Assignment 1:   
Monitoring And Evaluation: M&E

Safa’a Fares

Strategia Netherlands

1. **Giving examples differentiate between Monitoring and Evaluation**

**Monitoring and Evaluation**

Monitoring and evaluation (M&E) are two crucial inputs for any project execution. The nature of the relationship between these processes takes an interdependent form, thus they are often considered and categorized as the same process. Both identify what does and does not work, how it works, and why. However, M&E are distinct processes, which will be outlined below through the definition of each (Felipe & Rhee, 2014)

**Monitoring**

Can be defined as a continuing function that aims primarily to provide the management and main stakeholders of given project with early indications of progress, or lack thereof, in the achievement of results. It helps organizations track achievements by a regular collection of information to assist timely decision making, ensure accountability, and provide the basis for evaluation and learning (World Bank, n.d)

Monitoring Therefore, **it** tackles the project objectives / activities / performance progress in a micro-efficient approach through observation performed by supervisors on the operational level*.* It is a routinely ongoing process throughout the project.

We monitor during the project implementation, on a daily basis: how the targets are being fulfilled and whether they are being implemented according to plan. If the numbers, inputs and performance indicate different results than planned, then, instant intervention and required action are in place. Thus, monitoring is short-term and looks for process indicators during the routine ongoing and continuous project implementation through direct intervention to report and gather data.

**Evaluation**

Is the systematic and objective assessment of an on-going or completed project, and its design, implementation and results. Its aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact, and sustainability ("Guidelines for project management specification", 2009, p. 14).

An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision making process of both recipients and donors ("Guidelines for project management specification", 2009, p. 16).

Evaluation, therefore,tackles the project achievements/ implementation process / recorded information in a macro-effective approach through judgment performed by managers on a business level. It is the periodic assessment of the project’s overall achievements.

The evaluation process is conducted after the activities are concluded and the project is done. We evaluate how much of the intended results are achieved by analyzing the numbers, targets, outcomes and impacts. We assess the what, why and where the bottlenecks of the project processes and implementations through conducting a comparison with the established standards and initial intended results. Thus, evaluation is long-term and looks for outcome indicators (gathered and reported by ongoing monitoring) during periodic assessment to critically test and measure the design, implementation and results of the project.

**Example 1: Health Care**

**Objective of the Project**

Ensuring that Diabetics are getting their necessary healthcare services.

The health care projects tackles primary healthcare in Lebanon, its objective is to ensure that people with Diabetes are getting their necessary healthcare services (MOPH, 2014).

***Monitoring.*** Takes place by checking routinely if the patients are getting the needed services according to the given guidelin*es* through checking the process indicator*.* In this case, the process indictor requires diabetics receive two HBA1C tests per year (MOPH, 2014).

***Evaluation.*** Data collected through the above process indicator (two HBA1C tests per year) will help us asses the new health status of the diabetics and the extent of improvement and change in their glucose level.

Thus the outcome indicator in this case the Good Glucose Level Indicator will measure the extent of change that we are making in the glucose level of each diabetic person after getting their necessary services for one year.

**Example 2: Solid Waste Management (SWM)**

**SWM**

In Lebanon SWM is funded by European Union (EU), the project aims to Improve the overall efficiency and effectiveness of Waste Management by building and upgrading SWM infrastructures including sorting and composting facilities to ensure that incinerations are a solution for the late solid waste crisis in Lebanon (OMSAR, 2005)*.*

***Monitoring****.* This project is monitored by first**,** spreading awareness campaigns to inform and teach about recycling. Second, conducting routinely scheduled and frequent unexpected field visits to the plants to inspect the sites’ operations (process indicators): waste collection, sorting, dumping and composting. After that, the inspector will fill a report of a checklist inspecting process and performance indicators.

