Design and Monitoring Framework (DMF):
results-focused project design and management

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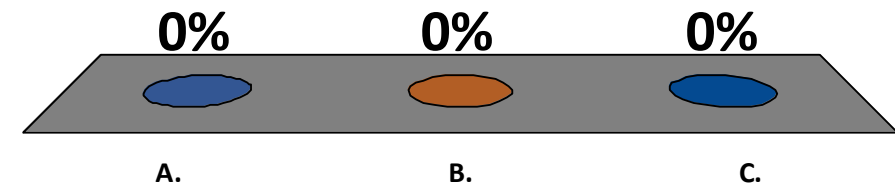
Session Objectives

Increased awareness about and knowledge of:

- Design and Monitoring Framework (DMF) as a tool for designing projects

- Preparing a good DMF; and,

- Using DMF for results-focused monitoring and reporting throughout project cycle

Question: Is this your first visit to Phnom Penh?

A. Yes

B. No – I have visited before

C. I live in Phnom Penh

0%   0%   0%

A.   B.   C.

How do we bring about effective development?
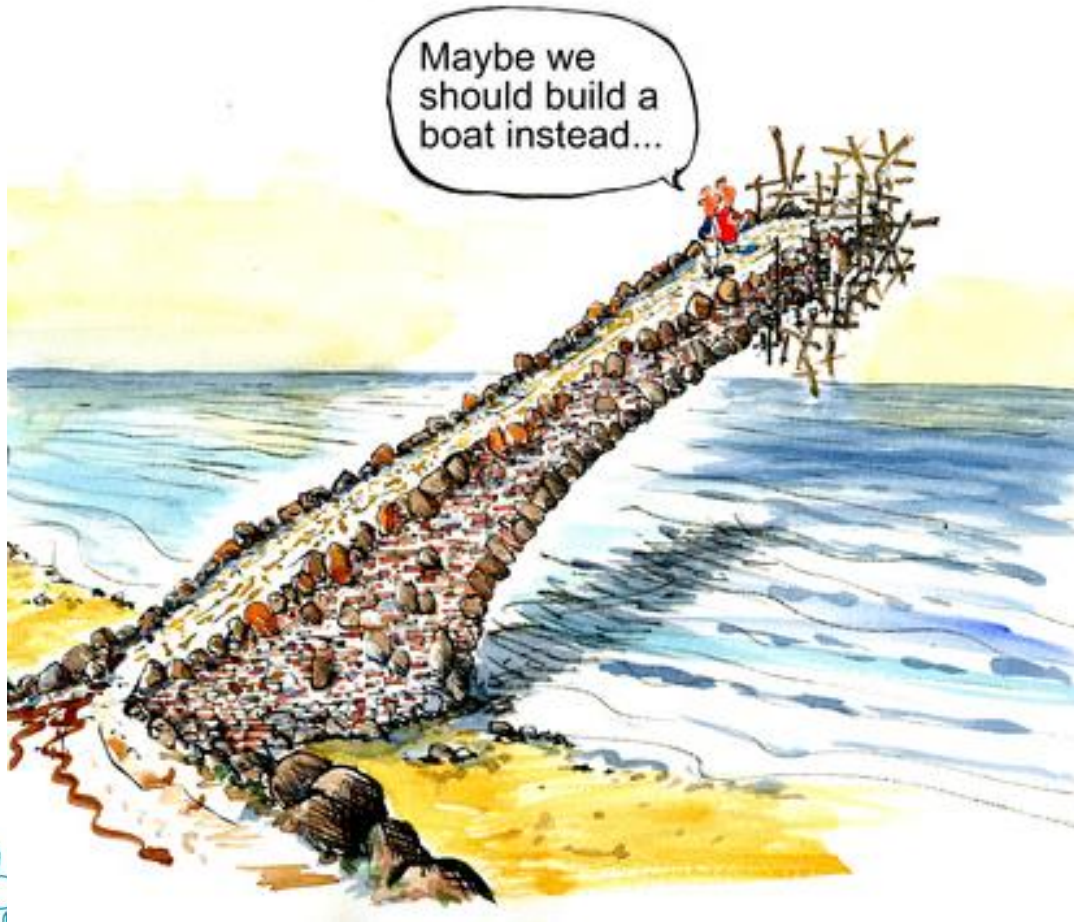
1. **By doing the right things:** selecting/designing a cohesive set of interventions that are best suited to achieving country development objectives

2. **By doing things right:** designing and implementing interventions so that they meet their development objectives

Managing for Development Results (MfDR)
in simple terms

What do you want to achieve with your project or program?

How do you know when the project has been successful?

What is MfDR in practice?
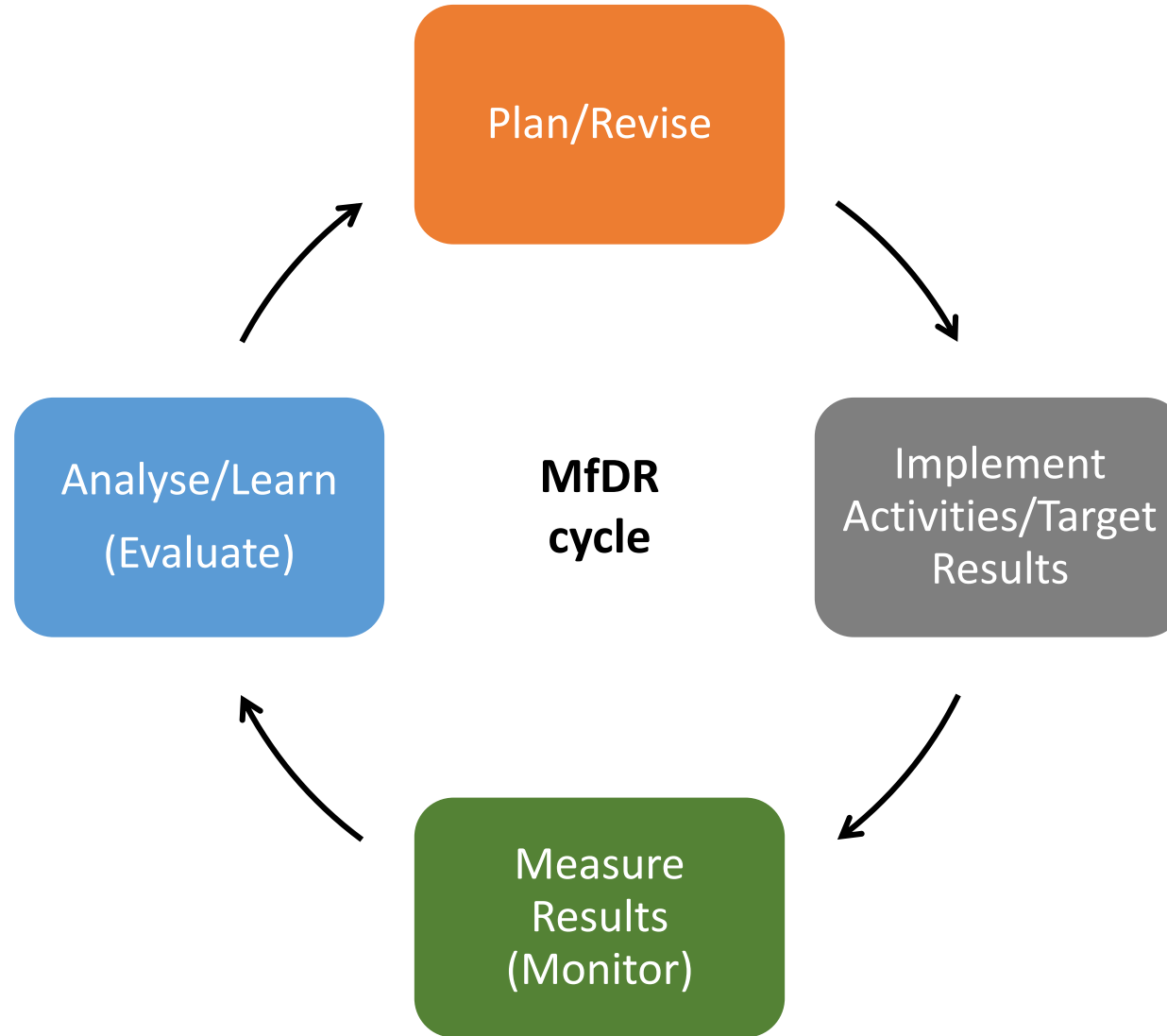
ADB's Project DMF

