What is evaluation and why evaluate?

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I. Who is J-PAL and ATAI?

II. Why evaluate?

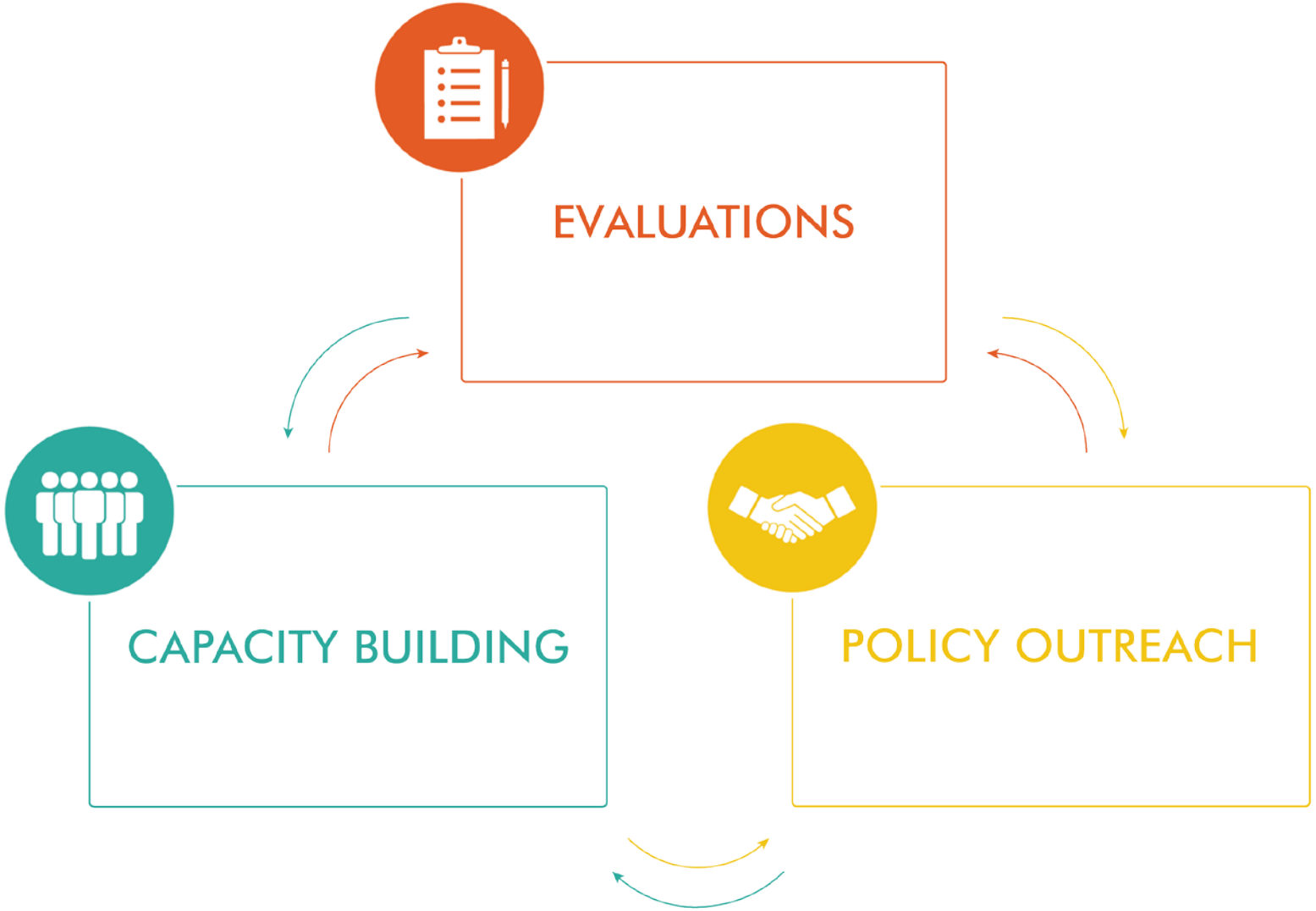
III. Why randomize?

IV. Randomized evaluation example

V. How to use randomized evaluations in policy decisions?

Introduction to J-PAL and ATAI

J-PAL's mission is to reduce poverty by ensuring that policy is informed by scientific evidence.



