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Appreciation Programme

Monitoring Adult Education Programmes

Module – III

Designing Monitoring and Evaluation Methods

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Monitoring and Evaluation of Adult Education Programmes

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Modules of Appreciation Programme on Monitoring and Evaluation of Adult Education Programmes

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Introduction and Objectives

Introduction

The designing of monitoring and evaluation methods, entails processes of data collection and analyses. A combination of primary and secondary data is required for monitoring and evaluation. These can be collected from both primary and secondary sources, through interviews, questionnaires, etc.

Participatory Rural Appraisal (PRA) is integral to participatory monitoring and evaluation. It involves various tools like transect walk, resource mapping, service mapping etc. These methods shall be discussed later in the Module.

Finally, the data should be thoroughly analysed. Qualitative (numerical) data can be analysed through statistical tools like Chi-square test, multiple regression etc. Some of the qualitative data (acquired through interview and focus group discussions) can also be analysed with the help of statistics; however the rest of such data needs to be thoroughly read and analysed accordingly.

Objectives

This module will inform the learners about:

- Different monitoring tools and methods used for assessing adult education programmes
- Ways to develop a) monitoring tools in the context of adult education programmes and b) pre-decided indicators keeping local realities in mind
- Guidelines to be kept in mind when collecting data
- Purposes and guidelines to analysing the data collected.

Unit 1: Choosing Data-Collection Methods

After developing indicators, the next immediate task in planning a monitoring system is the selection of data-collection methods. The process of choosing appropriate methods for data-collection starts from identifying what data is needed for each indicator. Choice of methods of data-collection is directly based on selection of indicators made earlier (as explained in Module 2).

1.1 Suggested Steps

The steps that need to be followed in moving from indicators to data-collection methods are:

Step One: Select an indicator specifying the type of information needed. For example, information about the percentage of learner drop-out may require other parameters to be considered, such as gender or income level of the drop-outs.

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 study of existing records of attendance, written report and even a physical visit.

Step Four In this step, a review of formats of attendance being maintained by study centres and manner of recording the attendance may suggest some changes in order to generate the gender segregated drop-out rates.

Step Five: After the initial exercise of linking the indicators with the mode of collecting information, the next essential step is to figure out how consolidation and aggregation of information collected would be carried out. Simplified formats that enable teachers to record drop-out information regularly may be needed to ensure aggregation across various centres.

1.2 Sources of Data

While collecting, one should be aware of the different kinds of data that may be available. The basic types of data are

- Primary and secondary
- Quantitative and qualitative

Primary data is that information that is collected first hand from the source, and given in the form of raw materials or originals in oral, visual or written forms. When data is directly collected from teachers, learners, supervisors and community members about their views, experiences, perceptions etc., it is called primary source.

Secondary data is that which has already been collected by others and available from documents, records, files, research studies, etc. this data may be available in libraries, from offices, schools and even on the internet.

Quantitative data is information that can be expressed as a number. Examples of quantitative data are scores on achievement tests, number of learners, or average attendance in a month. This data may lend itself to statistical analysis readily.

Qualitative data records experiences, emotions, views and insights (learning ability, pace of learning, learning environment, facilitator, etc.). These cannot be expressed as a number but can be depicted in the form of quotations, comments, stories, anecdotes, perceptions, values, etc.

Using a combination of qualitative and quantitative data can improve the overall quality by ensuring that the limitations of one type of data are balanced by the strengths of another. Certain indicators (like drop-out rates) can be quantified; certain indicators (reasons for drop-outs of women, for example) may produce only qualitative data. However, it is possible to combine qualitative and quantitative data in order to generate interesting information – for example 6 teachers, 12 community women, 7 citizen leaders were of the view that the location of the centre was a reason behind women drop-outs.

Likewise, combining primary and secondary sources of data can complement each other in providing a holistic picture of what information is required. . Data from existing records should be included and a strategy developed to collect additional data that is needed.

1.3 Choosing Appropriate Tools

There exist a variety of data-collection methods such as survey forms, questionnaires, progress reports, visits, checklists, focus group discussions, and many others. It is neither necessary nor feasible to integrate all indicators into a single method. It is very also important to keep in mind that a method found useful in one community, may not necessarily be appropriate in another. Some of the issues that must be taken into consideration when choosing appropriate methods include:

- How much primary data is needed?
- Who are the sources for such data? What is their literacy level? Can they fill a questionnaire?
- Would group discussions yield more nuanced data on difficult issues (like reasons for women's drop-out)?
- Would time and resources permit interviews?
- How many interviews would be needed?