The checklist will provide data about the working hours of the plant, the machinery status according to the terms of reference (TORs), the site & surrounding cleanliness, the waste input (calorific value of the wasteindicator), the emissions standards, the sorting/shredding area and composting area*.*

Thus, monitoring of the facility operations helps track the achievement of the specific goals set forth in the contract, namely:

* Sorting minimum of 10% of total household waste as recyclables
* Producing compost of Grade B quality
* Producing compost equivalent to a minimum of 20% of total organic waste sorted
* Disposing a maximum of 35% of total incoming waste in landfills*.*

***Evaluation*.** Gauging the recycling practices and change of the citizens’ behavior after the awareness campaigns spread.Assessing the health and environmental impact through the inspector’s reports, checklists, data and monitored inputs observed during the field site visits to the plant.

This provide feedback about how effective are the incinerators to the solid waste management project. Some specific outcome indictors that help in the assessment process are the quality of the compost generated, the kind of secondary fuels produced, solid waste residues (bottom and fly ash), levels of air pollution (Flue Gases Emissions indicator that measures the total dust), the hazardous substances and the odor produced.

Thus, evaluation of the results from the monitoring activities gives rise to possible successes and weaknesses in the overall design of the facilities and/or their operations. As such, the evaluation of the quantitative results of the sorting, composting, and landfilling could play an important role in finding possible drawbacks in the operational efficiency of the contractor, thus it helps put recommendations for corrective measures.(OMSAR, 2005).

1. **Why is Baseline survey an important part in Project Management?**

The Baseline survey provides an overview of the status quo, which in turn helps in setting SMART (**S**pecific, **M**easurable, **A**ttainable, **R**elevant, **T**ime-bound) targets for a given project.Thus, the importance of Baseline survey in project management can be derived from the lead role it plays in the project.

It acts like the foundation and infrastructure of the action plan of the project. As the word itself implies, baseline provides the base grounds of where, who, what, why and how to start the implementation after the initial current pre- project data surveyed has been collected, measured and assessed. Baseline survey thus informs us about the current status at 0 starting point of the project implementation. It is a step that paves the road for Monitoring and Evaluation.

According to the baseline survey diagnosis, monitoring and evaluation will prioritize and choose the focal indicators in the process performance and implementation. Baseline data, in short, serves as a benchmark for measuring project success or failure.

The new post- project status will be compared to the initial pre project to measure the impact accordingly efficiently and effectively. To ensure the reliability of such comparison, the same tools used in the initial pre project implementation baseline survey are used in the post project implementation evaluation process; ensuring that apples are being compared to apples.

Based on the above, we can conclude the importance of a baseline survey to project management. It is the compass of the monitoring and evaluation process. Unless we know where we are at point 0 of the project implementation, we can never know where and how far we progressed at evaluation point.

For example, in the case of waste management project in OMSAR, the baseline survey would be conducting a waste characterization to understand the nature and quantity of solid waste generated in a given region, and analyze the fate of these waste; whether they are treated, recycled, and/or disposed. As such, the targets set would be to improve the status quo, for example through increasing the level of treatment and sending less waste to landfills (OMSAR, 2004).

1. **Distinguish between Summative and formative evaluation Methods with examples.**

Evaluation Process rotates around two broad methods for gathering information and data collection; formative (processes), and summative (outcome) methods.

According to Jacobs (1988), the method adopted depends on the stage of the project implementation. Thus it is very crucial to know the stage of development of the program being evaluated to decide whether formative or summative method that is required at that specific period of time.

**Formative Evaluation**

Accompanies project program implementation at the very early stages - as the name implies “Forming”. In fact, it starts asking questions with the birth of the program to provide the right information needed to proceed with the program operation and implementation. It is an ongoing process all through the project implementation with set outputs to provide an instant feedback to direct us and alert us for any changes or direct interventions required. Information and data collection can occur at multiple intervals: before, during, and after the project implementation. Thus the focus of formative method is “program improvement” mainly at the operational level for staff to carry out and proceed with their execution plan.