J-PAL consists of a network of 145 professors who use randomized evaluations to inform policy

Abhijit Banerjee, MIT

Esther Duflo, MIT

Sendhil Mullainathan, Harvard

Nava Ashraf, Harvard

Seema Jayachandran, Northwestern University

Cally Ardington, University of Cape Town

Jakob Svensson, Institute for International Economic Studies

Martina Bjorkman Nyqvist, Stockholm University

Isaac Mbiti, University of Virginia

Tavneet Suri MIT

Michael Kremer, Harvard

Raghabendra Chattopadhyay, Indian Institute of Management

Claudio Ferraz, PUC-Rio

Pascaline Dupas, Stanford

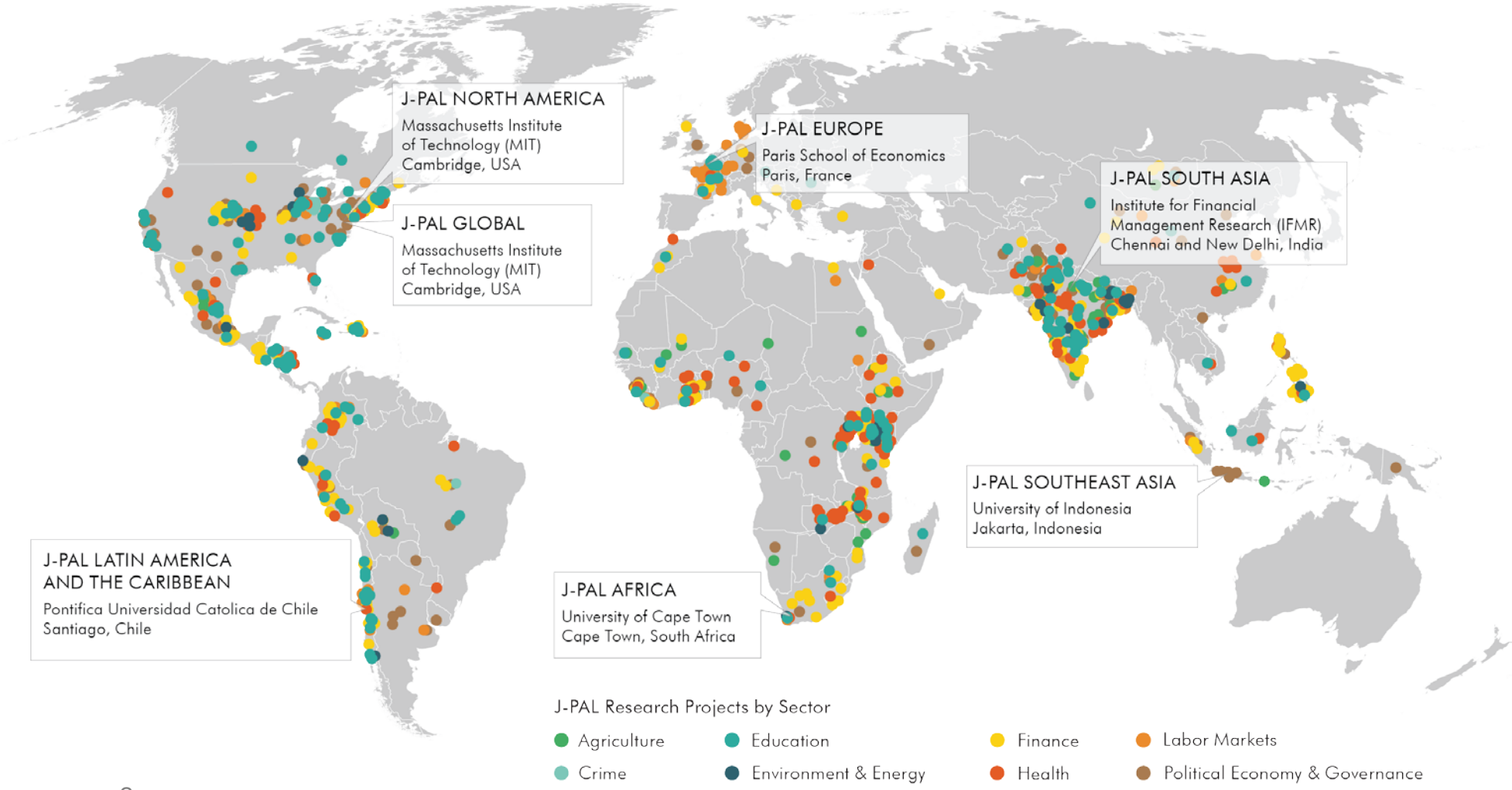
