



Developing indicators

From logic frameworks to M&E plans



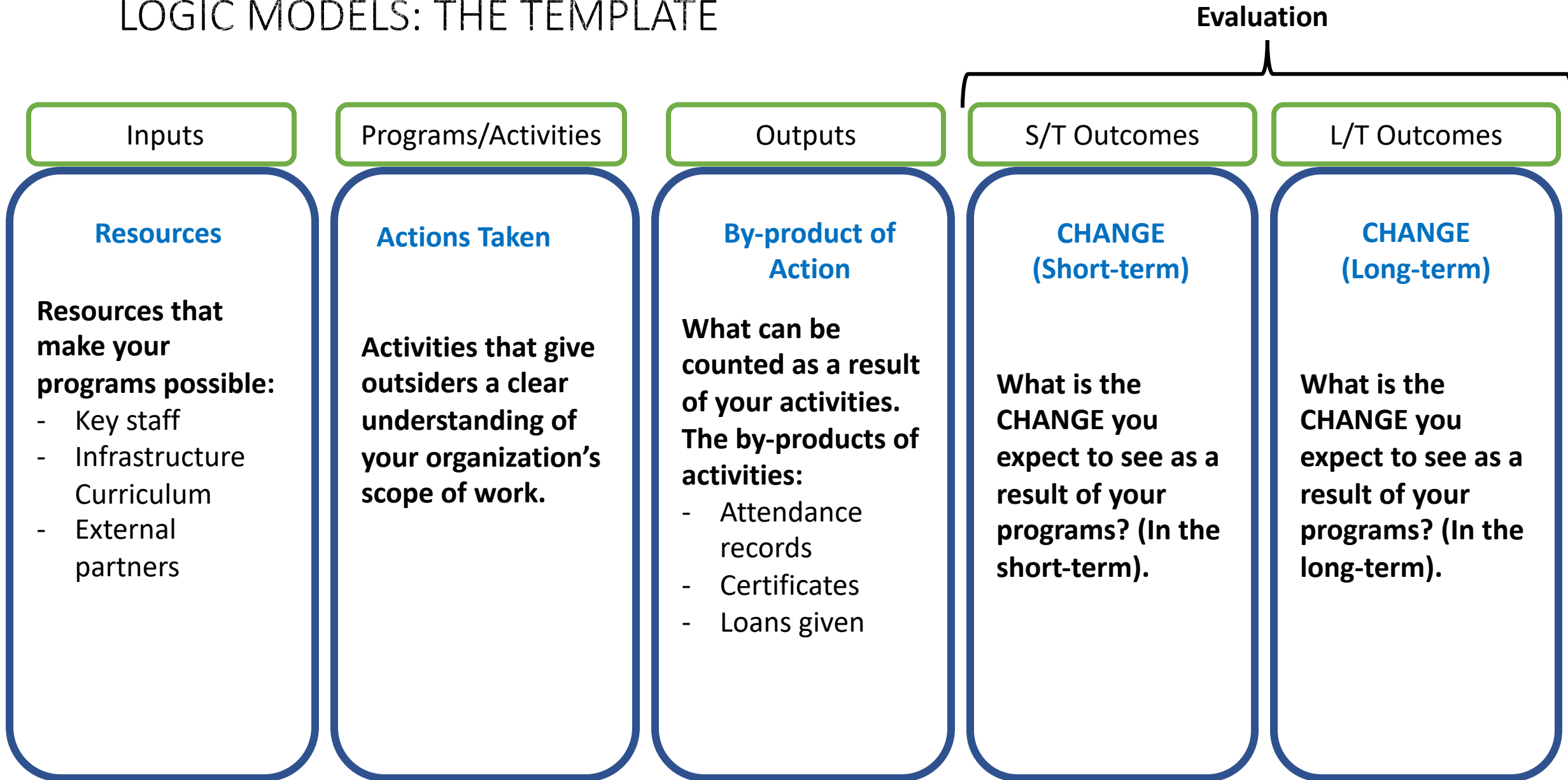
Prerequisites & Today's Learning Objectives

- Prerequisites to achieving today's learning objectives
 - How to develop a logic model/theory of change
 - How to develop an M&E plan
- **Today's Objectives**
 - 1. Know the different types of indicators
 - 2. Learn how to develop good indicators
 - 3. Setting targets using indicators

