

# Мониторинг и оценка (M&E) региональных программ

Monitoring and Evaluation (M&E)  
of regional programs

# Outline

- Introduction
- Overview of Evaluation in Developed and Developing Countries
- Results-Based Monitoring and Evaluation (M&E)
- Approaches to Evaluation

# Introduction:

## Importance of evaluation

- There are growing pressures in developing countries to improve performance of their public sectors
- Involves reform by tracking results of government or organizational actions over time
- Is a management tool

# The Power of Measuring Results

- If you do not measure results, you cannot tell success from failure
- If you can not see success, you can not reward it
- If you can not reward success, you are probably rewarding failure
- If you can not see success, you can not learn from it
- If you can not recognize failure, you can not correct it
- If you can demonstrate results, you can win public support

- Overview of Evaluation in Developed and Developing Countries

# Evaluation in Developed Countries

- Most of the 32 OECD countries have mature M&E systems
- Earliest adopters had:
  - democratic political systems
  - strong empirical traditions
  - civil servants trained in social science
  - efficient administrative systems and institutions

# A Strong Evaluation Culture Exists when:

1. Evaluation takes place in many policy domains
2. Supply of evaluators on staff who have mastered methods of different specialized disciplines
3. National discourse exists on evaluation
4. Profession exists with own societies or meetings with discussion of norms and ethics

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# A Strong Evaluation Culture Exists when: (cont.)

5. Institutional arrangements exist in government for conducting evaluations and disseminating to decision makers
6. Institutional arrangements present in legislative bodies for conducting evaluations and disseminating them to decision makers

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# A Strong Evaluation Culture Exists when:

(cont.)

7. An element of pluralism exists within each policy domain
8. Evaluation activities also take place within the supreme audit institution
9. Evaluations focus not only on technical production or relation between inputs and outputs but also on program or policy outcomes

# Approaches

- Whole-of-Government
- Enclave
- Mixed

# Whole-of-Government Approach

- Adopted in some early M&E pioneer countries
- Broad-based, comprehensive M&E at all levels of government
- Millennium Development Goals created impetus
- Challenging where different ministries are at different stages

# Enclave Approach

- More limited, focus on one part or sector of government (a ministry or the cabinet)
- Strategy:
  - begin at local, state, or regional governmental level
  - pilot evaluation systems in a few key ministries or agencies

# Mixed Approach

- Blended whole-of-government and enclave approaches
- Some areas have a comprehensive approach; others more sporadic attention

# Evaluation in Developing Countries

- Face similar and different challenges
- Weak political will slows progress
- Difficulties in inter-ministerial cooperation and coordination can impede progress

# Evaluation Systems in Developing Countries

- New evaluation systems need:
  - political will in the government
  - highly placed champions willing to assume political risks
  - credible institutions

# Developing Countries Need to:

- Establish a foundation for evaluation
  - statistical systems and data, as well as budgetary systems
- Routinely collect baseline information
- Train officials in data collection, monitoring methods, and analysis



# Development Assistance Committee (DAC) Criteria for Evaluating Development Assistance

- Relevance
- Effectiveness
- Efficiency
- Impact
- Sustainability

- Results-Based Monitoring and Evaluation

## Results-Based Monitoring

- Results-based monitoring (what we call “monitoring”) is a *continuous process* of collecting and analyzing information on key indicators, and *comparing actual results* to *expected results*

## Results-Based Evaluation

- Results-based evaluation is an assessment of a planned, ongoing, or completed intervention to determine its relevance, efficiency, effectiveness, impact, and/or sustainability

# Difference between Results-Based Monitoring and Results-Based Evaluation

- Monitoring: tracks movement of indicators towards the achievement of specific, predetermined targets
- Evaluation: takes a broader view, considering progress toward stated goals, the logic of the initiative, and its consequences
- Both are needed to better manage policies, programs, and projects

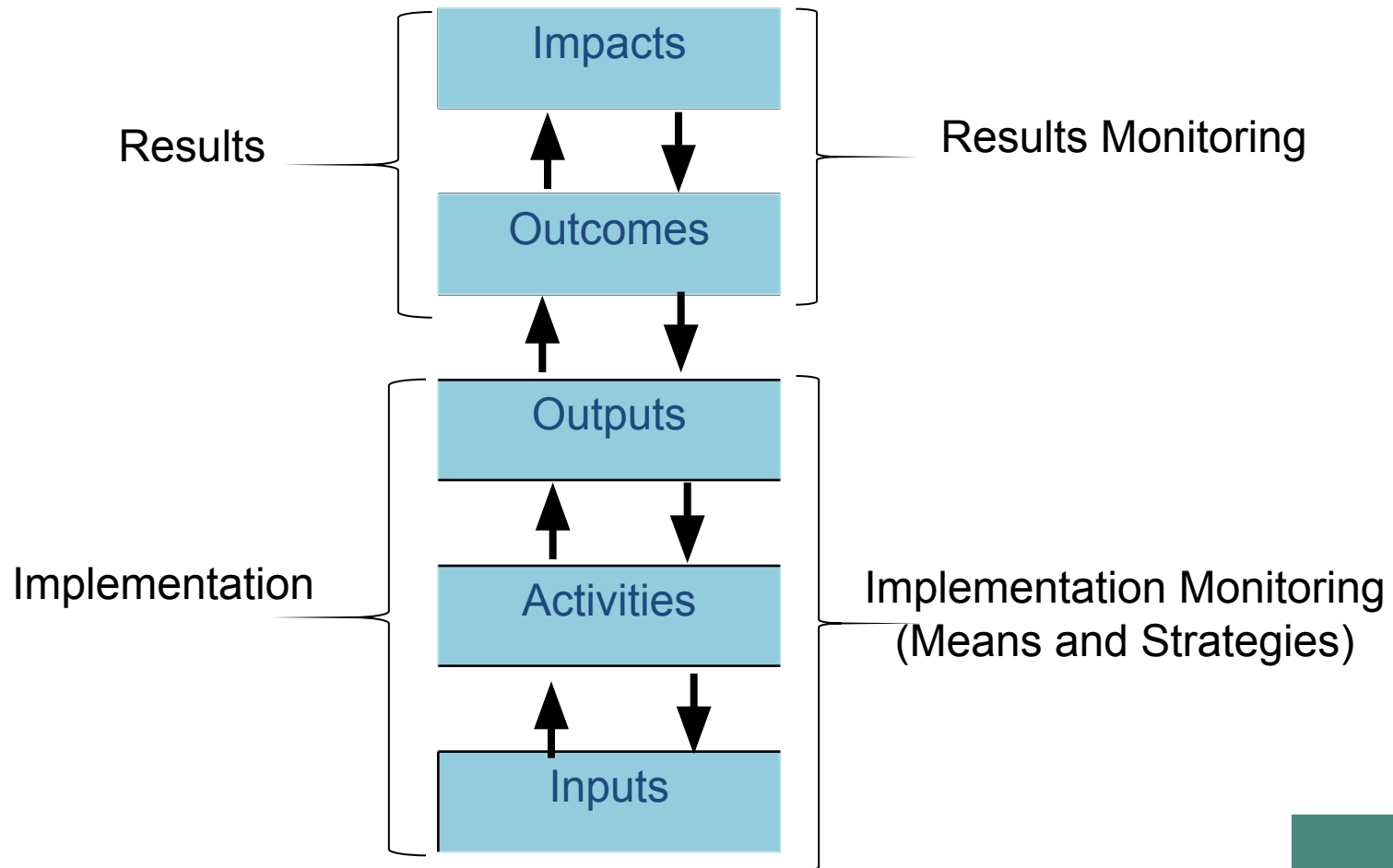
## Brief Introduction to Theory of Change

- Theory of change is a representation of how a project, program or policy initiative is *expected* to lead to the outcomes and impacts. It also identifies the *underlying assumptions* being made with respect to how the change will occur.

## Components of Theory of Change

- Inputs – financial, human, and material resources
- Activities – tasks undertaken
- Outputs – products and services
- Outcomes – behavioral changes
- Impacts – long term widespread improvement in society

# Theory of Change and Types of Monitoring



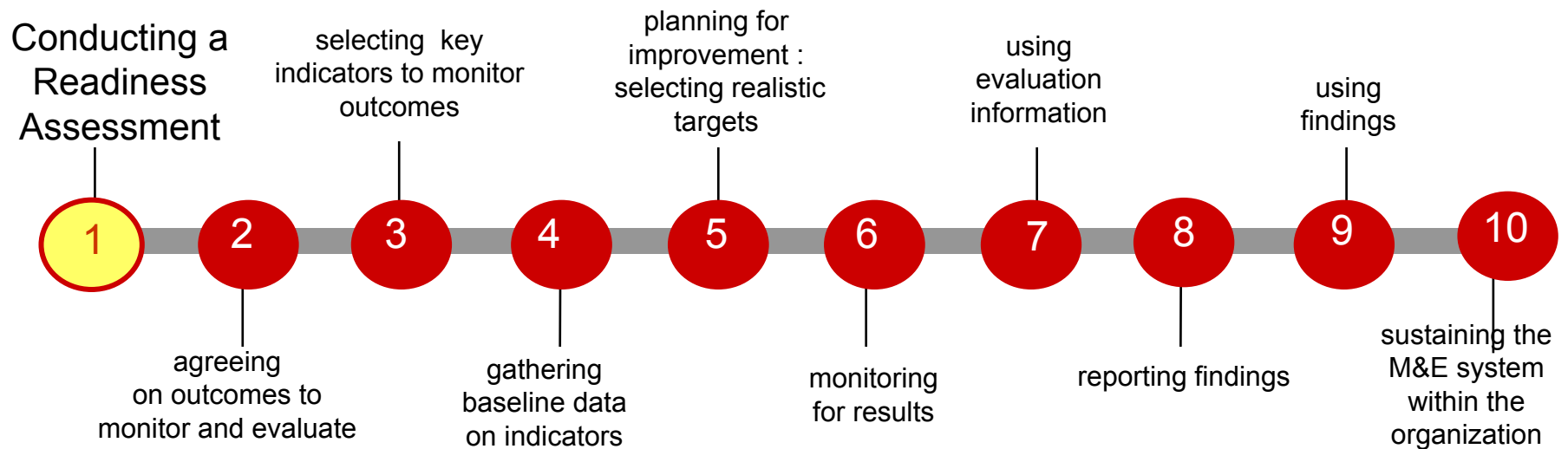


## Performance Indicators

- A variable that tracks the changes in the development intervention or shows results relative to what was planned
- The cumulative evidence of a cluster of indicators is used to see if an initiative is making progress