**Summative Evaluation**

Asks its questions at the end of the project implementation. Once the program is concluded, summative - as the name implies “Summing”- jumps in to evaluate the achievements, the success of the project implementation and the extent of the initial project goals accomplished.

Summative evaluation is conducted mainly at two intervals: “End Evaluation” at the end of the program completion and “Ex-post Evaluation” after some period of time (2-5 years) that passed on the project overall. Thus the focus of summative method is “program outcome and impact” mainly at the purpose level for all beneficiaries to carry on and take in the lessons learnt from the program.

**Example: Educational Program 1 by ANERA**

**Objective of the program**

Is giving access to educational and learning opportunity to the Syrian and Palestinians refugees in Lebanon.

The program has a specific outcome. Which is, having the youth enhance their literacy and numeracy skills with life skills. Along with a bigger outcome of havingthe youth (mainly who are out of school) to reach a level of literacy and numeracy that will allow them to either enter back to school, to find alternative higher education (vocational training) or, to find better job opportunities (Kasturiarachchi, 2009).

***Formative evaluation.*** Will be based on two tests*:* first, the Placement test that will tell us about the level (e.g. Arabic Level 1, Math Level 2, English Level 0, Computer Level 2) of each student. Thus students will be classified according to their literacy level at each interval (3 Months). Second, the Exit test that informs us who passed and who failed the assigned level in that interval.

The Placement and Exit tests are formative assessments that allow us to examine whether:

1. the youth has gained particular learning outcomes
2. our courses are giving youth the information and teaching methodology needed to move to the next level

The main goal is to create pathways for vulnerable youth either to continue their education of find better job. To assess the outcome of the program (pathways for youth) we need a ***Summative evaluation*** to ensure: whether the goals have been actually achieved, to what extent, what are the ways to improve, the reasons why something wasn't achieved (Kasturiarachchi, 2009).

Therefore, a “Tracer Survey” is conducted after the course completion to trace the achievements and impact of the program. The Tracer Survey administers the youth 3 months after each course is completed where each student is called back and asked a list of questions to see what they are doing after they have finished the course.

1. **Monitoring and Evaluation uses both qualitative and quantitative methods to measure the success and impact of the projects. However, economists and statisticians adapt a one sided method (quantitative) to analyze the results**
2. **Identify the potential dangers of a one sided monitoring system**
3. **Critically analyze the quantitative method often employed by economists and statisticians in monitoring and evaluating development projects**

**Quantitative and Qualitative Methods**

Quantitative and Qualitative methods are two research tools that provide data collection for Monitoring and Evaluation system to measure and assess the impact of project.

**Quantitative method**

Tackles objectively the who, how much and how many where quantitative indicators are statistical measures that measure results in terms of number, percentage, rate (example: birth rate—births per 1,000 population) and ratio (example: sex ratio—number of males per number of females). (Kasturiarachchi, 2009).

**Qualitative method**

Tackles subjectively different questions of “why”, and the “type of effect on an individual, or group”. In other words, qualitative indicators reflect people’s judgments, opinions, perceptions and attitudes towards a given situation, subject, or variable.

They can include changes in sensitivity, satisfaction, influence, awareness, understanding, attitudes, quality, perception, dialogue or sense of well-being (Kasturiarachchi, 2009).Qualitative indicators measure results in terms of: Compliance with, quality of, extent of, and Level of the variable studied. (Kasturiarachchi, 2009).

Although each method can be adopted separately depending on the information needed and resources available, it is strongly recommended that M&E is conducted with a mix of the two methods. Obviously data is collected in various ways, thus, no one methodology is inclusive of all.

Since each method has its own identity, value, importance, advantages, limitations and skills, both methods are in no position to be compared or considered competitors. In short, a reliable program management does not infer to “Quantitative OR Qualitative”; it should rather strive to “Quantitative AND Qualitative”.

However, with the continuous call for using mixed methods, it is still very common to find among project management that one sided method is being adopted. This is of course due to many reasons: 1) the high cost of survey research limits the evaluation to allocate the budget to a one single approach, 2) time constraint for data collection, 3) researchers are usually trained on one method and will by default perceive only the relevance and importance of the method they are experienced with.

