**STRATEGIA NETHERLANDS**

**Faculty of Arts and Social Sciences**

**Department of Monitoring and Evaluation**

**Course**

**Online Diploma Programme**

**Assignment Four (4)**

**Submission**

**12, October, 2019**

**Registration No: SN331/05/2019**

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1. A) **Collecting information or data is just one part of the process of monitoring and evaluation.**

**What is meant by data analysis?**

The process of extracting, compiling, and modeling raw data for purposes of obtaining constructive information that can be applied to formulating conclusions, predicting outcomes or supporting decision in business, scientific and social science sittings**.**

Data analysis is a primary component of data mining and Business Intelligence (BI) and is key to gaining the insight that drives business decisions. Organizations and enterprises analyze data from a multitude of sources using Big Data management solutions and customer experience management solutions that utilize data analysis to transform data into actionable insights.

Dennis Junk, a Hub Spot certified inbound marketer with Aptera, aptly explains data analysis in his blog post: data analysis is “all the ways you can break down the data, assess trends over time, and compare one sector or measurement to another. It can also include the various ways the data is visualized to make the trends and relationships intuitive at a glance.” Data analysis involves asking questions about what happened, what is happening, and what will happen (predictive analytics). As Junk puts it, “analytics is generally the data crunching, question-answering phase leading up to the decision-making phase in the overall Business Intelligence process.”

**Approaches to analysis**

Merriam (1998) discusses several approaches to data analysis, including ethnographic analysis, narrative analysis, phenomenological analysis, and constant comparative method, Ethnographic analysis involves identifying categories related to a culture’s economy, demographic, human life, particularly family education and health cares, issues and the environment. She describes narrative analysis as it is used in several fields of study. For examples sociological/sociolinguistic models relate narrative to the social context, psychological approaches. Focus on memorization in storytelling, with particular emphasis on understanding, recall, and summarization. Anthropological models emphasis how stories vary across cultures, looking at customs, beliefs, values and social context of narrative. Literary models focus in grammar, syntax and plot of narrative; ideological perspective, like feminist theory, critically theory, and postmodernism, may be used to analysis includes and epocha approach, which involves laying out one’s assumption about the phenomenon under study, bracketing, imaginative variation (looking at the phenomenon in various ways) and first and second order knowledge, constant comparative method assign code that reflect the conceptual relationships (Merriam, 1998).

**State any three uses of monitoring and evaluation results.**

There are several reasons to use and disseminate M&E results: to improve program interventions, to strengthen programs institutionally, to advocate for additional resources and youth-friendly policies and to contribute to the global understanding of what works. Each of these reasons is explained in detail below.

1. **M&E results help improve your program interventions**.

Using M&E results keeps you and your staff in a learning mode as you gain understanding about how and why your program is working. M&E results also help you make decisions about the best use of resources. For example, outcome and impact evaluations may provide further insight on certain risk and protective factors, thus shaping your future efforts. As staff use results to reflect on the programs implementation and make necessary improvements, they are more likely to feel supported by the M&E process.

1. **Using M&E Results to Improve and Strengthen Your Program**

M&E results should be disseminated and used on an ongoing basis, right from the beginning. You’re quarterly monitoring and process evaluation reports can be summarized and presented to donors and other stakeholders. Outcome and impact evaluation results should also be used in a timely manner in order to ensure that they have a role in improving and strengthening your program.

1. **M&E results should also lead to decisions about changes in program implementation.**

Periodic staff meetings devoted to discussing M&E results can engage staff in collectively making program adjustments. If you identify problems early in implementation, you can respond promptly by modifying your program strategy, reassigning staff or shifting financial resources to improve the chances of meeting your program goals and objectives. If you used a participatory evaluation approach, you should ensure that participants are involved in reviewing results and determining how to use them.

Specifically, M&E results can be used to:

* Highlight program strengths and accomplishments,
* Improve program management and planning,
* Identify weaknesses of program implementation,
* Determine demand for service modification or expansion,
* Assess quality of care,
* Identify future research needs, and
* Strengthen funding proposals.

There are many learning and feedback frameworks, such as M&E systems, action-research projects, impact assessments, reviews and reports. Whatever system you use, make sure it has a clear purpose, a plan for collecting data, time to analyses the results and ways to communicate them to stakeholders. You may need to change your existing M&E system to make sure it provides the information you need on how your activities are affecting children.

