

## Evaluation: What, Why, When

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## Aid optimists



"I have identified the specific investments that are needed [to end poverty]; found ways to plan and implement them; [and] shown that they can be affordable."

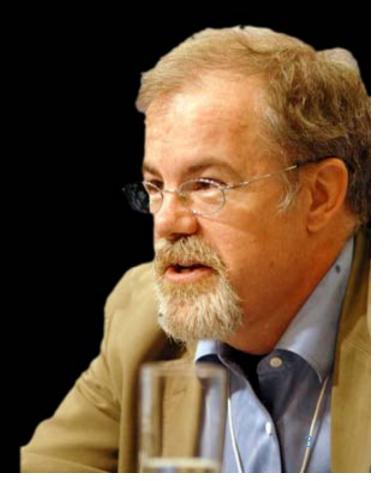
Jeffrey Sachs End of Poverty

## Aid pessimists

"After \$2.3 trillion over 5 decades, why are the desperate needs of the world's poor still so tragically unmet?

Isn't it finally time for an end to the impunity of foreign aid?"

Bill Easterly
The White Man's Burden



# What goes into policymaking?

#### Knowledge

- Evidence
- Experience
  - Personal
  - collective

#### Ideology

- Own
- External

#### Support

- Budget
- Political
- Capacity

Programs /Policies

# Why focus on impact evaluation?

- Surprisingly little hard evidence on what works
- Can do more with given budget with better evidence
- If people knew money was going to programs that worked, could help increase pot for anti-poverty programs
- Instead of asking "do aid/development programs work?" should be asking:
  - Which work best, why and when?
  - How can we scale up what works?

#### **Course Overview**

- 1. Why evaluate? What is evaluation? When?
- 2. Outcomes, indicators and measuring impact
- 3. Impact evaluation why randomize
- 4. How to randomize
- 5. Sampling and sample size
- 6. Analysis and inference
- 7. RCTs: Start to Finish

#### Lecture Overview

- Why evaluate? What makes a good evaluation?
  - What do we hope to learn?
- What do different type of evaluation do?
  - Understanding the program
  - Impact evaluation
  - Defining impact (preview)
- When to do a randomized evaluation?

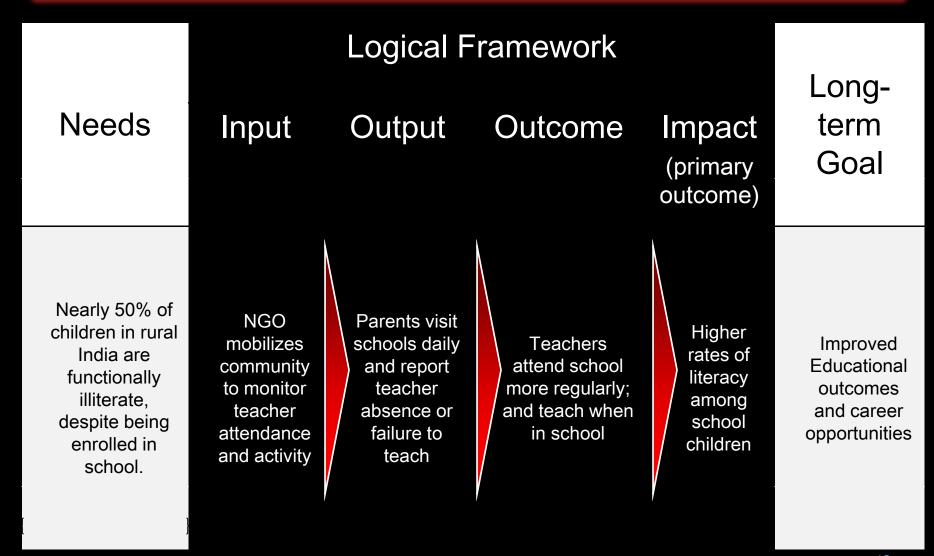
### Objective of evaluation

- Lesson learning
  - Beneficiaries
  - Program
  - Organization
  - World
- Accountability
- Reduced poverty through more effective programs
- Different types of evaluation contribute to these different objectives of evaluation

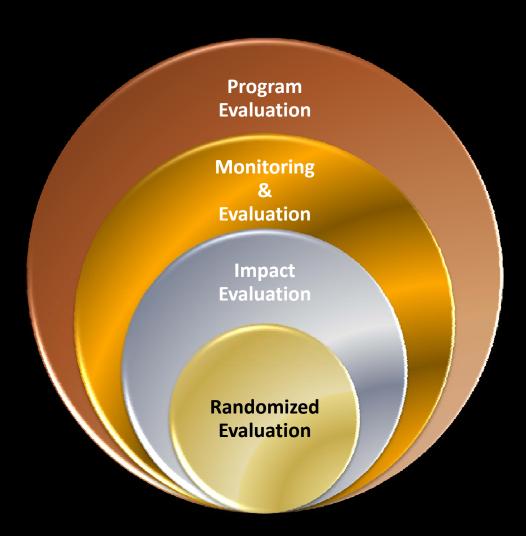
# What makes a good evaluation?