Impacts the Project is Aligned With			
Results Chain	Performance Indicators with Targets and Baselines	Data and Reporting	Risks
Outcome			
Outputs			
Key Activities with Milestones			
Inputs			
Assumptions for Partner Financing			

Question: How familiar are you with the ADB DMF?

A. **Unfamiliar –** I have not yet seen or used a DMF

B. **Somewhat familiar –** I have seen a DMF, but never used it

C. **Familiar –** I have used a DMF for project monitoring or reporting

0%	0%	0%
A.	B.	C.
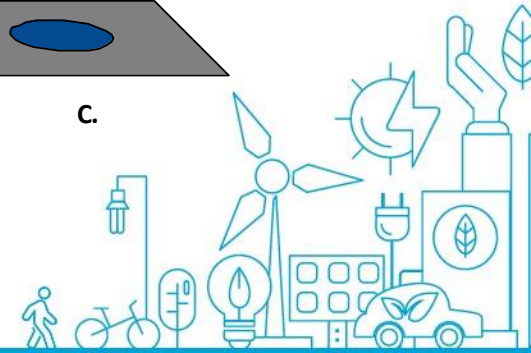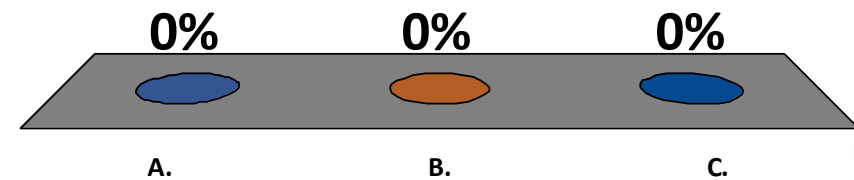
Thinking about results, what is the difference between these two pictures?
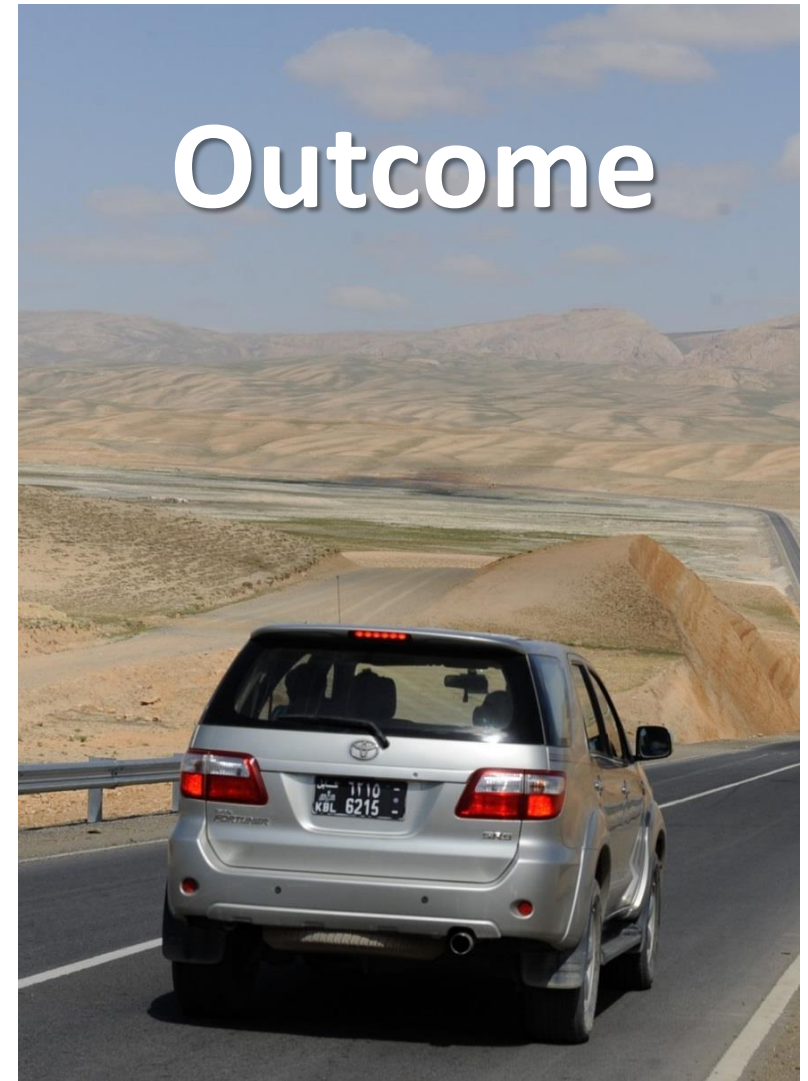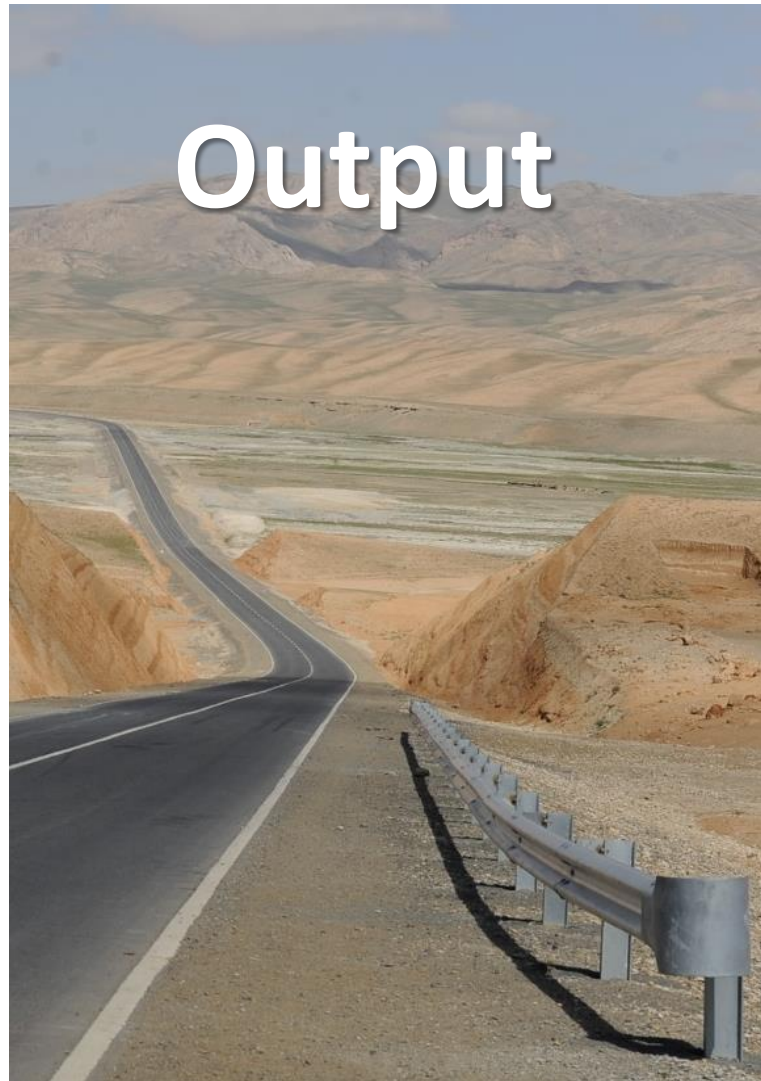
Output