# Ten Steps to Building a Results-Based M&E System

## Step 1: Conducting a Readiness Assessment



## What Is a Readiness Assessment?

- A systematic approach to determine the capacity and willingness of a government or organization to construct a results-based M&E system
  - The approach focuses on: presence or absence of champions, incentives, roles and responsibilities, organizational capacity, and barriers to getting started

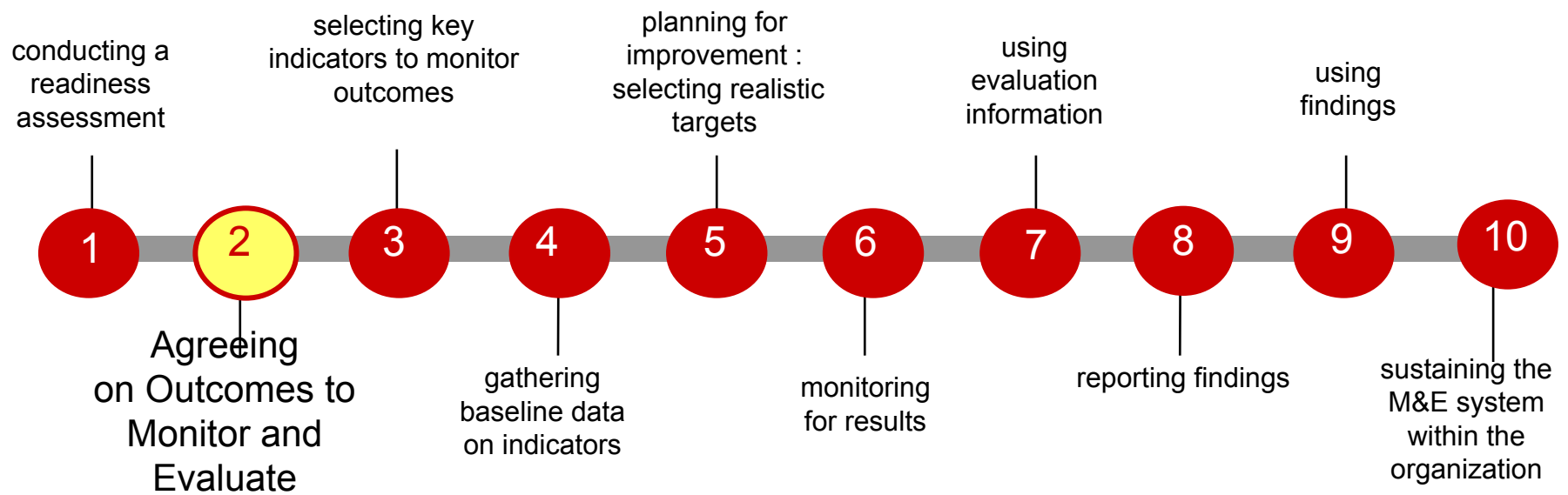
## Incentives

- Sort out the answers to these questions:
  - What is driving the need for building an M&E system?
  - Who are the champions for building and using an M&E system?
  - What is motivating those who champion building an M&E system?
  - Who will benefit from the system?
  - Who will not benefit?

## Barriers to M&E

- Do any of the following present barriers to building an M&E system?
  - lack of fiscal resources
  - lack of political will
  - lack of a champion for the system
  - lack of an outcome-linked strategy ,or experience
- How do we confront these barriers?

## Step 2: Agreeing on Outcomes to Monitor and Evaluate



## Why an Emphasis on Outcomes?

- Makes explicit the intended objectives of government action
- Outcomes are what produce benefits
- Clearly setting outcomes is key to designing and building results-based M&E system
- *Important!* Budget to outputs, manage to outcomes!
- (*"Know where you are going before you get moving"*)

# Developing Outcomes for One Policy Area: Education

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Outcomes:	Indicators:	Baselines:	Targets:
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1. Improved coverage of preschool programs			
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2. Improved primary school learning outcomes			
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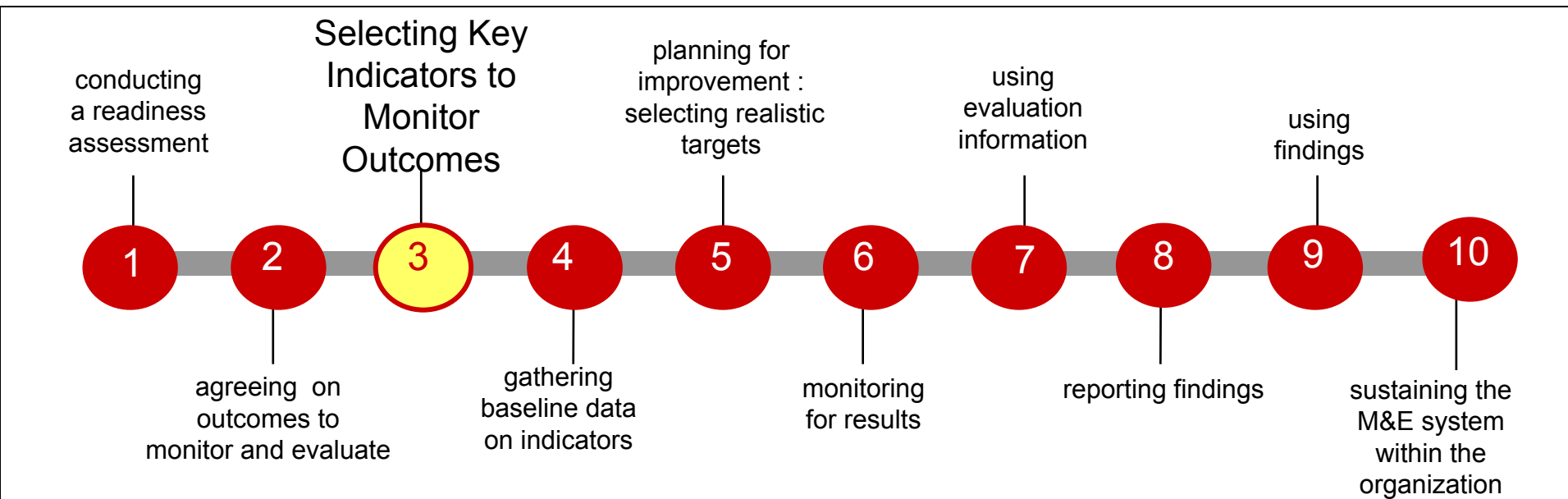
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## Outcomes:

- Outcomes are usually not directly measured — only reported on
- Outcomes must be translated to a set of key indicators
- When choosing outcomes, “Do not go it alone!” – agreement is crucial

## Step 3: Selecting Key Indicators to Monitor Outcomes



## Results Indicator

- A specific variable, that when tracked systematically over time, indicates progress (or lack thereof) toward an outcome or impact
  - for new M&E systems, all indicators should be numerical
  - qualitative indicators can come later with mature M&E systems
- Indicators ask: How will we know success when we see it?

## Indicator Development

- “CREAM”
  - Clear
  - Relevant
  - Economic
  - Adequate
  - Monitorable

# Matrix for Building/Using Indicators

Indicator	Data source	Data collection method	Who will collect data	Frequency of data collection	Cost to collect data	Difficulty to collect	Who will analyze and report data	Who will use data
1.								
2.								
3.								
4.								

# Developing Set of Outcome Indicators for One Policy Area: Education

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Outcomes:	Indicators:	Baselines:	Targets:
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1. Improved coverage of preschool programs

1. Percent of eligible urban children enrolled in preschool  
2. Percent of eligible rural children enrolled in pre-school

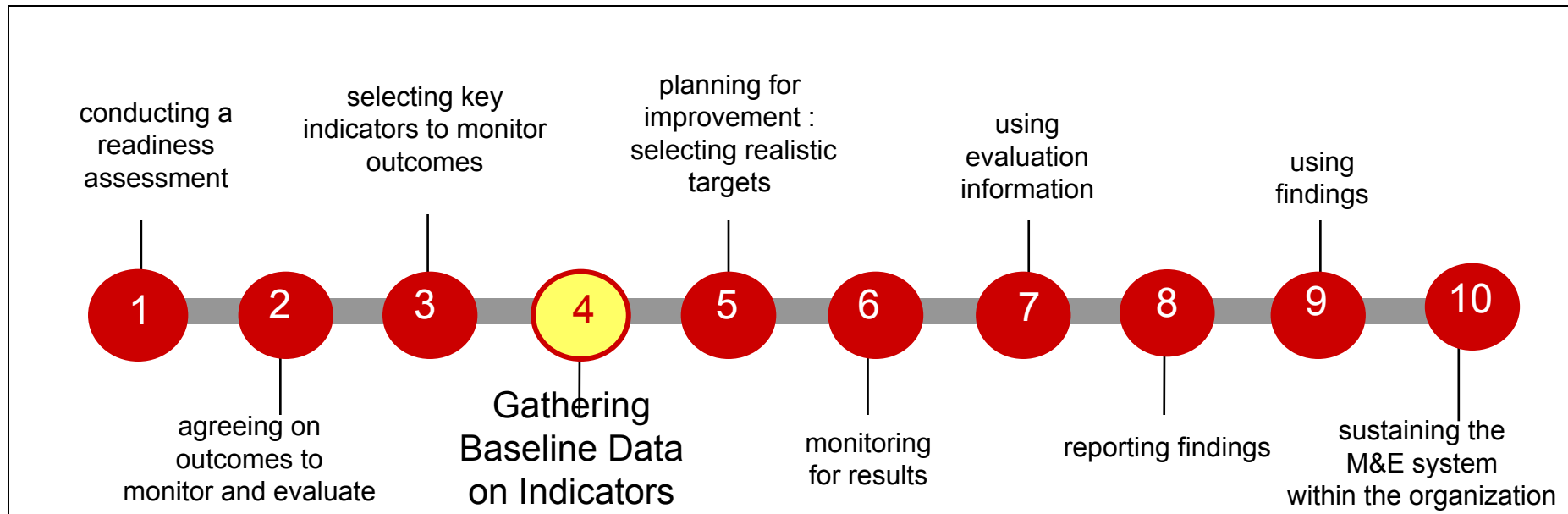
2. Improved primary school learning outcomes

1. Percent of Grade 6 students scoring 70 percent or better on standardized math and science tests  
2. Percent of Grade 6 students scoring higher on standardized math and science tests in comparison to baseline data

## Developing Indicators

- Develop your own indicators to meet your needs
- Developing good indicators usually takes more than one try
- State all indicators neutrally – not “increase in...” or “decrease in...”
- Pilot, Pilot, and Pilot!