Recap on components of logic frameworks

- *Also called: Logical Framework /Log Frame/Result frameworks*
- Shows your organization's programs, resources and expected results
- *They provide a clarity of project purpose and implementation*
- *Other strengths include;* Encourages review of progress and taking corrective action ; Encourages participative approaches by engaging partners and stakeholders in clarifying objectives and designing activities
- *Weaknesses;* Sometimes difficult to accommodate the unexpected ;Needs some training/expertise to design and use effectively ; If not updated during implementation, can fail to reflect changing conditions

LOGIC MODELS: THE TEMPLATE



Monitoring

3. M&E PLAN =

RESULTS + INDICATORS + GOALS+ DATA COLLECTION PLAN

Result	Measurement	Goal		Data Collection Plan		
Outcomes	Indicator	Baseline	Target	Data Source?	When collected?	Collected by Who?
1. Girls have improved Agency	Percent of girls scoring above average on the Agency Survey	25% of girls have above-average Agency	75% of girls leave program with above-average Agency	Agency Survey	Beginning and end of each school year	M&E officer
2. Girls aware of the SRH needs and rights	Percent of girls with increased knowledge of SRH	Girls score avg 10% on SRH pre-test	Avg score on SRH post-test increases to 70%	SRH pre/post test survey	Bi-annually at beginning and end of school year	Faculty Advisor

The M&E plan

Pending questions on the M&E plan?

M&E Plan Components: Indicators



What are indicators?



Benchmarks for demonstrating the achievements of a program



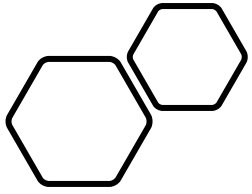
Selecting appropriate indicators is a critical step in designing an M&E plan



May be quantitative or qualitative



Indicators are an essential part of effective monitoring and evaluation. They can provide vital information on performance, achievement and accountability



Who should develop indicators?



Collaborative effort



M&E staff in close collaboration with program staff who are designing the program and have clear knowledge of the program goals and objective.



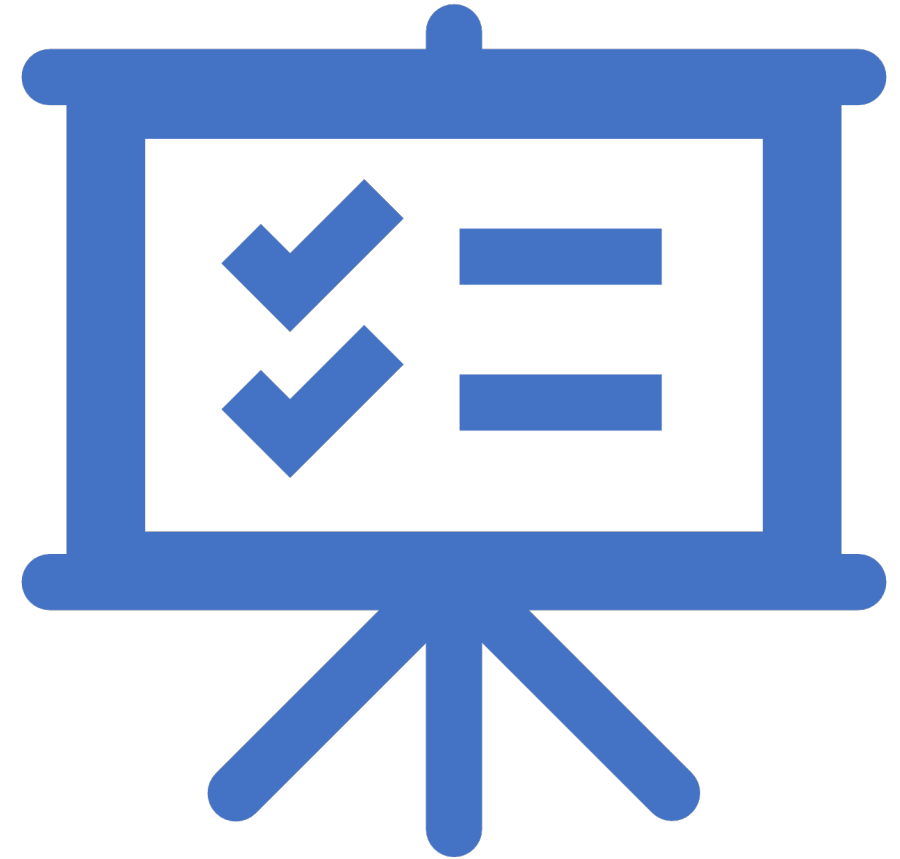
Once program staff reach consensus on set of indicators, share with all parties; managers, personnel, funders, boards, etc