- Ask the right questions
  - For accountability
  - For lesson learning
- Answers those questions in unbiased and definitive way
- To do that you need a model: logical framework/theory of change
  - Who is the target?
  - What are their needs?
  - What is the program seeking to change?
  - What is the precise program or part of program being evaluated?

#### Eg: community mobilization for education



# The different types of evaluation



# Different levels of program evaluation

- Needs Assessment
- Program Theory Assessment
- Process evaluation
- Impact evaluation
- Cost-benefit/Cost-effectiveness analysis

#### Eg: community mobilization for education

Logical Framework Long-Needs term Input Output Outcome **Impact** Goal (primary outcome) Nearly 50% of NGO Parents visit children in rural Higher mobilizes schools daily **Teachers Improved** India are rates of community and report attend school Educational functionally literacy to monitor teacher more regularly; outcomes illiterate. among and teach when teacher absence or and career despite being school attendance failure to opportunities in school enrolled in children and activity teach school. Needs assessment

Program evaluation

Process evaluation

Impact evaluation

# Program Evaluation: community mobilization in education



#### Needs Assessment

- Clear sense of target population
- Clear sense of need program will fill
- Clear articulation of program benefits
- Clear sense of alternatives



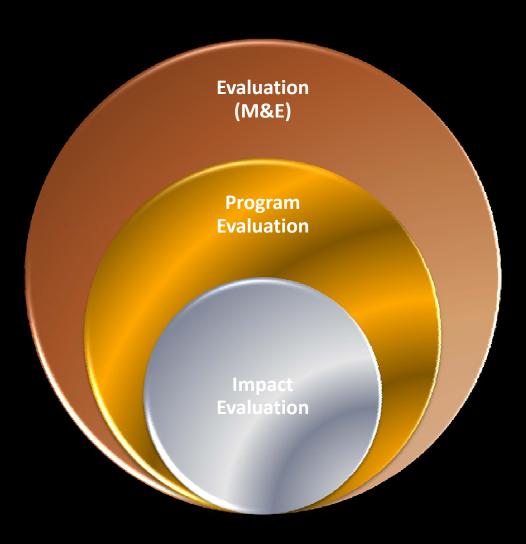
# Program Theory Assessment

- How will the program address the needs put forth in your needs assessment?
  - What are the prerequisites to meet the needs?
  - How and why are those requirements currently lacking or failing?
  - How does the program intend to target or circumvent shortcomings?
  - What services will be offered?

#### **Process Evaluation**

- Are basic tasks being completed?
- Are the services being delivered?
- Is the intervention reaching the target population?
- Is the intervention being completed well or efficiently and to the beneficiaries' satisfaction?

# Impact Evaluation



### Impact Evaluation

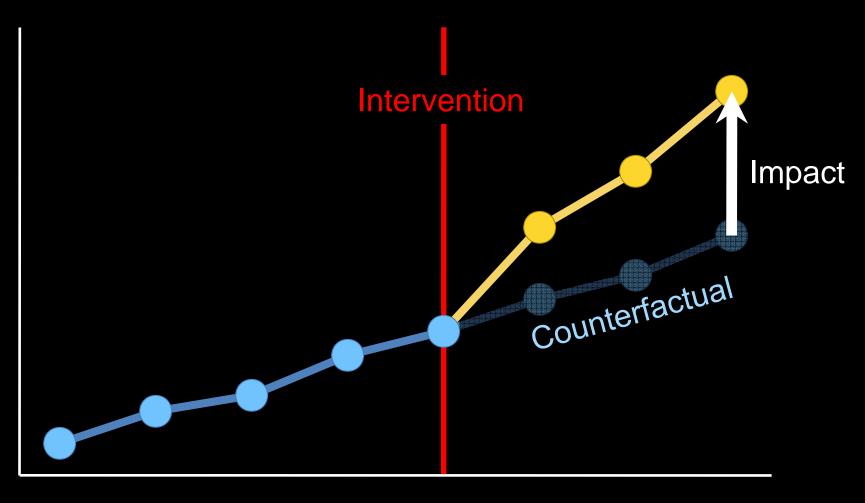
- The program happened, how did it change lives?
- What does Theory of Change say we might expect to change?
- Primary outcome (impact): did community monitoring cause children to learn more (e.g. measured by test scores)?
- Also distributional questions such as, did the program impact some children more than others?