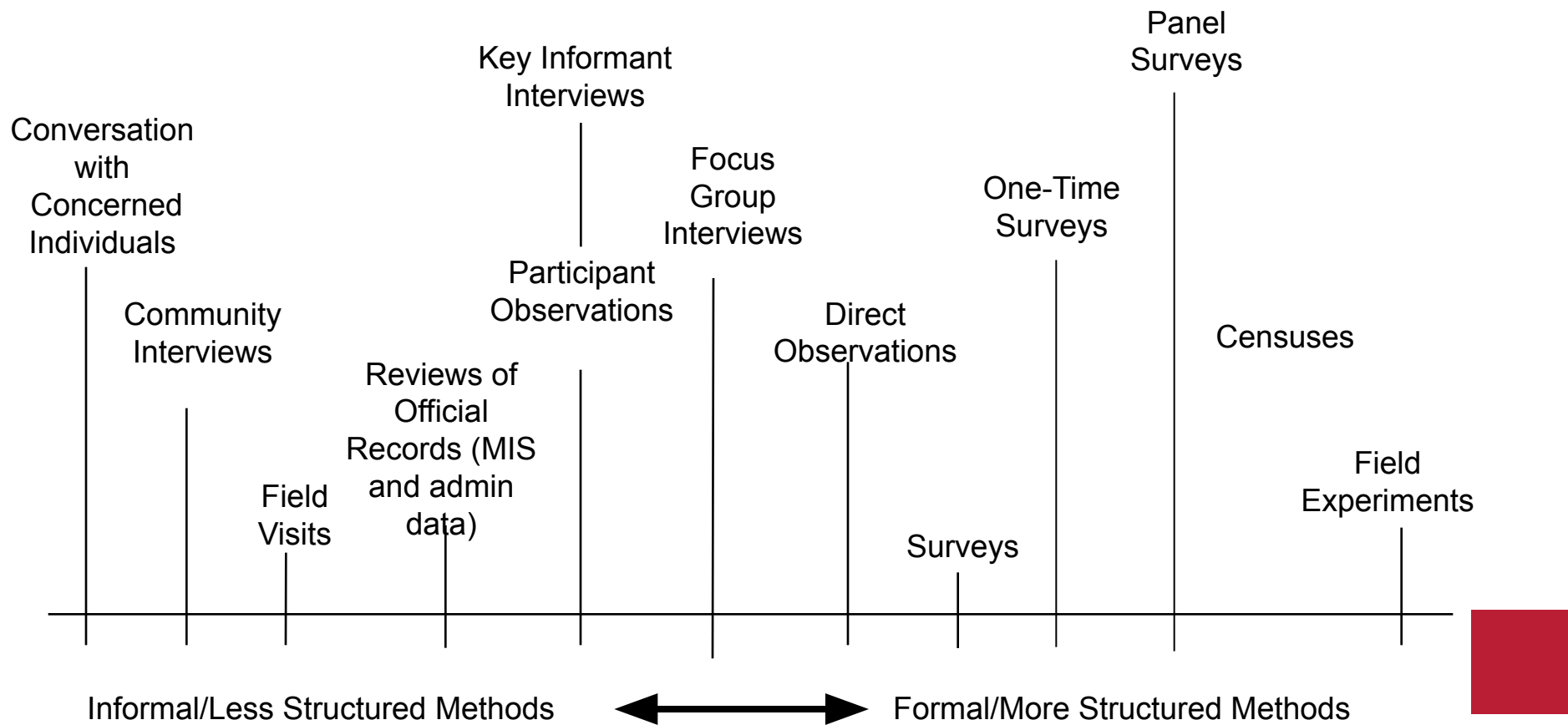
## Step 4: Gathering Baseline Data on Indicators





## Baseline Data and Sources

- Baseline data:
  - Measurements to find out - where are we today?
- Primary source:
  - gathered specifically for the project
- Secondary source:
  - collected for another purpose
  - can save money but be careful to ensure that it is truly the information you need

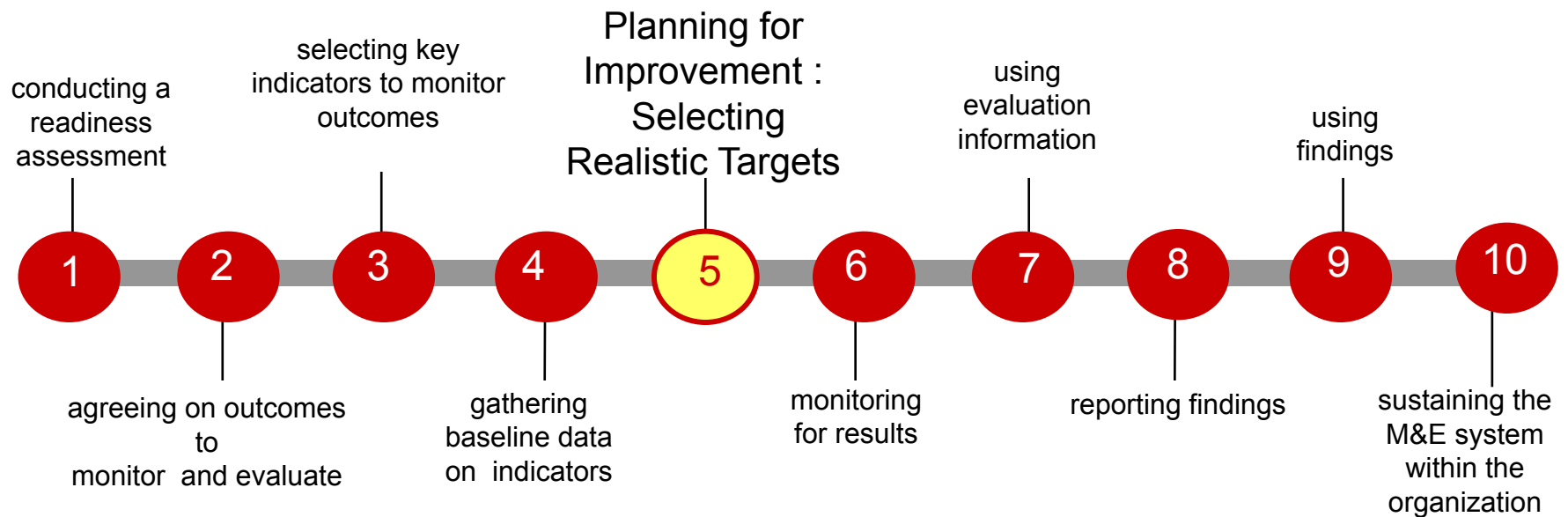


# Continuing Example, Developing Baseline Data for One Policy Area: Education

Outcomes:	Indicators:	Baselines:	Targets:
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1. Improved coverage of preschool programs	1. Percent of eligible urban children enrolled in preschool	1. 75 % in urban areas in 1999	
	2. Percent of eligible rural children enrolled in pre-school	2. 40 % in rural areas in 2000	
2. Improved primary school learning outcomes	1. Percent of Grade 6 students scoring 70% or better on standardized math and science tests	1. In 2002, 47% of students scored 70% or better in math and 50% or better in science	
	2. Percent of Grade 6 students scoring higher on standardized math and science tests in comparison to baseline data	2. In 2002 mean score for Grade 6 students was 68% in math and 53% in science	

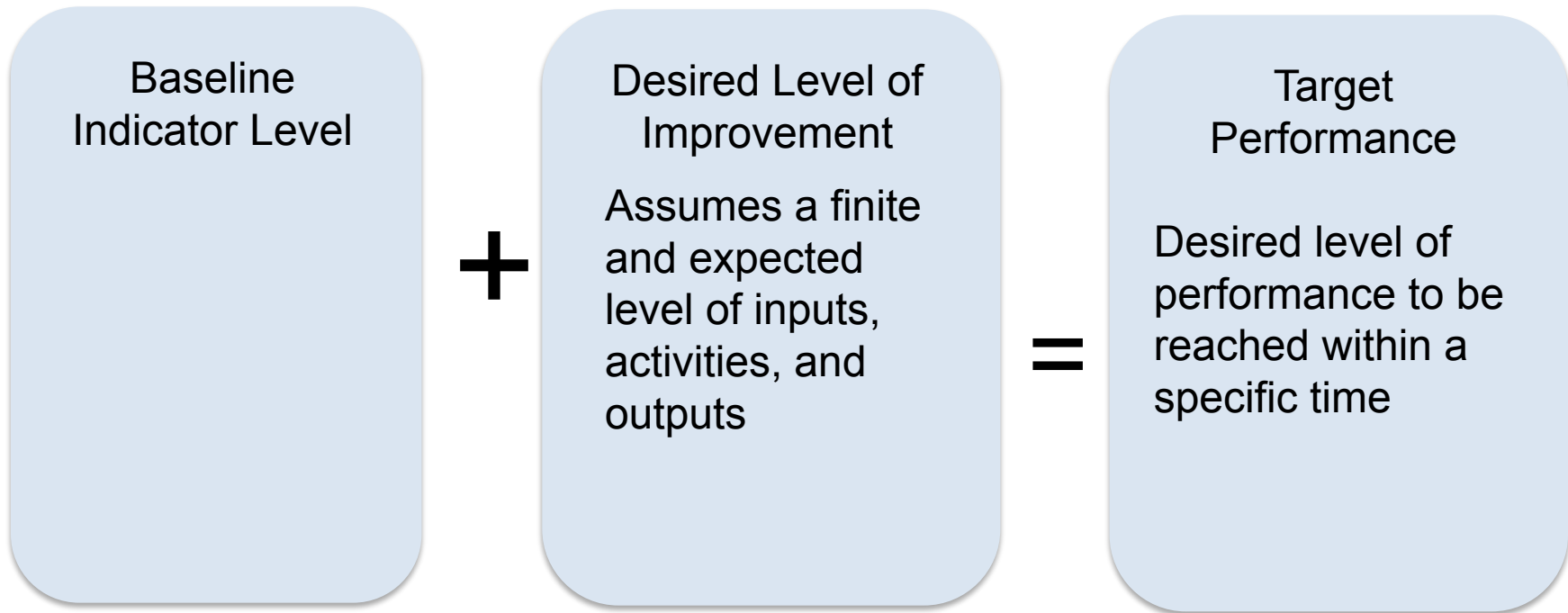
## Step 5: Planning for Improvement: Selecting Realistic Targets



## Targets:

- The quantifiable levels of the indicators that a country or organization wants to achieve at a given point in time
- Example:
  - Agricultural exports will increase in the next three years by 20% over the baseline

