Theory of Change

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JPAL South Asia at IFMR

3 July, 2017

Course Overview

1. What is Evaluation?
2. **Theory of Change**
3. Outcome, Impact, & Indicators
4. Why Randomize?
5. How to Randomize?
6. Sampling and Sample Size
7. Threats and Analysis
8. Research to Policy
9. Project from Start to Finish

Session Overview

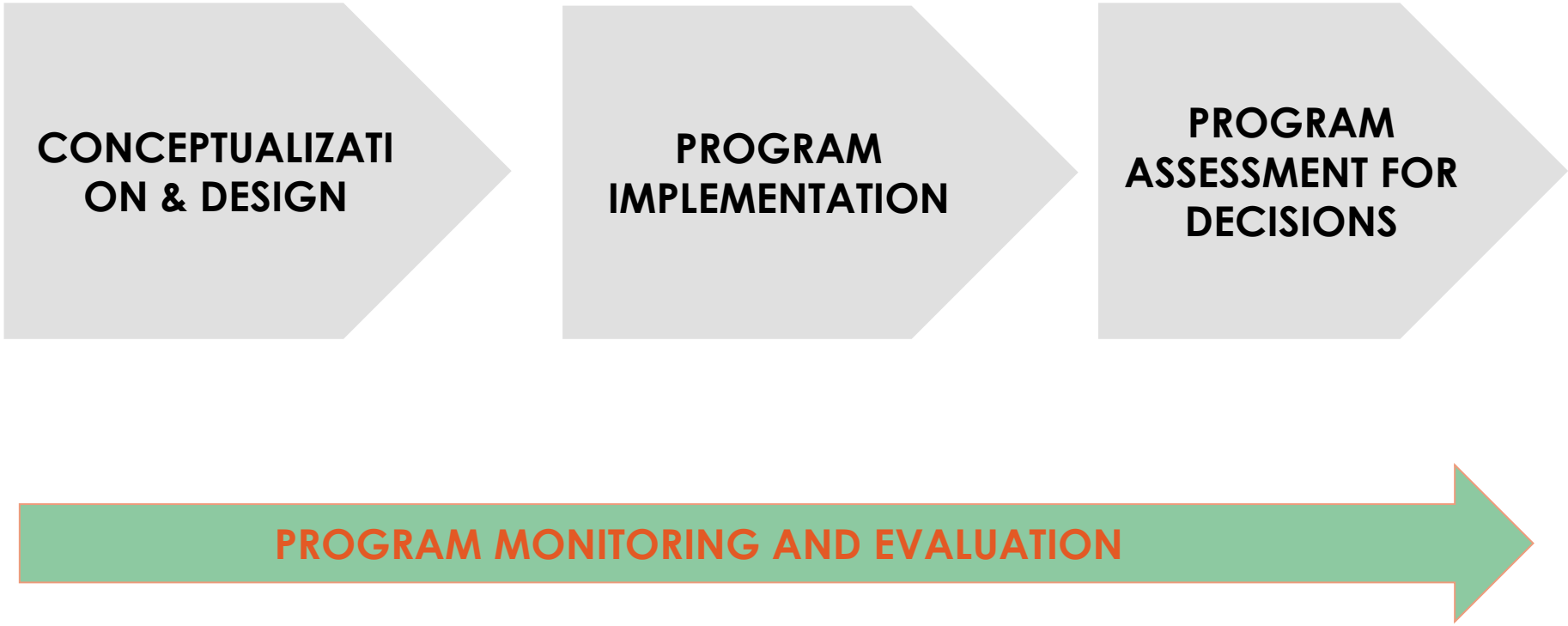
I. Context: Program cycle

II. Building a Theory of Change (in 6 steps)

III. Why is Theory of Change important?

CONTEXT: PROGRAM CYCLE

Lifecycle of a Program



Components/Stages of Program Evaluation

Conceptualizing And Designing

- Needs Assessment — What is the problem?
- Program Theory Assessment — How, in theory, does the program fix the problem?

Build a Theory of Change

Implementation

- Process Evaluation — Does the program work as planned?

Program Assessment

- Impact Evaluation — Were its goals achieved? The magnitude?
- Cost Effectiveness — Given magnitude and cost, how does it compare to alternatives?

Theory of Change (ToC)

- Definition
  - Theory of change is an on-going process of reflection to explore change and how it happens – and what that means in a particular context, sector, and/or group of people.

- ToC thinking
  - Structured way of thinking about change and impact to be achieved
  - Integrated approach to program design, implementation, M+E, and communication

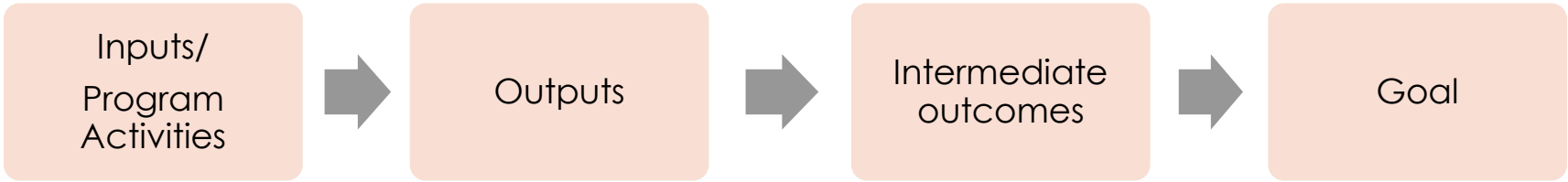
Causal Hypothesis

Q: How do I expect results to be achieved?

A: **If** [inputs] and [activities] **produce** [outputs] this should **lead to** [outcomes] which will ultimately **contribute to** [goal].

- **ToC maps the expected causal pathway** between Inputs + Activities and the Desired outcomes, assumptions and risks in implementation
- Is usually represented in a schematic diagram and a logical framework table

Theory of Change Components



What we do as a part of the program - deliver, teach, offer loans, etc.