Outcome

Levels of Results

Broader Development Results

- **Impact –** High level development objective that project outcome is aligned to

Project Results Chain

- **Outcome –** Immediate and direct benefit of use or application of outputs
- **Output –** Goods, services, or products delivered by the project to direct beneficiaries

Importance of results

Project control & accountability

Attribution to project

Impact
Longer term change

Outcome
Immediate benefits of use

Output
Deliverables

	Transport	Water	Energy
Impact	Income increased	Health improved	Education attainment higher
Outcome	Mobility improved	Household use of clean water increased	Households using electricity increased
Output	Roads constructed	Water networks built	Power distribution capacity expanded

Question: Which is the correct results chain for this project?

	A	B	C
Impact	Income and employment increased	Income and employment increased	Agricultural production and productivity increased
Outcome	Agricultural production and productivity increased	Irrigation infrastructure constructed	Income and employment increased
Output	Irrigation infrastructure constructed	Agricultural production and productivity increased	Irrigation infrastructure constructed

0% 0% 0%

A. B. C.

Agriculture and Natural Resources Project

Question: Which is the correct results chain for this project?

Impact

Outcome

Output

	A	B	C
Impact	Graduation rate increased	Teaching and learning in classrooms improved	Graduation rate increased
Outcome	Teachers trained and curriculum updated	Graduation rate increased	Teaching and learning in classrooms improved
Output	Teaching and learning in classrooms improved	Teachers trained and curriculum updated	Teachers trained and curriculum updated
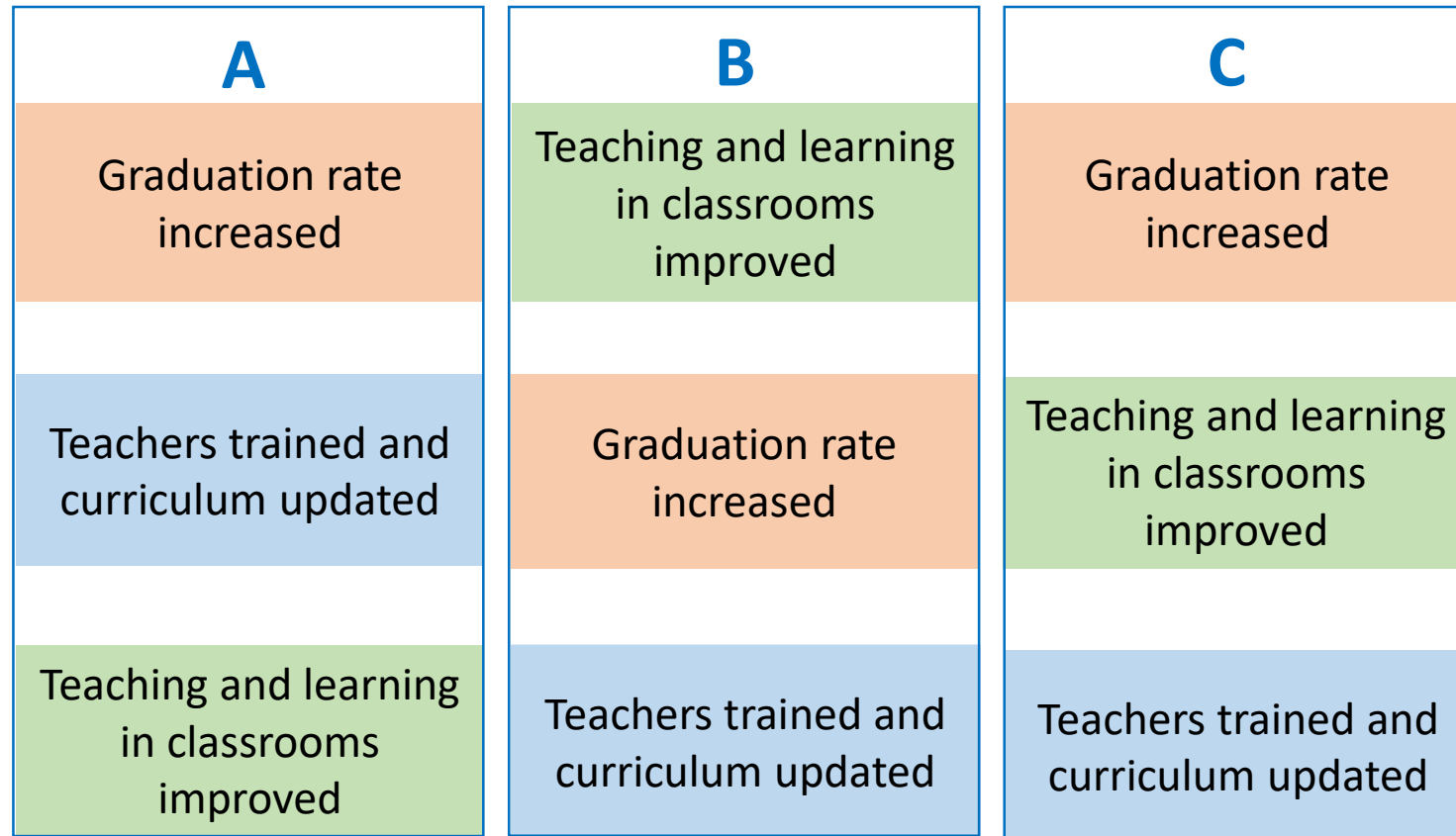
Education Project

0%   0%   0%

A.   B.   C.
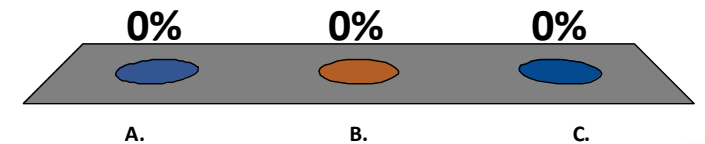
Whose Results?
Preparing the DMF

The process produces the DMF

Solution Development
- Results Chain Development
- Results Analysis

Situation Analysis
- Problem Analysis
- Stakeholder Analysis

Impacts the Project is Aligned With

	Results Chain	Performance Indicators with Targets and Baselines	Data and Reporting	Risks
Outcome				
Outputs				