# Identifying Expected or Desired Level of Improvement Requires Targets



## Caution:

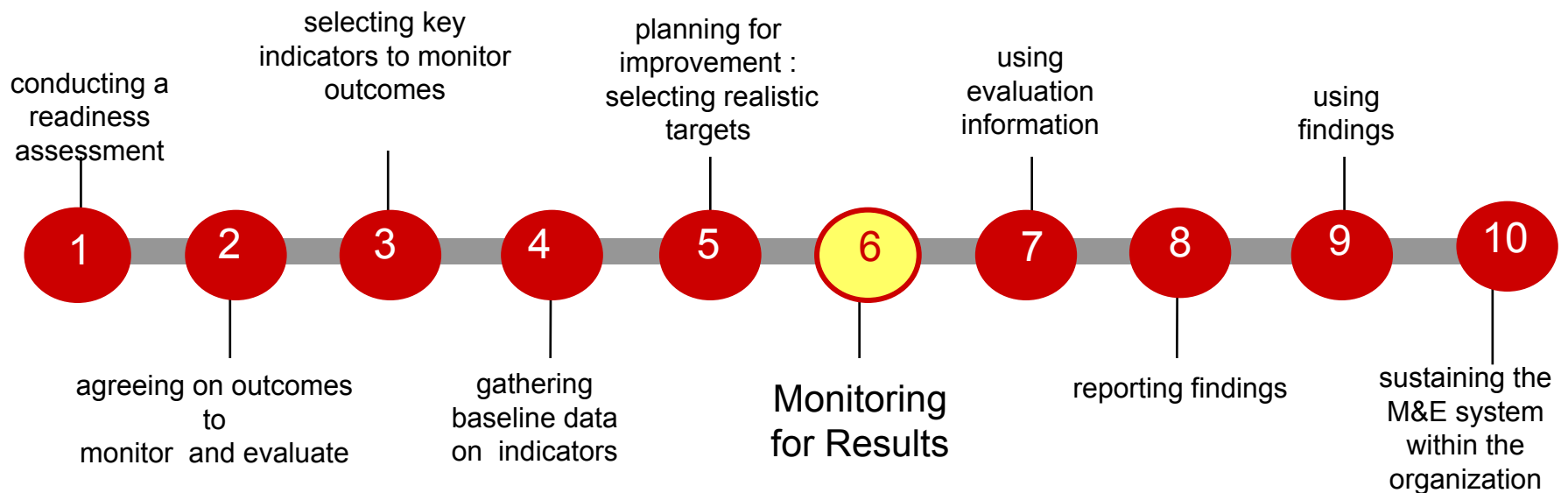
- It takes time to observe the effects of improvements, therefore:
  - Be realistic when setting targets
  - Avoid promising too much and thus programming yourself to fail

# Continuing Example, Setting Performance Targets for One Policy Area: Education

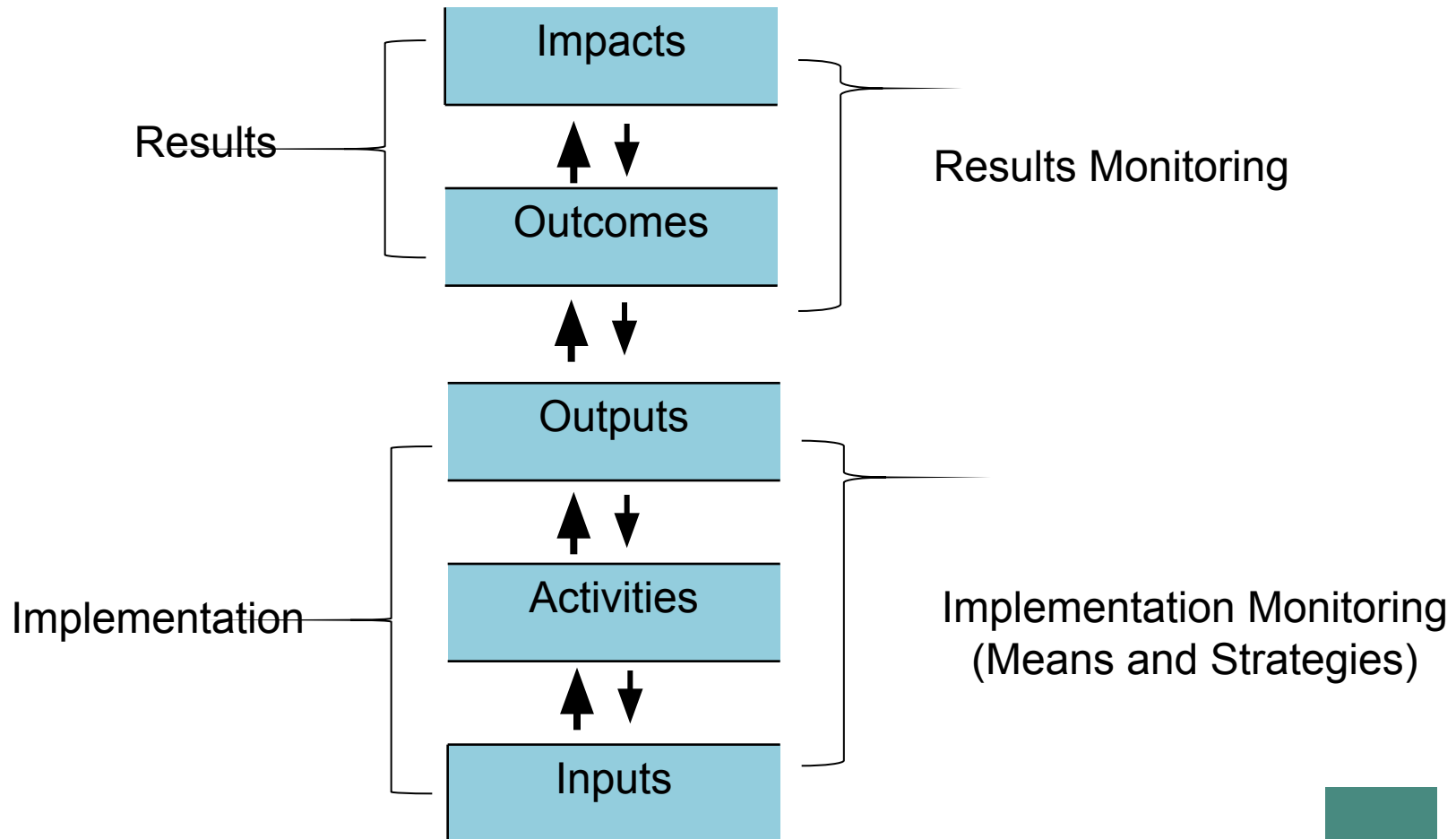
Outcomes:	Indicators:	Baselines:	Targets:
1. Improved coverage of preschool programs	1. Percent of eligible urban children enrolled in preschool	1. 75 % in urban areas in 1999	1. 85 % in urban areas by 2006
	2. Percent of eligible rural children enrolled in pre-school	2. 40 % in rural areas in 2000	2. 60 % in rural areas by 2006
2. Improved primary school learning outcomes	1. Percent of Grade 6 students scoring 70% or better on standardized math and science tests	1. In 2002, 47% of students scored 70% or better in math and 50% or better in science	1. By 2006, 80% of students will score 70% or better in math 67 % will score 70% or better in science
	2. Percent of Grade 6 students scoring higher on standardized math and science tests in comparison to baseline data	2. In 2002 mean score for Grade 6 students was 68% in math and 53% in science	2. In 2006 mean test score will be 78% for math and 65% in science



