Cooperation Committee for Cambodia (CCC)

37th Monitoring and Evaluation Learning Forum

AI Tool for Data Management and Analysis

22th October 2026

KEY CONTENTS

- Open Remarks
- Session 1: Reflection on last M&E learning forum
- Learning Objectives
- Session 2: Project Logframe/M&E Framework Introduction
- Session 3: AI for Data Management and Practices
- Session 4: AI for Data Analysis and Practices
- Closing Remarks

Learning Objectives

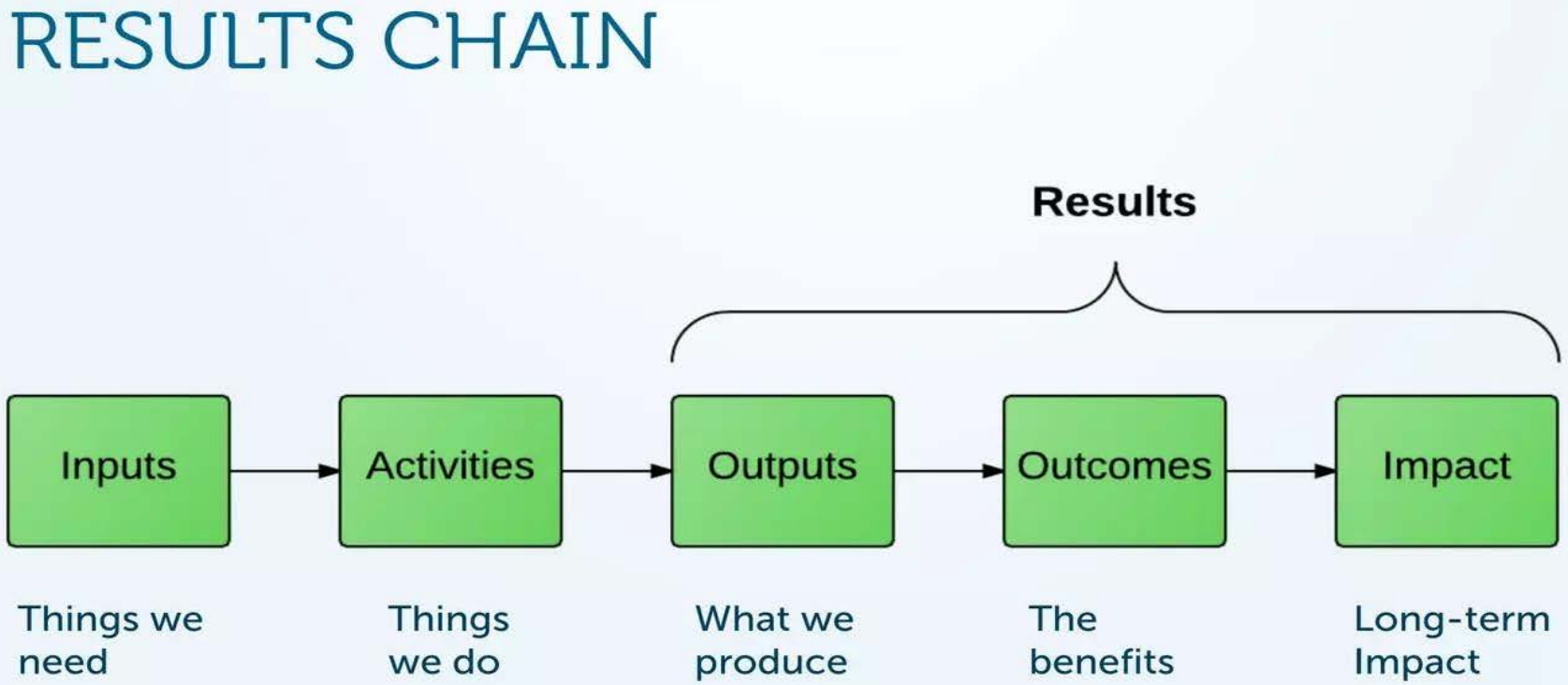
- To strengthen understanding of project Logframe and M&E frameworks.
- To build skills in using AI Tools for M&E data management.
- To improve data analysis and visualization through practice.

SESSION 2:

Project Logframe/M&E Framework Introduction

What Is a Project Logframe?

A Logical Framework (Logframe) is a planning and management tool that summarizes a project's objectives, expected results, indicators, data sources, and assumptions.



Results Hierarchy

Impact
Long-term change

Outcome
Changes in behavior, access, or performance

Outputs
Products and services delivered

Activities
Actions undertaken using project resources

Inputs
Budget, staff, equipment, and materials

Key Components of a Logframe Matrix

Results Chain	Performance indicators	Means of verification	Assumptions and risks
Impact/Goal	Measures long-term change	Evaluations, official statistics	External conditions remain favorable
Outcome/Purpose	Measures changes resulting from project outputs	Surveys, program records	Target groups use the services
Outputs	Measures goods and services delivered	Reports, registers, records	Resources and partners are available
Activities	Measures tasks completed	Work plans, attendance sheets, expenditure reports	Activities can be implemented as planned

Key principle: Every result should have clear indicators and a reliable way to verify progress.