What are the resources used –funds, staff, equipment, curriculum, all materials

Tangible products or services produced as a result of the activities

Short-term behavioral changes that result from the outputs - preventive health habits, usage of tablets

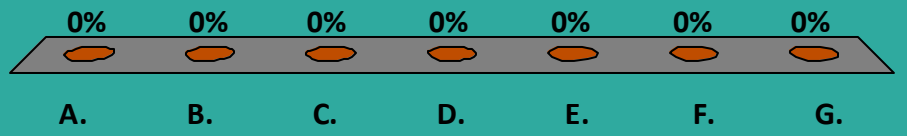
Long-term changes that result from outcomes – the result of the program

A close cousin: the Logical Framework

	Intervention logic	Objectively verifiable indicators	Sources of verification	Assumptions
Overall objective				
Project purpose				
Intermediate results				
Activities				

If a school implements a free textbook program with the aim of improving learning outcomes, the number of textbooks successfully delivered is an…

A. Input
B. Output
C. Intermediate Outcome
D. Goal



BUILDING A THEORY OF CHANGE (IN 6 STEPS)

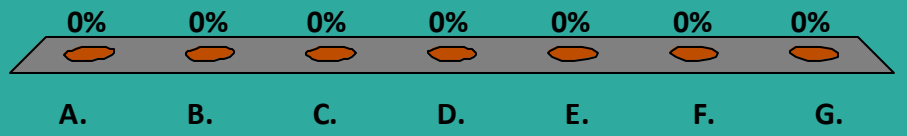
6 Steps to Building a ToC

1. Situation analysis – Specifying the context
2. Clarify the program goal
3. Design the program /product
4. Map the causal pathway
5. Explicate assumptions
6. Design SMART indicators

EXAMPLE: IMMUNIZATION INCENTIVES PROJECT, RAJASTHAN

What do you think is the most cost-effective way to increase full immunization rates?

A. Community mobilization campaign
B. Improve healthcare worker attendance
C. Develop new vaccines such as pneumococcal
D. Hold special 'immunization camps'
E. Incentivize parents to immunize their children



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Step 1: Situation/Context Analysis

- What it is:
  - Identifying target population (beneficiaries)
  - Needs, opportunities, barriers to progress
  - Map relevant stakeholders
  - Analyze broader political and economic context

- Purpose:
  - Begin to design the right product, identify markers for success

Map opportunities, risks, broader context

Step 1: Situation/Context Analysis

The Need

- Every year, between 2 and 3 million people die from vaccine-preventable diseases

- Only 54% of 1-2 year olds in India receive the basic package of immunizations
  - BCG, DPT, Polio, and Measles vaccines
  - At least 5 visits

Step 1: Situation/Context Analysis

What is the Problem ?

- In India, immunizations are offered for free… but the immunization rate remains low

- In rural Rajasthan, this rate falls to 22%

Step 1: Situation/Context Analysis

Underlying Issues

- **Supply side constraints:**
  - Average household is within 2 kilometers of the nearest clinic
  - High absenteeism at government health facilities – 45% of Auxiliary Nurse Midwives are absent on any given workday

- **Demand side constraints:**
  - Cultural resistance, distrust in public health institutions
  - People don't value immunizations: short-term cost for long-term (and invisible) benefits
  - Limited income: parents can't afford to take a day off

Step 1: Situation/Context Analysis

Situation/Context Analysis: **High health worker absenteeism, low value of immunization, limited income and time**

Weigh Alternative Solutions

Supply-side Solutions

- Strengthening of the existing government program
  - Stronger mechanisms to address staff absenteeism in clinics
  - Tracking of unimmunized children and providing immunization
  - More regular camps?

Demand-side Solutions

  - Information campaigns
  - Address lingering doubts regarding problems arising out of immunizations
  - What about giving people **incentives**? Is this feasible?

Formulating solutions

- **Regular camps**
  - As a dependable center for immunization

- **Incentives:**
  - Encourage parents to immunize children

- Compare the new/revised program to the existing program
  - How does the new program address the needs identified in the contextual analysis
  - Does the new program address the shortcomings of the existing program

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Step 2: Setting program goals

Increased full immunization rates

Step 2: Setting the program goals

GOAL

INCREASED IMMUNISATION

Situation/Context Analysis**: High health worker absenteeism, low value of immunization, limited income and time**

6 Steps to Building a ToC

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Step 3: Describe the program

Solutions to address supply and demand-side constraints

Regular immunization camps

Incentives for full immunization

Step 3: Describe the program

Solutions to address supply and demand-side constraints

Regular immunization Camps

- A mobilized immunization team conducted monthly immunization camps in each village
- Camps held on fixed date once a month from 11am-2pm
- Social workers informed mothers of the camp and the benefits of immunization

Incentives: 1 kilo of lentils per visit + steel plates

- Parents were offered 1 kilogram of lentils per immunization received (Rs 40)
- Parents were offered a set of steel plates after the child was fully immunized

Step 3: Describe the program

GOAL

INCREASED IMMUNIZATION

Incentives for immunization

Immunization Camps

Situation/Context Analysis: High health worker absenteeism, low value of immunization, limited income and time

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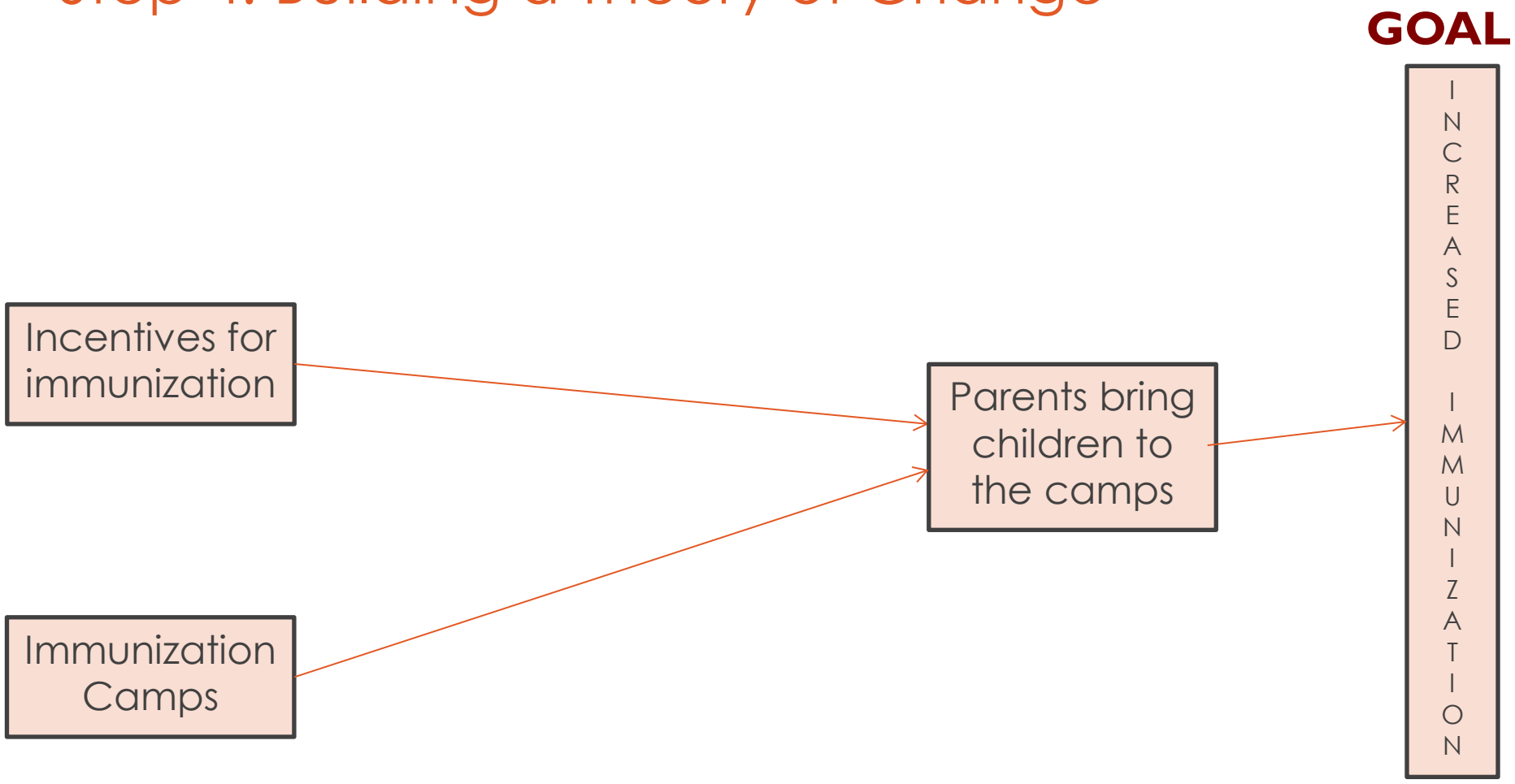
Step 4: Mapping the Causal Pathway

