



FREE ONLINE TRAINING

UNDERSTANDING THE FUNDAMENTAL CONCEPT OF INDICATORS AND DATA ELEMENTS FOR NUTRITION PROGRAMMING

*Lesson from Multisectoral Nutrition Information System
(MNIS)*



DATE
18th June 2026

TIME
10:00 AM - 1:00PM

Mr.

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Statistician
Facilitator 1



Ms.

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Facilitator 2



Training Objectives:



By the end of this session, You will be able to:

1

Understand the difference between Data Element and Indicator

2

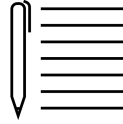
Use indicators to track nutrition program performance, identify gaps, and guide evidence-based decisions

3

Use data elements to improve data quality at facility and community level for more accurate nutrition reporting



Outline :



Part One:

1. Introduction to Indicators
2. Types of Indicators

Part Two:

1. Concept of Data Element
2. When data element can be used as an Indicator
3. Differences between Indicators and Data Elements



Introduction to Indicators

Indicator Definition

Is a calculation or metric used to measure performance, progress, or change. It is usually derived from one or more data elements.

Features



Has a formula (numerator / denominator)



Used for monitoring trends, Performance assessment and decision-making.



Tells whether things are improving or not



Usually expressed as a percentage, rate, or ratio



Buld up by one or two data elements



> Examples of Indicators

01

Percentage of under five children with SAM who died

02

Proportion of pregnant women taking iron and folic acid (IFA) for 90+ days during pregnancy

03

Proportion of women of reproductive age with anaemia

04

Prevalence of stunting among children under five



Indicator Must have the following descriptions

1

Indicator Name

Clear and Descriptive

2

Definition

Explains what is being measured and why

3

Calculation formula

Numerator: The number of events, individuals or cases that meet a specific condition

Denominator: The total population under consideration

4

Unit of Measurement

Percentage, proportion, ratio, rate, number

5

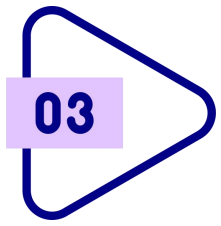
Disaggregation

Important for equity analysis: by gender, age, area/region

❑ Data Sources

❑ Frequency of Reporting





Types of Indicators

01

Input Indicators

02

Process Indicators

03

Output Indicators

04

Outcome Indicators

05

Impact Indicators



Input Indicators:

Measure resources invested in implementing interventions. It reflect the readiness and capacity of a system to deliver planned activities.

- ☑ It measure availability of resources to meet program needs
- ☑ Can be presented as numbers, scores, percentage, proportions, rate, ratio and timeliness.

Examples:

- © Proportion of the annual nutrition budget allocated to micronutrient procurement
- © Percentage of planned nutrition staff positions that are filled



Input Indicators



Process Indicators:

Measure whether activities are performed as planned

Purpose:

- ☑ To monitor the quality and efficiency of implementation

Examples in MNIS:

- © Proportion of Health Care Providers(HCP) trained on IYCF
- © Proportion of children aged 6 months provided with VAS through campaign



Process Indicators



Output Indicators:

Outputs Indicators:

- ☑ Measure immediate products or services delivered as a result of activities
- ☑ It track what has been produced or delivered

Example:

- © Proportional of mothers/caregivers of children 0-23 months of age who have received IYCF counselling from Community Health Workers
- © Number of children under 6 months who are exclusively breastfed



Output Indicators



Outcome Indicators:

Definition: Measure medium-term behavioral or coverage changes

Example:

- ☑ Increased proportion of children aged 0-5 months who are exclusively breastfed
- ☑ Increased proportion of children aged 6-59 months who received Vitamin A Supplement during the last 6 months

Key Question: Is the program beginning to work?

Output vs Outcome:

- ◎ Output = What did we deliver?
- ◎ Outcome = What changed as a result?



Outcome Indicators



Impact Indicators:

Definition: Measure long-term, high-level changes in nutrition status

Examples:

- ☑ Reduce prevalence of stunting among children (0-59 months)
- ☑ Prevalence of low birth weight

🗉 Key Question: Did people's nutrition and health actually improve?

👑 The Complete Chain: Input → Process → Output → Outcome → Impact



Impact Indicators



Presentation of Indicators

Presentation format of Indicators	
Count/Number	A simple total of items, people, events, or activities
Proportion	A proportion is a type of indicator that compares a part to the whole.
Score/Index	A composite measure created from multiple variables combined into one value
Percentage	A percentage is similar to a proportion but always expressed as X out of 100
Rate	A measure of how often something happens over time or within a population at risk
Ratio	A comparison of two separate quantities
Timeliness	A measure of how quickly an activity, service, or report is completed compared to the expected time



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Thank you for Listening



End of Session One





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Session 2: Concept of Data Element

Ms.

Upendo Mlengu

Statistician
Facilitator 2



Data Element

- ✦ A data element: is the raw data or specific piece of information that is collected at the source (facility, district, community, etc.)
- ✦ They describe the raw data, such as simple counts, not calculated values like coverages



Examples of Data Element

Number of children under five years screened for malnutrition at a health facility

Number of pregnant women who attended antenatal care this month

Number of community health workers trained on IYCF

What do all these have in common?