Key Activities with Milestones

Inputs

Assumptions for Partner Financing
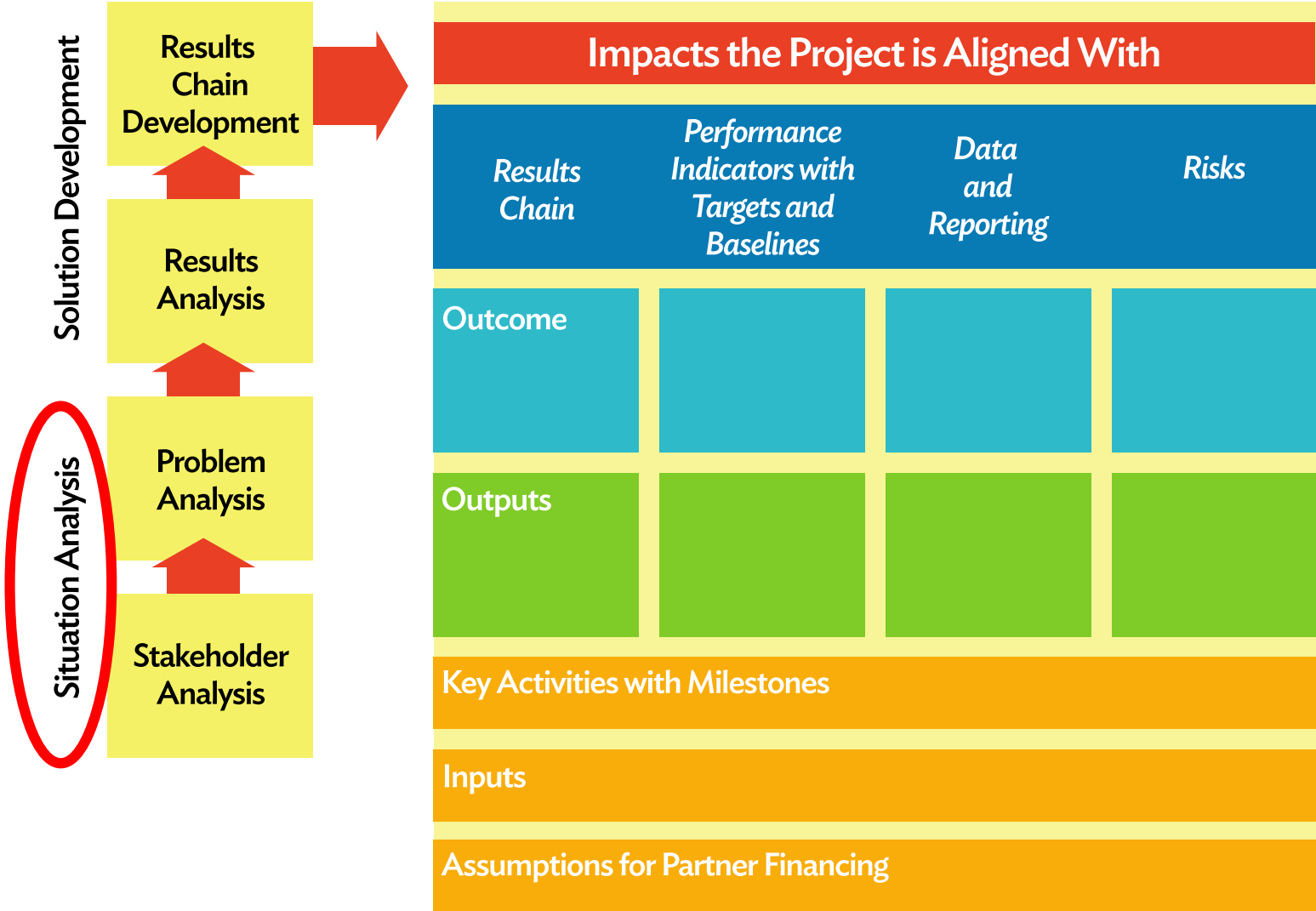
What happens when we don't sufficiently consult stakeholders

Project Concept	Preliminary Design	Project Approval

Detailed Design	Construction	What beneficiaries wanted
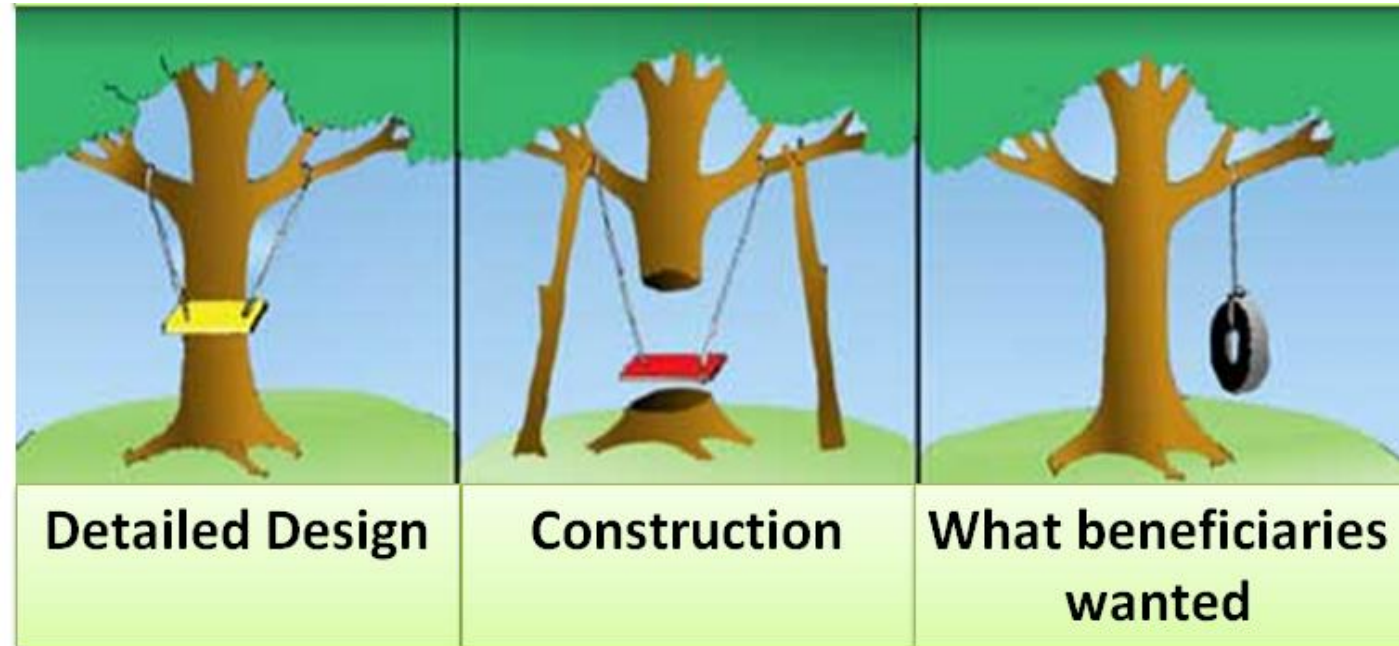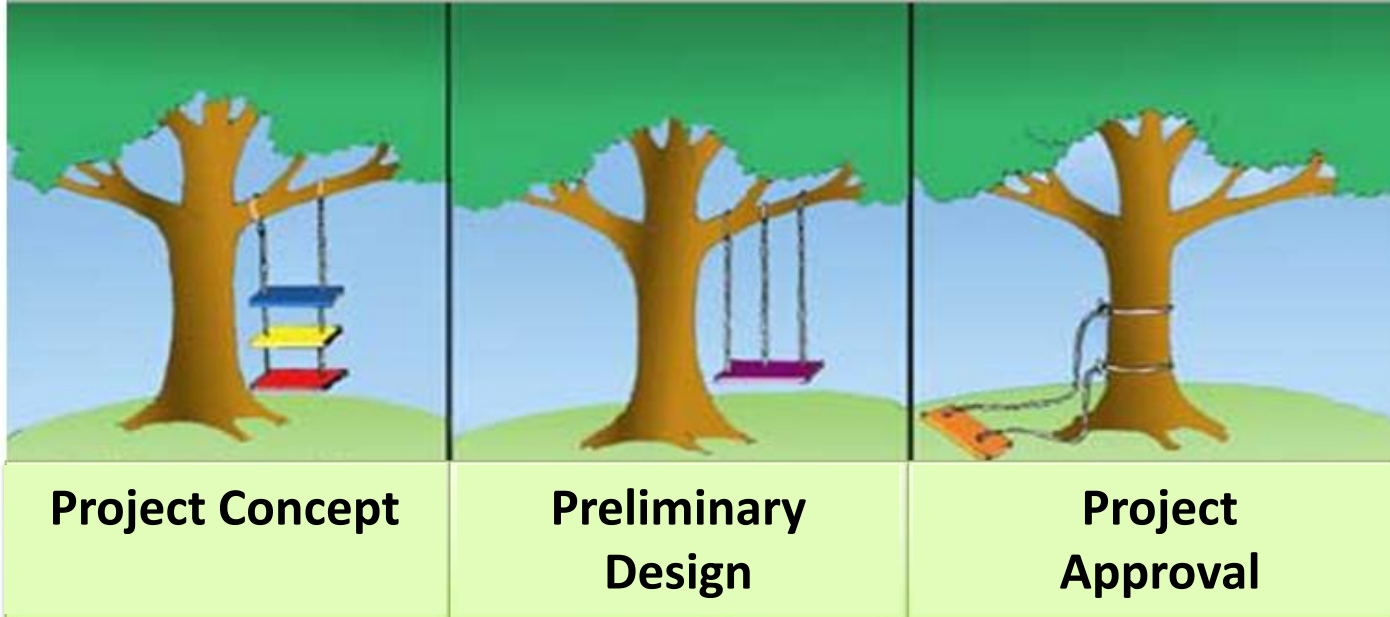
What are Stakeholders?

