



# Selecting Effective Indicators

USAID Monitoring, Evaluation, and Learning Activity

# Session Objectives

## **Goal of this workshop:**

- Participants are more comfortable in selecting/developing performance indicators

## **Workshop Objectives:**

### **By the end of this session, participants are expected to:**

- Understand what performance indicators are and what is their role in tracking progress
- Be familiar with different ways of expressing performance indicators
- Learn best practices in identifying performance indicators
- Understand what context indicators are and how they can be used

# Content

- Terminology
- Introduction
- What is an indicator?
- Why do we use performance indicators?
- Types of indicators
- Criteria of good indicators
- Considerations for identifying performance indicators
- Baselines and targets
- Challenges IPs face with indicators and tips to overcome them
- Context indicators

## EXERCISE : Definitions and Acronyms



<b>AMELP</b>		<b>IPs</b>	<b>DQA</b>
<b>PIRS</b>		<b>CDCS</b>	<b>PMP</b>
<b>DO</b>		<b>AOR/COR</b>	<b>TOC</b>

## Introduction

*Who has seen the wind?*

*Neither you nor I.*

*But where the trees bow down their heads,*

*The wind is passing by.*

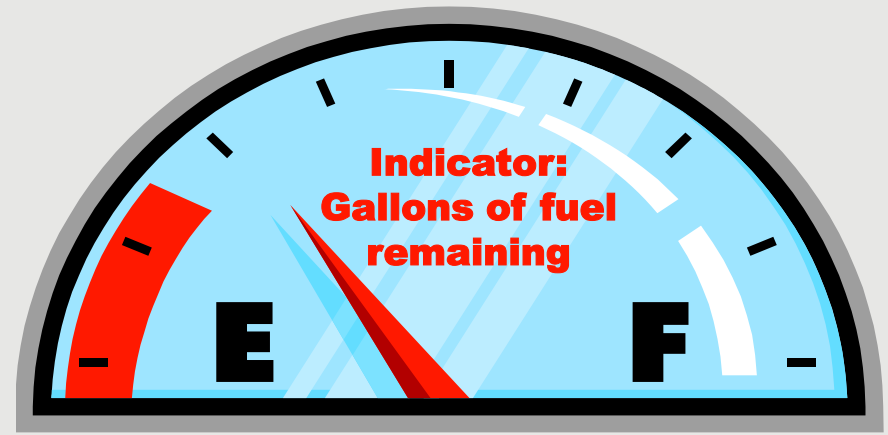
- The Wind, Christina Rossetti, 1830-1894

# What is an indicator?

## Indicator

noun in ·di ·ca ·tor \ 'in-də- ,kā-tər\

<http://www.merriam-webster.com/>



- a sign that shows the condition or existence of something
  - a pointer or light that shows the state or condition of something
  - a device that shows a measurement
- 
- ADS Definition:  
Performance Indicators measure a particular characteristic or dimension of strategy, program, project, or activity level results based on a Mission's CDCS Results Framework or a project's logical Framework (LogFrame) [*or Activity logic model*].

## An Indicator is **Not**

Indicators are not results, goals, objectives, or targets. Indicators measure results and help us understand our performance against targets.

Indicators are not biased; i.e. they do not specify a particular level of achievement or direction of change.

Result statements show the desired direction of change (increase or decrease).

Targets identify the desired value of the indicator that we want to achieve.

**Result:** Grade-two students reading skills improved

**Indicator:** Percent of grade two students who demonstrate that their reading skills improved

**Target:**  
55%

# RAIN Exercise (15 minutes)

In small groups

Are these: Results? Activities? Indicators? Or Not?



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# Why do we need Performance Indicators?

## Performance Indicators allow us to:

- Measure progress and achievements;
- Clarify consistency between activities, outputs, outcomes and goals;
- Assess activity performance, and identify areas of success and for increased attention;
- Communicate achievements to partners
- Understand “how” we are doing **but not why?**