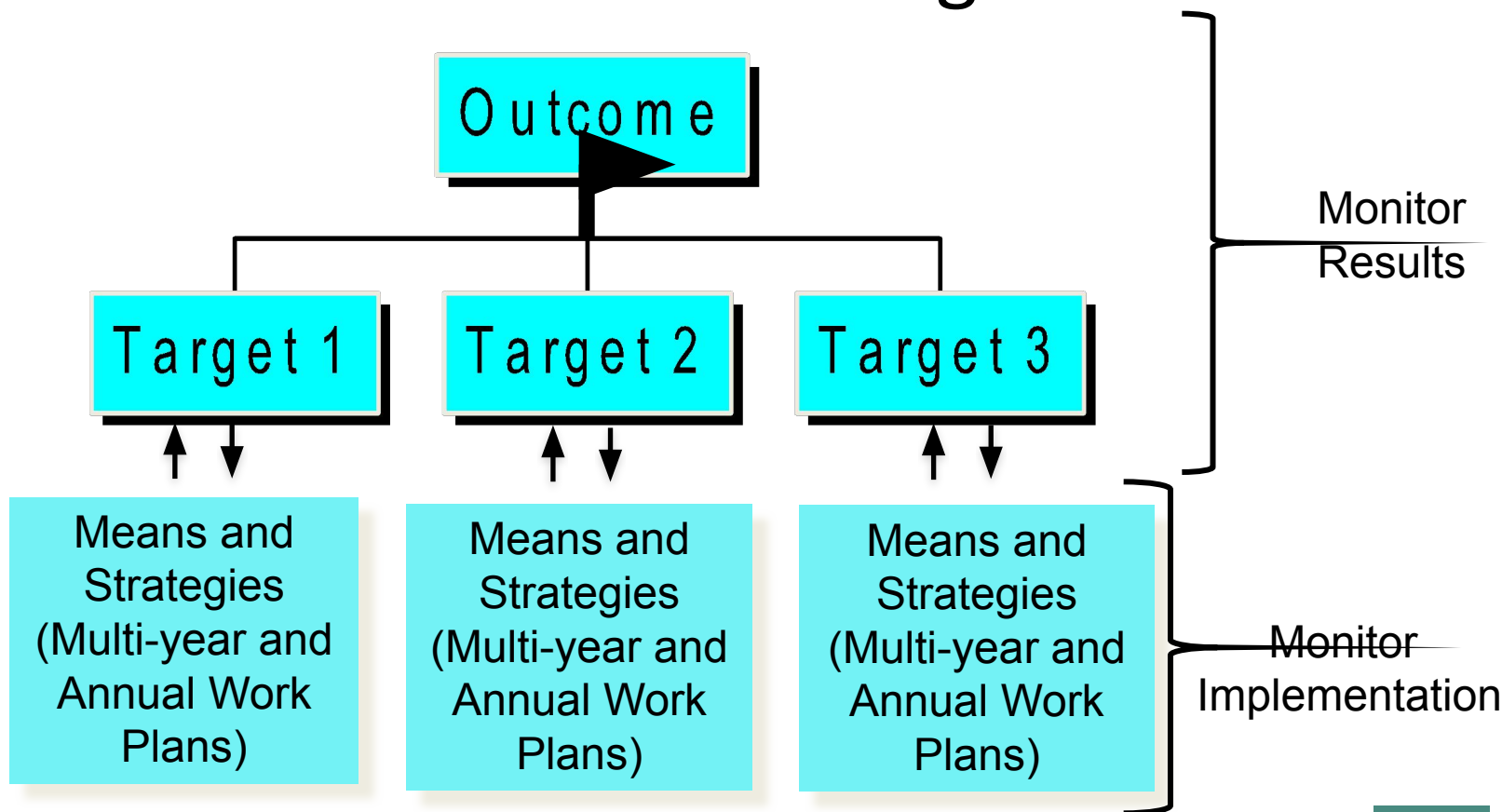
## Step 6: Monitoring for Results

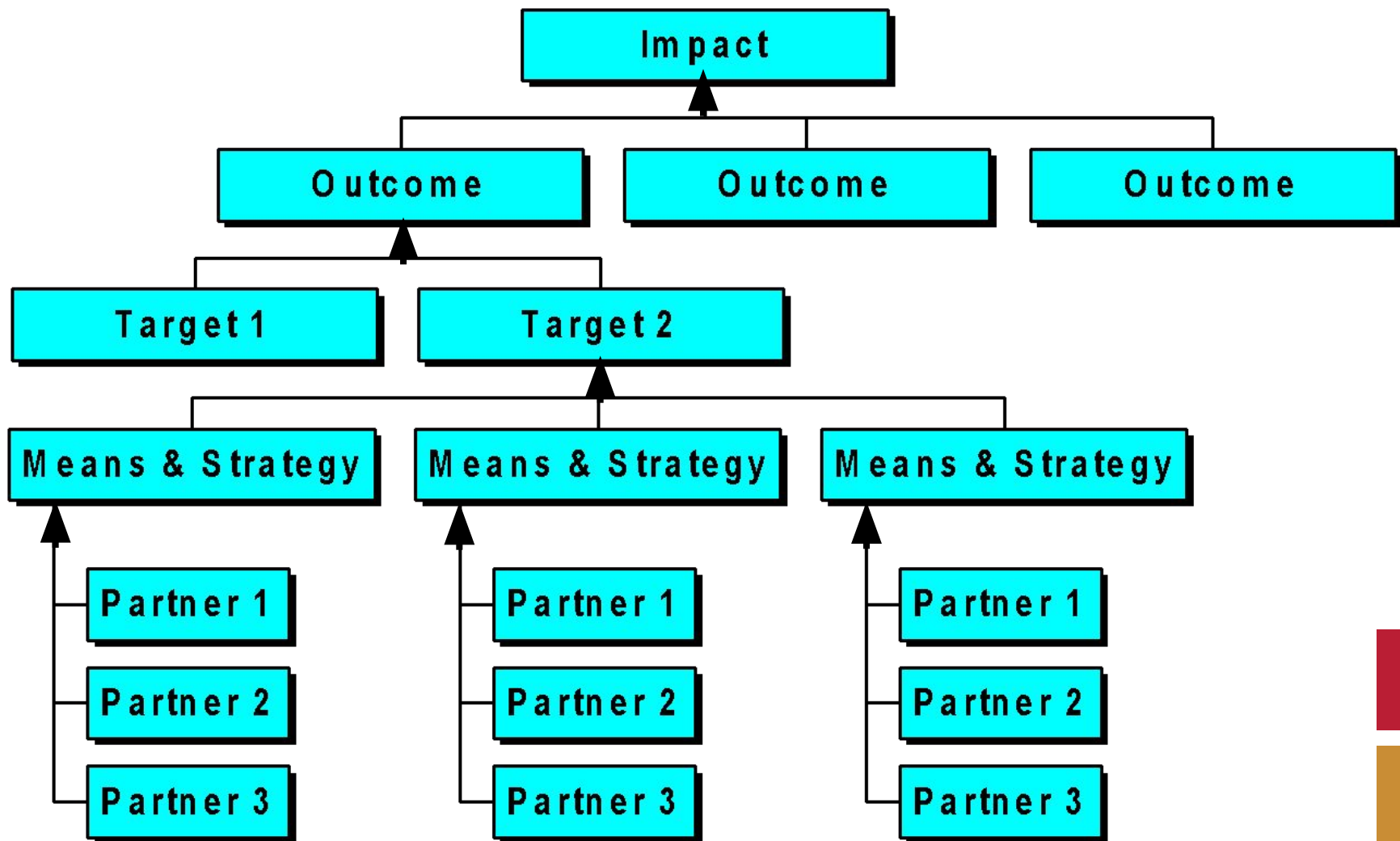


# Key Types of Monitoring



# Implementation Monitoring Links to Results Monitoring

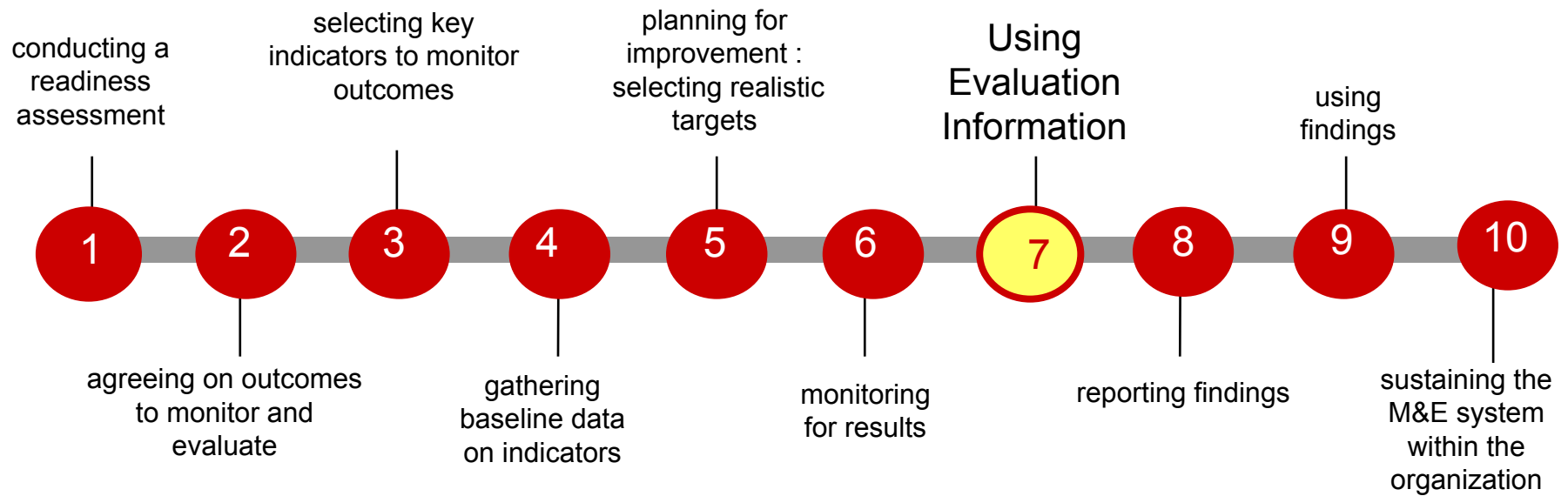




## Successful Monitoring Systems

- To be successful, every monitoring system needs the following:
  - ownership
  - management
  - maintenance
  - credibility

## Step 7: Using Evaluation Information



## Evaluation Means Info on:

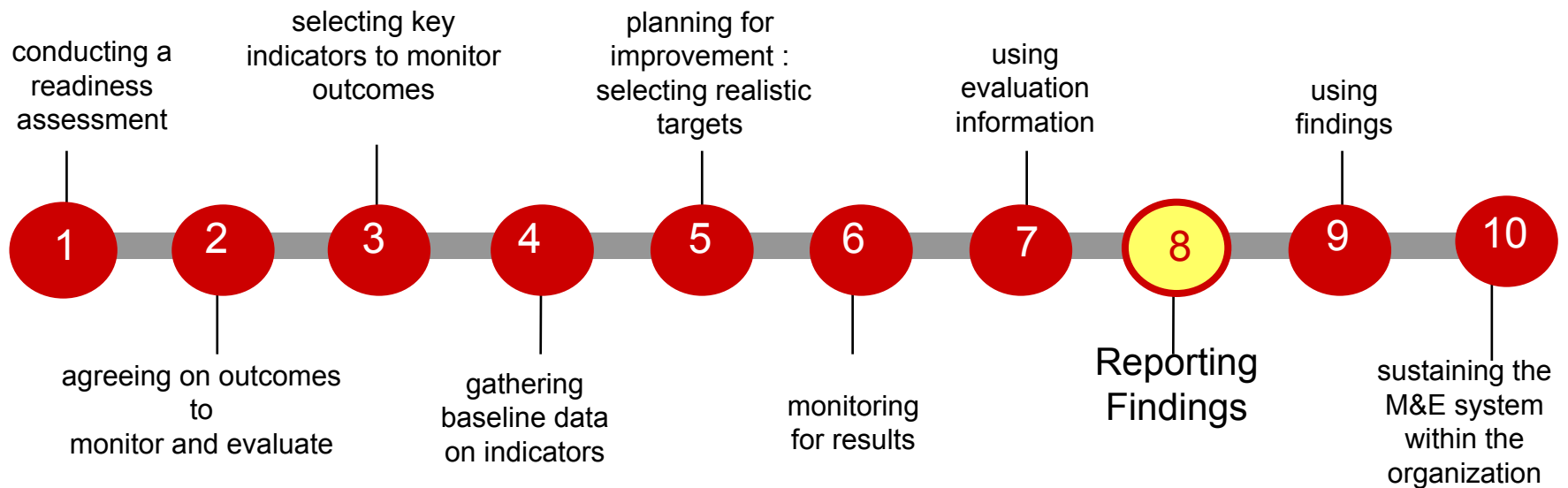
- Strat  
egy
  - Whether we are *doing the right things*
    - Rationale/justification
    - Clear theory of change
- Ope  
ratio  
n
  - Whether we are *doing things right*
    - Effectiveness in achieving expected outcomes
    - Efficiency in optimizing resources
    - Client satisfaction
- Lear  
ning
  - Whether there are *better ways of doing it*
    - Alternatives
    - Best practices
    - Lessons learned

## Evaluation — When to Use?

- Any time there is an unexpected result or performance outlier that requires further investigation
- When resource or budget allocations are being made across projects, programs, or policies
- When a decision is being made whether or not to expand a pilot
- When there is a long period with no improvement, and the reasons for this are not clear
- When similar programs or policies are reporting divergent outcomes



## Step 8: Reporting Findings



## Reporting Findings

- Provides information on status of projects, programs, and policies
- Yields clues to problems
- Creates opportunities to consider changes
- Provides important information over time on trends and directions
- Helps confirm or challenge theory of change