- Would expression of authentic data by learners be better done through a folk method (song, dance, music, poetry, drawing, etc.)?

1.4 Choose a Combination of Tools for Cross-checking

There may be a need to cross-check information generated at community-level meetings with data gathered through individual or smaller-group discussions. Experience shows that some issues are more likely to be freely discussed in larger meetings, while some information will only be shared privately in personal interviews. Researchers have noted that in public, individuals discuss issues of community interest, while in private that they are more likely to discuss the weakness and flaws of a programme. Cross-checking helps re-establish reliability of information. This is also helpful when checking for viability of indicators. (Jayanthi, Geddes, Moitra, & Mondal, 2007)

It is important to note that even after the monitoring and evaluation process has begun, there may be a need to modify and refine methods and tools to suit the local community. Such a step helps captures the dynamic nature of the monitoring and evaluation process, which is subject to change according to local realities.

Unit 2: Preparing Data-Collection Tools for Monitoring

Once selection of method of data collection is done based on the selection of appropriate indicators, then tools for that specific method have to be prepared, which are relevant to that local context. If questionnaires are to be used for primary data-collection from learners, then the questionnaire has to be prepared. If teachers or community leaders are to be interviewed for primary data collection, then two separate interview schedules will have to be made for them. If the Focus Group Discussion (FGD) method has to be used with community members, then an FGD guide has to be prepared.

Some tips for preparing questionnaires, interview schedules and FGD guidelines are presented below.

2.1 Preparing Specific Data Collection Tools

The quality of data collected depends on the quality of tools prepared and used. We shall now look at a brief description of tips for preparing some common tools.

Questionnaire

A questionnaire is a list of structured and/or unstructured questions to be answered by a number of people. Structured questions are closed ended with precise answers – ‘yes’, ‘no’, ‘maybe’. Unstructured questions, on the other hand, do not always have direct, straight forward answers, but they prompt rich and insightful discussions, which are helpful for qualitative data (CVENT, 2011).

However, whether structured or unstructured the questions should simple, clear and easily understandable. The language and terminology to be used needs to be explicit and unambiguous. The instrument is prefaced by brief instructions and a statement of the purpose of the questionnaire, as it is possible that this tool may be used by those who have not developed the same.

In developing a questionnaire, one should try to avoid unnecessary questions. Keeping the respondents in mind, questions need to be focused on the data that needs to be collected. Even unstructured questions have to be relevant and the discussion it prompts should deal with the appropriate experiences that contribute to the needed qualitative data. Some standard demographic information such as age, gender, occupation, marital status and education level can help in interpreting the overall responses and provide disaggregated information. For example - the views of men and women; the views of married women as opposed to those who are unmarried; youth as compared to the older generation.

Interview Guide

Interviews can be structured or unstructured in nature, depending on the nature of data to be collected. A minimum structure is necessary otherwise irrelevant data gets collected during interviews, making the process of data analysis cumbersome and time-consuming. In today's world, telephonic and Skype interviews are also common, as are face-to-face interviews and give the interviewer an opportunity to probe further and ask questions that will validate earlier responses.

Interview guides vary from highly scripted to relatively loose, but they all share certain similar features. A guide helps to know

- what questions to ask
- in what sequence to ask them
- how to pose the questions and
- how to pose follow-up questions

The guide provides direction about what to do or say next, after the interviewee has answered the last question. It is important to have a guide for interview schedules so that same set of questions are asked in the same sequence in all interviews conducted, irrespective of who the interviewer is.

Different schedules are needed for different types of respondents and various respondents such as learners, teachers, and community leaders may each require different interview schedule and therefore different guides

Observation Guide

Field observations are an important source of data (like a visit to an adult education centre). Observations must be recorded, a task made simpler by setting structured variables 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. Therefore, an observation checklist must be prepared in advance.

While observing a learning centre, details like seating arrangement, cleanliness, availability and use of learning materials, etc. contribute a lot in understanding the kind of access and facilities that people have in acquiring adult education. Sometimes observation can be combined with interviews, in order to ensure corroboration of data. For example, books that look very new may be a sign that they have not been touched by programme beneficiaries or used by the instructor.

Use of Archival Material

Another important source of information is from existing programme documents, reports, records, registers, photos, videos, etc. However, a guide should be prepared to help peruse archival materials. What data is being looked for, which document may have it, where is that document located, how its review can be solicited—these are important aspects of preparation in advance of the actual data collection. If this is not done, there is a risk that a lot of time and effort will be wasted in identifying, locating, and reviewing archives with limited success in getting the required data.