Note: Although the interests of [stakeholders](#) are critical to selecting proper indicators, this does not mean that indicators must be created to capture every stakeholder concern. The managers of the program must use their best judgment to include stakeholder interests where possible and appropriate.

When should indicators be developed?

- IDEALLY: during the program design phase
- Start of the program
- Can we develop indicators for ongoing projects? DEFINITELY!
- We can also refine previously set indicators during the program life cycle if needed





How to set
indicators

Step 1: Identify What to Measure

- Determine which characteristics of the program are most important to track
- Referring to the program's logic model can help to identify key program areas that need to be included in monitoring/evaluation indicators
- As noted previously, this should be a collaborative effort
- Various types of indicators can be formulated as follows;

Types of indicators

- 1. *Process indicators:*** are those indicators that are used to measure project processes or activities. For example, in a SRH project, this could be “the number of participants that have received training on contraceptive methods.”
- 2. *Outcome Indicators:*** Are indicators that measure project outcomes. For example, in the case of the SRH project, outcome indicators could be “the proportion of participants taking up a long-term contraceptive method”
- 3. *Impact Indicators:*** Are indicators that measure the long term impacts of a project, also known as the project impact. In the case of the SRH project, it could be, “the prevalence of unwanted pregnancies in the target age group.”

Step 2: Develop High-Quality Indicators

- Aspects to consider when developing new indicators/ revising old ones
- Various acronyms exist to guide indicator development
- SMART process (Specific, Measurable, Attainable, Reliable, Time-Bound)
- ROARS process (Relevant, Objective, Available, Realistic, Specific)

GOOD INDICATORS



01

SPECIFIC/PRECISE

Accurate description of what is being measured



03
ATTAINABLE

Collecting data for the indicator should be simple, straightforward, and cost-effective.



04
RELIABLE/VALID

Reliability here implies that the indicator yields the same results on repeated trials/ attempts

Validity here implies that the indicator actually measures what it intends to measure.



02

MEASURABLE

Should be measurable either quantitatively/qualitatively

05
TIME-BOUND

include a specific time frame

Qualitative and Quantitative Expressions of Indicators

- ***Quantitative indicators*** are numerical eg percentage of enrolled students graduating secondary school.
- ***Qualitative indicators*** may be defined as those that are based on individual perceptions/judgements. They often include a categorical scale of classification eg yes/no or high, medium, low etc.
- An example; in a group activity, emerging sense of collective trust and solidarity may be used to monitor progress and the indicator may be phrased as amount of students reporting that collective trust was achieved/not achieved..

Qualitative and Quantitative Expressions of Indicators

- Qualitative indicators can and often do contain numbers ie they can be expressed as numerical expressions or perceptions can be quantified eg through rating systems
- Are qualitative indicators useful?
- Especially when coupled with **quantitative** measures, **qualitative indicators** provide a fuller, richer understanding of the changes being assessed.
- However they may be difficult to develop and implement as the “Measurement” may prove quite challenging

Example: setting a SMART indicator

- Implemented between 2015 and 2019 in Tanzania, the Panga Jamii Campaign was designed to address the issue of parents not speaking to their children about SRH particularly use of contraceptives. This campaign included various mass-media and community-based activities. The M&E process for this campaign used multiple indicators to track the progress of the intervention, including ones used to track community discussions about SRH/Contraceptives use.
- One such indicator is used in the example below. Note how much the indicator improves through this SMART process.

Example...cont

1. What is the input/output/outcome being measured?

- Outcome: An increase in parental communication about contraceptive use

2. What is the proposed indicator?

- Percent that have talked about contraceptives.