## Relevant Definitions

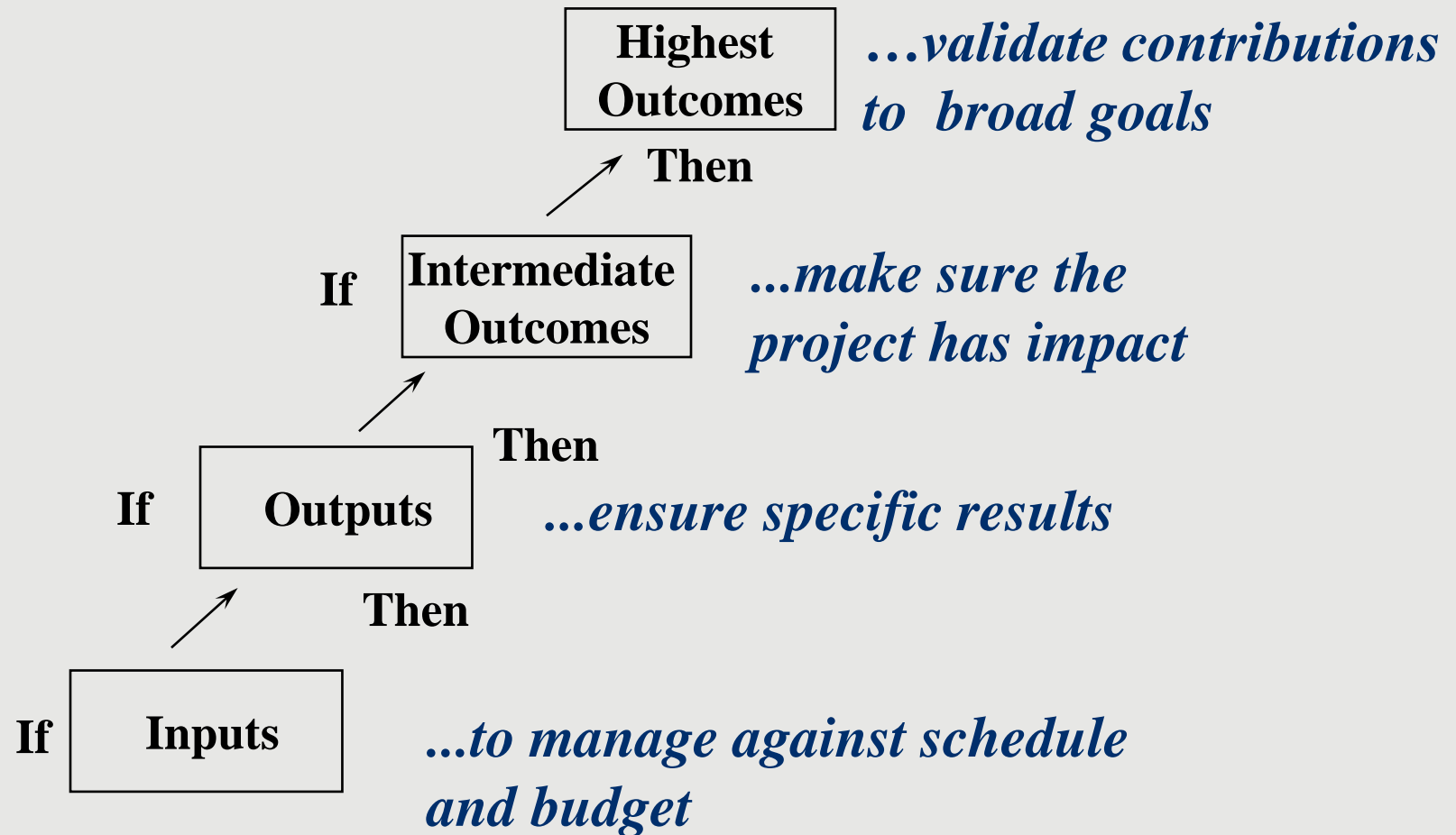
### Outputs

are what is produced as a direct result of inputs. They are the **tangible, immediate, and intended** products or consequences of an activity **within our control or influence**.

### Outcomes

are the conditions of people, systems, or institutions that indicate progress toward achievement of goals. Outcomes are any **result higher than an output to which a given output contributes to** but for which it is not solely responsible.

# Monitor All Levels of a Program



# Exercise (10 minutes)

In small groups

## **From Results to Indicators –**

Order results from lowest to highest level and  
Identify the indicators that measure the result

## Results Statements

Increased productivity for key commodities

Improved knowledge of new farming technology

Inclusive economic growth from agriculture increased

Smallholder farmers trained in new farming technology

Increased adoption of new technologies

Smallholder farmer income increased in NE region

## Indicators

Number of farmers trained in new farming technology

Gross margins per hectare of key commodities in targeted region

% of targeted beneficiaries applying new farming technology

Average score from training participants on quality of the training course

% change in contribution of key commodities to agricultural GDP

Average change between pre-test and post-test score on information about new farming technology