## When Analyzing and Presenting Data:

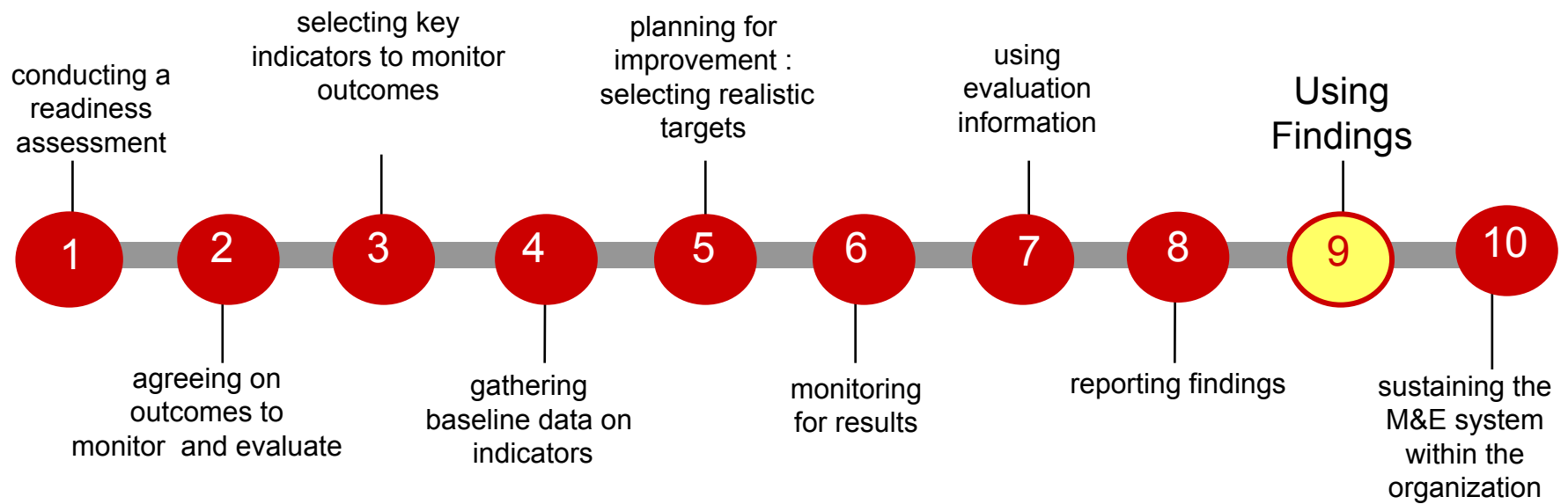
- Compare indicator data with the baseline and targets, and provide this information in an easy-to-understand visual display
- Compare current information with past data and look for patterns and trends
- Be careful about drawing sweeping conclusions based on small amounts of information. The more data points you have, the more certain you can be that trends are real

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## When Analyzing and Presenting Data: (cont.)

- Protect the messenger: people who deliver bad news should not be punished. Uncomfortable findings can indicate new trends or notify managers of problems early on, allowing them time needed to solve these problems

## Step 9: Using Findings



## Ten Uses of Results Findings

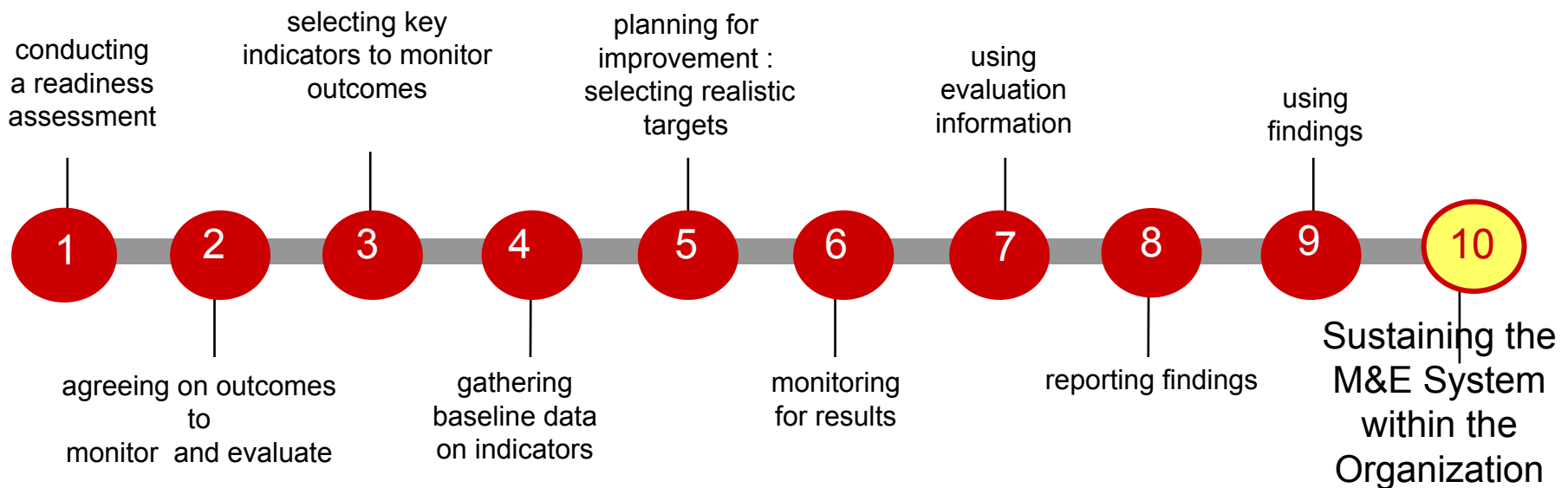
- Responds to elected officials' and the public's demands for accountability
- Helps formulate and justify budget requests
- Helps in making operational resource allocation decisions
- Triggers in-depth examinations of what performance problems exist and what corrections are needed
- Helps motivate personnel to continue making program improvements

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## Ten Uses of Results Findings (cont.)

- Monitors the project or program performance against outcome targets
- Provides data for special, in-depth program evaluations
- Helps track services delivery against precise outcome targets
- Supports strategic and other long-term planning efforts
- Communicates with the public to build public trust

# Step 10: Sustaining the M&E System within the Organization





# Critical Components Crucial to Sustaining

- Demand
- Clear roles and responsibilities
- Trustworthy and credible information
- Accountability
- Capacity
- Incentives



## Concluding Comments

- The demand for capacity building never ends! The only way an organization can coast is downhill
- Keep your champions on your side and help them!
- Establish the understanding with the Ministry of Finance and the Parliament that an M&E system needs sustained resources
- Look for every opportunity to link results information to budget and resource allocation decisions

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## Concluding Comments (cont.)

- Begin with pilot efforts to demonstrate effective results-based monitoring and evaluation
- Begin with an enclave strategy (e.g., islands of innovation) as opposed to a whole-of-government approach.
- Monitor both implementation progress and results achievements
- Complement performance monitoring with evaluations to ensure better understanding of public sector results

- Approaches to Evaluation

# What is the evaluation approach?

- The systematic application of social research procedures for assessing the conceptualization, design, implementation, and utility of programs” (Rossi and Freeman 1993)
- “Evaluation identifies the impacts of an intervention program by analyzing cause and effect” (Ezemenari et al., 2001)

# Key Points

- There is no a silver bullet approach
- Answer different research questions
- Intrinsically connected to the design of the project/program/policy
- Have different data requirements
- Not all project/program/policies can be evaluated
- Usefulness of triangulation methods

# Four Main Evaluation Approaches

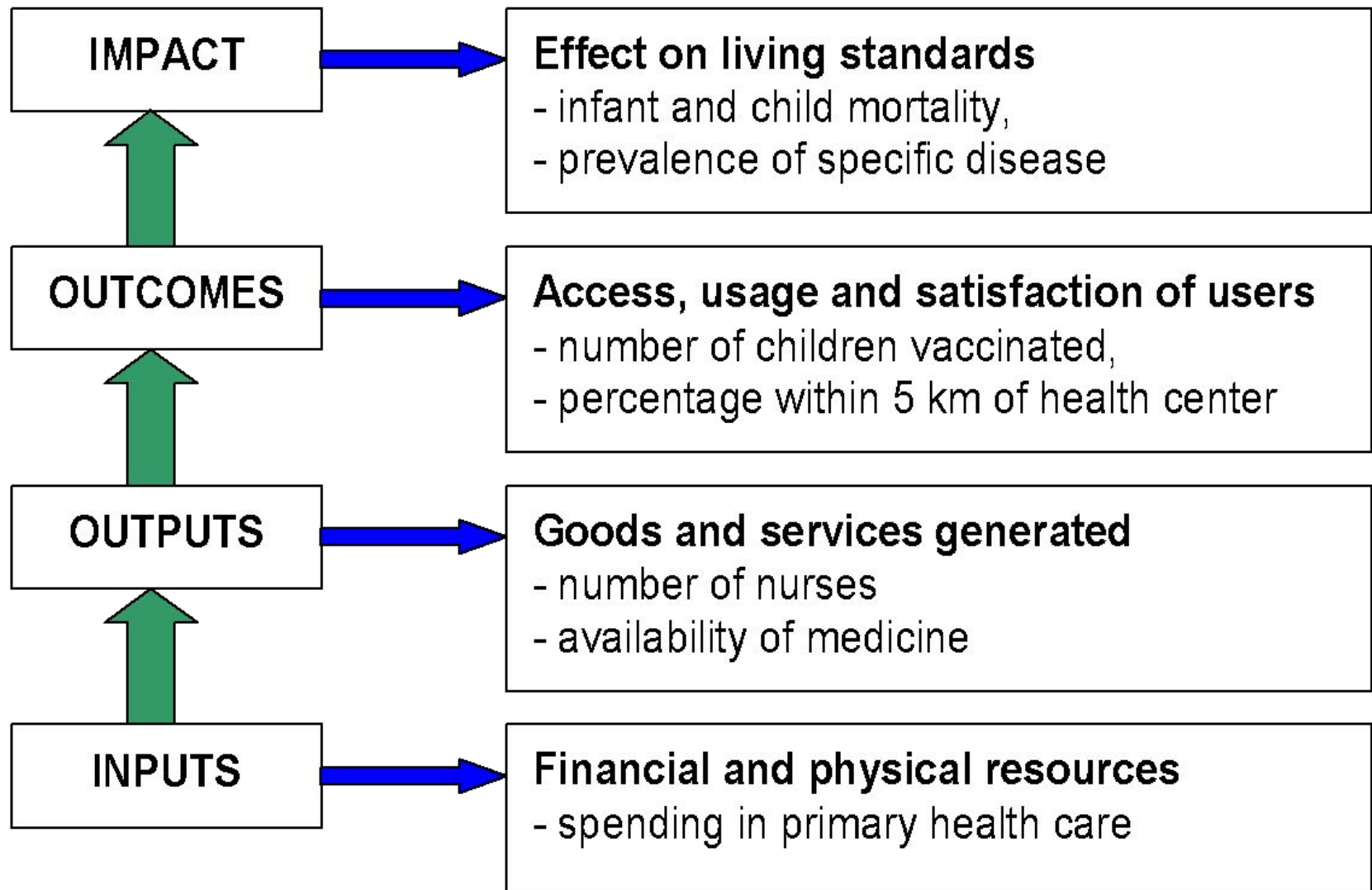
1. Impact Evaluation
2. Outcome-Based Evaluation
3. Monitoring/Process Evaluation
4. Participatory Evaluation

