Capacity Building Programme for the Officers of Government of Meghalaya under P. A. Sangma Fellowship for Legal & Policy

Resource Pack
Basic Readings on Project, M&E and Indicators

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1.Understanding Project

We are constantly working on a variety of projects. These projects could be related to health, education, livelihoods, child rights depending on the organisational mandate and mission. At any given time, an organisation may be working on multiple projects as well. To understand a project, let us take a look at what we do when we work on projects.

1.1 What is a Project?

A project visualizes **'a number of activities'** to be carried out over the course of the project period. Activities are 'what we do' in a project and form the main field of action. When we design a project, we plan the activities keeping in mind a **'specific purpose'** or objective in mind. What this objective is depends on what the project seeks to achieve, and may differ from project to project. However, every project has a 'specific objective'.

Another aspect that characterizes a project is the time duration. Each project has a **'definite start'** and a **'definite end'**. What is being sought as the objective is to be achieved within the stated project period. *We do not speak of projects extending indefinitely, do we? Can we say that the specific objective is to be achieved in the specific time?*

Last but not the least, what about the **'resources'** (financial, human and physical) that we employ to implement the activities in a project? Are they also fixed? The answer is yes. A resource, by definition, is scarce and has an alternative use. We, therefore, have resources apportioned to meet project requirements that are very 'specific' in use. It likewise follows that resources are deployed in a project according to what is best needed for attaining a specific objective within a specified time.

How do we define a project?

1.2 How do we define Project objective? Is it Objective or Objectives?

So far, we know that each project has a set of activities that are executed within a specified time, using given resources. And these objectives we know are directed towards realizing a particular objective. *But how many 'objectives' should a project have?*

One Project

One Objective

Projects are meant to break down a **large problem into its smaller parts**. Each problem is then addressed one at a time in a single project. Therefore, each project ideally should have only one objective and a well-designed project is one, which is able to clearly articulate its objectives.

Thus, coming back to the question of how many 'objectives' should a project have? One or many? **The answer is one.**

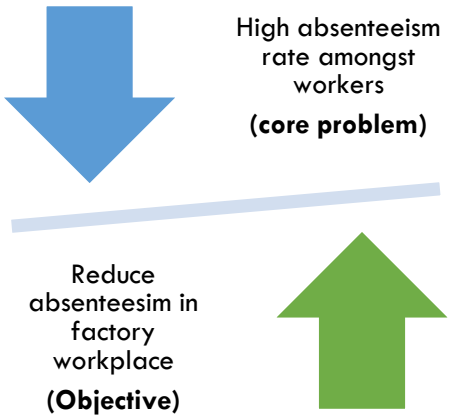
Example:

What is the objective of the project "Sewing for a Brighter Future"?

To ensure that the garment factory workers have increased knowledge, access to and use of information and services for key focus areas which are: sexual and reproductive health, HIV/AIDS, nutrition and hygiene, maternal and new-born health, financial literacy, sexual harassment.

1.3 What is an Objective?

In the example above, we wrote that the objective of the project is to ensure that the garment factory workers have increased knowledge, access to and use of information and services for key focus areas. *How did we come up with that statement?* Because the core problem is that there is a high level of absenteeism due to issue of health and wellbeing. Reduction in absenteeism means making sure a quick recovery with proper access to health services or services relating to other focus areas causing absenteeism.



It is because the project objective is nothing but an inverted image of the problem that the project is trying to address.

The problem here is high absenteeism rate amongst workers and the solution is reducing absenteeism by enhancing knowledge, access and use of information and services.

Further, we are often told that the symbol of a good project objective is its SMART character.