Number of farmers in targeted areas applying new farming technology

% change in per capita household expenditures of USG targeted beneficiaries

## Exercise: Results to Indicators

### Results Statements

**Inclusive economic growth from agriculture increased**

**Smallholder farmer income increased in NE region**

**Increased productivity for key commodities**

**Increased adoption of new technologies**

**Improved knowledge of new farming technology**

**Smallholder farmers trained in new farming technology**

### Indicators

**% change in contribution of key commodities to agricultural GDP**

**% change in per capita household expenditures of USG targeted beneficiaries**

**Gross margins per hectare of key commodities in targeted region**

**Number of farmers in targeted areas applying new farming technology**

**% of targeted beneficiaries applying new farming technology**

**Average change between pre-test and post-test score on information about new farming technology**

**Average score from training participants on quality of the training course**

**Number of farmers trained in new farming technology**

# Types of Performance Indicators



# Indicator measurement formats

## **An indicator can be expressed as:**

Quantitative expressions of indicators:

1. Count value (Number)
2. Ratio
3. Percentage
4. Average
5. Rate

Qualitative expressions of indicators:

1. Rating scale
2. Milestone
3. Categorical



## Note about indicators

**No one type of indicator is inherently better than another; its suitability depends on how it relates to the result it intends to describe and how it will be used to support management decision making.**

# Quantitative Expressions of Indicators

- Count Value: Number of students benefiting from infrastructure improvements
- Percentage: Percent of students passing the math and Arabic portion of the National Test at grade 4
- Ratio: Ratio of private sector to public sector funds in public-private partnerships
- Average: Average number of days required to trade goods across borders (average of export/import time)
- Rate: GDP Growth Rate

# Qualitative Expressions of Indicators

- Milestone: A type of indicator that measures progress towards a desired outcome by dividing the progress into a series of defined steps. E.g. Yes or NO.
- Rating Scale: A type of indicator that allows the quantification of a range of subjective responses on a single issue or single dimension of an issue. E.g. Agreement on a 5 point Likert scale.
- Categorical: A type of indicator that allows the quantification of responses to a limited number of responses (categories). E.g. type of education (elementary vs higher vs vocational education).

# Combining qualitative and quantitative indicators' expressions

- Indicators can combine quantitative and qualitative expressions (quantifying qualitative data).

Example: *Rating scale indicator*

- After attending course A and course B, please rate your learning experience on a scale from 1 to 10.
- This indicator can be quantified using quantitative expressions.

	Course A n=95	Course B n=78	Overall
Average	7.8	6.1	7.0
Percentage	60% $\geq 5$	63% $\geq 5$	61% $\geq 5$
Number	9 selected = 10	12 selected = 10	21 selected = 10

# Types of Performance Indicators according to F Structure

## Standard F

- Standardized definition, unit of measure and data source via the indicator handbook.
- Produce data that can be aggregated across Activities/Missions.

**Example: Number of primary or secondary classrooms built or repaired with USG assistance (F ID: ES.1-16)**

## Custom

- Used when there is not an appropriate F-indicator for the result
- Reflect progress within each country or activity context.

**Example: Percent of women of reproductive age with Anemia in targeted facilities (Mission indicator ID: 3.1.c)**

# Discussion

(5 minutes)

Q: What type of indicator should we use?  
Does the choice make any difference on our work?

In your experience, what factors other than desire to select the best and most appropriate indicator, has affected the selection of performance indicators?

Give specific examples.

## Selection of Indicators

Good indicators should meet certain criteria. USAID criteria for selecting indicators are that they should be **Objective, Practical, Useful for Management, Direct, Adequate, and Attributable** ?”

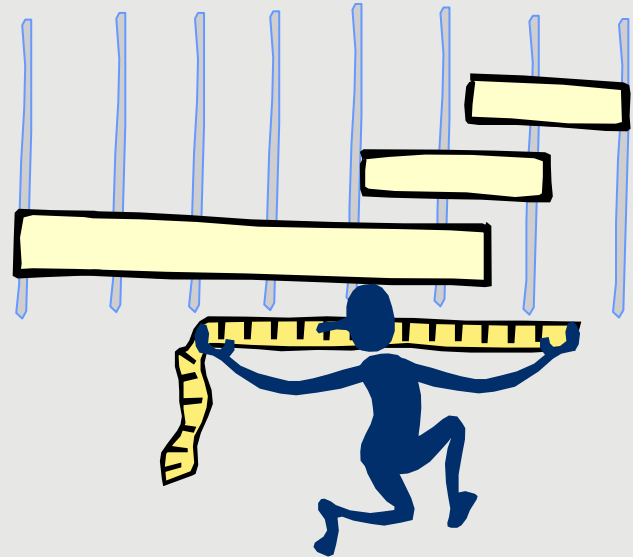
Be aware of the trade-offs between the criteria and use the MEL Plan to document the limitations of an indicator and the rationale for selecting the indicator.