#### How to measure impact?

- What would have happened in the absence of the program?
- Take the difference between

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what happened (with the program) ...and
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- what would have happened (without the program)
- =IMPACT of the program



Time

## Constructing the counterfactual

 Counterfactual is often constructed by selecting a group not affected by the program

#### Randomized:

 Use random assignment of the program to create a control group which mimics the counterfactual.

#### Non-randomized:

Argue that a certain excluded group mimics the counterfactual.

## How impact differs from process?

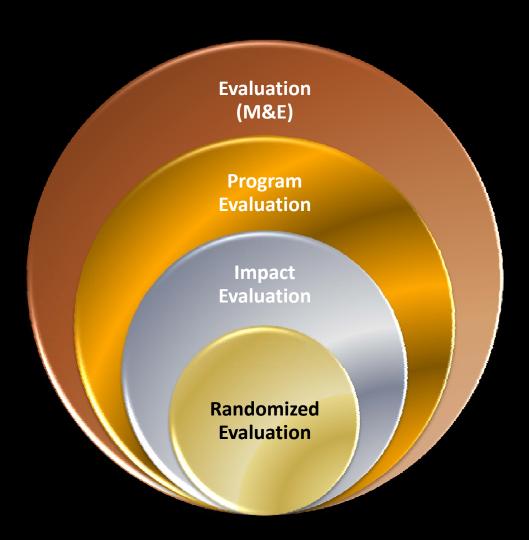
 When we answer a process question, we need to describe what happened.

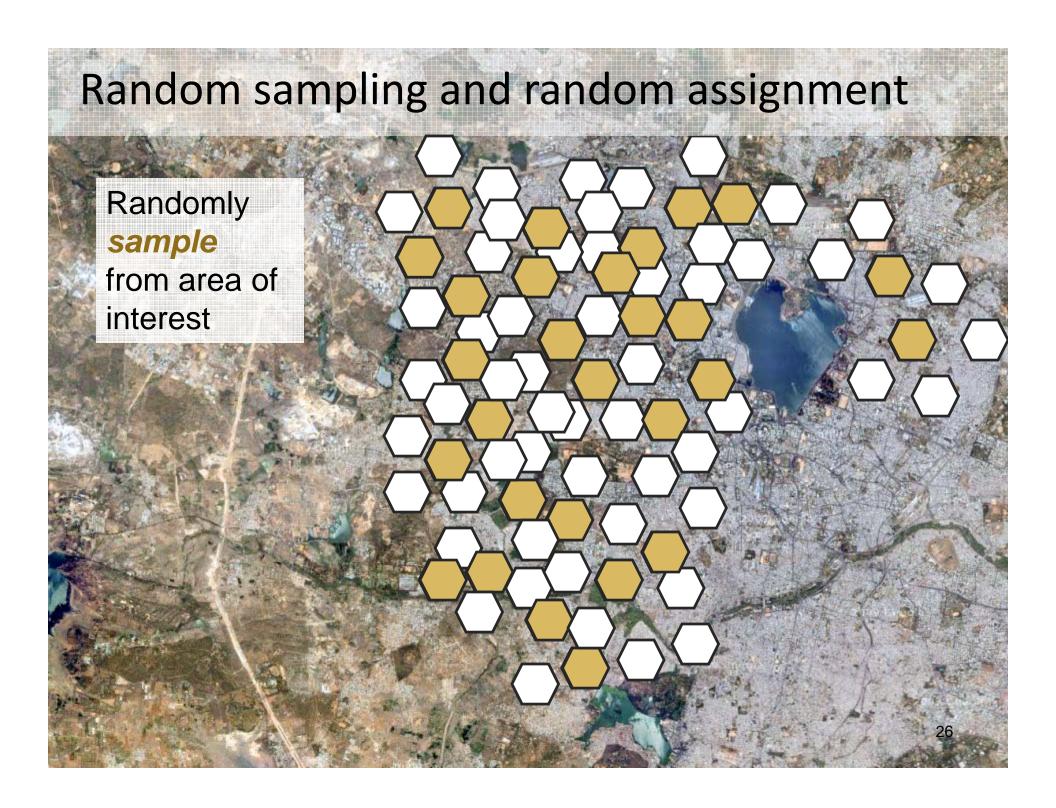
 When we answer an impact question, we need to compare what happened to what would have happened without the program

#### Methodologies in impact evaluation

- Experimental:
  - Randomized Evaluations
- Quasi-experimental
  - Instrumental Variables
  - Regression Discontinuity Design
- Non-experimental
  - Pre-post
  - Difference in differences
  - Regression
  - Matching