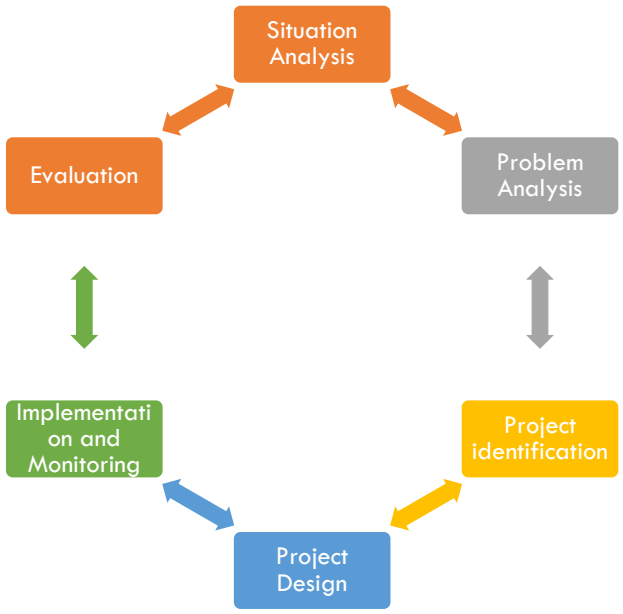
Specific	Measureable	Attainable	Realistic	Time-bound

Can we develop a SMART objective for what we want to achieve?

1.4 What are the different stages of a project?

We all know that all projects follow a sequence in the way they are planned and carried out. Understanding the project cycle is key to designing, planning and executing our work better. Let us look at the project cycle in this context.

A generic program cycle with its various stages looks like this:



Stage 1: Situation Analysis
To identify what is 'wrong' with the given context that needs to be addressed through the project interventions

Stage II: Problem Analysis
To identify possible causes of the situation or problem

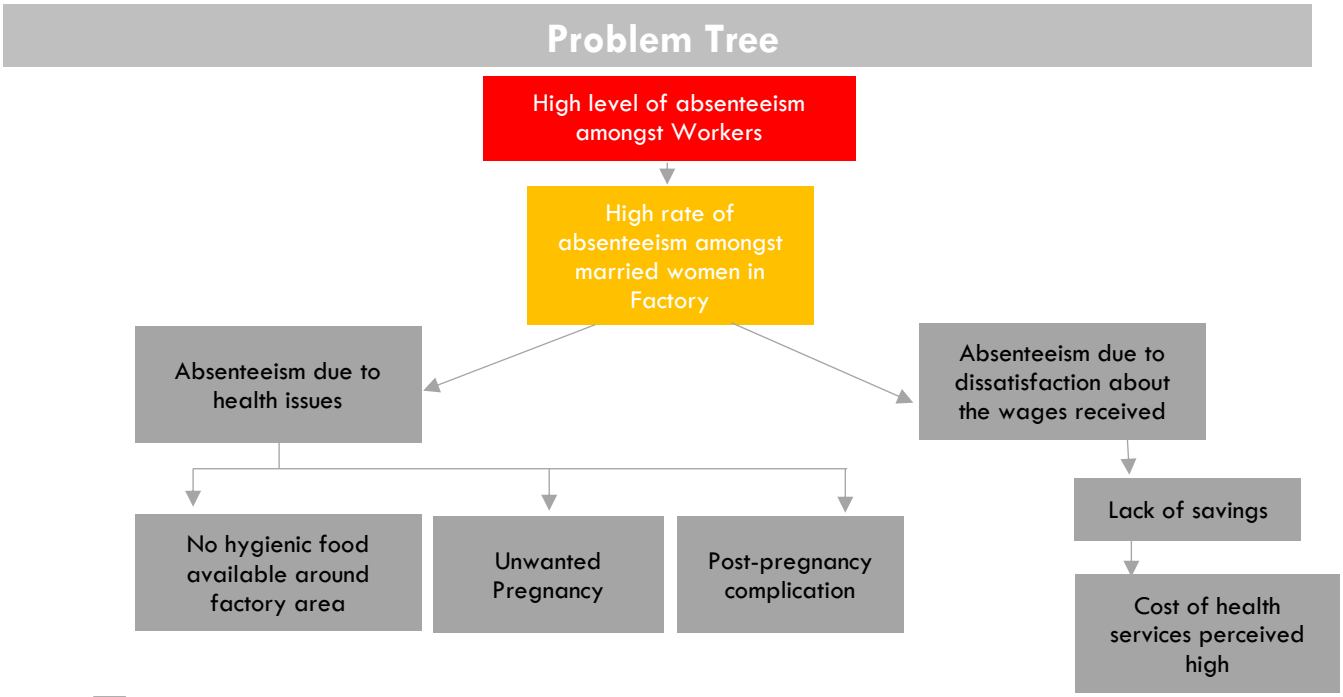
Stage III: Project Identification
We cannot tackle all the problem. This stage will help identify problem the project can address