**C)**. **Describe any seven factors that may lead to project failure**.

**Project failure** can happen in any organization and to any project. There are an infinite number of reasons for failure. Sometimes it’s out of the control of a project manager and/or the team members. Sometimes failure is controllable. Failed projects and people involved with the failure have some things in common. In both cases they are given prescriptions for “quick fixes” which typically prove to be ineffective and can sometimes produce disastrous side effects. Using a medical metaphor, flu’s are viral and are unresponsive to antibiotic drugs. For projects, technology is the antibiotic often prescribed. Suggestions like, upgrade your software for tracking the project, use the critical chain instead of the critical path, or use a (Monte Carlo) simulation to compute the project risks. In many cases, these powerful interventions fail because they are inappropriately applied. The goal of project management is to produce a successful product or service. Often this goal is hindered by the errors of omission as well as commission by management, project managers, team members and others associated with the projects. The purpose of this paper is to enable the identification of the common causes of project failures through the use of surveys and questionnaires to provide information which can be used to mitigate their occurrence and in many cases repair the damage caused and hopefully, recover the projects.

Projects most commonly fail because there is a lack of attention and efforts being applied to seven project performance reasons:

1. **Establish clear accountability for measured results.** There must be clear view of the interdependencies between the projects, the benefits, and the criteria against which success will be judged. It is necessary to establish a reasonably stable requirement baseline before any other work goes forward. Requirements may still continue to creep. In virtually all projects there will be some degree of “learning what the requirements really are” while building the project product.
2. **Focus on business value, not technical detail.** This involves establishing a clear link between the project and the organizations key strategic practices. The project plan needs to cover the planned delivery, the business change required and the means of benefits realization.
3. **Have a consistent methodology for planning and executing projects.** There should be a detailed plan developed before any release date of a project is announced. Inadequate planning is one of the major reasons why projects spin out of control.
4. **Have consistent processes for managing unambiguous checkpoints.** Successful large projects typically have software measurement programs for capturing productivity and quality historical data that can be sued to compare it against similar projects in order to judge the validity of schedules, costs, quality, and other project related factors. The lack of effective quality centered mechanisms can be a major contributor to both cost and schedule overruns.
5. **Include the customer at the beginning of the project and continually involve the customer as things change so that the required adjustments can be made together.** It has been observed that successful projects occur when end users (customers) and the project members work as teams in the same cubicle, although this is not always possible. Projects are less likely to fail if there are informed customers giving meaningful input during every phase of requirements elicitation, product description and implementation. The customer needs to be asking, “how are the project result used over time and what do I get out of the results?
6. **Manage and motivate people so that project efforts will experience a zone of optimal performance throughout its life.** This involves managing and retaining the most highly skilled and productive people. Knowledge is money. A project team made up of higher paid people with the right specialized skills is worth more per dollar than a group of lower cost people who need weeks or months of training before they can start to be productive.
7. **Provide the project team members the tools and techniques the need to produce consistently successful projects.** The project team must be skilled and experienced with clear defined roles and responsibilities. If not, there must be access to expertise which can benefit those fulfilling the requisite roles.

**Conclusion**

Assessing and recovering a failing project can be among the most challenging work for a project manager to perform for an organization. However, the payoff can be huge, since a project t brought out of failure can provide significant value to a firm. The seven factors outlined in this paper are critical for assessing a failing project’s performance and planning corrective action to make the project successful. All seven factors are needed for success. When one factor turns negative and is not corrected disaster is unavoidable.

The authors’ survey results on the common causes of project failure indicate that the failure factors can be grouped into three main categories.

They are:

(1) **People factors,**

**(2) Project process factors; and**

**(3) Project communications factors**.

Managing a failing project begins by assessing its real condition by the use of questionnaires, surveys, and interviews. When the assessment is complete and the project go/no decision has been made by the stakeholders, the assessment team can build a plan to implement project recovery.

**Q.2. Identify any six parts of a monitoring and evaluation report**

1. Identify the purpose and scope of the M&E system

2. Plan for data collection and management

**3. Plan for data analysis**

Data analysis is the process of converting collected (raw) data into usable information. This is a critical step of the M&E planning process because it shapes the information that is reported and its potential use. It is really a continuous process throughout the project/programme cycle to make sense of gathered data to inform ongoing and future programming. Such analysis can occur when data is initially collected, and certainly when data is explained in data reporting (discussed in the next step).