For example, in the case of economists and statisticians who work best with numbers, they prefer quantitative method. Data quantified and reduced down to numbers are easily interpreted, compared and put down into graphs and charts that allow them to correlate findings to draw conclusions on how one thing affects the other.

Economists and statisticians will rely on numbers only (quantitative indicators) making their evaluation objective and valueless ensuring to detach their feelings and judgments from any findings to quantify them. They just need mechanical methods that are theoretically expected to give the same results, no matter who measures them.

With the above preference, a critical drawback arises to the surface. The quantitative doesn’t really reflect a comprehensive evaluation or the reality of the circumstances. For example, how much a poor community is empowered may not be measured in strict quantitative terms. But they can be graded based on qualitative findings. Dr. Peters (2018) explains best the dependability of the two methods on one another: Indeed, one of the most common uses of qualitative data is to help explain or add perspective to quantitative data (Peters, 2018).

As per UNDP, a frequent weakness seen in formulating indicators is the tendency to use general and purely quantitative indicators that measure number or percentage of something; for example, percentage of recyclables collected through the sorting process.

These are often weak indicators as they merely communicate that something has happened but not whether what has happened is an important measure of the objective. As such, the qualitative monitoring would help in identifying the extent of compliance and quality of work (Kasturiarachchi, 2009).

As an example, in the solid waste management program at OMSAR, the monitoring is done through both quantitative and qualitative indicators. The latter is executed through frequent inspection visits to the mechanical and biological treatment facilities of household waste in order to observe the quality of operations and check the extent of compliance with the previously set regulations in the terms of reference. Hence, along with the quantitative measurements of the facility outputs (quantities of recyclables, compost, and rejected waste); one can better understand the reasons behind given weaknesses in the project implementation process.

**5. a. Define Logical Framework**

**b. Define and Explain key components of Logical framework**

We have established the importance of Monitoring and Evaluation to the project development. We have explained the different methods of evaluation (formative and summative) and data collection tools (quantitative and qualitative). We have defined our status at level 0 of the project implementation through the baseline survey.

Yet we have not designed the logical way to work out the plan within the frames of the stakeholders’, donors’ and beneficiaries’ values. A crucial section of any proposal to the donors will require the analytical approach to fulfilling the objectives, and the first thing an evaluator will request upon implementation would be the structure and framework of the project. This brings us to introduce and define Logical Framework.

**Logical Framework**

**(Logframe) (Appendix A)**

As defined by OECD, itis a snapshot of a project’s design, including the goal, outcomes, outputs, and activities ("DAC Glossary of Key Terms and Concepts", n.d).

To carry out effective monitoring and evaluation systematically, it is essential to have a clear framework agreed upon among stakeholders at the end of the planning stage (Kasturiarachchi, 2009).

This framework serves as a plan for monitoring and evaluation and as an overview of the objectives, activities and resources of a project. It also provides information about external elements that may influence the project, known as assumptions and tells you how the project will be monitored, through the use of indicators.

Logical Framework presents its information and summarizes its analytical approach in a matrix form (see appendix A) - table with four columns and four rows that form the key components of the log frame.

The first column represents the projects hierarchy of objectives hence referred to as project logic (vertical logic). It shows the effect of activities at the bottom of the table working its way up to the outputs, then outcomes to reach the goals. The table shows that every lower level works towards achieving the higher level.

Thus the vertical logic or “project logic” means that one thing leads to another: the activities lead to tangible outputs, the outputs lead to the project’s outcomes, the outcomes contribute to one or more goals *("What is a logical framework?", 2014).*

We describe the project’s logic in the first column assuming that everything goes well. But in reality this is mission impossible, so we should take precautions to deal with the risks as best as we can. The first column (objectives) and last column (assumptions) together form the horizontal logic.

