04/PR/me/01 notes on monitoring Check !

Learning Material

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MONITORING

Monitoring is an essential ingredient of planning activity. Since it helps to pinpoint problems requiring action and it is also important in the context of coping with uncertainty in planning. It is a systematic and continuous assessment of the progress of a piece of work over time. Monitoring involves collecting information about what actually happens during the implementation of the programme in order to find out how the inputs to the plan or project (in resources) are being used; how activities essential implementation are proceeding, whether or not deadlines are being met and generally whether or not, things are working out as intended. project monitoring is fundamentally concerned with measuring quantities relating to resources expended and to time in particular. it is really a mechanism for correcting daiatiary that may have occurred between what was intended to be done and what has actually happened.

Types of Monitoring

The different types of monitoring commonly used in development rk are: management/administration, finance, and programme monitoring.

Tables A, B and C below show some of the information that would be collected for each type of monitoring, where the information would come from, and how it could be used.

The types of monitoring shown in Tables A and B for management and administration purposes. Systems for monitoring staff and accounts will not be considered in further detail here. Financial record systems for economic or income-generation programmes are dealt with under programme monitoring below.

The rest of this reading concentrates on programme monitoring.

TABLE : MANAGEMENT/ADMINISTRATION

Staff/
personnel
.sues

Vehicles

Supplies

Information
to be collected

*Performance
*Achievement
*Absenteeism
*Problems
*Expectations
*How staff work
as team
*Whether staffing
Structures work

*Fuel consumption
*mileage
*Repairs
*New parts
*Capital and running cost
* Performance

*Where to obtain supplies
* Cost from different suppliers
* Re-order levels
* Items about to run out
* Time needed to supply

Sources information

* Staff/team meetings
* Staff reviews
* Supervision
* Information meetings
* Observation

* Log book of fuel and mileage
* Record sheets of repairs and spare parts fitted

* Records of money spent on each vehicle
* meetings with driver
* Observation

* Suppliers, catalogues Inventory of stocks
* Stock-keeping record system

use of Information

* Give staff support and feedback
* Training and staff development
* Improve management practices
* Modify/clarity job descriptions

* Decisions about
replacing old vehicles
when they become uneconomical to run
* Compare different makes of vehicle
* Check mechanic's
performance parts fitted, frequency of
repairs, etc.
*Identify problems, eg. excessive fuel consumption

* Obtain best value
 supplies
* Obtain supplies on
time
* Maintain adequate stock levels

TABLE B: FINANCE

Project budget
and
expenditure

Staff salaries

Cash flow
analysis

Information to be collected

Expenditure by
project

* Expenditure by
budget head
* Balance of budget
remaining this year
* Regularly recurring
items of expenditure, eg. rent
*Previous year's budget and expenditure
* Rates of inflation
* Exchange rates

* Salaries
* Tax, insurance, etc.
* Annual increments
* Final pay
* Other payments: eg. health allowance, staff loans

* When is cash needed for project?
* Where will cash come from? (might include loan repayments, community contributions, etc.)
* What and when are cash outgoings?
(regular and irregular)

Sources of information

Invoices and vouchers
* budget break-down
* Analysis of budget and expenditure, eg. using computer spreadsheets
* newspapers, banks

* Staff records
* Payslips
* Salary records

* Cash record system

Use of information

* predict expenditure for budgeting
* Compare costs of different projects
* Identify areas of excessive expenditure
* Identify any savings
* Compare costs with project achievements to assess cost-effectiveness

* Ensure staff are paid according to pay scale reflecting nature of job and length of service
* Ensure other payments are made according to correct procedures
*Ensure all staff know what benefits they are entitled to
* To ensure sufficient but not excessive cash is available

TABLE C: PROGRAMME MONITORING

Results of activities, project outputs

Project inputs

Progress of programme according to objectives

The way the programme is managed, style of work

Background information on target population and context

Information to be collected

* What has been done
* What has not been done but was planned
* What problems have been encountered
* How the problems have been addressed
*How the external situation has changed
*Any other information relevant work of project

*What is needed and where it can be found?
When it is needed and when it will be available
* Cost

progress towards achieving objectives
* Are objectives till relevant?