- Step-by-step laying out the theory connecting your product/program to the goal

- Series of if…/then… statements forming results chain

Step 4: Building a Theory of Change



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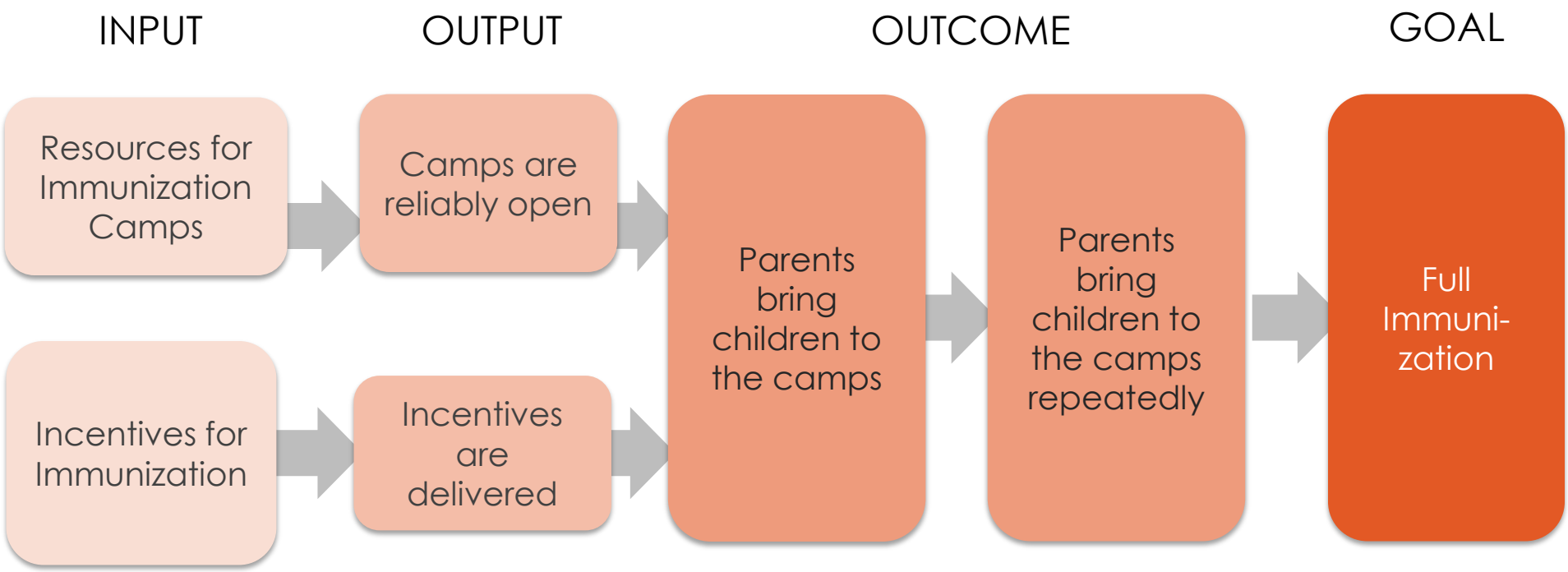
Step 4: Building a Theory of Change



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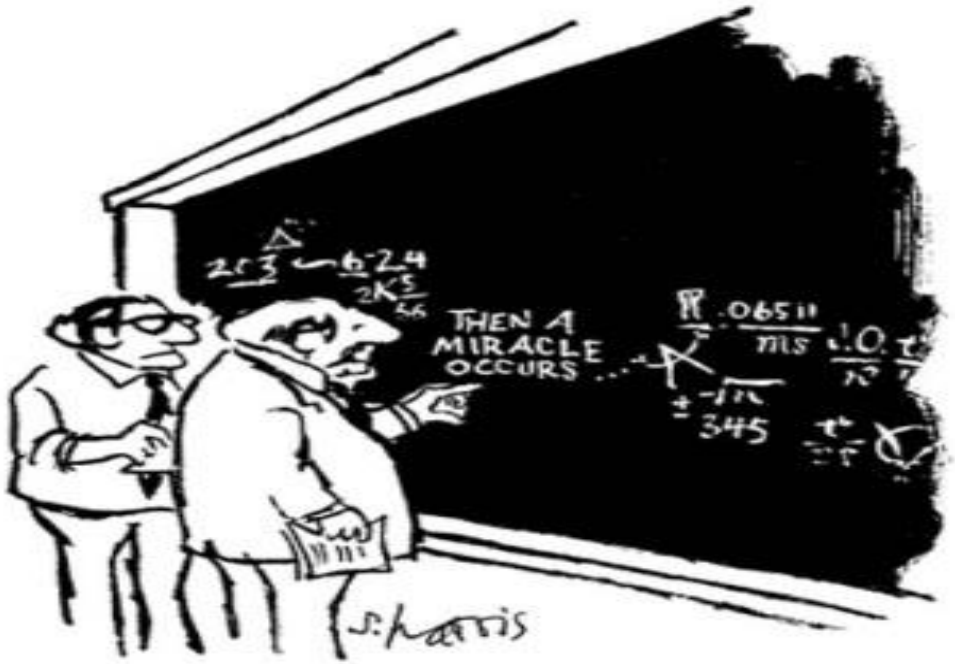
6. Design SMART indicators