Data analysis involves looking for trends, clusters or other relationships between different types of data, assessing performance against plans and targets, forming conclusions, anticipating problems and identifying solutions and best practices for decision-making and organizational learning. Reliable and timely analysis is essential for data credibility and utilization.

**2.3.1 Develop a data analysis plan**

There should be a clear plan for data analysis. It should account for the time frame, methods, relevant tools/templates, people responsible for, and purpose of the data analysis. A data analysis plan may take the form of a separate, de- tailed written document, or it can be included as part of the overall project/ programme management and M&E system – for instance, it can be captured in the M&E plan. In whatever way it is stated, the following summarizes key considerations when planning for data analysis.

1. **Purpose of data analysis**

What and how data is analysed is largely determined by the project/programme objectives and indicators and ultimately the audience and their information needs. Therefore, data analysis should be appropriate to the objectives that are being analysed, as set out in the project/programme logframe and M&E plan. For example

* Analysis of output indicators is typically used for project/programme monitoring to determine whether activities are occurring according to schedule and budget. Therefore, analysis should occur on a regular basis (e.g. weekly, monthly and quarterly) to identify any variances or deviations from targets. This will allow project/programme managers to look for alternative solutions, address any delays or challenges, reallocate resources, etc.
* Analysis of outcome indicators is typically used to determine intermediate and long-term impacts or changes – e.g. in people’s knowledge, attitudes and practices (behaviours). For instance, an outcome indicator, such as HIV prevalence, will require more complicated analysis than an output indicator such as the number of condoms distributed. Outcome indicators are usually measured and analysed less frequently. When analysing this data, it is important to bear in mind that it is typically used for a wider audience, including project/programme managers, senior managers, donors, partners and people reached.

1. **Frequency of data analysis**

Data analysis has to be given sufficient time. The time frame for data analysis and reporting should be realistic for its intended use (discussed above). Accurate information is of little value if it is too late or infrequent to inform project/pro- gramme management; a compromise between speed, frequency and accuracy may be necessary. An important reminder is to avoid allocating excessive time for data collection (which can lead to data overload), while leaving insufficient time for analysis.

The frequency of data analysis will largely depend on the frequency of data collection and the informational needs of users – typically reflected by the reporting schedule. A schedule for data analysis can coincide with key reporting events, or be done separately according to project/programme needs. Whenever data analysis is scheduled, it is important to remember that it is not an isolated event at the end of data collection, but is ongoing from project/ programme start and during ongoing monitoring and then evaluation events.

1. **Responsibility for data analysis**

Roles and responsibilities for data analysis will depend on the type and timing of analysis. Analysis of monitoring data can be undertaken by those who collect the data, e.g. field monitoring officers or other project/programme staff. Ideally there would also be an opportunity to discuss and analyse data in a wider forum, including other project/programme staff and management, partner organizations, beneficiaries and other stakeholders.

For evaluation data, analysis will depend on the purpose and type of evaluation. For instance, if it is an independent, accountability-focused evaluation required by donors, analysis may be led by external consultants. If it is an internal, learning- oriented evaluation, the analysis will be undertaken by the IFRC’s implementing project/programme or organization(s). However, whenever possible, it is advisable to involve multiple stakeholders in data analysis – refer to. Evaluations may also use independent consultants to initially analyse statistical data, which is then discussed and analysed in a wider forum of stakeholders.

**4. Plan for information reporting and utilization**

Having defined the project/programme’s informational needs and how data will be collected, managed and analysed, the next step is to plan how the data will be reported as information and put to good use. Reporting is the most visible part of the M&E system, where collected and analysed data is presented as information for key stakeholders to use. Reporting is a critical part of M&E because no matter how well data may be collected and analysed, if it is not well presented it cannot be well used – which can be a considerable waste of valuable time, resources and personnel. Sadly, there are numerous examples where valuable data has proved valueless because it has been poorly reported on.

**2.4.1 Anticipate and plan for reporting**

Reporting can be costly in both time and resources and should not become an end in itself, but serve a well-planned purpose. Therefore, it is critical to anticipate and carefully plan for reporting. Summarizes key reporting criteria to help ensure its usability.