Participatory Rural Appraisal (PRA) Tools

PRA tools are commonly used in a community to facilitate identification of needs, problems and to find solutions to the same. Participatory processes encourage sharing of data, especially sensitive data, from those types of respondents who are uncomfortable with questionnaires and interviews. A wide variety of PRA tools have been developed, and can be further modified for specific use in a monitoring plan. Some common ones are:

- 1) **Transect Walk:** To make the process truly participatory, transect walks can be conducted with members of the community. People can be taken on walks across the community, where they have conversations and discussions with and observations about the rest of the community. It functions as a tool to evaluate the validity of discussions conducted during meetings with the people.
- 2) **Time Line:** This is the process where the history of the people of the community and the development that has occurred is recorded in detail. The people of the community having the best knowledge of what have been the issues and the development that has been undertaken, will now own this information since it is generated through them and not from official records.
- 3) **Relationship Matrix:** This gives a detailed account of the various groups of people that reside in a particular locality. It also gives an account of the power relations that exist with the group and the access each of these classes/groups have to the development programmes. This will also ensure that the micro-plans prepared for the community have included the views of people from every walk of life.
- 4) **Social Mapping:** Social mapping, done by the people themselves, will provide information regarding the population of the village, the kind of homes (*pucca* or *kutcha*), details on the land holdings etc.

“It also lets us know of the spatial setting of the community as well as services that are available groups of people” (PRIA, 2004, p. 32).

- 5) **Service Mapping:** Service mapping is a subset of resource mapping. It provides a diagrammatic representation of the services that are available to the community. The diagram will also represent how far services such as educational institutions, railway stations, bus terminals etc. are located from the settlement or village. Sometimes, despite the services being geographically close, they may only be accessible to people of particular castes or gender. This information needs to be highlighted in the service map (*Ibid*).

In case of the WELLD project, data collection methods were based on the indicators decided and included:

- **Case studies:** Daily account or any observations demonstrating change in learners were noted down by the facilitators, after the classes. Each facilitator had maintained a register and marked 3-4 pages having names of the individual female learners. Daily accounts contributed in developing a case tracking their progress.
- **On site visits:** The frequent visits by project officials of WELLD from state and national offices were another way of monitoring the working of the project.
- **Regular reviews and meetings:** The Non-Governmental Organizations and the Support Organizations used to meet every six months to share the progress of work completed, project outcomes/achievements, as well as challenges faced. These detailed presentations were accompanied with reasons and explanations, which formed the basis of the basis of the next round of planning. Since the WELLD project was implemented by six partners in the two states, these review meetings helped in bringing out issues and challenges of the partnership. These included challenges of co-ordination, communication and other matters which were identified and sorted out during these meetings.
- **Reporting and Maintaining Diaries:** Facilitators would maintain a diary with detailed information on women learners. The project coordinators and supervisors would get this information from the facilitators, to which they would add their own observations and prepare their reports using a pre-decided format. (PRIA, 2002)

Unit 3: Plan for Analysis of Data Collected

Once the data has been collected, it has to be turned into usable and relevant information. This requires a process of analysis - sorting and collating the data and reducing it to manageable proportions. This is a stage that requires care, as well as attention to detail, in order that there is no bias or distortion of the results.

Analysis of the data 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, it must be ensured that everything is read with attention. The important task to be done is to thoroughly review the data gathered from use of the various monitoring tools. If the data collected from the women indicates that some of them are not coming to attend classes, a proper analysis should offer reasons for that data. Therefore during the data collection process, women should be encouraged to discuss the reasons for absenteeism and consider possible actions to keep irregular attendance in check. The analysis may then give rise to some possible action to be taken at the level of the implementing agency, such as changing the timing of the classes, making sessions more interesting by using alternative learning methods, etc.

An important aspect of developing an analysis plan is to ask who needs the analysis and for what purposes. In monitoring an Adult Education Programme (AEP), there are several stake-holders who have different motivations in using the data analysis generated through monitoring process, to improve the delivery of AEP. These include:

- Programme managers who need data analysis to improve programme delivery, within the time and budget available for achieving outputs.
- Implementing staff (like teachers and facilitators) who need data analysis for improving methods of teaching and learner motivation.

- Learners who may need data-analysis to assess self-progress of learning and to choose steps to improve the pace of learning.