They are all raw numbers or direct observations

They don't involve division, multiplication, or percentages



What are the key characteristics of a Data Element?



First: Data elements describe raw data. They are the building blocks.

Second: They are collected at the source – for example, a health facility register, a community survey, or a household interview.

Third: They are usually simple counts or facts, not calculated values.

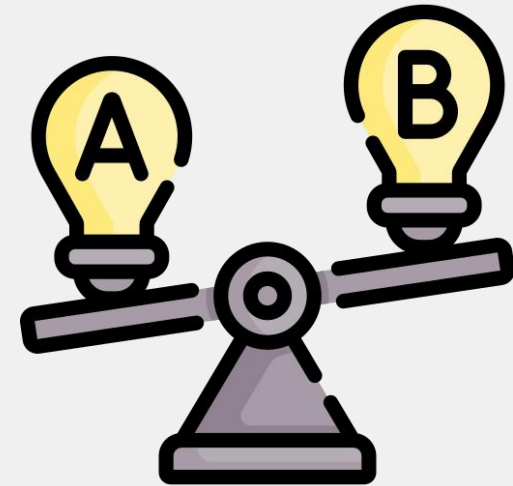
Fourth: Unlike indicators, data elements do not have formulas. They are not percentages, rates, or ratios. They are simply what you record

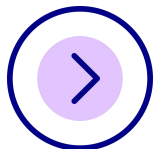


When data element can be used as Indicator?

👉 A data element can sometimes function as an indicator, but this depends on how it is used and interpreted.

👉 Below are the key scenarios where a data element can serve as an indicator

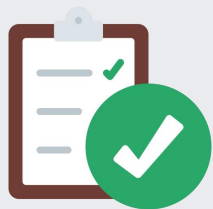




Data Element Can be Used as an indicator



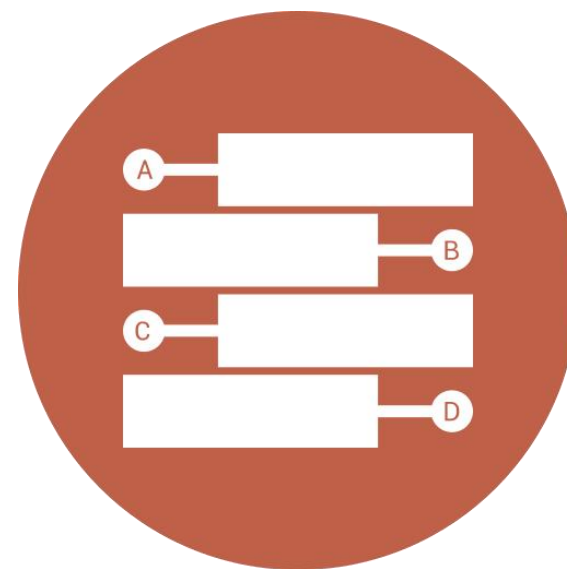
When a Data Element is Directly Measurable & Meaningful

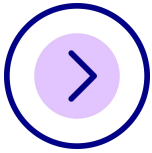


If a data element already represents a meaningful metric without further processing, it can act as an indicator:



Number of Health care Providers in the health facilities trained on IYCF





Data Element Can be Used as an indicator



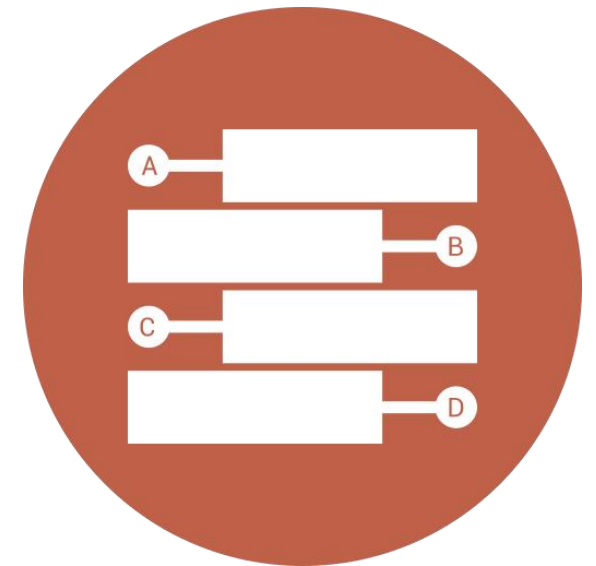
When Used in a Benchmark or Target Comparison



If a data element is compared against a standard or goal, it transforms into an indicator.



- ☐ If a data element is compared against a standard or goal, it transforms into an indicator
- ☐ Target: 640 CHW's trained on IYCF per year



Importance of Data Elements and Indicators



Tracking progress toward nutrition goals



Identifying areas needing improvement



Supporting evidence-based decisions to enhance program effectiveness





	Data Element	Indicators
Purpose	Are raw data input	Are derived measure for assessment
Calculation	Directly recorded	Derived from multiple data elements
Usage	Data collection & storage	Performance monitoring, decision-making
Examples	Number of household using treated drinking water	Proportion of household using treated drinking water (%)



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Thank you for Listening



End of Session Two



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