1. **Relevant and useful**. Reporting should serve a specific purpose/use. Avoid excessive, unnecessary reporting – information overload is costly and can burden information flow and the potential of using other more relevant information.
2. **Timely**. Reporting should be timely for its intended use. Information is of little value if it is too late or infrequent for its intended purpose.
3. **Complete**. Reporting should provide a sufficient amount of information for its intended use. It is especially important that reporting content includes any specific reporting requirements.
4. **Reliable.** Reporting should provide an accurate representation of the facts.
5. **Simple and user-friendly.** Reporting should be appropriate for it’s in- tended audience. The language and reporting format used should be clear, concise and easy to understand.
6. **Consistent.** Reporting should adopt units and formats that allow comparison over time, enabling progress to be tracked against indicators, targets and other agreed-upon milestones.
7. **Cost-effective**. Reporting should warrant the time and resources de- voted to it, balanced against its relevance and use (above).
8. **Identify the specific reporting needs/audience**

Reports should be prepared for a specific purpose/audience. This informs the appropriate content, format and timing for the report. For example, do users need information for ongoing project/programme implementation, strategic planning, compliance with donor requirements, and evaluation of impact and/or organizational learning for future project/programmes?

1. **Determine the reporting frequency**

It is critical to identify realistic reporting deadlines. They should be feasible in relation to the time, resources and capacity necessary to produce and distribute re- ports including data collection, analysis and feedback. Some key points to keep in mind in planning the reporting frequency:

1. **Reporting frequency should be based upon the informational needs of the intended audience**, timed so that it can inform key project/programme planning, decision-making and accountability events.

**2. Reporting frequency will also be influenced by the complexity and cost of data collection**. For instance, it is much easier and affordable to report on a process indicator for the number of workshop participants than an outcome indicator that measures behavioural change in a random sample, household survey (which entails more time and resources).

3. **Data may be collected regularly, but not everything needs to be reported to every- one all the time. For example:**

1. A security officer might want monitoring situational reports on a daily basis in a conflict setting
2. A field officer may need weekly reports on process indicators around activities to monitor project/programme implementation
3. A project/programme manager may want monthly reports on outputs/services delivered to check if they are on track
4. Project/programme management may want quarterly reports on outcome indicators of longer-term change
5. An evaluation team may want baseline and end line reports on impact indicators during the project start and end.
6. **Determine specific reporting formats**

Once the reporting audience (who), purpose (why) and timing (when) have been identified, it is then important to determine the key reporting formats that are most appropriate for the intended user(s). This can vary from written documents to video presentations posted on the internet. Sometimes the reporting format must adhere to strict requirements, while at other times there can be more flexibility. The IFRC has defined reporting templates for many technical areas, as well as for many donor reports and communications, with related links to the donor reporting web pages. Summarizes different types of reports (and formats) that may be used for reporting, and below we specifically discuss a recommended IFRC format for a project/programme management report.

**5. Plan for M&E human resources and capacity building**

An effective M&E system requires capable people to support it. While the M&E plan identifies responsibilities for the data collection on each indicator, it is also important to plan for the people responsible for M&E processes, including data management, analysis, reporting and M&E training. This section summarizes key considerations in planning for the human resources and capacity building for a project/programme’s M&E system.

**2.5.1 Assess the projects/programme’s human resources capacity for M&E**

A first step in planning for M&E human resources is to determine the available M&E experience within the project/programme team, partner organizations, target communities and any other potential participants in the M&E system. It is important to identify any gaps between the project/programme’s M&E needs and available personnel, which will inform the need for capacity building or outside expertise.

**Key questions to guide this process include:**

1. Is there existing M&E expertise among the project/programme team? How does this match with the M&E needs of the project/programme?
2. Is there M&E support from the organization implementing the project/pro- gramme? For instance, is there a technical unit or individuals assigned with M&E responsibilities to advise and support staff, and if so, what is their avail- ability for the specific project/programme?
3. Do the target communities (or certain members) and other project/pro- gramme partners have any experience in M&E?

It can be useful to refer to the discussions about the M&E stakeholder assessment and the M&E activity planning to guide this process. When available, any larger organizational assessment that has included M&E should be referred to for projects/programmes belonging to the organization. For example, the IFRC’s secretariat offers a planning, monitoring, evaluation and reporting assessment tool for National Societies and project/ programme teams, which can help assess the institutional understanding and practice of M&E for an implementing National Society or for the project/programme team itself.