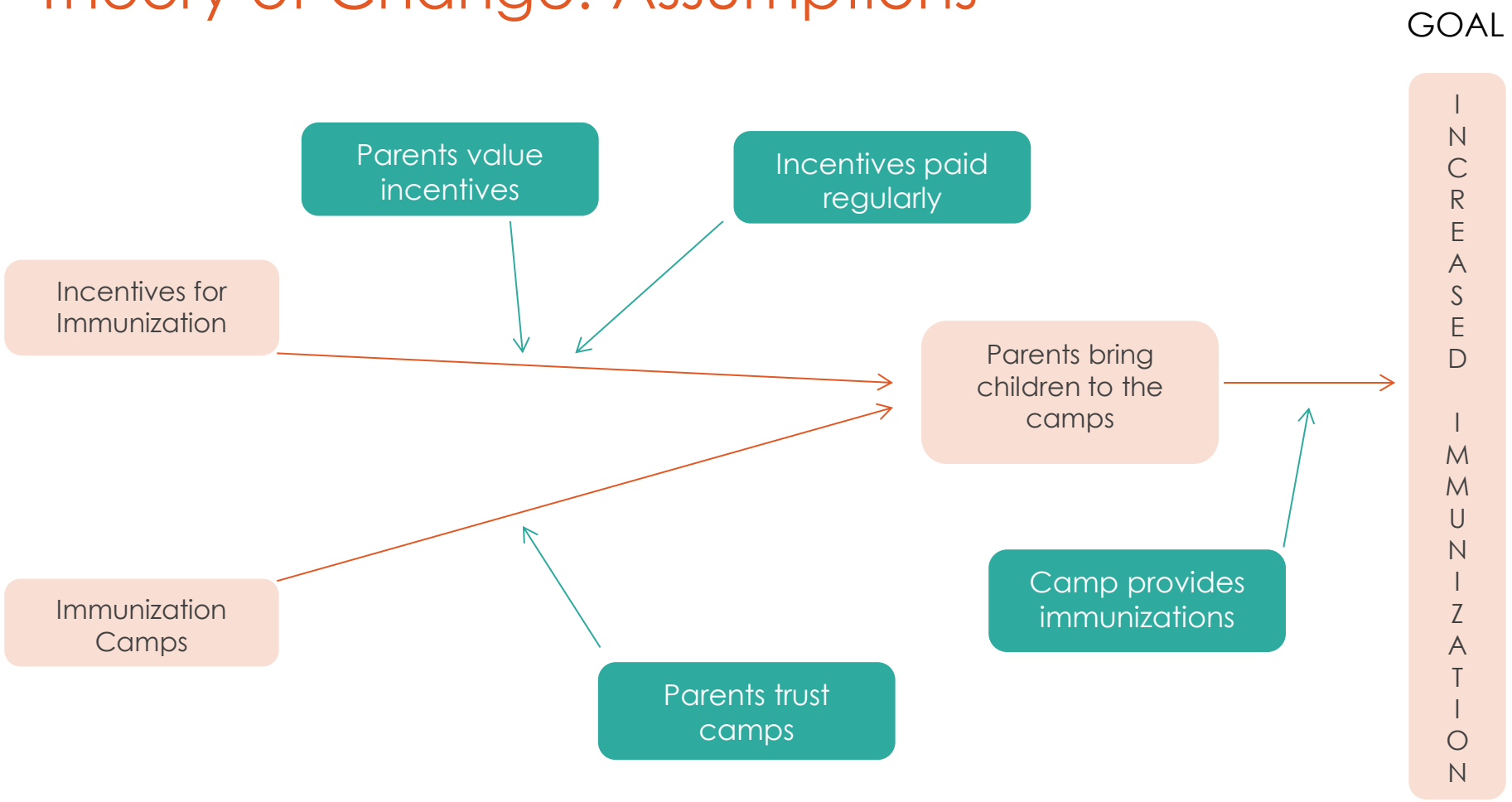
Step 6: Explicate Assumptions

Assumptions are the key to unlocking the theory of change thinking



"I think you should be more explicit here in step two."

Theory of Change: Assumptions



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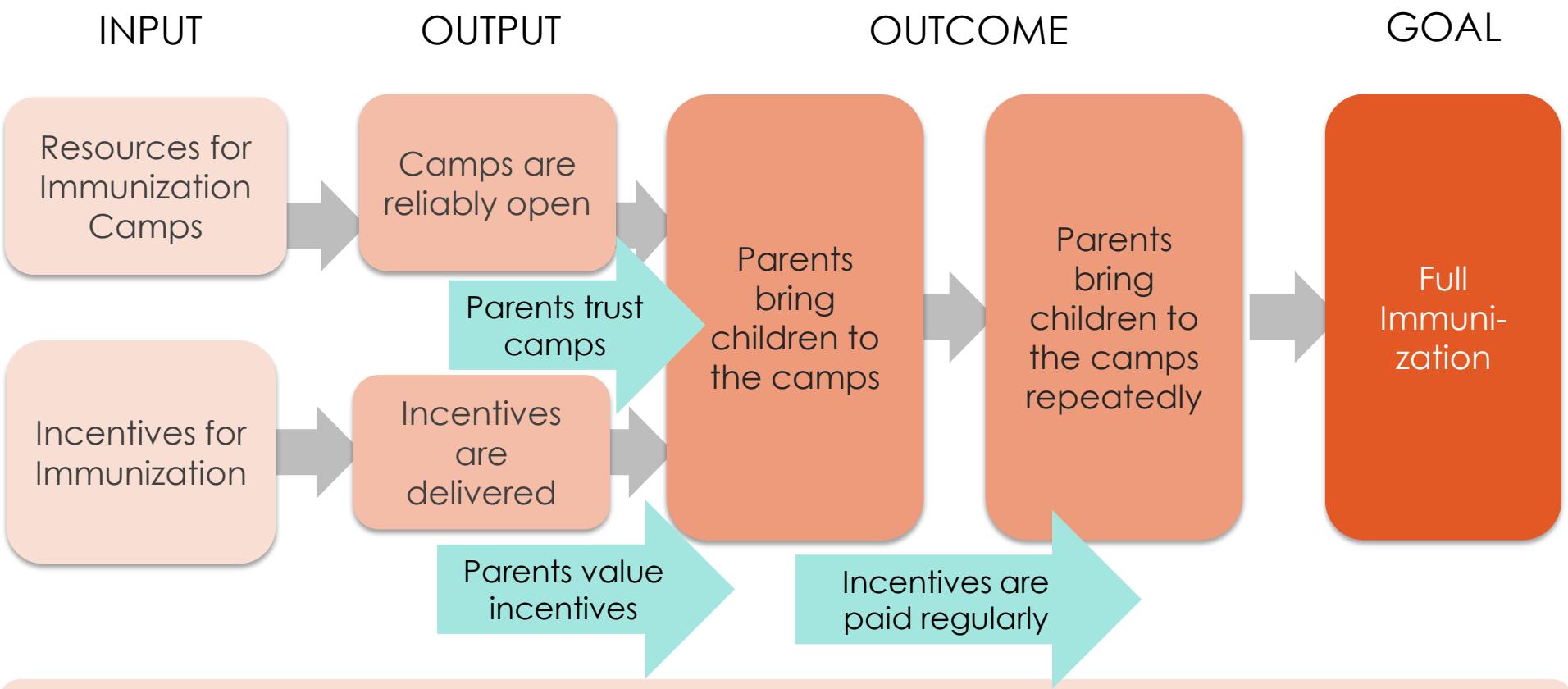