Mushfiq Mobarak, Yale

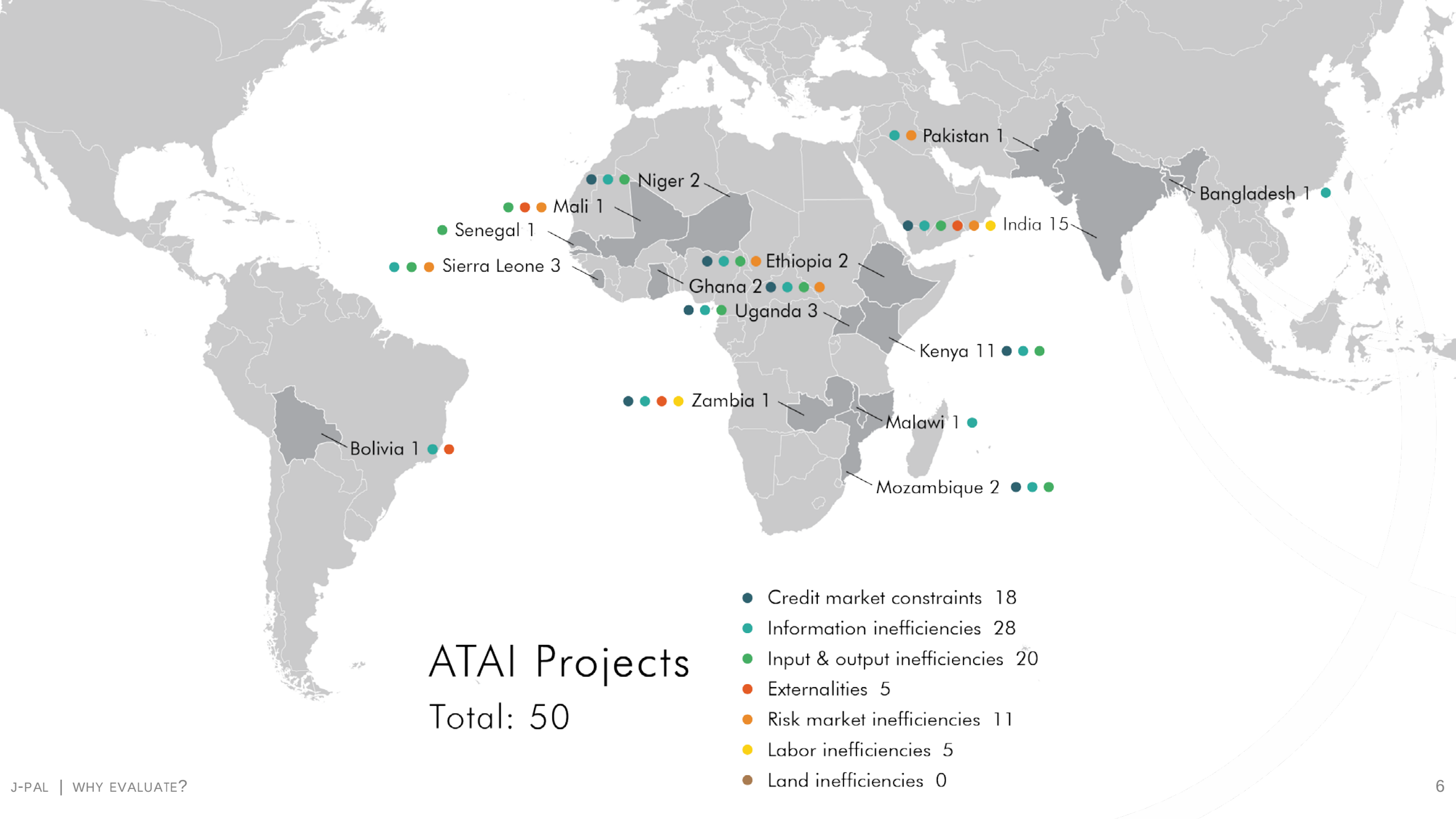
Jessica Cohen, Harvard

Grant Miller, Stanford

Margaret McConnell, Harvard

We have more than 820 ongoing and completed projects across 8 sectors in 70+ countries




Pakistan 1
Niger 2
Bangladesh 1
Mali 1
India 15
Senegal 1
Ethiopia 2
Sierra Leone 3
Ghana 2
Uganda 3
Kenya 11
Zambia 1
Malawi 1
Bolivia 1
Mozambique 2
ATAI Projects
Total: 50
Credit market constraints 18
Information inefficiencies 28
Input & output inefficiencies 20
Externalities 5
Risk market inefficiencies 11
Labor inefficiencies 5
Land inefficiencies 0

Why evaluate?