**2.5.2 Determine the extent of local participation**

Ideally, data collection and analysis is undertaken with the very people to whom these processes and decisions most relate. This is an important principle for the Movement which prioritizes the involvement of local volunteers and communities. Often, local participation in M&E is expected or required, and building local capacity to sustain the project/programme is identified as a key objective of the project/programme itself.

**2.5.3 Determine the extent of outside expertise**

Outside specialists (consultants) are usually employed for technical expertise, objectivity and credibility, to save time and/or as a donor requirement. Clearly, and especially for external evaluators, experience, reliability and credibility are essential when considering whether or not to use outside expertise.

**Examples of when outside expertise is used include**:

* For the independent, final evaluation of all secretariat-funded projects/ programmes exceeding 1,000,000 Swiss francs (in accordance with the IFRC’s management policy for evaluations)
* As part of a joint, real-time evaluation for a disaster response operation involving the IFRC, OCHA (United Nations’ Office for the Coordination of Humanitar- ian Affairs) and other participating partners, such as CARE International
* To administer random samples for household surveys during a baseline or end line study
* For project/programme data entry and statistical analysis
* For the translation of project/programme documents

**2.5.4 Deﬁne the roles and responsibilities for M&E**

It is important to have well-defined roles and responsibilities at each level of the M&E system. The M&E plan identifies people responsible for the specific collection of data on each indicator, but there are other responsibilities throughout the M&E system, from data management and analysis to reporting and feedback. This will ultimately depend on the scope of the project/programme and what systems are already in place within the project/programme and/or the implementing organization.

**One key planning consideration is who will have overall management responsibility for the M&E system.** It is important to clearly identify who will be the primary resource person that others, internal and external to the project/ programme, will turn to for M&E guidance and accountability. This person (or their team) should oversee the coordination and supervision of M&E functions, and “backstop” (screen) any problems that arise. They need to have a clear understanding of the overall M&E system, and will likely be the person(s) leading the M&E planning process.

**2.5.5 Plan to manage project/programme team’s M&E activities**

Whether project/programme staff, volunteers, community members, or other partners involved in the M&E system, it is important to develop tools and mechanisms to manage their time and performance. As M&E plan helps define these roles and the time frames. It is also important to include this planning as part of the overall performance monitoring system for staff/volunteers. Other tools, such as time sheets, are usually available from an organization’s human resources (HR) department/unit. Finally, as with beneficiaries themselves, it is critical to up- hold sound, ethical HR practices in the management of staff and volunteers.

**Managing human resources** effectively has been identified as a considerable challenge in the humanitarian sector, where deployments of the right people with the right skills, to the right place at the right time is critical for successful operations. To facilitate this, the organization People in Aid’s Code of Good Practice seeks to “improve agencies’ support and management of their staff and volunteers,” which is critical to the success of delivering our work. The code has seven principles, around HR strategy, policies and practice; monitoring progress against its application seeks to, “enable employers to become clearer about their responsibilities and accountabilities, and help them become better managers of people, and therefore better providers of quality assistance.”

**2.5.6 Identify M&E capacity-building requirements and opportunities**

Once roles and responsibilities have been determined, it is important to specify any M&E training requirements. For longer-term projects/programmes, or those with significant training needs, it may be useful to create an M&E training schedule (planning table), identifying key training sessions, their schedule, location, participants and allocated budget.

M&E training can be formal or informal. Informal training includes on-the-job guidance and feedback, such as mentorship in completing checklists, commenting on a report or guidance on how to use data management tools.

**6. Prepare the M&E budget**

It is best to begin systematically planning the M&E budget early in the project/programme design process so that adequate funds are allocated and available for M&E activities. The following section summarizes key considerations for planning the project/programme’s M&E budget.

**2.6.1. Itemize M&E budget needs**

If the M&E planning has been approached systematically, identifying key steps and people involved, detailing budget items should be straightforward. Start by listing M&E tasks and associated costs. If a planning table for key M&E activities has been prepared, this can be used to guide the process. If there is a required format for itemizing budget items – e.g. within the implementing organization or from the donor – adhere to the format or an agreed-upon variation. Otherwise, prepare a spreadsheet clearly itemizing M&E expenses. It is particularly important to budget for any “big-ticket items”, such as baseline surveys and evaluations.

**Examples of budget items include:**

**Human resources.** Budget for staffing, including full-time staff, external con- sultans, capacity building/training and other related expenses, e.g. transla-tion, data entry for baseline surveys, etc.