* How are decisions made?
*Are the people who are supposed to be involved really involved?
* Do the partners/people affected by the work/programme staff feel a sense of ownership of the programme?

* Have there been any significant political, economic, or environmental developments affecting target population?
* Have there been any developments affecting the programme?
* How is the population changing in terms of the characteristics the programme is hoping to influence?

Sources of Information

* Regular records of activities
* supervision reports
* Periodic reports
* Meetings, workshops with staff, project partners, and people affected by the work
* Staff reviews
* newspaper, radio
*informal discussion
* Observation
* surveys

* Form suppliers, other organisations, government, etc.

*Indicators which show degree of participation
*Identify need to change methods to encourage more participation
* Meetings, discussions
* Observation

* Surveys
* Sources of information about politics, economics
* Meetings with other agencies, government officials
* Observation

Use of Information

* Plan future work
* Identify project successes
* Identify opportunities to build on strengths
* Identify problems and weaknesses, plan strategy
* Review priorities
* Identify training needs
* Identify need for further information on research, review or evaluation

* Plan and schedule activities
* Monitor costs and budget accordingly

* Modify strategy and/or objectives if necessary

* Feedback
* Identify need for review or evaluation
* identify need for further information or improvements in monitoring systems

* Show need to change management style
* identify need to change methods to encourage more participation
* identify problems in relationship between partners/people affected by the work/staff, and address them.

* On-going collection of baseline data which can be used to evaluate progress
* Response to changing situation, rapid response to emergencies
* Keep in tough with relevant work by other agencies, government

Process monitoring and impact monitoring

As shown in the above table, programme monitoring should include information about the use of resources, the progress of activities, and the way these are carried out. This is known as process monitoring. Process monitoring is a means for:

* reviewing and planning work on a regular basis;
* assessing whether activities are carried out as planned (for example, according to standard criteria of quality);
* identifying and dealing with problems as they come up;
* building on strengths and taking advantage of opportunities as they arise;
* assessing whether the style of work and management in the best way to achieve the development objectives of the work (capacity building, changing power relationships, etc.);
* monitoring changes in the target population and in the external environment that are relevant to the work.

Monitoring should also provide information on progress towards achieving OBJECTIVES, and on the impact the programme is having in relation to these objectives. This is known as impact monitoring. Impact monitoring is the means by which:

* the work can be related to its overall purpose on a continuous basis, in order to provide a measure of progress;
* the work can be modified in response to changing circumstances without losing its overall direction;
* the need to change objectives can be identified;
* the need for further information or research can be identified;
* the assumption that the activities will help achieve the stated objectives can be verified.

Impact monitoring is a form of continuous self-evaluation. if it is done well, formal evaluations will be needed less often. And a formal evaluation is carried out, the programme staff will already be familiar with their work in relation to their objectives. They will be able to participate more fully in the evaluation, and find it less threatening.

All monitoring systems should include both process and impact monitoring.

Designing A Monitoring system

A 'monitoring system' is a system for collecting and using information about the progress of a piece of work. its purpose is to help all the people involved in the work and appropriate decisions. It is not simply a means of collecting information, however. It must also be a communication system, in which information flows in different directions between all the people involved.

The essential components of a monitoring system are:

* the selection of INDICATORS for each activity;
* the collection of data concerning the indicators;
* the analysis of the data;
* presenting the information in an appropriate way;
* using this information to improve the work.

The parts below address further some of the major questions relevant to designing & managing a monitoring system.

1. Defining the Aim of the Monitoring System

A Monitoring system should be designed to meet specific needs and these will vary according to the nature and AIMS of the work, the organisational structures of all the partners agencies and government(s) involved, and specific requirements of donors. it is important to define the overall and long-term aim of the monitoring system before designing it and setting objectives. The system itself can then be monitored and evaluated to see whether it is meeting its objectives, and can be adjusted if necessary.