Stage IV: Project Design
This stage will help identify project strategy, stakeholders, plan activities and allocate resource

Stage VI: Evaluation
Upon completion of all the project activities, Evaluation helps take stock of whether the situation has changed or not

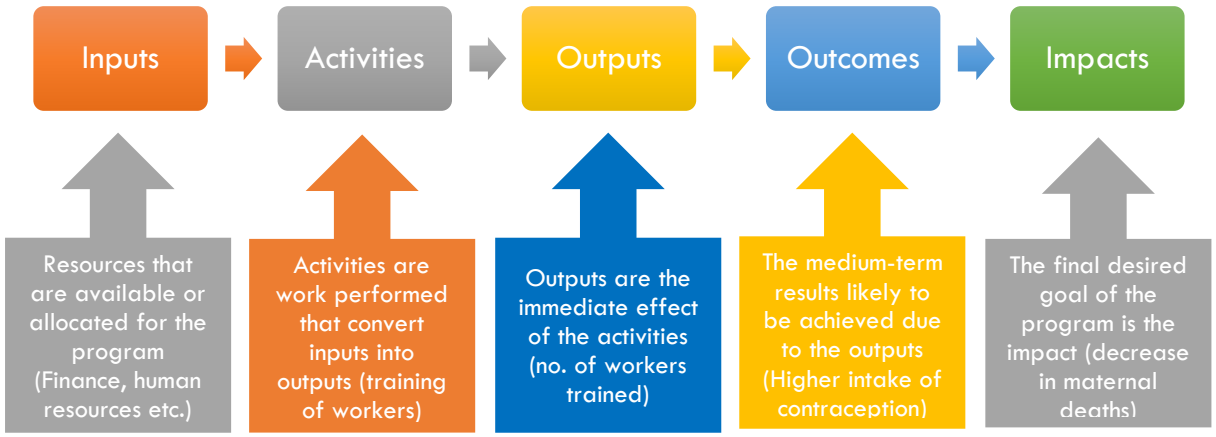
Stage V: Implementation and Monitoring
In this stage, the activities are executed and progress of activities is monitored to ensure project is on track

Example of a problem tree for problem Analysis



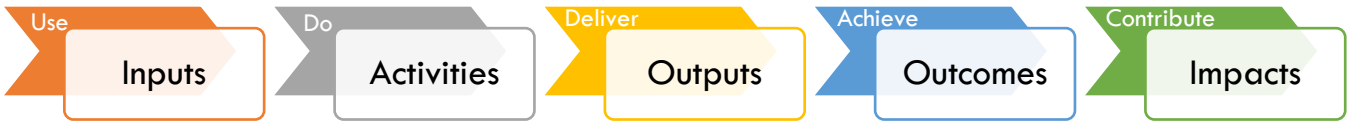
1.5 Results Chain

Once we identify the core problem that our project is going to address vis-à-vis the objective, the next thing to do is to develop a results chain for the project. **Result Chain is a sequence of changes from use of resources to perform certain activity to final outcomes or impacts**. A results-chain has the following hierarchical levels:



To summarize, we can say that a results chain is a logical and causal sequence of inputs, activities, outputs, outcomes and impact that outlines how a program achieves its intended goals. Usually in a program, there are multiple results and chains that are envisioned, meaning there will be more causes leading to an effect which needs to be considered.

Let us design a results chain for the project "Sewing for a Brighter Future". Remember the **logic (if-then) or (cause-effect)**



2.Understanding Monitoring and Evaluation

2.1 What is Monitoring?

Monitoring essentially is the process of **tracking of implementation of activities** of the project and attainment of planned outputs. It is the process of systematically collecting data in order to provide information for all stakeholders (managers, funders, participants) on the progress of implementation and the achievement of desired outcomes.