3. Is this indicator *specific*?

- It describes what people are talking about but does not specify the audience to be measured or who they are talking to. The indicator should include the percent of what population have talked to who? about contraception

Example....cont

4. Is this indicator *measurable*?

- Yes, but additional refinement would make it easier to replicate over time. Some participants may discuss contraceptive use even if they were not exposed to the Campaign. A better way to assess this would be include the campaign name in the indicator eg add discussion about a “Panga jamii” contraceptive message.

5. Is the indicator *attainable*?

- This indicator is attainable because data for this indicator may be collected through a question in a project-funded survey.

Example...cont

6. Is the indicator *relevant* and related to the input/output/outcome being measured?

- This is directly related to the outcome as individuals who have talked to someone about contraceptive use

7. Is this indicator *time-bound*?

- This indicator is implicitly time-bound, but not explicitly. The word “ever” or "in the last three months" should be added to clarify the time frame.

Example... cont

8. Based on answers to the above questions, what is the revised proposed indicator?

- Percent of parents that have discussed a “Panga jamii” contraceptive message with their children in the last three months
- Others?

Selecting project indicators: standards

1. The indicator is needed and useful.
2. The indicator has technical merit (reliable and valid).
3. The indicator is fully defined.
4. It is feasible to measure the indicator.

Another example?

Step 3: Establish a Reference Point

To show change or progress in a program, a [reference point](#) must be established

INTERVENTION HAS NOT BEGUN	INTERVENTION HAS BEGUN	INTERVENTION IS OVER
Establish the reference point immediately before it begins. This point is usually referred to as a baseline.	See if any data related to the program indicators were collected in other surveys targeting similar populations. For example, use data from large-scale national surveys like DHS.	A reference point can be established through a control group. Identify a sample group that has not been exposed to the intervention and is demographically, geographically, culturally, and socially similar to the intervention group. Then administer data collection on program indicators with this group.
	If comparable measurements in other surveys/programs cannot be found, use the program indicators to collect data on the current state of the program, even if it has already begun.	

Step 4: Set Targets

- Targets vs Indicators? Unlike indicators targets specify the level and direction of achievement
- Factors to consider when setting targets;
- Baseline data. What is the situation at the outset of the activity, project or programme?
- Historical trends. What pattern of change has occurred over time? Is the same pattern likely to continue?



Step 4: Set Targets

- Stakeholders' expectations. What do key stakeholders (e.g. funders and programme implementers) believe can/ should/must be accomplished?
- Expert opinions and research findings. What do the experts think about targets? What has previous research indicated that is relevant to target setting?
- Performance of similar activities, projects or programmes. How have similar efforts performed at other times and/or in other settings? With other partners?



Step 5: Determine the Frequency of Data Collection

- Determine benchmark time points that will properly track program progress
- The frequency of collecting data is mostly dependent on the cost and length of the program



Take home



Don't necessarily strive for "perfect indicators" but aim to have technically sound indicators



Remember no indicator will meet all of the SMART criteria equally. Use discretion in determining what will provide a balance between validity and practicality.



DON'T Choose an indicator that your program activities cannot affect, a common pitfall which may arise when you borrow from seemingly similar programs without checking if activities are indeed similar



Qualitative or Quantitative? No one type of indicator or observation is inherently better than another; its suitability depends on how it relates to the result it intends to describe.

Recap Quiz

- **Answer options**
- Impact
- Input
- Outcome
- Output

Recap Quiz

- The immediate results of programme activities. This term relates to the direct products or deliverables of programme activities, such as the number of counselling sessions completed, the number of people reached and the number of materials distributed.
- The intermediate changes that a programme effects on target audiences or populations, such as change in knowledge, attitudes, beliefs, skills, behaviours, access to services, policies and environmental conditions.

Recap Quiz: cont

- A resource used in a programme, including financial and human resources from a variety of sources, as well as curricula, materials, etc.
- The longer range, cumulative effect of programmes over time on what they ultimately aim to change. Often, this effect will be a population-level outcome, such as a change in HIV infection, morbidity and mortality.

Questions/Contributions



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Homework?

- Refine the indicators in your previous M&E plan homework output using the SMART process