How are policies made?

Opinion-based policy making

Evidence-based policy making

Brandon Reynolds, commissioned by University of Cape Town Graduate School of Development Policy and Practice

How do you think policies are made?

A. Ideology

B. Experience

C. Financial resources/constraints

D. Implementation capacity

E. Evidence

What's the difference between: Monitoring and Evaluation

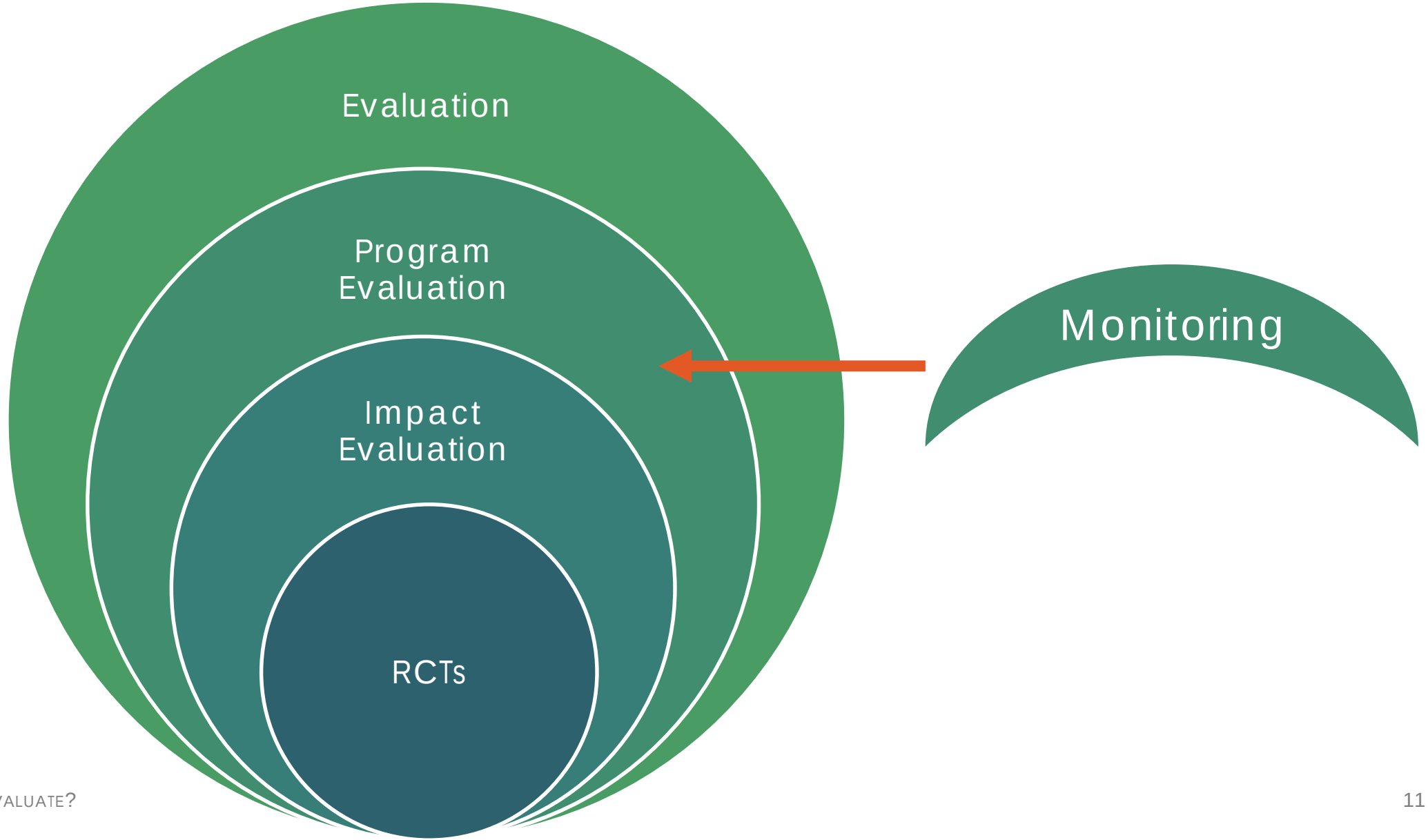
A. Nothing. They are different words to describe the same activity.