Critical Functions of Monitoring

1. Gather feedback from Participants
2. Analyse contextual changes
3. Provide an early warning system of potential challenges
4. Provide information to make informed mid-term programmatic changes

2.1.1 Monitoring Typologies

Questions	Clarification
1. Is monitoring done internally or externally?	It is undertaken by the 'doers' or the project implementers themselves hence internal. However, implementers can choose to involve external parties, often called as external monitoring
2. How frequently should monitoring be conducted?	Depends on the project objective, outputs and outcomes envisaged. it can be daily, weekly, monthly, quarterly
3. Do communities engage in monitoring?	If the project implementers restrict the monitoring process all to themselves, it is **non-participatory monitoring.** The communities here just remain mere information providers and have no role in analysing the information and providing inputs for project implementation. In case of **participatory monitoring,** communities and project stakeholders engage in providing inputs for program implementation.
4. What is Process Monitoring?	Process Monitoring falls under the overall evaluation of a project. It systematically assesses the levels of intervention, activities conducted and related outputs and outcomes, tracking the change trajectory and efficiency of the project.
5. What is Progress Monitoring?	Progress monitoring is a periodic assessment of the project results. The data collected is analysed periodically to track changes made by the project.

2.3 What is Evaluation?

Evaluation is the **assessment of outcomes and impacts**. It is to answer the question that whether the envisaged outcomes and goals have been achieved or not. And secondly, whether the achievement is because of the project interventions or not.

Critical Functions of Evaluation

1. Evaluation establishes the cause-effect relationship between the activities and outputs with the objectives and goals
2. Assess the results to see whether the achievement is because of the project or not

2.3.1 Evaluation Typologies

Questions	Clarification
1. Is Evaluation done internally or externally?	Evaluation is an external activity usually done by those external (individuals/agencies/institutions) to the project. However, the project implementers may undertake evaluation all by themselves. In such a case evaluation is internal evaluation.
2. How frequently should Evaluation be conducted?	Evaluation per se is a less frequent activity generally undertaken at completion of a project for assessment of attainment of objectives. This is the **post-project or post-facto evaluation**. If the project duration is long a **mid-term evaluation** is undertaken.

2.4 Monitoring Versus Evaluation

To put in simple words, monitoring is to see "what we are doing" whereas evaluation is to assess "what we have done". Some of the distinctions between M&E are given in the matrix below.

Monitoring	Evaluation
▪ Systematically tracks down the key elements in the performance of a given program/project	▪ Sequential validation of change in the results proposed that may be attributed to the program/project
▪ Focuses on activities and outputs	▪ Focuses on outcomes and impacts
▪ Generally, an internal activity	▪ Generally, an external activity
▪ Systematic activity	▪ Episodic activity, not very frequent
▪ Is more frequent, basis of evaluation	▪ Requires more resources and time

2.5 At what project levels do we conduct Monitoring and Evaluation?

As is clear from the above matrix, monitoring is a routine day-to-day activity of assessment of project progress whereas evaluation is the episodic assessment of overall achievement. With respect to the results chain discussed above, the **M&E levels** are given in the matrix below:

Input	Monitoring
Activity	
Output	Evaluation
Outcome	
Impact	

3. Understanding Indicators

Central to M&E are the indicators therefore the first step for designing a monitoring system or evaluation is development of indicators.

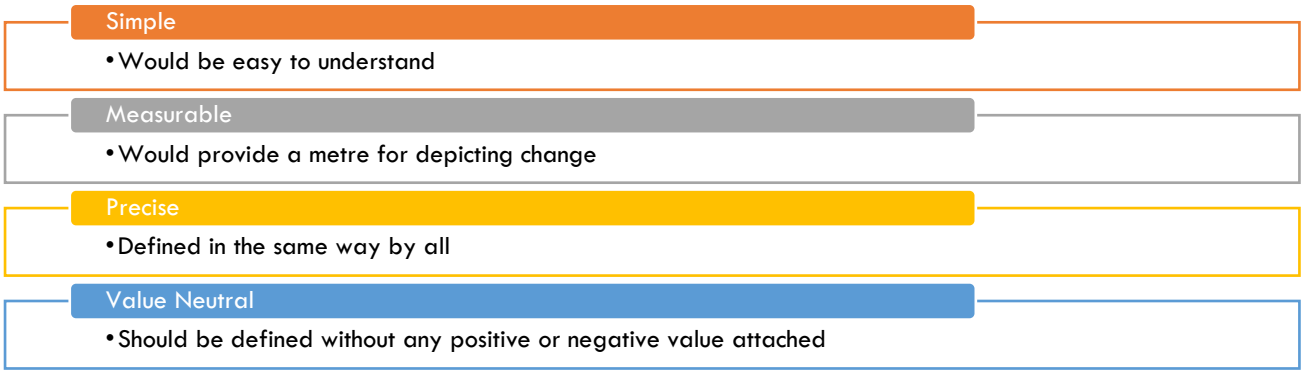
3.1 What are Indicators?