Agencies, organizations, groups or individuals who have a direct or indirect interest in the project

- May affect, be affected by, or perceive to be affected by a project decision, activity, or result

Stakeholder Analysis – When and Why?

Continuous process that happens during:

1. Problem identification

- Identify important stakeholders and involve them in problem analysis

2. Project formulation

- Solicit stakeholder input into design decisions and risk analysis

3. Project implementation

- Confirm stakeholder involvement, keep them informed, track their changing circumstances / interests, and plan their possible involvement in monitoring and evaluation
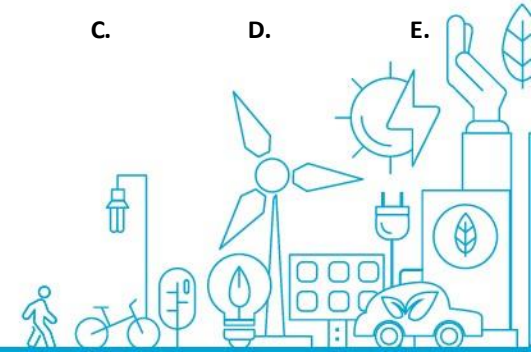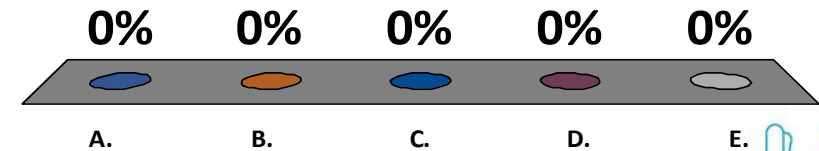
Problem Tree Analysis - steps

Effects

Core "Starter" Problem
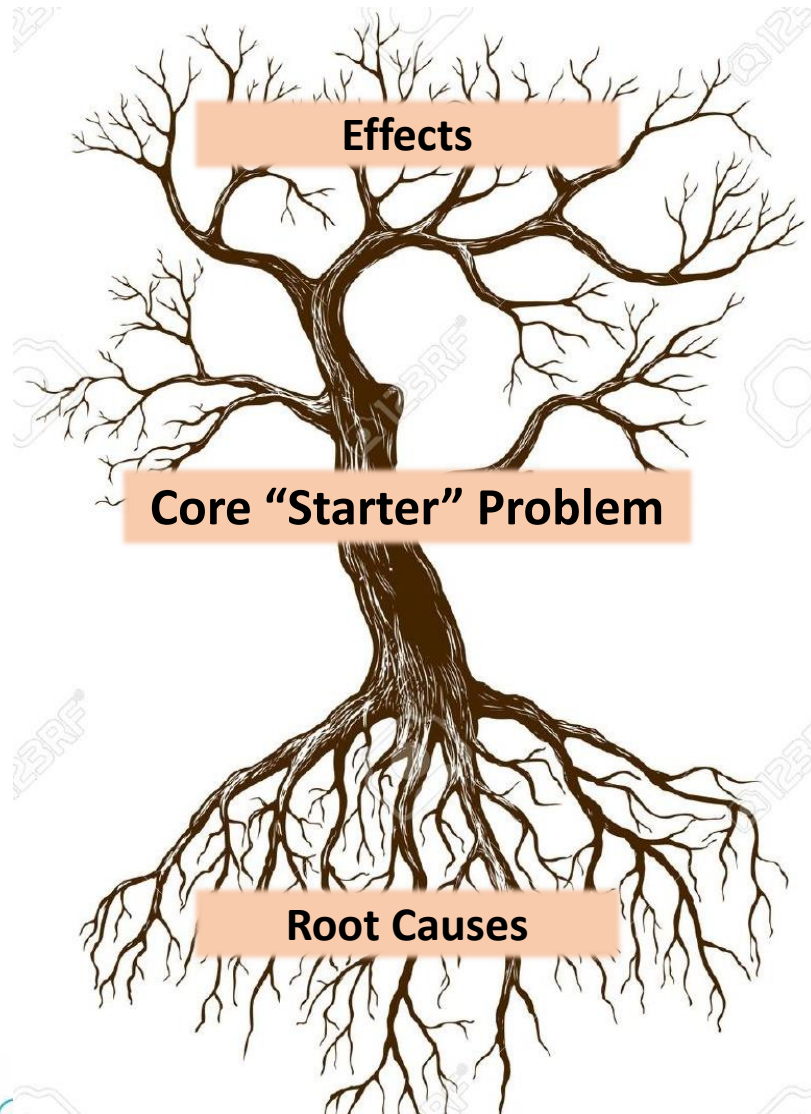
Root Causes

1. Place core "starter" problem in center

2. Identify direct cause of core problem, then secondary cause, creating a hierarchy of problem causes and effects ("roots")