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6. **Design SMART indicators**

Step 5: Design indicators

- Indicators for each component
  - Goal, outcome, output, input
- Indicators are
  - Signals of change
  - Measures of progress

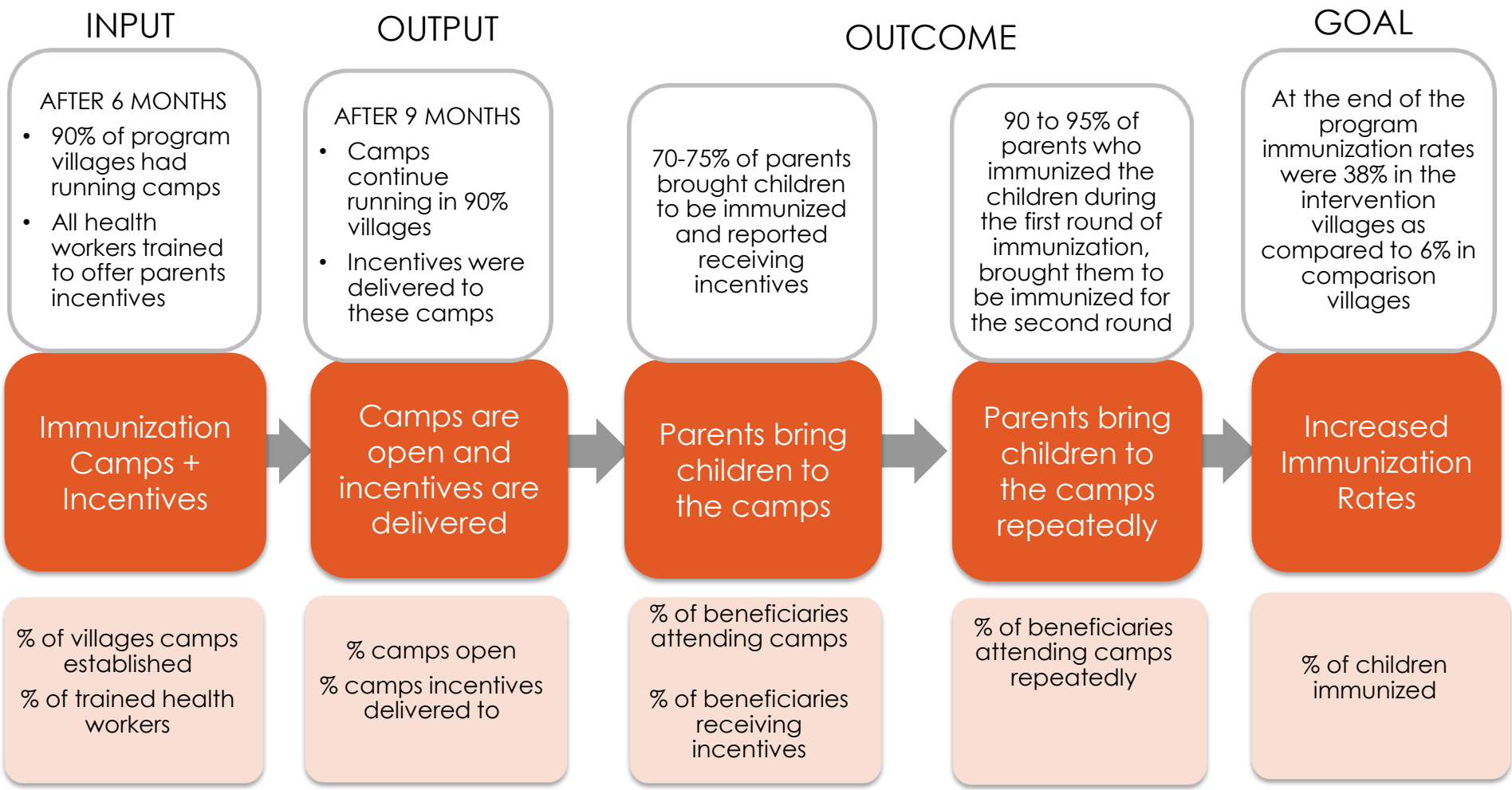
Good Indicators

- Quantitative and qualitative

- Standard of comparison (i.e. baseline v. endline, defining "high-quality," etc.)

- **SMART**
  - **S**pecific - Ask (answer) one question at a time
  - **M**easurable - Quantifiable, accurate, unbiased, sensitive
  - **A**chievable - Is the indicator realistic?
  - **R**elevant - Is this the most relevant program indicator given the needs
  - **T**ime-bound – Measured over a period of time