B. Monitoring tracks the process. Evaluation determines the impact.

C. Monitoring is for small programs. Evaluation is for big programs.

D. Don't know.

What is evaluation?



What types of questions can you answer?

- Evaluations of all kinds can be thought to answer three types of questions :
  - Descriptive questions
  - Normative questions
  - Cause and effect questions

- Impact Evaluation can answer cause and effect questions.

Types of Impact Evaluations

- Non-experimental methods include:
  - Pre-post
  - Difference in difference
  - Matching
  - Instrumental Variables
  - Regression Discontinuity

- These methods rely on being able to "mimic" the counterfactual under certain assumptions
- Problem: Assumptions are not testable

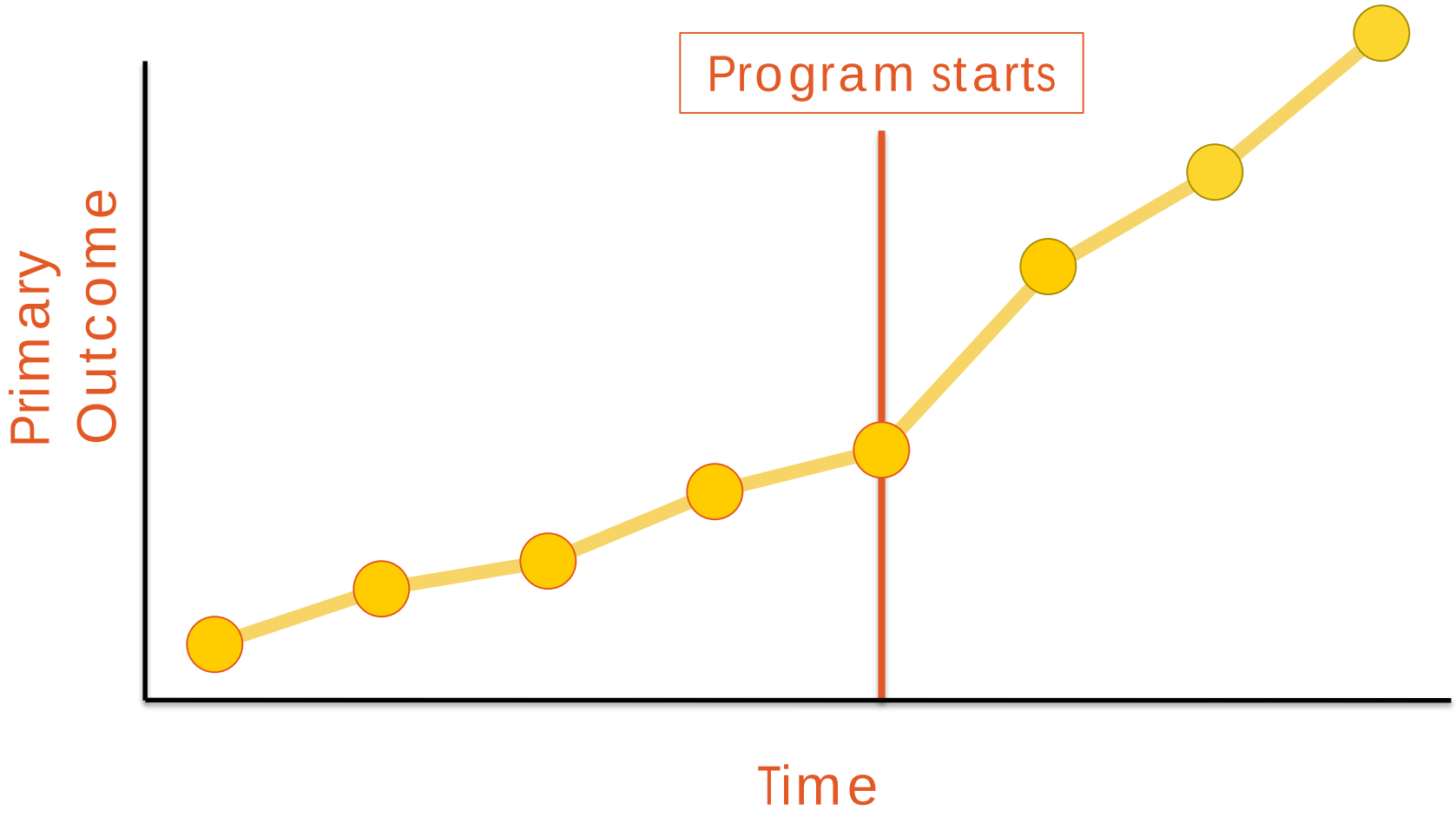
Why randomize?