Performance data must also meet reasonable quality criteria of **VIP-RT**.

# Good Performance Indicators Are...

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- Direct
- Objective
- Adequate
- Practical





# Measure exactly the relevant result

**What might be a direct indicator of:**

**“Increased consumption of fruits and vegetables”**

# Some Indicators that are Indirect Aim Too High

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**Result:** Increased use of improved teaching methods

**Indicator:** Literacy rates for primary school leavers

too high

# Some Indicators that are Indirect Aim Too Low

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**Result:** Increased use of improved  
teaching methods

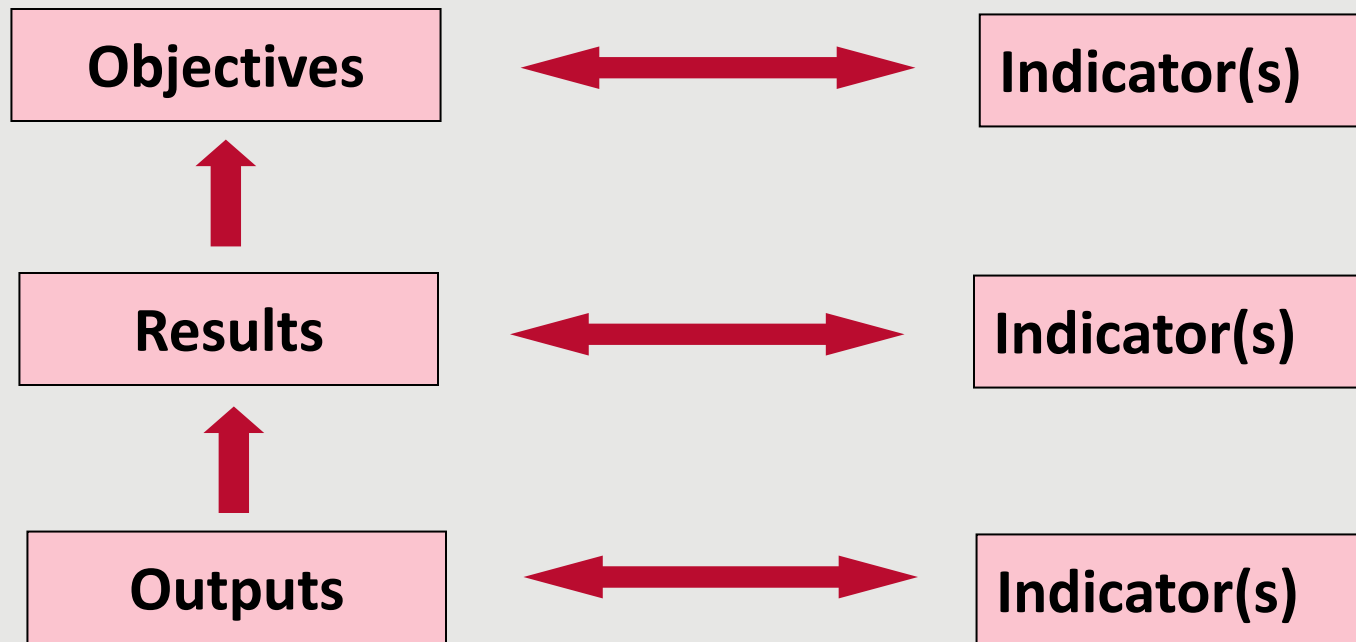
**Indicator:** Number of teachers trained