**Capital expenses**. Budget for facility costs, office equipment and supplies, any travel and accommodation, computer hardware and software, printing, publishing and distributing M&E documents, etc.

In addition to itemizing expenses in a spreadsheet, a narrative (description) justifying each line item can help guard against unexpected budget cuts. It may be necessary to clarify or justify M&E expenses, such as wage rates not normally paid to comparable positions, fees for consultants and external experts, or the various steps in a survey that add up in cost (e.g. development and testing of a questionnaire, translation and back-translation, training in data collection, data collectors’ and field supervisors’ daily rates, travel/accommodation costs for administering the survey, data analysis and write-up, etc).

**2.6.2 Incorporate M&E costs into the project/programme budget**

Costs associated with regular project/programme monitoring and undertaking evaluations should be included in the project/programme budget, rather than as part of the organization’s overhead (organizational development or administrative costs). Therefore, the true cost of a project/programme will be reflected in the budget. Otherwise, including M&E costs as an administrative or organizational development cost may incorrectly suggest inefficiencies in the project/programme and the implementing organization, with donors reluctant to cover such costs when in reality they are project-related costs. Ideally, financial systems should allow for activity-based costing where monitoring costs are linked to project/ programme activities being monitored.

**2.6.3 Review any donor budget requirements and contributions**

Identify any specific budgeting requirements or guidance from the funding agency or implementing organization. If multiple funding sources are utilized, ensure that the budget is broken down by donor source. Determine if there are any additional costs the donor(s) will or will not cover, such as required evaluations, baseline studies, etc. Check with the finance unit or officer to ensure the budget is prepared in the appropriate format.

**Q.3. WHY IS FEEDBACK AN IMPORTANT COMPONENT OF PROJECT MONITORING AND EVALUATION?**

M& E systems provide important feedback about the progress, as well as the success or failure, of projects, programs, and policies throughout their respective cycles. These systems constitute a powerful, continuous public management tool that decision makers can use to improve performance, and demonstrate accountability and transparency with respect to results. One way of consider M&E feedback within the development context is as follows: Evaluation feedback has been broadly defined as dynamic process which involves the presentation and dissemination of evaluation information in order to ensure its application into new or existing development activities, feedback as distinct from dissemination of evaluation findings, is the process of ensuring that lessons learned are incorporated into new operation” (OECD 2001,p.60).  
Monitoring and evaluation can provide a wealth of knowledge derived from experience with development cooperation in general and specific programmes and projects in particular. It is critical that relevant lessons be made available to the appropriate parties at the proper time. Without good feedback, monitoring and evaluation cannot serve their purposes. In particular, emphasis must be given to drawing lessons that have the potential for broader application, i.e., those that are useful not only to a particular programme or project but also to related interventions in a sector, thematic area or geographical location.

A sound project M&E system requires six main components which together help to ensure that M&E is relevant to the project, within the capacity of the project management organization, and is used to good effect. Each is considered briefly below.

1. **Clear statements of measurable objectives for the project and its components.**

Projects are designed to contribute to long-term sectoral development goals, but at the level of project purpose their outcomes should be quite specific and complete. Thus, for example, an irrigation project may be designed to further the sectoral goals of increased agricultural productivity, farm incomes and rural employment, but have a project purpose of providing an increased and more reliable irrigation supply through rehabilitation or modernization of an irrigation system. Objectives at the level of project purpose should be specific to the project interventions, realistic in the timeframe for their implementation and measurable for evaluation.

**(2) A structured set of indicators covering: inputs, process, outputs, outcomes, impact, and exogenous factors**.

Indicators provide the qualitative and quantitative detail necessary to monitor and evaluate progress and achievements at all levels of the project hierarchy. The ability to define an indicator, and agree with partners and stakeholders a target and the timing for its achievement, is a demonstration that project objectives are clearly stated, and are understood and supported.

**(3) Data collection mechanisms capable of recording progress over time, including baselines and a means to compare progress and achievements against targets**.

Within project M&E systems there will be a need to collect information of the baseline situation and for measurement of change over time for the indicators selected. It is vital to think about the sources of data, the reliability of that information and the costs and responsibilities.

Data sources for indicators can be primary or secondary. Primary data are collected directly by the project team or agency concerned, whilst secondary data have been collected by other organisations for purposes not specific to the project concerned.