The following points must be analysed to define the objectives of the monitoring system.

Deciding who needs a monitoring system and what for

Some examples of how information can be used for different purposes are given in the tables above. Monitoring systems commonly address the following needs:

Information needed to make day-to-day decisions about the Work

Managers, staff and partners use information about the progress and quality of the work and about external factors and affect it, tO plan and manage work effectively. The information is needed:

* To provide an ongoing picture of progress: to show [illegible] impact the work is having, and progress towards meeting objectives so that the activities can be adjusted if necessary.

* To maintain high standards : to monitor to quality, effectiveness and efficiency of activities, as well as the volume of work.

* To make sure resources are used effectively: to find out what resources are required to produce a certain effect, or how resources can be distributed differently to be more effective.

* To plan work : to show what and who will be available when, and how work could be affected by seasonal trends in, for example, labour availability, disease, rainfall, market prices, transport,etc.

* To identify problems and find solutions at an early stage: to make sure problems can be discussed and tackled before they become to serious.

* To provide a record of events : so people can check on what has happened.

* To look at the 'process' of development: to help analyse the style of work, whether this is the best way of working to achieve more self-motivation, capacity-building, awareness of gender inequality, etc.

* To provide an information base for future evaluations: what has been done and why, and to show trends over time.

* To help staff feel their work has a definite purpose: knowing more about objectives, progress, impact and quality of work will help staff feel motivated and involved in the work.

Information needed to be accountable

Although different donors have different requirements, if work is monitored well enough to ensure good management, most of the information needed by donors should also be available. Donors needed information:

* to demonstrate good management of resources;
* to show that the work is as effective as possible in terms of working towards the stated objectives;
* to show what impact the work has had on different groups;
* to show how problems have been addressed;

* to determine the sustainability of the work, for example in terms of institutional strengthening;
* to show what lessons have been learned.

Information needed to be accountable to partners

Programme partners should be accountable to each other in order to demonstrate their joint responsibility for achieving the objectives of the partnership. Each partners needs:

* to know how their partners work as organisations: how decisions are made, what procedures are involved etc.;
* to know their partners' objectives in being involved in a piece of work;
* to show that their partners are working according to agreed objectives;
* the opportunity to discuss the relationship between partners, and to address any problems in the relationship that affect the work.

Information needed to be accountable to people affected by the work

A programme should also be accountable to all the people who will be affected by it, even when they are not actively involved in the work. People affected by the work need:

* the opportunity to say whether they think the agency is doing a good job, and what is good or not good about it;

* information to show how their problems, as they perceive them, are being addressed;

* to know what is happening to them and what is likely to happen to them in the future (this particularly applies to children in unstable situations, such as refugee camps);

* information to show that the PROJECT is working in the most effective way possible;

* information to show that the resources they contribut including time and labour, are being well spent.

Setting the objectives of the monitoring system

The specific objectives of the monitoring system will depend on its overall aims and who it is for.

2. **THE SELECTION OF RELEVANT INFORMATION**

Deciding what information will be useful for making decision about an activity or programme is often the most difficult part of setting up a monitoring system. There is always a danger of collecting too much information on every detail of a programme. The problems associated with this are:

* if too much data is collected it may not be measured or recorded accurately.

* There is no time to analyse or use a large amount information.

* If a large amount of information is being collected regularly form the same people they may resent it.

* If information is too detailed it may be difficult to identify important trends.

It is worth remembering that a small system that works is better than a big system that does not. The perceptions of people who are affected by the work are often more useful than a large amount of quantitative data. useful information can be selected according to the objectives of the system. Since it is difficult for people with no previous experience of an effective monitoring system to know what information they will need, workshop and training sessions may be necessary to help identify information needs.

Key indicators

The selection of indicators to reflect progress towards meeting objectives is discussed in the reading on indicators. Key indicators for monitoring can be selected by asking the following questions:

* What indicators will demonstrate progress (in terms of both process and impact) in relation to the programme objectives?