too low

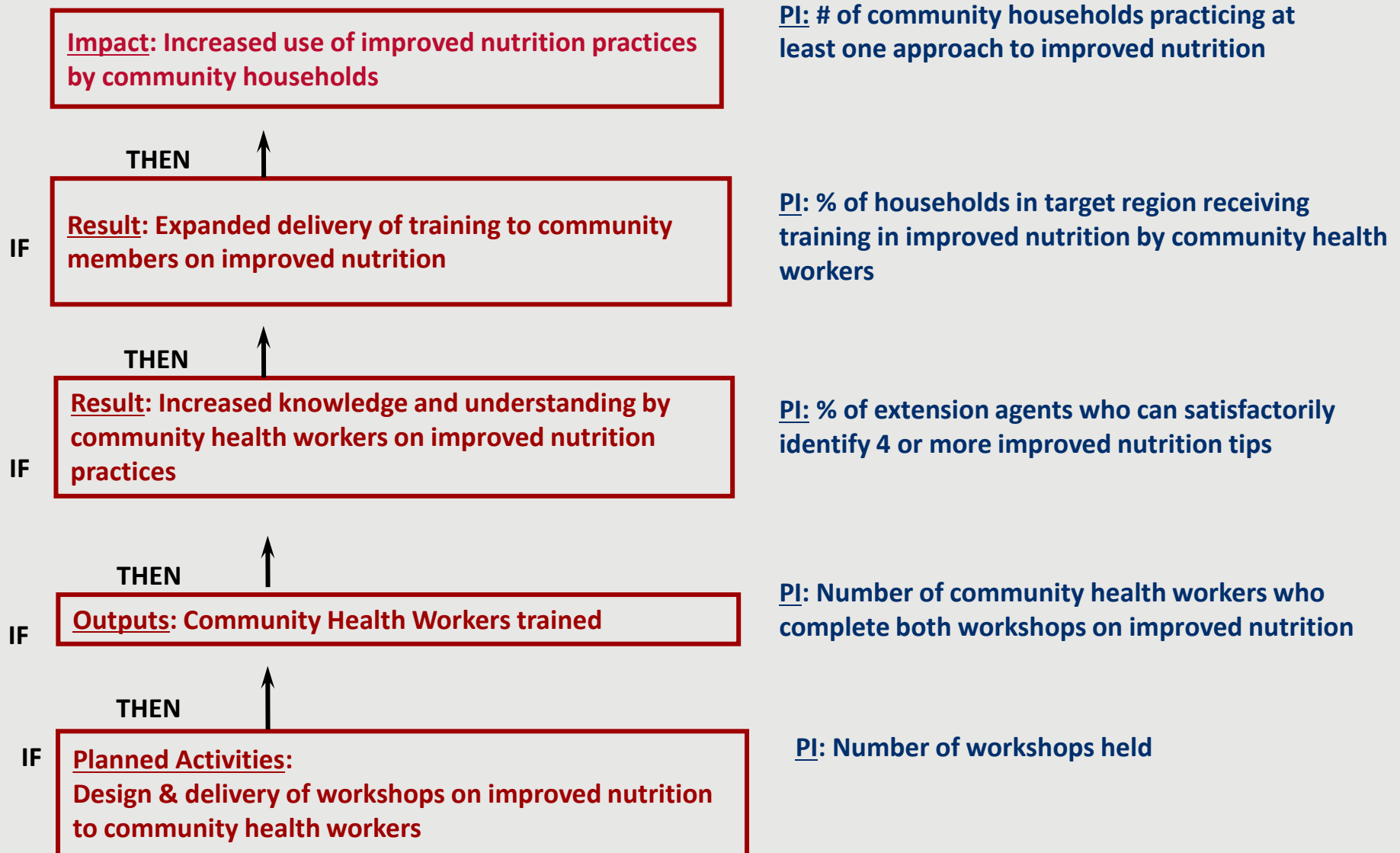
# Each Indicator Measures Just One Result

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Measure each result in the causal chain independently and by different means.



# Example



# Which Indicator is a More Direct Measure of the Objective?

**Result:** Responsibility of reproductive behaviors of young people aged 15 to 24 years improved

## Indicators



a) Percent of young people in target areas with access to family planning services

b) Percent of young people in target areas who regularly use a modern method of contraception

# Which Possible Indicator is the most Direct Measure of the Result?

## **Result:**

Young people's awareness of community and civic issues expanded

- a) Number of targeted youth who participate in community-focused life skills workshops.
- b) Percent of targeted youth who are able to identify 3 or more critical issues for their local community.
- c) Number of targeted youth who volunteer in community-based programs and activities.