Developing SMART Indicators

Indicators help determine whether a project is achieving its intended results.

SMART indicators are:

- **S — Specific:** Clearly define what is measured.
- **M — Measurable:** Can be quantified or assessed consistently.
- **A — Achievable:** Realistic given available resources.
- **R — Relevant:** Directly linked to project objectives.
- **T — Time-bound:** Specify when the result should be achieved.

Example of an improved indicator

Weak: Improve access to clean water.

SMART: Increase the proportion of targeted households with reliable access to safe drinking water from 55% at baseline to 85% by December 2028.

What Is a Monitoring and Evaluation Framework?

Monitoring

The continuous and systematic tracking of project activities, outputs, indicators, budget, and implementation progress.

Key question: Are we implementing the project as planned?

Evaluation

A systematic assessment of a project's relevance, effectiveness, efficiency, impact, and sustainability.

Key question: What results did the project achieve, and why?

Monitoring	Evaluation
Conducted regularly	Conducted at selected stages
Tracks progress against targets	Assesses results and explains changes
Supports operational adjustments	Supports strategic decisions and learning
Uses routine data and reports	Use surveys, interviews, comparisons, and other studies

Components of the M&E Framework

An effective M&E Framework should specify:

- **Indicators:** What will be measured?
- **Baseline:** What is the situation before implementation?
- **Targets:** What results are expected, and by when?
- **Data sources:** Where will the evidence come from?
- **Methods and tools:** How will data be collected?
- **Frequency:** When will data be collected and reported?
- **Responsibilities:** Who collects, checks, analyzes, and reports the data?
- **Data use:** How will findings inform decisions and project improvements?

Data Collection, Analysis, and Reporting

Collect data

Use surveys, observations, interviews, attendance records, and administrative data.

Verify data quality

Check accuracy, completeness, consistency, and timeliness.

Analyze performance

Compare actual results with baseline values and targets.

Report findings

Prepare dashboards, progress reports, and stakeholder updates.

Take corrective action

Identify delays, revise implementation plans, and document lessons learned.

Data Quality Assessment (DQA) Dimension

Dimension	Definition
Validity	Data should clearly and adequately represent the intended result.
Integrity	Data should have safeguards to minimize the risk of transcription errors or data manipulation.
Precision	Data should have a sufficient level of detail to permit management decision-making.
Reliability	Data should reflect consistent data collection processes and analysis methods over time.
Timeliness	Data should be available at a useful frequency, should be current, and should be timely enough to influence management decision-making.

Illustrative Actions calendar

Progress Reports:

Activity progress, expenditure, and implementation challenges.

Monitoring Results:

Indicator performance, risks, and corrective action plans.

Performance Results:

Outcome review, budget performance, and work-plan revision.

Baseline:

Assess starting conditions and confirm targets.

Midterm:

Assess implementation progress and opportunities for adjustment.

Endline:

Assess achievements against baseline, targets, and project objectives

Example Results Chain

Impact: Improved health and well-being
Reduced exposure to unsafe water and sanitation-related risks

Outcome: Improved WASH access and practices
Households use safe water, sanitation facilities, and handwashing practices

Outputs: Services and capacities delivered
Functional water systems, improved sanitation, hygiene promotion, and trained WASH committees

Activities: Implementation actions
Assess needs, construct or rehabilitate facilities, test water quality, train committees, and conduct hygiene promotion

Inputs: Resources
Funding, technical staff, construction materials, training tools, and community contributions

Example Project Logframe

Results Chain	Performance indicators	Means of verification
Impact: Improved community health and well-being	Reduced WASH-related health risks; assess changes through appropriate health and household data	Health records where available, household surveys
Outcome 1: Improved drinking-water access	At least 90% of targeted households use an improved drinking-water source meeting applicable safety requirements	Household surveys, water-quality test results
Outcome 2: Improved sanitation	At least 80% of targeted households have and use a basic sanitation service	Household surveys, structured observations
Outcome 3: Improved hygiene	At least 80% of households have a designated handwashing facility with water and soap available at the time of observation	Household observations, surveys
Output 1: Water infrastructure delivered	5 community water systems installed or rehabilitated and meeting agreed functionality criteria	Completion reports, inspections, functionality records
Output 2: Sanitation support delivered	300 eligible households receive sanitation support or documented technical assistance	Beneficiary records, inspection reports
Output 3: Hygiene and management capacity strengthened	500 people reached through hygiene promotion; 5 WASH committees trained	Session reports, attendance sheets, committee assessments

Assumptions: Appropriate technical design, sufficient water availability, community participation, affordable operation and maintenance, and continued access to required supplies

THANK YOU!