# Preview: why randomize?





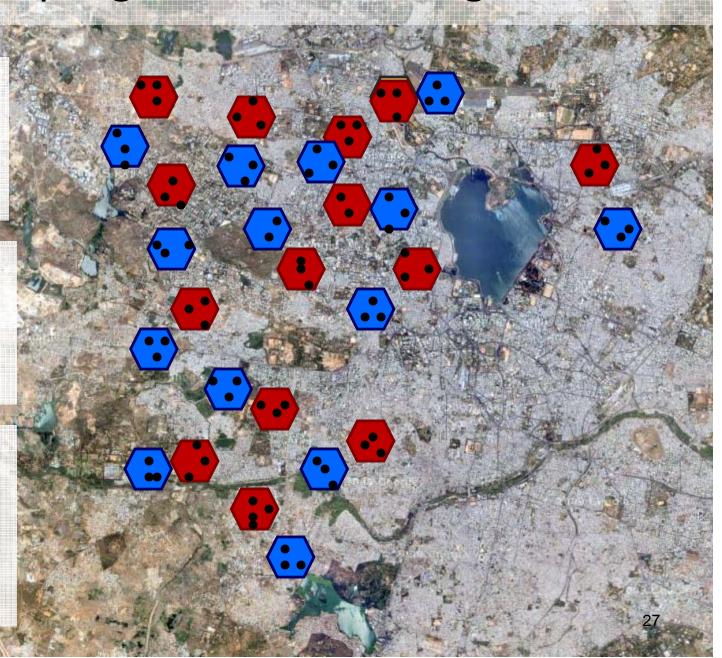
#### Random sampling and random assignment

Randomly sample from area of

trom area of interest

Randomly
assign
to treatment
and control

Randomly sample from both treatment and control



# Linking back to objectives for evaluation

- Accountability
- Lesson learning
- Reduced poverty through more effective programs
- Solid reliable impact evaluations are the building blocks for more general lesson learning

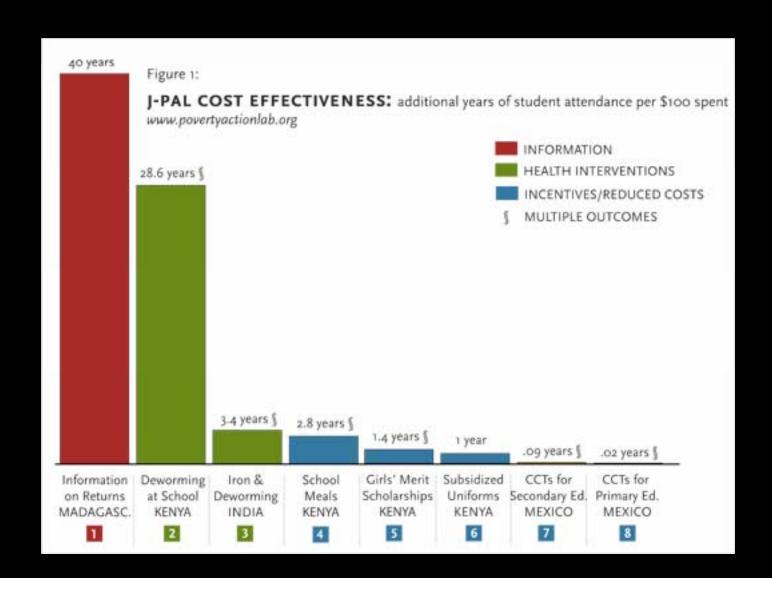
## Learning from impact evaluations

- Learning from a single study
- Learning from an accumulation of studies
- We learn more if we place each evaluation inside a general learning strategy, helps us be explicit about
  - questions we want to answer
  - hypotheses we want to test

#### Evaluation and cost-benefit analysis

- Needs assessment gives you the metric for measuring impact
- Process evaluation gives you the costs of all the inputs
- Impact evaluation gives you the quantified benefits
- Identifying alternatives allows for comparative cost benefit

## Eg: Comparative cost effectiveness



#### When to do a randomized evaluation?

- When there is an important question you want/need to know the answer to
- Timing--not too early and not too late
- Program is representative not gold plated
  - Or tests an basic concept you need tested
- Time, expertise, and money to do it right
- Develop an evaluation plan to prioritize

#### When NOT to do an RE

- When the program is premature and still requires considerable tinkering to work well
- When the project is on too small a scale to randomize into two "representative groups"
- If a positive impact has been proven using rigorous methodology and resources are sufficient to cover everyone
- After the program has already begun and you are not expanding elsewhere

## Developing an evaluation strategy

- Determine key questions for your organization
- How many can you already answer?
- Select top priority questions for impact evaluation
- Establish plan for answering them
- With key questions answered from impact evaluations, process evaluation can give your overall impact
- A few high quality impact studies are worth more than many poor quality ones
- If you ask the right question, more likely to use it

MIT OpenCourseWare http://ocw.mit.edu

Resource: Abdul Latif Jameel Poverty Action Lab Executive Training: Evaluating Social Programs Dr. Rachel Glennerster, Prof. Abhijit Banerjee, Prof. Esther Duflo

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