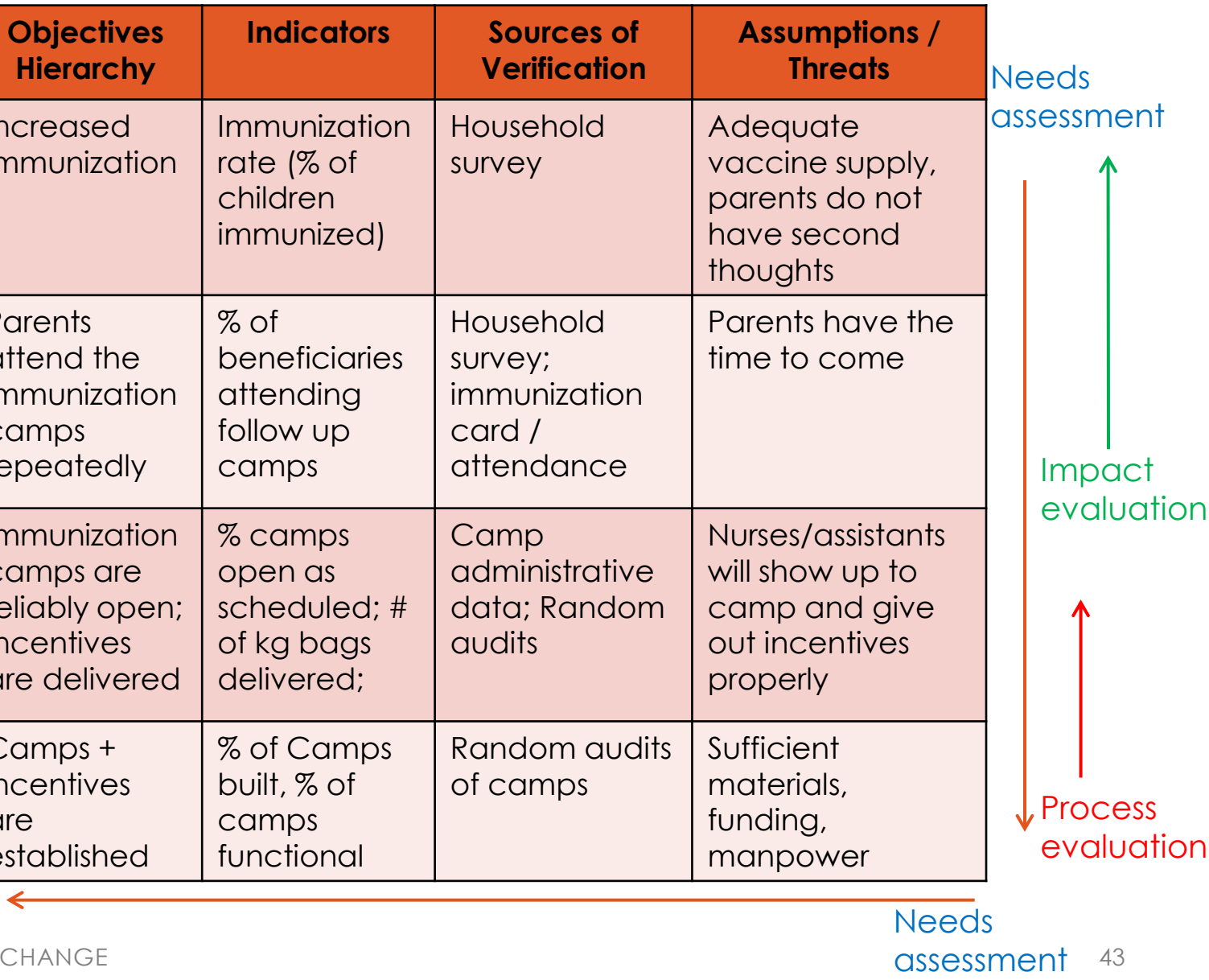
Step 6: Building a Theory of Change



Situation/Context Analysis: High health worker absenteeism, low value of immunization, limited income and time

Convert to Log Frame

	Objectives Hierarchy	Indicators	Sources of Verification	Assumptions / Threats
Impact (Goal/ Overall objective)	Increased immunization	Immunization rate (% of children immunized)	Household survey	Adequate vaccine supply, parents do not have second thoughts
Outcome (Project Objective)	Parents attend the immunization camps repeatedly	% of beneficiaries attending follow up camps	Household survey; immunization card / attendance	Parents have the time to come
Outputs	Immunization camps are reliably open; Incentives are delivered	% camps open as scheduled; # of kg bags delivered;	Camp administrative data; Random audits	Nurses/assistants will show up to camp and give out incentives properly
Inputs (Activities)	Camps + incentives are established	% of Camps built, % of camps functional	Random audits of camps	Sufficient materials, funding, manpower