# Impact Evaluation

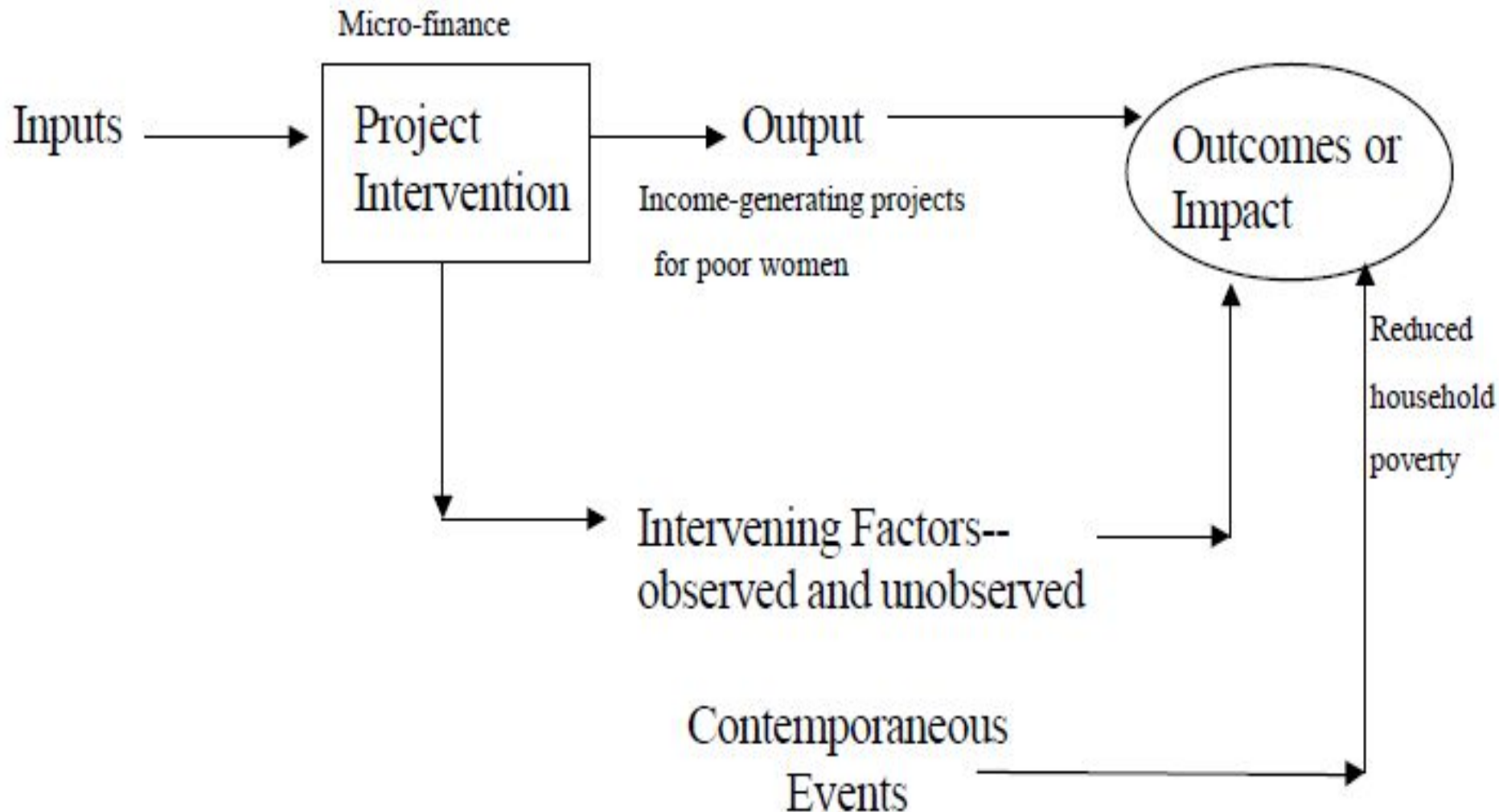
- Impact evaluation is intended to determine more broadly:
  - whether the program had the desired effects on individuals, households, and institutions,
  - whether those effects are attributable to the program intervention.
- Relevant Research Question: Is the intervention causally effective in attaining the desired goals or benefits?



# The Evaluation Problem



# The Evaluation Problem



# The Evaluation Problem

- When participation in the program is related to unmeasured characteristics that are themselves related to the program outcomes it is difficult to disentangle the causal effect of the intervention.
- If the same individual could be observed at the same point in time with and without the program, the evaluation problem would not arise.
- But, we cannot observe the same individual in both states at the same time: This is the evaluation problem.
- The key to disentangling project impacts from any intervening variables is determining ***what would have happened in the absence of the program at the same point in time: THE COUNTERFACTUAL.***

# Thinking About The Problem At Hand

	With program	Without the program
Participants	factual	counterfactual
Non-participants	counterfactual	factual

# Defining Counterfactuals

- Determining the counterfactual is at the core of impact evaluation
- Use control or comparison groups (those who do not participate in a program or receive benefits), which are subsequently compared with the treatment group (individuals who do receive the intervention).
- Control or comparison groups consist of a group of individuals who do not receive the intervention but have similar characteristics to those receiving the intervention.

# Why it Matters?

- We want to know if the program had an impact, the average size, and the distribution of that impact
  - Understand if policies work
    - Justification for program
    - Scale up or not
    - Compare different policy options within a program
  - Understand the net benefits of the program
  - Understand the distribution of gains and losses

# Key Steps in Designing and Implementing

- 1. Determining whether or not to carry out an impact evaluation**
- 2. Clarifying objectives of the evaluation**
- 3. Exploring data availability**
- 4. Designing the evaluation**
5. Forming the evaluation team
6. If data will be collected: sample design and selection, surveys, training fieldwork personnel, pilot testing, data collection, data management and access
7. Ongoing data collection
8. Analyzing the data
9. Writing the report

# Determining Whether Or Not To Carry Out An Impact Evaluation

- Cost and benefits should be assessed
- Strong political and financial support
- Program is suitable for evaluation



# Clarifying Objectives of Evaluation

- Establishing clear objectives
- Use and analysis of the program's logical framework helps

Example: The evaluation is about the “effect of the PROBECAT training program on labor market outcomes”

Example: The evaluation is about the “effect of the PROBECAT training program on subsequent labor hourly earnings of beneficiaries”

# Data Availability

- Know the institutions of the program well.
- Collect information on the relevant “stylized facts”
- Ensure that there is data on the outcome indicators and relevant explanatory variables

# Designing The Evaluation

- Know the institutions of the program well.
- Defined the evaluation question(s) (unit of analysis, outcomes, time framework, etc)
- Timing and budget concerns (short-, medium-long-term evaluation)
- Implementation capacity. Big issue in developing countries.

# Impact Evaluation Example: PROGRESA

- PROGRESA is the principal antipoverty strategy of the Mexican government
- Large program
  - By 2003 4.2 million families were receiving benefits
  - 72,000 localities
    - 40% of all rural families
    - 1/9 of all families
- Annual budget: 46% of Federal poverty alleviation budget

# PROGRESA'S Goals

- Long-run poverty alleviation
  - Investment in human capital
  - Education
  - Health
  - Nutrition
- Short-run poverty alleviation
  - cash transfers

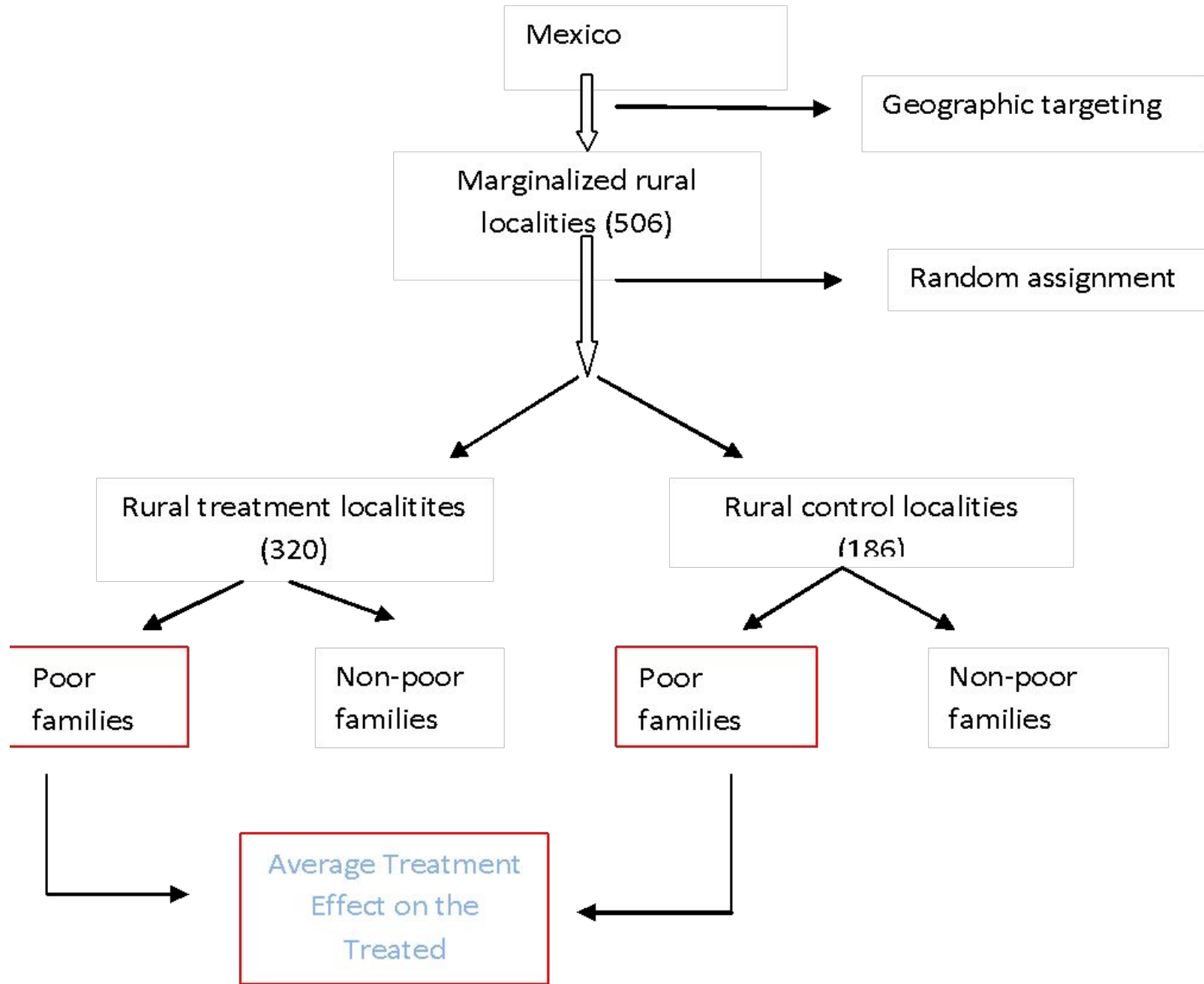
# Features & Institutions

- Conditional cash transfers given to mothers (why?)
- Simultaneous and targeted intervention in 3 key sectors (synergies)
- Experimental evaluation of the intervention
- Uses existing school and health facilities