* What are the priority problems or key aspects of the work?

In a large programme or project, it is more difficult to select key indictors, but this can be made easier by first identifying the key aspects of a programme, or the priority problems that are being tackled. it is then possible to formulate the questions that need to be answered in order to find out how well the programme is working. The key indicators may need to be changed as the programme progresses and new areas of work develop.

* What information can be collected accurately?

  - the skills, training and supervision of staff;

  - the possibility of standardising collection techniques for qualitative and quantitative information for an example of a set of questions as indictors for measuring progress on increasing group self-reliance);

  - the availability of accurate statistics if the indicators used are to be calculated using information from other sources. For example, if you want to calculate rates of immunisation coverage, are reliable statistics on the population available?

* What is the capacity to respond to the information? This will depend on the decisions and action that people can realistically take, given the resources available, including material resources and staff skills.

* What is the decision-making structure? The ability to take action may also depend on the existence of clear job descriptions, assigned responsibilities, and good communication between different levels of the Organisation (for example, between field and headquarters).

* What planning procedures are in operation? The kind of indicators that can be used will depend on the existing procedures for planning and making decisions, and on the training that will be available

to increase the use of information in decision-making. The way decisions are made will influence the selection of key indicators, and whether qualitative or quantitative information is most useful.

* What are the information needs of funding agencies?

When working closely with government or other agencies there may be some pressure to collect information that is required by international organisations. These may coincide or conflict with the information needs of the programme itself.

3. THE COLLECTION AND ANALYSIS OF DATA

Methods of collecting data

There are many different methods of data collection. The most appropriate methods can be selected according to the kind of information that is needed, who is collecting it, and when and how it will be used. A combination of methods should always be used so that data can be cross-checked.

Possible methods of **collecting data at specific points** during monitoring include:

Surveys with set questionnaires

Survey samples can be selected to compare populations affected by the work with people who are not affected by the work, or to compare current data with the results of a BASELINE STUDY carried out before the work began. Regular surveys can be used in monitoring system to collect information about key indicators to see how the target population is affected by a piece of work over time.

participatory methods

PARTICIPATORY METHODS, including those discussed under PRA can be useful for finding out how the different people involved in a programme, including the people affected by the work, view its progress. it is important to ensure that different groups participate for example, by making sure the location and timing to meetings are acceptable and convenient for different groups.

Measuring skills and knowledge

The skills and knowledge of trainees can be assessed to measure the effectiveness of activities designed to train or teach people or to influence their attitudes or behaviour, Methods for this include:

* written, oral or practical tests: simple tests to see whether someone knows something or can do something, and more difficult questions which find out whether someone understands the reasons for doing something;
* role play and games;
* demonstration of a particular task;

* observation of normal practice using a checklist.

Possible methods of **collecting data regularly** for a monitoring system include:

Regular record-keeping: forms and diaries
Some information about activities is recorded on a regular basis. Forms and SET FORMATS are often used for recording quantitative and qualitative information.

The following factors are important:

* Good form design will facilitate the accurate recording of information.

* Clear instructions on how to use forms should always be available. Instructions would include clear definitions of terms used on the forms.

* The form should contain enough information to be useful to the people collecting the data.

* The people collecting the data need to understand how the information will used.

* The information needed to complete the forms should be available without too much extra effort.

* The format should be the same in the different forms and registers used.

Other methods of regular record-keeping inclue:

* Diaries to record activities (especially useful for recording qualitative information).

* OBSERVATION using checklists.

Supervision checklists and reports

The collection of data during supervision meeting provides an opportunity to discuss the information as it is being collected. This can be useful for both supervisors and those being supervised. Checklists and set formats can be used to ensure that information about key indicators is collected.

Case studies

Case studies can be used to examine the impact of a programme on particular households. A checklist can be used to ensure certain questions are addressed, without being restricted only to predetermined indicators. It can be a useful way of looking at unexpected outcomes and indirect effects of a programme, and to see how other factors have contributed to any changes in people's lives.