3. Identify problems which are direct effects/symptoms of core problem. Put them above ("branches")

How to Build the Problem Tree

Harvest is lower than expected

Not able to plan for farm productivity improvements

Farmers' planting area is reduced

Starter Problem

Irrigation system is not reliable

EFFECTS

CAUSES

Water supply Is erratic

System breaks down often

Water source dries up in summer

Maintenance not done regularly

Irrigation is not a priority of Local gov't

The process produces the DMF

Solution Tree

Harvest at or above planned levels

Harvest is lower than expected

Not able to plan for farm productivity improvements

Long-term plans undertaken

EFFECTS

CAUSES

Farmers' planting area is reduced

Farmers planting area optimized

Irrigation system is not reliable

Farmers' water requirements are met

Water available at required times

Water supply Is erratic

System breaks down often

System functions 90% of days

Water sources supply needs year round

Water source dries up in summer

Maintenance not done regularly

Maintenance according to schedule

Water sources / catchment areas protected

Irrigation is not a priority of Local Govt

Local Govt funds irrigation at needed levels

How will we know if we have succeeded?

Indicators and Performance Targets

What are you going to measure?

	Performance Indicators with Targets and Baselines	Data and Reporting	
Impacts the Project is Aligned With			
Results Chain	**Performance Indicators with Targets and Baselines**	**Data and Reporting**	**Risks**
Outcome			
Outputs			
Key Activities with Milestones			
Inputs			
Assumptions for Partner Financing			

What is an Indicator?

A measurement device to:

- Tell you whether an expected result has been achieved, recognizes success

- Force us to clarify what we mean by our expected results

- Rate project success

A good indicator is SMART

- **<u>S</u>pecific –** details result statement (who, where, when, quality, quantity, cost, etc.)

- **<u>M</u>easurable –** stated in quantifiable terms; feasible to collect data for

- **<u>A</u>chievable –** realistic in what is to be achieved

- **<u>R</u>elevant –** appropriate to the result statement; useful for management information purposes

- **<u>T</u>ime-bound –** state with <u>target and baseline</u>, both with dates

Example Performance Indicator

Road Project – Outcome Indicator

Average bus passenger travel time from town A to town B decreased to 50 minutes by 2021 (2018 Baseline: 120 minutes)

Legend

Result (Change we want)
Indicator (How we will count it)
Target & Baseline (How much change from where we are now, by when)

Data Sources and Reporting: What to include in the DMF

Ministry of Agriculture Annual Production Report

Survey of training participants, Final Report of Training Consultant
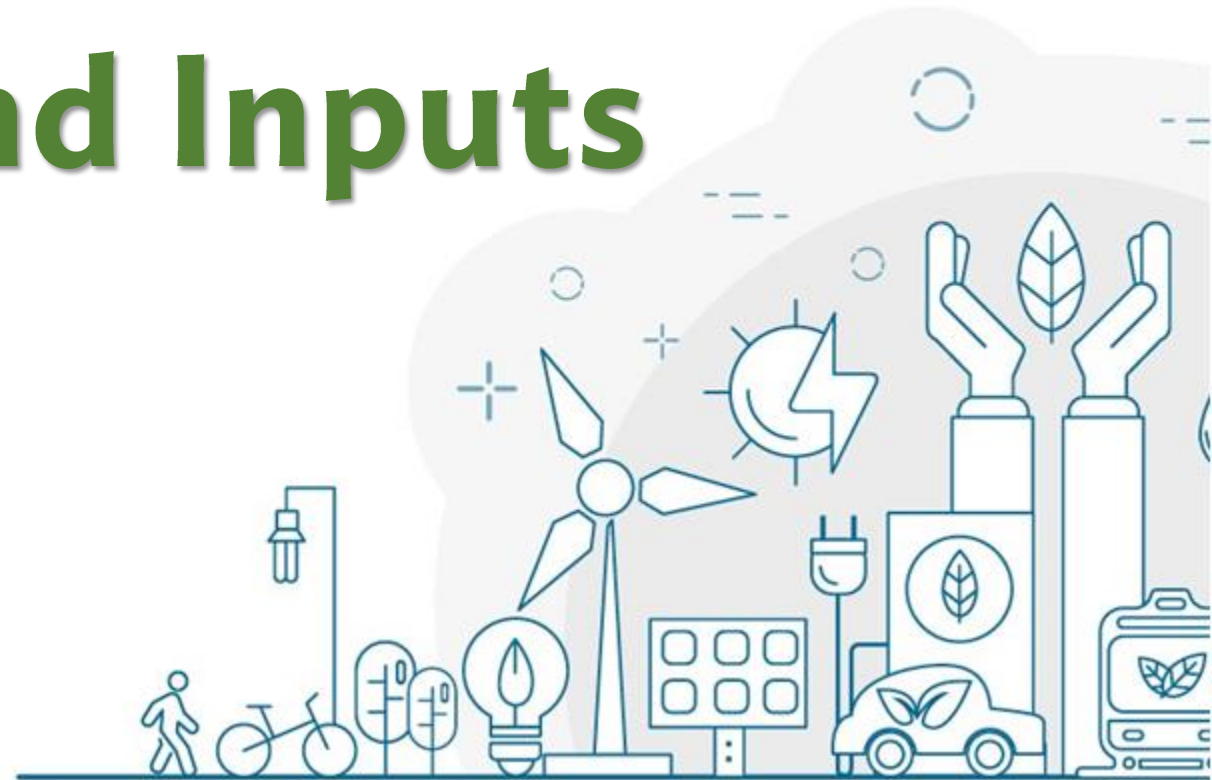
Legend:
1. **Document Name**
2. **Document Author**
3. **Frequency of the document**
4. **Root source/data collection tool**

How will we deliver results?

Activities and Inputs

Activities and Inputs

Impacts the Project is Aligned With			
Results Chain	Performance Indicators with Targets and Baselines	Data and Reporting	Risks
Outcome			
Outputs			
Key Activities with Milestones			
Inputs			
Assumptions for Partner Financing			

Key Activities with Milestones
Example in DMF

Key Activities with Milestones

Output 1: 550 km north–south road corridor improved
1.1 Recruit project management, supervision, and design consultant (Jan 2011)
1.2 Procure civil works (Jan 2011–May 2019)
1.3 Mobilize project management and supervision consultant (Jun 2011)
1.4 Implement and complete civil works (September 2013–Jun 2019)

Output 2: Border and customs facilities modernized
2.1 Procure equipment (Jan 2015)
2.2 Install equipment (June 2015)
2.3 Rehabilitate and improve facilities (Jan 2015–Jun 2019)

Project Management Activities
Conduct needs assessment for specific skills and knowledge areas (Q1–Q2 2015) [G/CD]
Customize learning modules as needed to fit participant needs (Q3 2015) [G/CD]
Deliver and evaluate training courses for 170 staff (50% female) in procurement, project management, safeguards, and financial management. (Q4 2015–Q4 2016) [G/CD] [GE]

Inputs

- **A summary of main resources**
- **Group inputs by financier**

Example:

Inputs	
Government:	$160,000,000
ADB:	$160,000,000
World Bank Group:	$100,000,000 (loan)
Australia:	$60,000,000 (grant)

What could prevent success?
Risks

What could go wrong?