# Group Exercise #7

## Indicator Matching

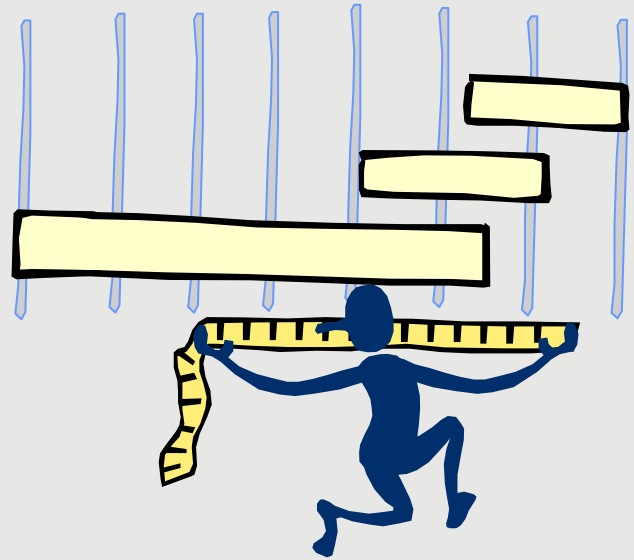




# Good Performance Indicators Are:

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- Direct
- Objective
- Adequate
- Practical



# Objective Indicators

## Components of Objectivity

- Fact-based
  - If observed by a proponent and a skeptic, they would have to agree on what they were observing
  - Re: opinions -- it is a fact that people hold certain opinions
- Indicator framed in precise, clear terms
- Indicator is uni-dimensional

## Precision leads to objectivity which leads to comparability over time

- Comparability over time is the gold standard

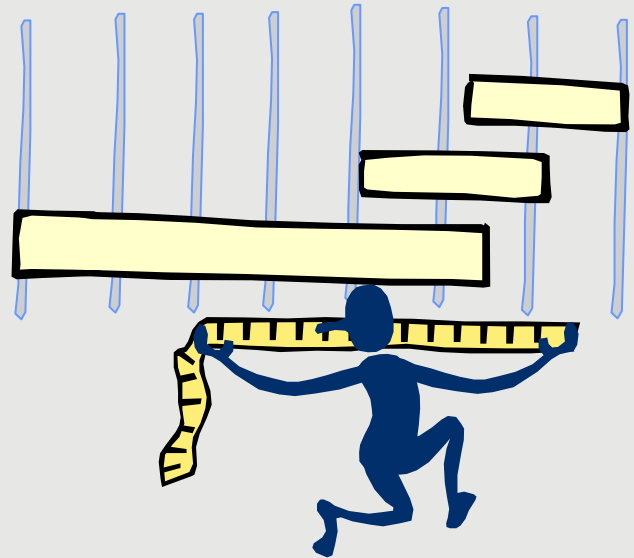
# Which of the Following Appears to be the Most Objective Indicator?

- a) # of youth trained who obtain a score of 90% on a post-training test
- b) # of successful trainees
- c) # of trainees who have improved their knowledge and skills

# Good Performance Indicators Are...

---

- Direct
- Objective
- Adequate
- Practical



# Adequacy is a Trade Off

The indicator(s) of a result should capture all aspects of that result.

- If one indicator alone is not sufficient to measure all dimensions, then two or more indicators should be used

Parsimony is the goal

- Identify the bare minimum number of indicators required to capture all elements of a result
- Avoid the data overload of having too many indicators

Trade off costs and benefits in the number of indicators selected for each result

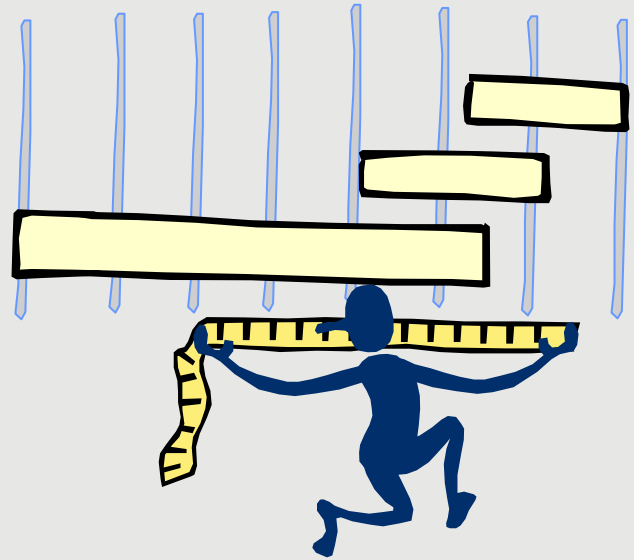
- Every performance measure requires resources to collect, record, display and analyze the data. The more you have, the more it will cost.