An indicator is nothing but a **unit of information**, which measured over time would depict the change in a given condition.

- **Do we need specific indicators for each specific project or M&E level?**
  - Yes. Specific indicators for each output, outcome
- **How many indicators should we have for one output or outcome?**
  - For each level of result, we should have at least one indicator and a maximum of three. More than three indicators would imply that we are not clear of what we are trying to achieve as a result.
- **Can indicators change over time?**
  - No. Set of indicators would measure the same thing and would not change over time
    Example: If the project intends to achieve change in the current access to banking facility by women in the rural areas, the indicator "% of women with savings bank account" would be used for monitoring or evaluation purposes at each time of data collection. The difference in the percentage or number will provide the level of change.
- **Can indicators be qualitative and Quantitative in Nature?**
  - Yes. Based on the nature of information that a particular indicator relates to, it can be Quantitative or Qualitative.
    Example: Income measured in absolute numbers lets' say measured as Dollars is a quantitative indicator. But, if the same information is collected as income levels of High, Medium and Low, the indicators would be qualitative indicator.

3.3 Designing Indicators

An indicator has to document change and therefore any indicator finalized should essentially be able to capture change in the condition that being assessed using the indicator. A good indicator would therefore be:



3.3.1 Steps of Designing Indicators

Step I: Brainstorming to identifying candidate indicators for a specific condition.

Example: When we talk about providing training on financial literacy, what are we going to measure? Knowledge about banking services or access or usage of banking services or all? Based on the conclusion we will devise indicators.

Step II: Assessment of each of the indicator with respect to the characteristics of a good indicator. So, we see that whether the candidate indicator is simple, measurable, precise and value neutral or not.

Example: Suppose we devise three or four indicators for each output, outcome and impact, we will have to choose which indicator is simple, measurable, precise and value neutral.

Indicator 1: Number of workers trained on financial literacy

Indicator 2: Proportion of workers who were aware of collateral against loan activity

Indicator 3: Percentage of workers trained on subject of health insurance

Step III: Shortlisted Indicators that satisfy the criteria can then be taken as the indicators for assessment of that particular condition. We can also modify the shortlisted indicators till they are in tune with the characteristics of a good indicator.

Which indicator would you choose and why? The indicators you have chosen is an output, outcome or an impact indicator?

Exercise- 1

Let's define some Indicators, based on your understanding and the criteria mentioned above, mark the indicators given below as good bad or worst indicators.

Indicators	Markers		
	Good	Bad	Worst
Reduction in the number of workers falling sick			
Positive change in the cleanliness index			
Improved access to reproductive government health schemes for the workers			
More diversified sources of banking services for the workers			
X% of workers feel empowered			
Increased awareness on menstrual hygiene practices			
Know different types of foods ad their purpose			
% of workers reported using contraception			

Exercise- 2

In this exercise, we will define some indicators based on the project sewing for a Brighter Future. Based on your understanding mark the indicators given below as output, outcome and impact indicators

Indicators	Markers		
	Output	Outcome	Impact

4. Developing Monitoring Plan

4.1 What is a Monitoring Plan?

Monitoring plan is an **outline for the steps you will undertake** to ensure that the project is on track. if we extend our plan to incorporate outcomes and impact as well, it will also go by the name of Performance Measurement Framework and Results Framework. It lists the methods that will be used to collect data, and when, by whom, and where data will be collected. A monitoring plan brings in one place all the aspects of monitoring in a project.