Impacts the Project is Aligned With			
Results Chain	**Performance Indicators with Targets and Baselines**	**Data and Reporting**	**Risks**
Outcome			
Outputs			
Key Activities with Milestones			
Inputs			
Assumptions for Partner Financing			

Risks are:

- **External factors outside project control that could prevent achievement of targeted results**
- **Uncertainties**

CHECKLIST

? What could shift in the external environment?

? What external forces may act against project success?

Transport – Identifying Risks

Outcome — Mobility from A to B increased

Sudden surge in crime limits travel

Output — Roads built

Bilateral issues lead to border closure delaying equipment imports

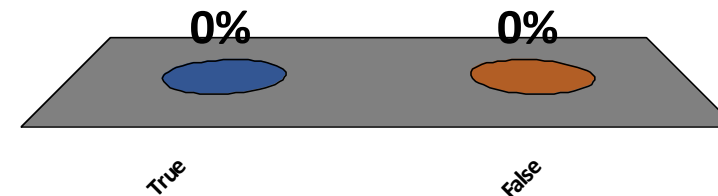**Activity** — Designing and constructing roads

How do we manage for success?

Results-focused Project Monitoring and Reporting

Question: True or False? If the project has delivered its outputs, measuring outcomes is no longer important:

A. True

B. False

0% 0%

True False

Output

Outcome

Why is monitoring outcomes so important?

Design stage considerations for ensuring quality results-based monitoring

- Required monitoring and evaluation (M&E) activities budgeted for

- Responsibilities, data collection methodologies, and reporting requirements adequately reflected in Project Administration Manual (PAM) and consultant Terms of Reference (TOR)
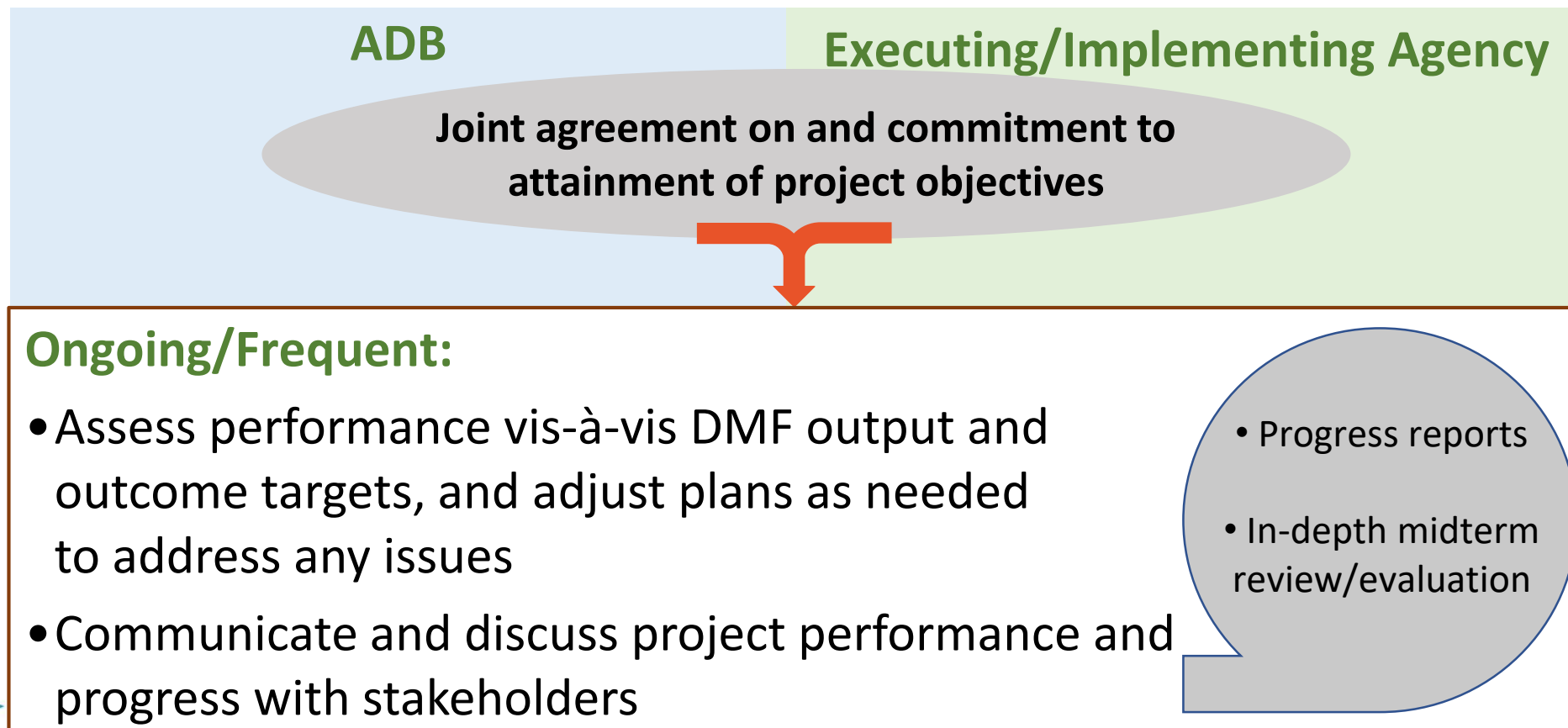 - Independent M&E consultant