# Good Performance Indicators Are...

---

- Direct
- Objective
- Adequate

- Practical



# Questions of Practicality

Is it realistic to collect the desired data?


- Secondary data vs. primary data
- Cost of primary data collection
- Validity of available secondary data

Can the data be available when needed?

Can the data be collected cost-effectively?

Can the indicator be relied upon to give a consistent measure over time?

# Practical: Are Data Available or Collectable?



**A Basic Rule:**  
Never accept an  
indicator unless  
there is a credible  
plan for getting  
data on that  
indicator

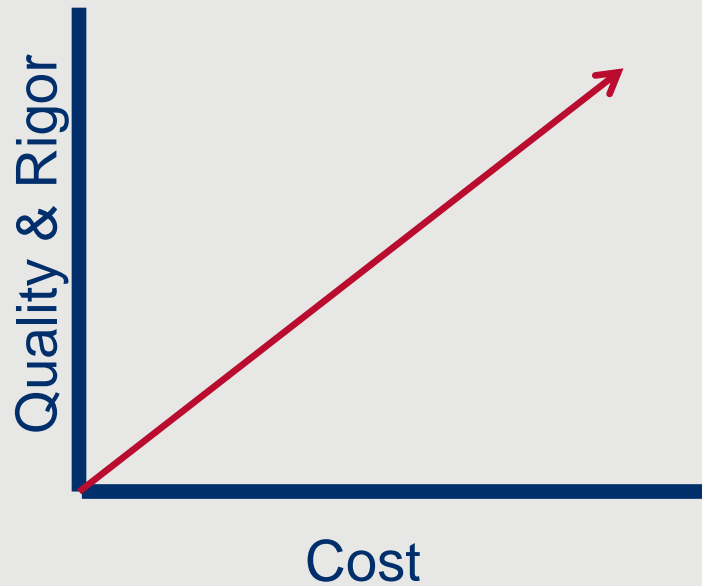


# To Be Practical, Data Must Be Timely

To be useful, data must be available to managers at a frequency that supports decision-making...

**Example:** Good statistics didn't make a dent in crime in a large city – until they came out weekly...and changed the way police assignments were made.

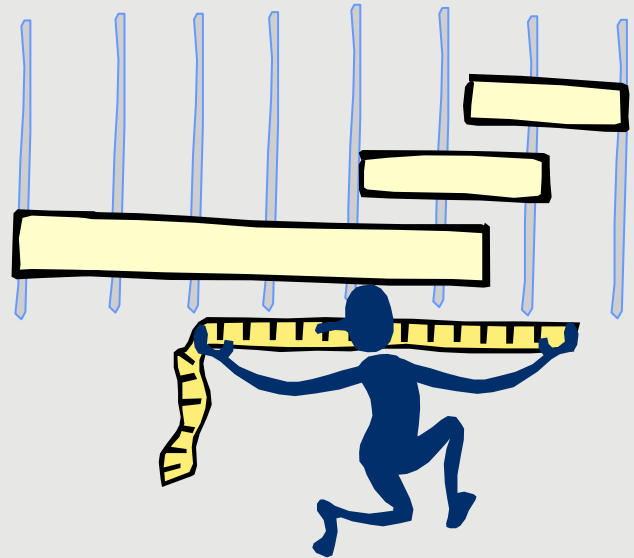
# Key Trade-Offs for Practicality



# Good Performance Indicators Are...

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- **D**irect
- **O**bjective
- **A**dequate
- **P**ractical



# Other Attributes of Good Indicators

- Sensitive to change
  - Is the indicator calibrated in a way that will show meaningful change when it occurs?
- Can be disaggregated by...
  - Sex, age, ethnicity
  - Location (e.g. urban, rural,) whenever these distinctions could point to significant differences

# Considerations for Identifying Performance Indicators

- **Best practices and not necessarily USAID specific guidance.**
- **Select/adapt rather than develop indicators from scratch.**
- What are the benefits/advantages of doing this?
- Common sources of indicators:
  - Standard F indicator
  - Mission indicators
  - Partners indicators
  - Host country governments indicators
  - Indicator handbooks/international standard indicators
  - Third party sources (WB, UN, thematic compendiums)

# Considerations for Identifying Performance Indicators

**For each result, there should be at least one indicator.**

You need the **fewest** number of indicators to measure your result.

As a best practice, you should have as many indicators in your M&E plans as needed to capture the progress made toward achieving results, while at the same time being cost-effective by eliminating redundant indicators.