# Overall Program Benefits

- Beneficiary households receive on average 200 pesos per month
  - 22% increase in the income level
- About 50% of the 200 pesos are cash transfers for food
- The rest are cash transfers for school-related items
- Heterogeneous benefits depending on family size and schooling needs

# Evaluation Framework





# Evaluation Framework

- This is a three-step process:
- Identification of marginalized localities using marginality index (**geographic targeting**)
- Selection of treatment and control localities within rural localities (**random assignment of poor localities**)
- Selection of beneficiary households within rural localities with high marginality index (**non-random assignment**)
- Good geographic targeting of rural areas
- Accurate method of selecting poor households within localities (7% under coverage)

# Evaluation Framework

- Program randomized at the locality level
- Sample of 506 localities
  - 186 control (no PROGRESA)
  - 320 treatment (PROGRESA)
- 24,077 Households (hh)
  - 78% beneficiaries
- The experiment lasted only for a year and a half because the control group families started to receive benefits in December 1999

# PROGRESA Evaluation

## Surveys/Data

- ☐ BEFORE initiation of program
  - ☐ October/November 97: Household census used for selecting program beneficiaries
  - ☐ March 98: Consumption, school attendance, and health
- ☐ AFTER initiation of program
  - ☐ Included survey of beneficiary households regarding operations
    - ☐ November 1998
    - ☐ June 1999
    - ☐ November/December 1999

# Evaluation Research Questions: Education Component

- Are more children attending school because of PROGRESA?
- Does PROGRESA have more impact in certain grades?
- Any effects on drop-out rates, grade progression, repetition, reentry?

# Evaluation Results: Education

- Positive effect on school attendance of boys and girls in primary and secondary school
  - Boys in secondary: increased 8 %
  - Girls in secondary: increased 14%
- Negative impact on children's labor market participation (especially boys)
- 10% increase in overall educational attainment (8% higher earnings)

# Evaluation Research Questions: Health

- Does PROGRESA increase visits to public health clinics?
- Does PROGRESA have an effect on child health?
- Does PROGRESA have an effect on the health of adults?

# Evaluation Results: Health

- Significant increase in visit rates
  - Nutrition monitoring visits
  - Immunization rates
  - Prenatal care in 1<sup>st</sup> trimester (8% increase)
- No substitution between private and public facilities
- Incidence of illness fell 12% in children between ages 0-5.
- Significantly positive effects on adult health

# Evaluation Research Questions: Nutrition

- Does PROGRESA impact child growth?
- Does PROGRESA impact household consumption and food diet?

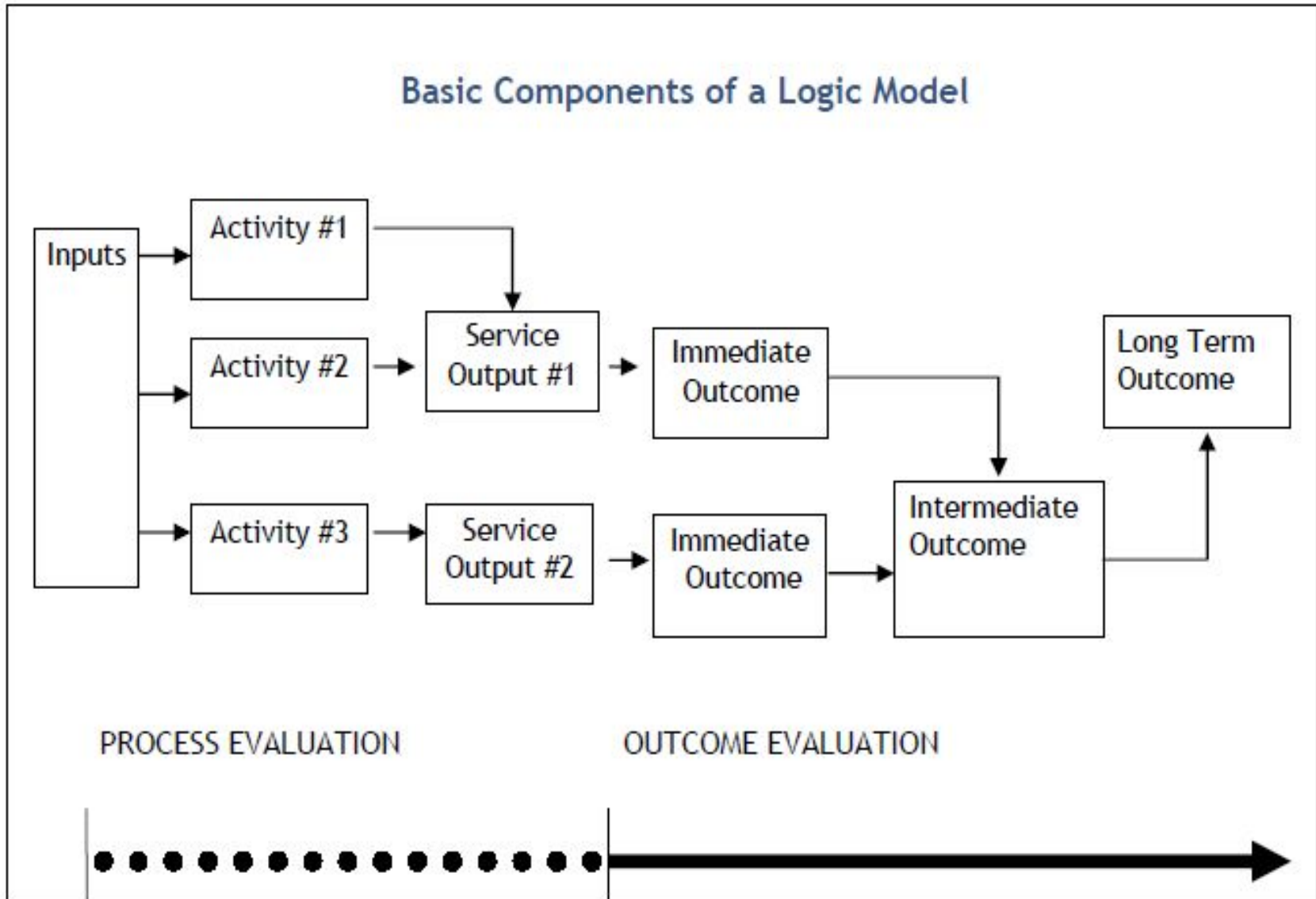


# Evaluation Results: Nutrition

- Significant effect in increasing child growth (1cm higher growth)
- Significant effect in reducing the probability of stunting
  - Children 12-36 months
- Household total consumption increases
- PROGRESA households “eat better”
  - Higher expenditures on fruits, vegetables, meats, and animal products

## (2) Outcome-Based Evaluation

Exhibit 1



# Basic Definitions

- Outcome-based evaluation is a systematic way to assess the extent to which a program has achieved its intended results,
  - How has the program made a difference?
  - Is the welfare of participants better off after the program?

# Why It Matters?

- Contribute to program effectiveness
- Provide a logical framework for program development
- Generate information for decision-making
- Communicate program value

# But Unlike Impact Evaluation

- It does not prove cause and effect, only suggest a cause and effect relationship.
- It shows contribution, not attribution

# (3)Monitoring/Process Evaluation

Help to assess whether a program is **being implemented as was planned**.

- Is a particular intervention reaching its target population?
- What activities and services are provided?
- Is there consistency between the activities and the program's goals?

It is also concerned with how the program operates and focuses on problems in **service delivery**.

- Who is served?
- When and how long?
- Are the intended services being provided

# Why It Matters?

- Helps on determining how a program's potential impact is related to its implementation (**evaluator's perspective**)
- Provide information that stakeholders need to judge the appropriateness of program activities and to decide whether a program should be continued, expanded, or contracted (**accountability perspective**)
- Provide information to incorporate corrective measures as a regular part of program operations (**management perspective**)

## (4) Participatory Evaluation

- Representatives of agencies and stakeholders (including beneficiaries) work together in designing, carrying out, interpreting, and reporting an evaluation
- Departs from the audit ideal of independence
- Departs from scientific detachment
- Partnership based on dialogue and negotiation



# Principles of Participatory Evaluation

- Evaluation involves building participants' skills
- Participants commit to the evaluation and make decisions and draw own conclusions
- Participants ensure evaluation focuses on methods and results they consider important
- People work together promoting group unity
- Participants understand and find meaningful all aspects of the evaluation
- Self-accountability is highly valued
- Evaluators/Facilitators act as resources

# Participatory Process

- No single right way
- Commitment to the principles of participation and inclusion
  - those closest to the situation have valuable and necessary information
- Develop strategies to develop trust and honest communication
  - information sharing and decision-making
  - create “even ground”

# Benefits of Participatory

- Increased buy-in, less resistance
- Results are more likely to be used
- Increased sustainability
- Increased credibility of results
- More flexibility in approaches
- Can be systematic way of learning from experience

# Challenges of Participatory

- Concern that evaluation will not be objective
- Those closest to the intervention may not be able to see what is actually happening if it is not what they expect
- Participants may be fearful of raising negative views
- Time consuming
- Clarifying roles, responsibilities, and process
- Skilled facilitation is required
- Just-in-time training

# В завершение (In Closing)

- The evaluation approach is the **generation of knowledge** about the performance and effectiveness of programs
- Choosing a particular evaluation approach depends on the research question you have
- Triangulation of evaluation approaches is very welcome