It is also important to ensure that such a data analysis plan is prepared in advance of data collection. If this step is missed out in the initial planning phase and the critical question of who needs the data analysis is not asked, then there is a high possibility that some important stake-holders have been missed out.

Analysis plans for quantitative data may include tabular forms of presentation and calculation of various statistical analyses---means, averages, variations, percentiles, etc. More complex statistical analysis may be desirable and possible with some type of quantitative data. The level of detail of statistical analysis should be related to the purpose of use. In practice, more complex statistical analysis is carried out in evaluations, while simpler statistical analysis is carried out in monitoring.

The purpose of analysis sometimes is to also identify cause-effect relationship between variables. It can identify special patterns, factors and tendencies influencing participation, performance, outcome and impact with tools as Chi-square test, correlations, multiple regressions, multivariate analysis, etc. This can also be used to then predict likely trends and patterns in a variable during a given period of time. Existing software programmes for coding, sorting, computing and analysis, such as SPSS (Statistical Package for the Social Sciences) can also be used for complex statistical analysis.

Analysis of qualitative data requires clarity of purpose. Interviews and FGDs can be content analysed to identify patterns. Classification of qualitative responses can be done according to certain categories. For example, factors leading to drop-out of women learners can be classified---lack of time, family obstacles, weak motivation, poor teaching, etc. Analysis of qualitative data may also be done through available software for content analysis.

A simple visual and compiled presentation of analysis helps stake-holders to make use of the information so generated, for improving AEP delivery. Tables, charts, graphs, maps in visual forms can enable discussion of analysis and agreements on corrective measures to be taken. Even when staff of the monitoring and evaluation department undertake data analysis, it is important that discussion of that analysis is conducted amongst various stake-holders of an AEP, including learners and their community, teachers and facilitators, supervisors and managers of the project. Sometimes these discussions are held separately, and at times jointly. It is important that analysis becomes the basis for discussion of progress of the implementation of plans, and the need for revision of plans to improve delivery. Such discussions have to be systematically structured and outcomes should be seen as commitments by various stake-holders. So if the discussion is around change, this must be discussed from the perspectives of different stakeholders, in order that there is a positive outcome of the monitoring process.

What changes will teachers and facilitators make?

What changes will learners and their community make?

What changes will supervisors and managers of the project make?

Summary

The first step after identifying indicators and planning a monitoring and evaluation plan is to choose the data collection methods appropriately. It is imperative to understand the different types of methods that can be used to collect data. These include questionnaire, interview guides, PRA tools, FGDs, observation, archival, etc. These methods need to be prepared as specific tools for data collection, keeping in view the kind of data to be collected and the kinds of people and sources from where it will be collected.

A combination of data collection methods simply devised and used can generate usable information for monitoring. A good monitoring and evaluation plan must enable its effective use. Data so collected have to be analysed keeping in mind the purposes and uses of that analysis. Several stakeholders are involved in monitoring—learners, teachers, supervisors, managers, therefore the analysis and its presentation should facilitate improvement in the delivery of AEP by each of them.

References

- CVENT. (2011, October 7). *Web surveys: a blog by cvent*. Retrieved December 5, 2013, from CVENT: Online Solutions for Events and Surveys:
<http://survey.cvent.com/blog/customer-insights-2/structured-vs-unstructured-questions>
- Davis-case, D. (1990). *The community's toolbox: the idea, methods and tolls for participatory assessment, monitoring and evaluation in community forestry*. Thailand, Bangkok: FAO/ Forest, Tree and People Programme Community Forestry Field Manual No. 2.
- Israel Galindo. (2012, July). *General guidelines for preparing questionnaires and surveys*. Retrieved November 2013, from Educational Consultants:
<http://www.israelgalindo.com/surveyguide.pdf>
- Jayanthi, G., Geddes, J., Moitra, U., & Mondal, A. (2007). *A handbook on using participatory monitoring and learning tools*. New Delhi: Academic Foundation/Action for Social Academis Foundation (ASA).
- PRIA. (2002). *Participatory programme management; Insights from women's empowerment through literacy and livelihood development (WELLD) project*. New Delhi: PRIA.
- PRIA. (2004). *Developing a micro plan: a facilitators' manual*. New Delhi: PRIA.
- UNESCO. APPEAL. (1999). *Monitoring and Evaluation of Literacy and Continuing Education*. Bangkok: UNESCO Principal Regional Office for Asia and the Pacific.