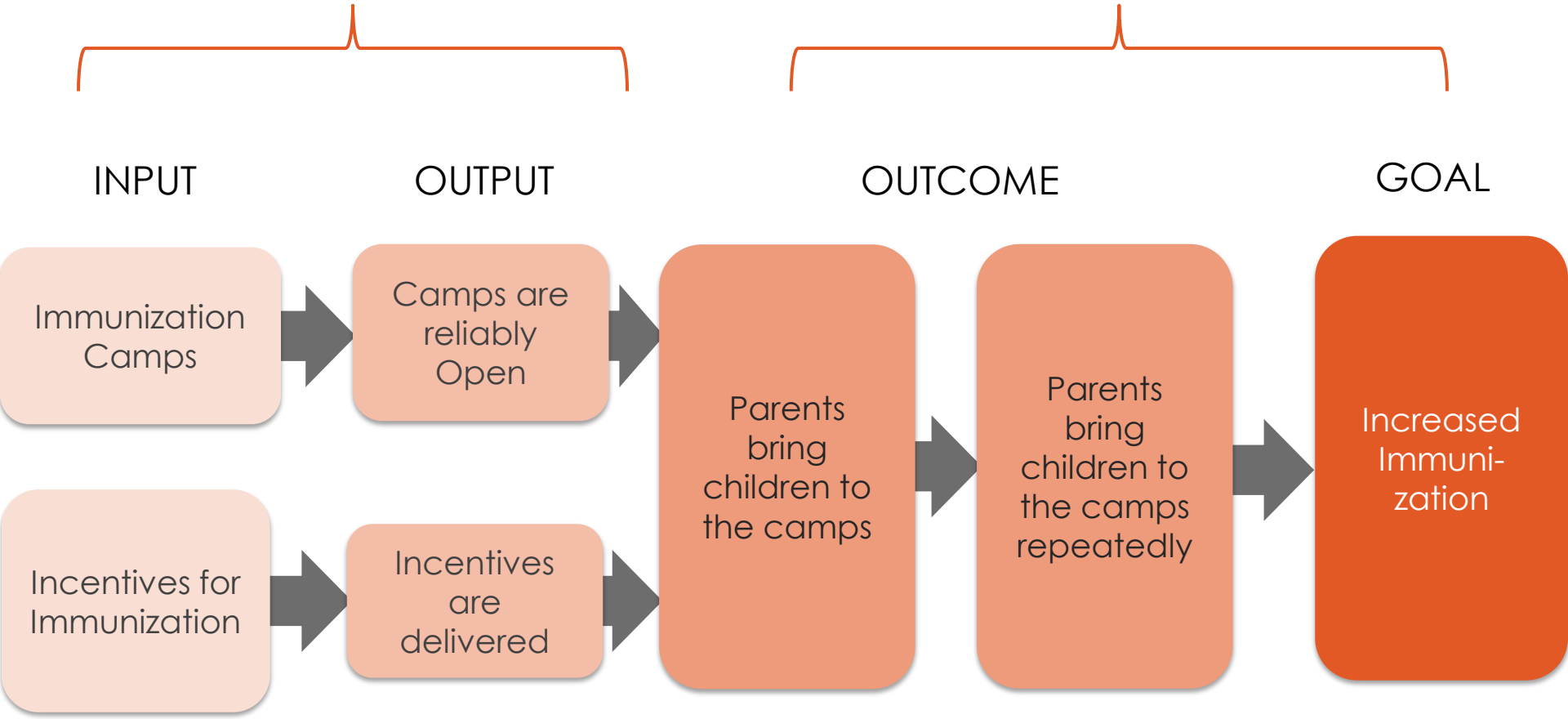


WHY IS THEORY OF CHANGE IMPORTANT

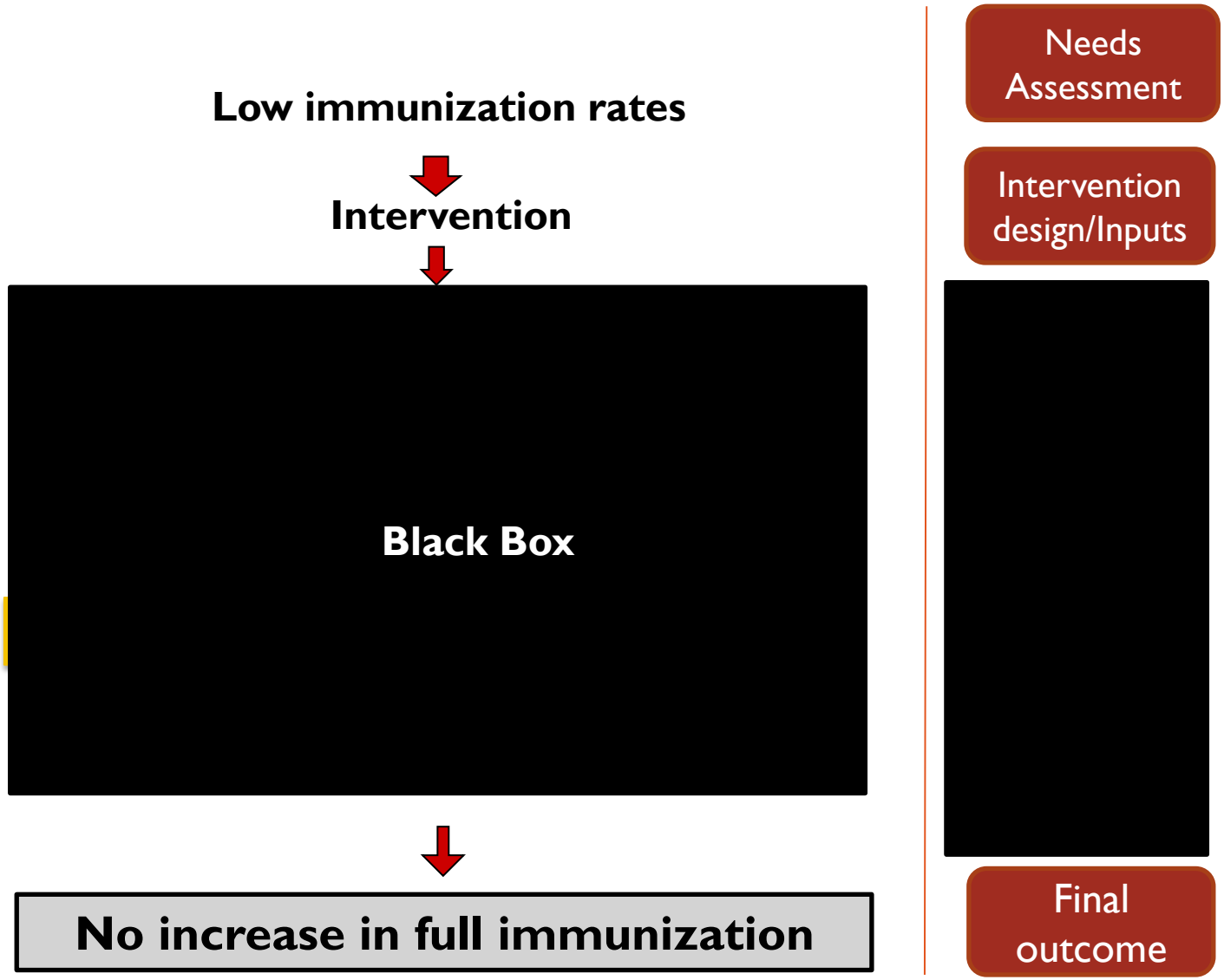
Why is Theory of Change Important

For evaluators, reminds us to consider process

For implementers, it helps us be results oriented



Solving the Black Box Problem



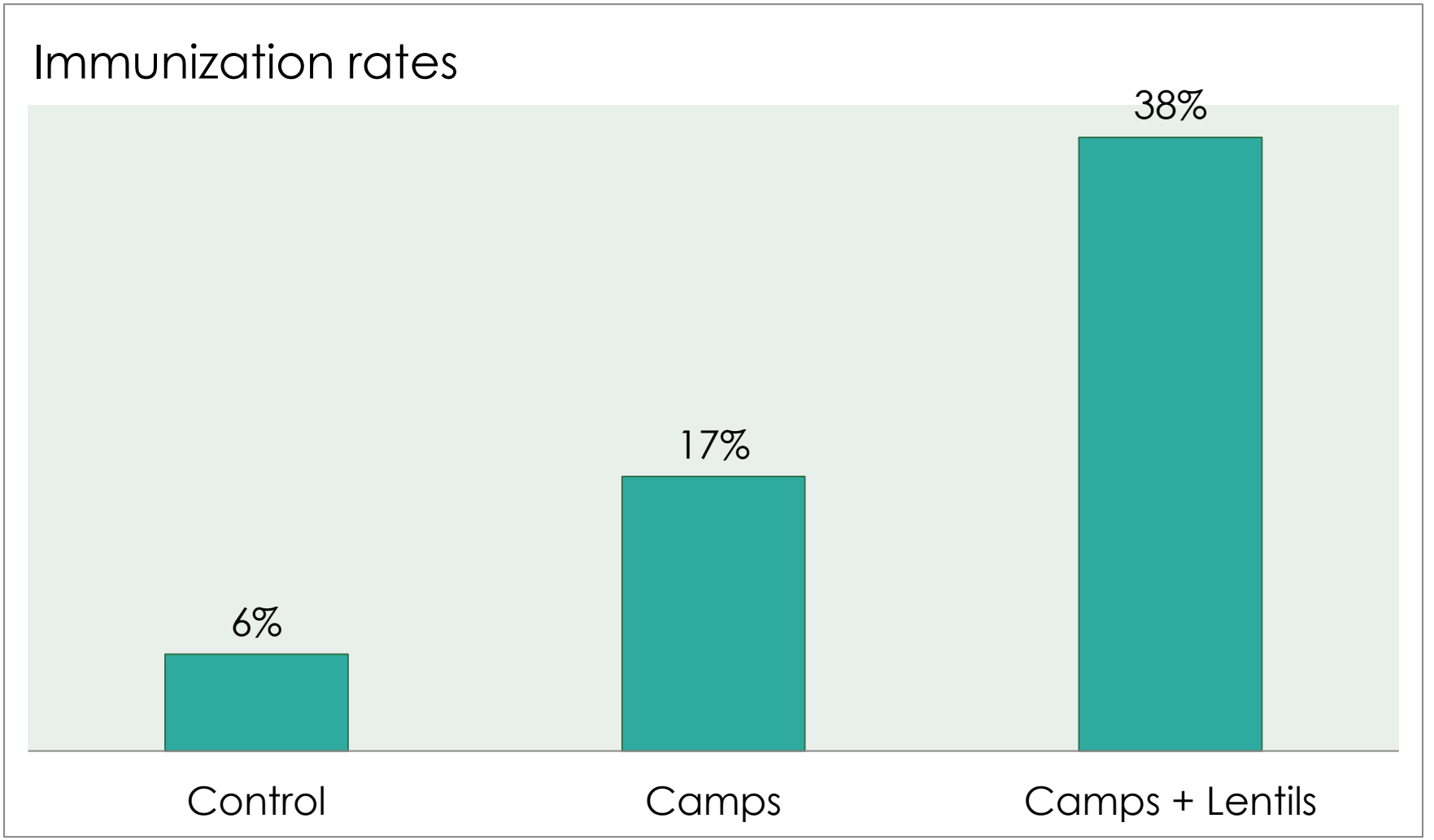
Identifying Theory Failure vs. Implementation Failure

Successful intervention

Implementation failure

Theory failure

Impact Results

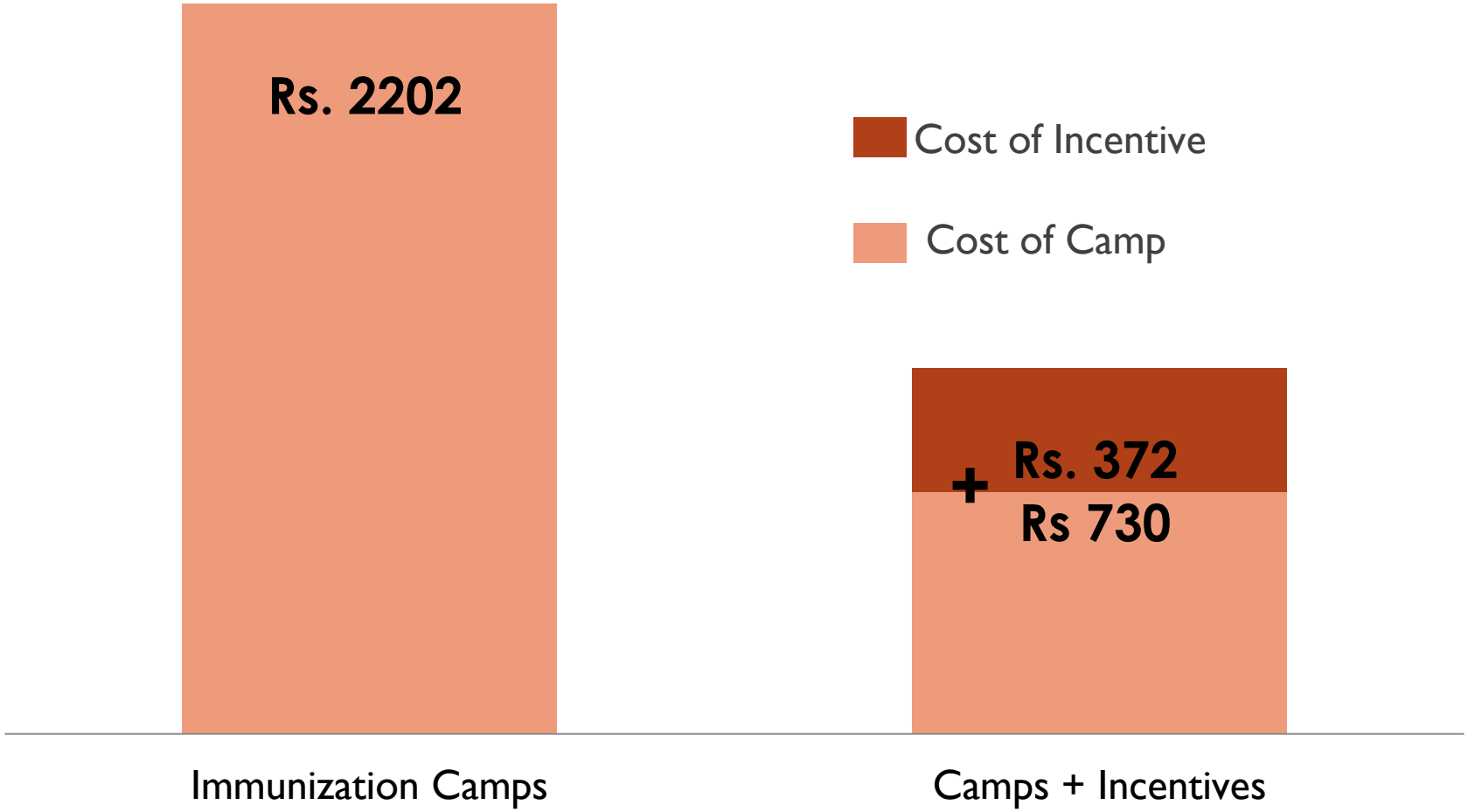


Making Policy from Evidence

National scale-up or global transfer?

- How representative is rural Rajasthan to the rest of India? (Recall: 22% vs. 54% nationally)
  - Same barriers to immunization?
- What about transferring this program to other countries/ contexts globally?
  - How do we know if it's relevant?
- Was the program cost effective?

Costs per fully Immunized Child



In summary

- A Theory of Change makes explicit how a program is expected to achieve impact

- Its main components are the causal chain, assumptions, and indicators

- Theory of Change can be used for both program as well as evaluation design

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Thank you!

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