Monitoring Plan is:

- An on-going process
- Has different information sources
- Has different timeframes
- Has different informaton
- Information is collected by different people

4.2 Developing a Monitoring Plan

The process of developing a monitoring plan is essentially finalizing indicators or expected result for various M&E levels, assigning periodicity to the indicators, finalizing method of assessment, defining the source location and assigning responsibility for getting the information. These are thus the components of a monitoring plan. Upon finalization, a generic monitoring plan would something like that shown in the matrix below.

Sample 1: Activity and Output Monitoring

What (Expected output and related activities)	When (periodicity)	How (method)	Where (Source & location)	Who (responsibility)
1. 2.				

- What to Assess? (what results you want to see?)
- When to Assess? (How often do you want to assess the results?)
- How to Assess? (What method will you use to collect information?)
- Where to Assess? (what will be your source & location of information?)
- Who will assess? (who is responsible for collecting information?)

Sample 2: Activity, Output, Outcome Monitoring

Expected output and related activities	Indicator	Periodicity	Source	Baseline Value	Milestones			Target
					Q1	Q2	....	
Impact								
Outcome								
Activity 1.1								
Activity 1.2								
Output 2								
Activity 2.1								
Activity 2.2								

Baseline or the starting value of the indicator before the intervention

Milestones that we plan to have for the changed condition, as we move across project years

Target of the condition that we want to achieve at the completion of the project

4.3 Steps in Designing a Monitoring Plan

Step 1: Populate the Expected Results Column

We have already defined the input, outputs, outcome and impacts while the developing the results chain. All we have to do now is to bring the input, outputs, outcome and impact from the result chain and put them in the respective expected results column at the assigned level.

Expected results	Indicator	Periodicity	Source	Baseline Value	Milestones			Target
					Q1	Q2	....	
Impact								
Reduction in absenteeism due to issue pertaining to health and well-being								
Outcome								
Improved knowledge on topics of sexual and reproductive health								
Output								
Output 1: Training conducted on sexual and reproductive health								
Activity 1.1: Training of Trainers								
Activity 1.2: Development of training aids								
Output 2: Improved knowledge on safe abortion								
Activity 2.1: Training of x number of workers on safe abortion								
Activity 2.2: one-to-one Counselling of x number of workers on safe abortion								

Step 2: Develop Indicators for the expected results

We are essentially interested in measuring change in a given condition as a result of our project. To be able to do so, we need have an indicator that would tell us that the condition has changed or the desired condition has been achieved.

Expected results	Indicator	Periodicity	Source	....	....			....
Impact								
Reduction in absenteeism due to issue pertaining to health and well-being	% of worker completing 150 days of work in a year							
Outcome								
Improved usage of sexual and reproductive health services	% of currently married women aged 15-49 years currently using any family planning method % of women whose abortion was conducted in a health facility							
Output								

Output 1: Training conducted on sexual and reproductive health	Number of Trainings conducted in three months							
Activity 1.1: Training of Trainers	10-12 trainers trained (2 trainer every 4 month)							
Activity 1.2: Development of training aids	1 training module on abortion 1 training module on healthy eating							
Output 2: Improved knowledge on safe abortion	% of workers who were provided one-to-one counselling on safe abortion by health workers							
Activity 2.1: Training of x number of workers on safe abortion	9x20 workers trained							
Activity 2.2: one-to-one Counselling of x number of workers on safe abortion	9x10 workers trained							

Step 3: Assign Periodicity and identify Sources and Responsibility

For each of the indicator or expected result, we need to then decide the time period over which we would be doing its measurement. If the change is visible within a short duration, the periodicity would be low such as quarterly or half-yearly. And if the change is visible after a longer duration, then the periodicity would be high such as say annually or biannually.

Upon assigning periodicity, it is important to identify the source from where the indicator information would be drawn from and who is responsible for getting the information. One should be able to pinpoint the exact source of this information so that anyone can access and understand this information. Also, if there are multiple sources for availing the indicator information then we should mention at least two of those sources.

Let us now see how the monitoring plan of our project looks like.