Project Administration Manual
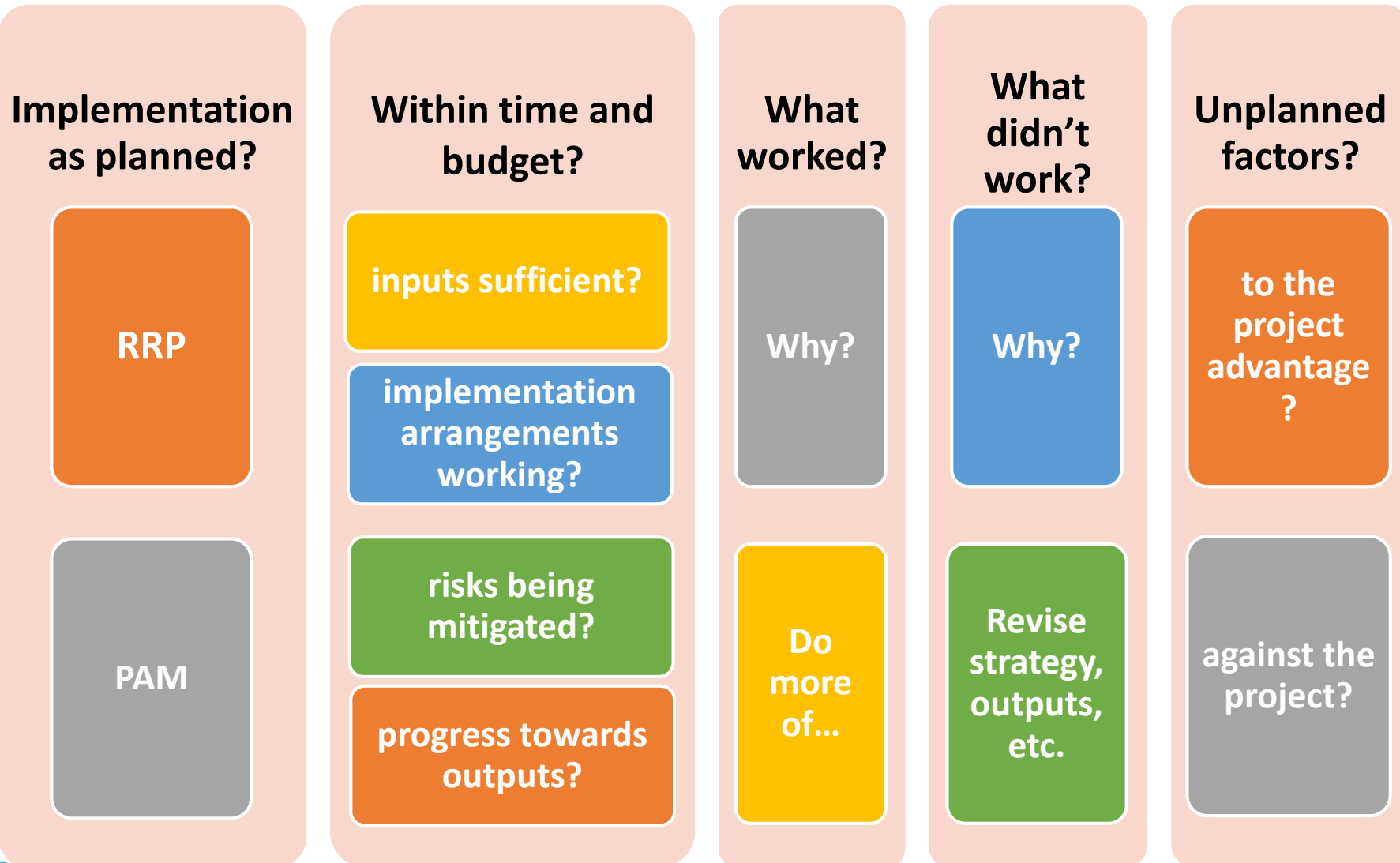
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Roles and Responsibilities for ADB financed projects

ADB

Executing/Implementing Agency

Joint agreement on and commitment to attainment of project objectives

Ongoing/Frequent:

- Assess performance vis-à-vis DMF output and outcome targets, and adjust plans as needed to address any issues

- Communicate and discuss project performance and progress with stakeholders

- Progress reports

- In-depth midterm review/evaluation
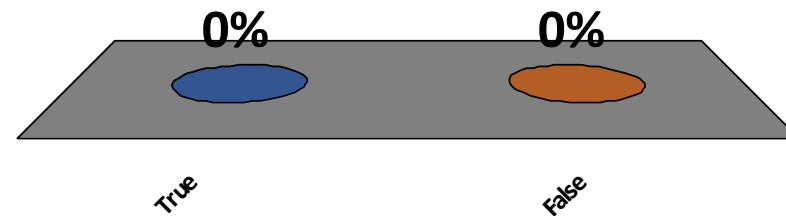
Question: True or False? A good progress monitoring report provides as many details as possible about activities:

A. True

B. False

0%   0%

True   False

Role of DMF during implementation

Measure progress (monitoring and evaluation)

Ensure activities are delivering outputs

Fact-driven decision-making

Maintain focus on outcomes

Project Administration Manual: DMF reporting template

Results Chain	Performance Indicators with Targets and Baselines	Achievements
Outcome Productive and resource efficient agribusiness value chains developed in project areas	By 2026 a. At least 15% increase in yields (2017 baseline: rice 2.7 tons, maize 4 tons, cassava 20 tons and mango 15 tons/ha). b. GHG emissions reduced by 240,000 tons of CO_2 (2017 baseline: 0 tons reduced due to the project). c. At least 50 agribusinesses become more resource efficient in terms of water savings (5-10% efficiencies); energy savings (20%); and reduction in post-harvest losses (10%) (2017 baseline: 0).	
Outputs 1. Critical agribusiness value chain infrastructure improved and made climate resilient	By 2024 1a. 27 irrigation and water management systems rehabilitated (2017 baseline: 0). 1b. 800 on-farm rainwater harvesting ponds installed and commissioned (2017 baseline: 0). …Etc.	

Example detailed DMF reporting template
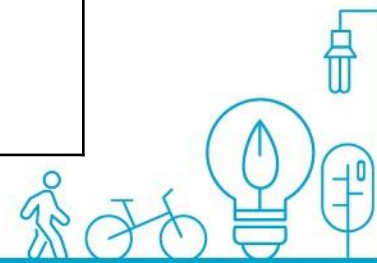
Example project progress report excerpt at year 2 of project implementation:

OUTPUTS

Output: Road users' capacity for safe road use increased.

Indicator	Unit of measure	Baseline	Baseline date		Year 1	Year 2	Year 3	Year 4	End of Project
At least 6,400 road users in project communities with increased awareness of safe road use practices. (M/F)	#	0	09/2011	T			3,000		6,400
				A	20 M: 10; F: 10	2,000 M: 1,250 F: 850			

Status Update: Following the pilot of the training program in year 1, the training was rolled out in year 2, putting the project on track to meeting the Year 3 milestone target. Via the post-training survey 2,020 participants (98% of respondents) have indicated that the training improved their awareness of safe habits for road use. The remaining 2% indicated that they were already aware of the habits taught prior to their participation.

Output: State highways upgraded.

Indicator	Unit of measure	Baseline	Baseline date		Year 1	Year 2	Year 3	Year 4	End of Project
At least 419 km of state highways upgraded to 2 lanes with paved shoulders.	Km	0	09/2011	T	0	100	280	370	419
				A	0	20			

Status Update: Material procurement delays put the building works being planned schedule. Requisite materials have now been acquired, and construction has begun. Project management has agreed to seek to speed-up work; however, given the extensive delay, the project timeline will need to be extended by 1 year.

Legend: T = target; A = actual

Revising or Updating the DMF

- **DMF should be adjusted as needed to reflect changing circumstances and project environments**

- **To make a change it must be:**

  (a) agreed between ADB and executing/implementing agency; and,

  (b) recorded, justified and approved

  ➢ **Major change in scope** – substantive changes to project outcome statement or outcome indicators
    - Requires Board approval on no-objection basis

  ➢ **Minor change in scope** – substantive changes to project outputs or output indicators

Role of DMF at Project Completion

Evaluate performance

Document learning and lessons for future programming

How ADB projects are rated

- **Relevance** – was outcome consistent with country and sector priorities and ADB's strategic objectives? Was project design suitable for addressing identified development constraints?

- **Effectiveness –** were outcome and output targets achieved?

- **Efficiency –** how efficiently were outputs delivered? (time, cost, expected rate of return)

- **Sustainability –** is outcome likely to be sustained overtime in an environmentally and socially sustainable way?

In Summary....

A Good Quality DMF:

1. Is informed by stakeholder consultations

2. Has a proper results chain – outputs and outcome

3. Has SMART indicators

4. Is actively used as a project management tool

Thank You!
Questions?

For enquiries:
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Resources:
ADB DMF Guidelines (2019)
Workshops on request