Thus the horizontal logic is the relationship between the first and fourth column and is as follows: 1) When we do the activities, and our assumptions hold, we’ll achieve the expected outputs, 2) when the outputs are achieved, and our assumptions hold, we’ll realise the project’s outcome, 3) When the project’s outcome is attained, and our assumptions hold, we’ll contribute to the listed goals.

Once the project objectives have been specified and their level described, *indicators* in the second column are needed to measure what have been achieving. Meanwhile, third column represents the tools required to measure the indicators known as Means of Verification.

According to OECD Glossary of Key Terms in Evaluation and Results Based Management, the key components of the logical framework mentioned in the table (appendix A) are defined as:

**Goal:** Overall objective of a given project (betterment of quality life, enhanced public health and environmental safety)

**Outputs:** The products, capital goods, and services that result from a development intervention (increased sorting rate for recyclables).

**Outcomes:** The likely or achieved short-term and medium-term effects or changes of an intervention’s outputs (increased awareness in the community for better sorting from the source).

**Activities:** Actions taken or work performed (operation of the facilities)

**Indicators:** Indicators are meant to provide a clear means of measuring achievement, to help assess the performance, or to reflect changes. They can be either quantitative and/or qualitative. A process indicator is information that focuses on how a program is implemented (rate of sorting).

**Means of Verification:** These identify the data collection methods to monitor the achievement of the indicators (for example, inspection visits).

**Assumptions:** Theseindicate the expectations about the project implementation within its contexts pursuant to the intended outputs and outcomes (for example, the political stability, the technical capacity of the facility operator which is assumed to be up to the standards).

Appendix A

**Standard Template for Logical Framework Matrix**

|  |  |  |  |
| --- | --- | --- | --- |
| Objectives | Indicators | Means of Verification | Assumptions |
| Goal |  |  |  |
| Outcomes |  |  |  |
| Outputs |  |  |  |
| Activities |  |  |  |

Reference:

A. (2018, November 01). American Near East Refugee Aid. Retrieved from https://www.anera.org/)

Bullen, P. B. (n.d.). How to write a logical framework (logframe). Retrieved from http://www.tools4dev.org/resources/how-to-write-a-logical-framework-logframe/

Felipe, J., & Rhee, C. (2014). Issues in modern industrial policy (II): Human capital and innovation, and monitoring and evaluation. *Development and Modern Industrial Policy in Practice,*51-69. doi:10.4337/9781784715540.00010

DAC Glossary of Key Terms and Concepts. (n.d.). Retrieved from http://www.oecd.org/dac/dac-glossary.htm

Kasturiarachchi, A. (2009). *Handbook on planning, monitoring and evaluating for development results*. New York: United Nations Development Programme.

M. (2014, December). MOPH - Integration of Non-Communicable Disease Services within Primary Health Care. Retrieved from https://www.moph.gov.lb/

Orlando, A., Ms. (2013, February 8). Quantitative & Qualitative Indicators. Retrieved from <http://monitoringevaluation.weebly.com/quantitative--qualitative-indicators.html>

Peters, B., Dr. (2018, June 15). Qualitative Methods in Monitoring and Evaluation: Thoughts Considering the Project Cycle. Retrieved from https://programs.online.american.edu/msme/resource/qualitative-methods-project-cycle

Programme management. Guidelines for project management specification. (2009). 14-16. doi:10.3403/03205047u

Sera, Y., & Beaudry, S. (2007). Monitoring & Evaluation - World Bank. Retrieved from http://siteresources.worldbank.org/INTBELARUS/Resources/M&E.pdf

O. (2005). Solid Waste Management Program. Retrieved from http://www.omsar.gov.lb/Cultures/ar-LB/Programs/eu/SolidWaste/Pages/default.aspx

What is a logical framework? (2014, May 09). Retrieved from https://www.logframer.eu/content/what-logical-framework

What is Monitoring and Evaluation? (n.d.). Retrieved from http://ieg.worldbankgroup.org/what-monitoring-and-evaluation