Expected results	Indicator	Periodicity	Source	..	....	....
Impact						
Reduction in absenteeism due to issue pertaining to health and well-being	% of worker completing 150 days of work in a year	Annual	Factory Management /HR records			
Outcome						
Improved usage of sexual and reproductive health services	% of currently married women aged 15-49 years currently using any family planning method % of women whose abortion was conducted in a health facility	Bi-annual	Sample survey of targeted workers/external expert			
Output						
Output 1: Training conducted on sexual and reproductive health	Number of Trainings conducted in three months	Every three months	External Expert/ training report/ Sample survey			
Activity 1.1: Training of Trainers	10-12 trainers trained (2 trainer every 4 month)	Yearly	External Expert/			

			training report					
Activity 1.2: Development of training aids	1 training module on abortion 1 training module on healthy eating	Yearly	External Expert					
Output 2: Improved knowledge on safe abortion	% of workers who were provided one-to-one counselling on safe abortion by health workers	Every three months	Sample survey of targeted workers/ counselling sheet					
Activity 2.1: Training of x number of workers on safe abortion	9x20 workers trained	Monthly	Monthly monitoring chart					
Activity 2.2: one-to-one Counselling of x number of workers on safe abortion	9x10 workers trained	Monthly	Monthly monitoring chart					

Step 4: Put the Target Values of the Indicators

We are interested in change measurement; therefore, it is very important to describe the starting point for calculating that change i. e baseline. Milestones are the benchmark values that we hope to achieve within the project implementation years. The milestone values are to be assigned based on the way we plan our project implementation.

Expected results	Indicator	Periodicity	Source	Baseline	Milestones			Target
					Q1	Q2	Q3	
Impact								
Reduction in absenteeism due to issue pertaining to health and well-being	% of worker completing 150 days of work in a year	Annual	Factory Management /HR records	55%				25%
Outcome								
Improved usage of sexual and reproductive health services	% of currently married women aged 15-49 years currently using any family planning method	Bi-annual	Sample survey of targeted workers/ External Expert	20%	25 %	35 %	45 %	60%
	% of women whose abortion was conducted in a health facility	Bi-annual	Sample survey of targeted workers	15%	20 %	35 %	45 %	60%
Output								
Output 1: Training conducted on sexual and reproductive health	Number of Trainings conducted in three months	Every three months	External Expert/ training report/ Sample survey	0	6		6	12
Activity 1.1: Training of Trainers	10-12 trainers trained (2 trainer every 6 month)	Yearly	External Expert/ training report	0	6		6	12

Activity 1.2: Development of training aids	1 training module on abortion 1 training module on healthy eating	Yearly	External Expert	0	1 1			1 1
Output 2: Improved knowledge on safe abortion	% of workers who were provided one-to-one counselling on safe abortion by health workers	Every three months	Sample survey/ Internal Counselling sheet	0	60	60	60	180
Activity 2.1: Training of x number of workers on safe abortion	9x20 workers trained	Monthly	Monthly training monitoring chart	0	60	60	60	180
Activity 2.2: one-to-one Counselling of x number of workers on safe abortion	9x10 workers trained	Monthly	Monthly Training monitoring chart	0	30	30	30	90

To summarize, what we have done is- develop a monitoring plan that captures the results of a project from the results chain using a four-step process. Can you visualize how the monitoring plan of your project would look like?

4.4 Input and Activity Progress Monitoring

In Activity-input progress monitoring we are primarily interested in knowing the following:

1. **Whether the activities are being complied with?**
2. **Whether they are being implemented within a specified time?**
3. **Whether they are being implemented within the given resources?**

To check there are no time and cost overruns in our project, we can use the format as given below. It is best compiled on a quarterly basis. it would help us tracking our activities and resource utilization as well as adherence to the project implementation schedule.

Sl no.	Activity	Activity Progress										Activity intensity		Remarks
		Apr	May	Ju	Jul	Aug	Sep	Oct	Nov	Dec	…	Budget (INR)	Spent (INR)	
1														
	1.1													
	1.2													
	1.3…													
2														
	2.1													
	2.2													
	2.3…													
3														
	3.1													
	3.2													
	3.3													

Planned Completed Delayed Additional Time Required

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