# Considerations for Identifying Performance Indicators

Indicators should produce data that meets **USAID Data Quality Standards (VIP-RT)**

**But remember, High Quality is not all that Matters! (ADS 203.3.6).**

**Utility:** Need to consider how useful your selected indicators are for management and decision making.

**Cost:** Indicator selection is always a balance between:

- a) the quantity and quality needed for management decisions, and
- b) the resources required to collect and analyze those indicators

# Considerations for Identifying Performance Indicators

- Do not select indicators that are unnecessarily complex and avoid ambiguous terms that could create confusion (e.g.: two levels, effectively, optimal)
- Think of how you will complete the PIRS before you finally adopt an indicator
- Apply the USAID criteria against selected/developed indicators (ask questions)
- Be sensible in to what is needed and what is doable
- Identify early on your logic model critical assumptions
- Do not try to measure each and every expected change within your logic model.



# Suggested Process for Selecting Performance Indicators

- **Understand your activity/interventions and the theory of change.**
- Brainstorm and include other stakeholders, program managers, and partners in the selection process
- Identify your logic model critical assumptions
- Consult indicator references and compendiums to select from
- Develop a list of potential indicators
- Examine each indicator and decide which ones to use

# Potential Reasons for Changing Performance Indicators

During implementation, the Mission or the Activity may need to change, drop or add performance indicators.

For example, if:

- Program/Activity priorities that affect the scope of the result we intend to measure change.
- Indicator becomes unsuitable (e.g. cost, data availability).
- New information/lessons learned becomes available.
- You aren't getting the information you need to understand and manage.

**Don't be afraid to talk to your AOR/COR**

# Discussion (20 minutes)

Discuss the following challenges that IPs face in selecting and implementing indicators and think of ways to mitigate these challenges based on what you have learned today

# Challenges IPs Face in Selecting Indicators

How familiar are these challenges, how do you think they can be mitigated?

1. M&E staff might not be conversant with the technical subject matter
2. The technical and senior management team might not be familiar with the M&E requirements for indicators and the best practices of developing them.
3. It is in a guess game, as we cannot tell early on if the indicators developed are going to be good indicators.
4. Need to include indicators that were developed during the RFP/Proposal process, which might not be the best indicators to work with.

# Challenges IPs Face in Implementing Indicators

How familiar are these challenges, how do you think they can be mitigated?

1. Targets are not appropriate/wrong.
2. Targets do not have consideration for level of result (i.e. outcome results require some time before change can be detected).
3. Change takes longer time to be measured than expected.
4. No baselines available or difficult to measure.
5. Definition of the indicator is not clear to enable proper data collection.
6. Data not available/not accessible/not timely.

# Challenges IPs Face in Implementing Indicators

7. Difficulty in developing measuring or data collection tools.
8. Difficulty collecting qualitative data.
9. What the team theorized will be collected is sometimes different from what is found in the field.
10. In some cases, the developed indicators does not measure the change the activity expected it would measure.
11. Calculation methods for some indicators change overtime.
12. Some indicators are not useful or not necessary for AMEP, but still it is difficult to drop them out.

# Conclusion

- Indicators are signposts of change. Only intended to indicate, and not to provide scientific “proof” or detailed explanations about change, nor tell the full story.
- Indicators are one tool we use to track change among others. Just because one indicator shows strong performance does not always mean everything is on track.
- Avoid the temptation to transform the measurement of change into a major exercise with a burdensome workload. It is the change we seek to influence that must remain the driver—not the indicator. Measuring change should not take precedence over activities that generate the changes to be measured.

# Context Indicators

## **What are context indicators used to track?**

Measure or track the factors that are beyond the management control of the Mission that are important to the successful implementation of the project or strategy. Do not directly measure the results of USAID activities.

Context Indicators do not require setting **Targets**, but you may want to set context indicator **Triggers**.



# Context Indicators can be used to Measure/Track...

- **Country Context.** Relevant to performance of projects – macroeconomic, social, political considerations
  - E.g. price of oil
- **Assumptions.** General condition that must hold true in order to achieve results
  - E.g. elections will take place, decentralization will proceed as scheduled, permissive security situation will continue in implementation areas
- **Risk.** A condition that could negatively influence program outcomes.
  - E.g. inability to monitor activities in conflict areas
- **Game-Changer.** Newly introduced element or factor that changes an existing context or project in a significant way
  - E.g. new natural resource discoveries

# Thank YOU

Please help us by completing a short evaluation