Use of secondary rather than primary data has both advantages and disadvantages. On the positive side its use can be more cost-effective, and for many project situations it may simply be too costly to collect detailed primary data when this would require a large and costly household survey, or alternative data collection method of comparable cost. On the negative side, secondary data may have limitations if the purpose for which it was collected does not match well with the purpose intended for project M&E. The validity and reliability of the data must be considered, trying to identify any sources of bias and inaccuracy that may have arisen during its collection.

**Potential problems with secondary data can arise in a number of ways. For example:**

1. Incomplete coverage of the specific project area
2. Inability to disaggregate the data to match the boundaries of the project area or sub-areas
3. Inability to disaggregate the data to match the project affected population or sub- groups
4. Inconsistencies in data collection in surveys implemented in different areas, by different teams or in different time periods (eg interviewing of household members in one survey and only household heads in another, or use of crop cut measurements for yield in one survey and farmer estimates in another)
5. Inaccuracies arising from inappropriate choice of measurement and collection methods or inadequate training and supervision of data collection staff Problems such as these may, when severe, invalidate any comparison intended to reveal and measure change in project outcomes and impact. To address such issues M&E plans should explain and justify the proposed approach and ensure consistency in methods. The complexity of the statistics and the problems of attributing causality may mean that it is often more cost effective and appropriate to use leading indicators such as delivery of services and beneficiary response as proxies, and at least as a complementary if not sole source of evidence, rather than to attempt to evaluate project impact using only secondary data sources.

**(4) Where applicable, building on data collection with an evaluation framework and methodology capable of establishing causation (attribution).**

As part of the growing emphasis on impacts and results, more attention than ever is now being given to rigorous impact evaluations that seek to discover how effective particular types of intervention or policy are at achieving their goals – for example, the effectiveness of free school meals in raising school attendance, or the impact of microfinance programmes on rural poverty rates. Driven by a desire for a better understanding of what does and what does not work in development, a small number of projects are even intended from the outset to serve as experiments to test the effectiveness of a particular development tool. Many of these involve randomized control trials (RCTs), in which project beneficiaries are randomly selected so that the outcomes for this group can be subsequently compared with those for a control group that did not benefit from the project, much in the way medical treatments are tested.

There are many different ways of trying to analyses the impact of an intervention. The choice will depend upon whether the need for such an analysis was fully recognized at the project design stage (so as to allow RCT, for example), upon the type of intervention being investigated, and the sorts of questions that need answering (Rogers 2009). We do not have the scope to examine the different techniques in this module, however, you should be aware that, whilst RCT is the most publicized one, and some would argue, the most rigorous technique, it is not the only one.

**(5) Clear mechanisms for reporting and use of M&E results in decision- making.**

There are a range of possible users for the results of monitoring and evaluation of development projects. These include primary stakeholders, the project management organisation, government agencies, other implementing partners, and donors. Clear feedback mechanisms are important if the purposes of M&E are to be achieved. Providing the right information in the right place and right form to be used by the right person in decision-making is the ultimate aim.

A good flow of information is also closely linked to the development of accountability within the project, sector, government, and donor. In many countries, information on projects and programmes is poor and difficult to access, and the mechanisms for feedback are weak or nonexistent. The highest payoffs to evaluation arise at the policy and programme level, but project-level evaluation offers an easier and less sensitive starting point in many instances. Information from monitoring and evaluation can be used to demonstrate accountability and to promote knowledge transfers and adaptive learning in government agencies and other organisations.

The uses of the information and the feedback mechanisms need to be structured and scheduled according to the needs of managers and other partners and stakeholders. For example:

Project management will need to monitor expenditure and progress against schedules, weekly and at least monthly.

1. Outputs are unlikely to be measurable at less than three-monthly intervals, and some may need much longer.
2. Consultations with beneficiaries, or surveys of their satisfaction with project services, should be timed to supply information to use in planning project activities.
3. The time period for reporting may vary with the level of management: for example, monthly at district level, quarterly at regional or state level.

**(6) Sustainable organizational arrangements for data collection, management, analysis and reporting.**

In terms of organizational arrangements there is no single correct way to build a project M&E system. Projects vary in their characteristics and requirements, and countries and organizations are at different stages of development with respect to good public management practices in general, and M&E in particular. It is also important to recognize that M&E systems are continuous works in progress that must be flexible and adaptable to changing needs and circumstances.

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