The selection of certain households for can studies need to be made in a systematic way to avoid concentrating on the favorite or most interesting families. In order to trace any long-term changes caused by the programme, there also needs to be some means of following up information on all members of the original family if they later move away (for example, because of marriage).

Spot checks: periodic studies into a particular aspect of the work

Selected activities may be monitored in detail over a specific period. For example, all staff could fill in activity sheets every day for several weeks to assess the effectiveness of their use of time. This can be a useful exercise leading up to a more formal evaluation, since it gives staff and participants a clearer idea of what they are doing, especially if they do not usually keep regular records of activities.

What training and support is needed for the people collecting the data?

Continuous training, support and supervision are all essential to ensure data is collected accurately, and to ensure that people understand the use of the information they are recording.

The analysis of data

Analysis refers to the way the information is interpreted and how the meaning of the results is assessed. This includes different methods of analysis, who should carry them out, and the use of computers. In a monitoring system, analysis can be done continuously, periodically, or irregularly, depending on the use of the information. The most important thing is to ensure that the analysis is accurate and relevant, that it is understood by the people using the findings, and that results are available when they are needed.

4. PRESENTING AND USING THE RESULTS

Feedback, discussing the findings

It is important to provide opportunities to discuss the findings with all the people who are interested, including the people affected by the work. This involves taking into account questions like what form of presentation is appropriate for different users, what conclusions and recommendation are required, what language should be used etc.

Using the results for planning procedures

Information has different uses for different people. if monitoring information is really going to be used to improve the quality of the work being carried out, it must be incorporated into existing planning procedures, or planning procedures should be developed specifically to use the information.

Using the results for institutional learning

Monitoring systems are a way of analysing project experience. The results of this analysis can be used by the agency and other organisations in making informed decisions about future work.

using the results as a basis for evaluation or review

Monitoring provides a continuous assessment of progress, but at certain times it is useful to undertake a formal **evaluation** to look in more detail at the impact of the work, from a more objective viewpoint. A **review** can also look in more detail at certain aspects of a programme which have been identified a problem areas through the monitoring system.

5. ORGANISATION

Deciding who should be involved in monitoring

Participation in monitoring: principles and methods

Participatory monitoring means that the information used for monitoring is chosen, recorded and analysed by all those involved in a piece of work, including the people affected by the work. it is particularly important for community-based programmes.

The basic steps in establishing a participatory monitoring system are:

1. Discuss the reasons for monitoring so that people can decide whether it will help them.

2. Discuss and review programme objectives and activities, to make sure everyone knows what they are trying to achieve, in their own terms.

3. Develop monitoring questions: what do we want to know, and what do we monitor to give us the answers?

4. Select the indicators to answer the monitoring questions.

5. Decide how the information will be collected.

6. Decide who will do the monitoring, since this may required people with particular skills, and will also require people's time.

7. Analyse and present the results at meetings, displayed as diagrams, etc.

Involvement of people from outside the programme

It is vital that all the people directly involved in a piece of work are responsible for monitoring. A monitoring system must be useful for them. However, it is often helpful to have assistance from an outsider who may have a more objective view of the work:

* to facilitate in discussions;
* to help identify key indicators by asking questions;
* to provide technical expertise or experience in methods of data collection and analysis;
* to concentrate specifically on setting up a monitoring system if other staff have other priorities.

Maintaining the monitoring system: resources, training, support and supervision

The cost of running a monitoring system can be considerable. It should be carefully considered and included in any programme budget. The cost comprises:

* the cost of designing the monitoring system: this includes staff time, workshops, training, and may include hiring outside consultants or trainers;
* staff time in collecting and analysing information;
* the resources needed to print and distribute forms for data collection, and provide other materials as necessary;
* continuous training and supervision for data collection and analysis;
* training of managers to promote effective use in planning and policy development;
* supervision needed to keep system standardised;
* modification of the monitoring system as necessary.