NERICA in Sierra Leone

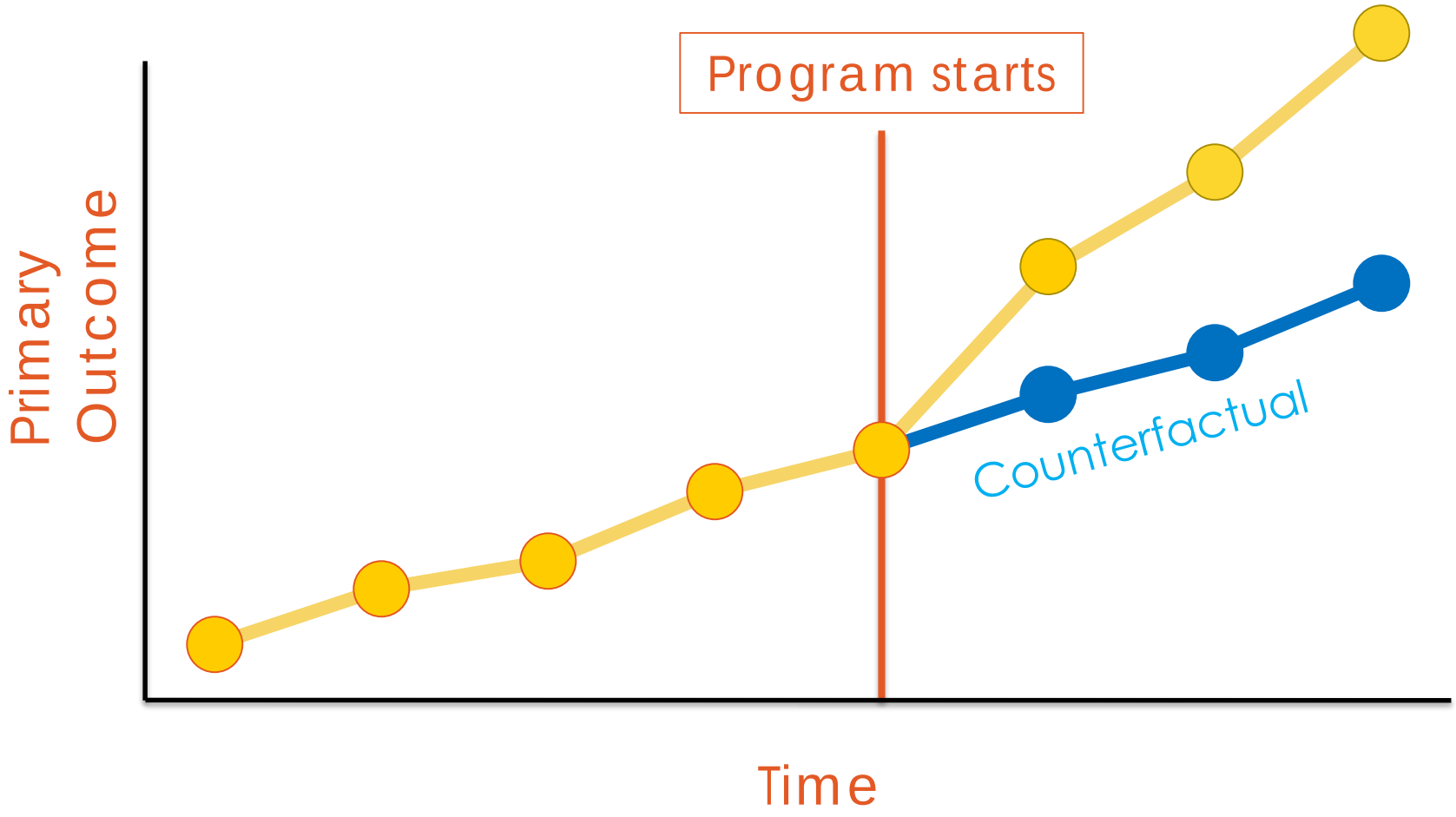
- Problem: Adoption of high-yielding crop varieties has been low
- Potential solution: Offer subsidies and trainings to increase take-up and yield

- What levels of subsidies are most effective? Does agronomic training help increase yields?

Impact: What is it?



Impact: What is it?



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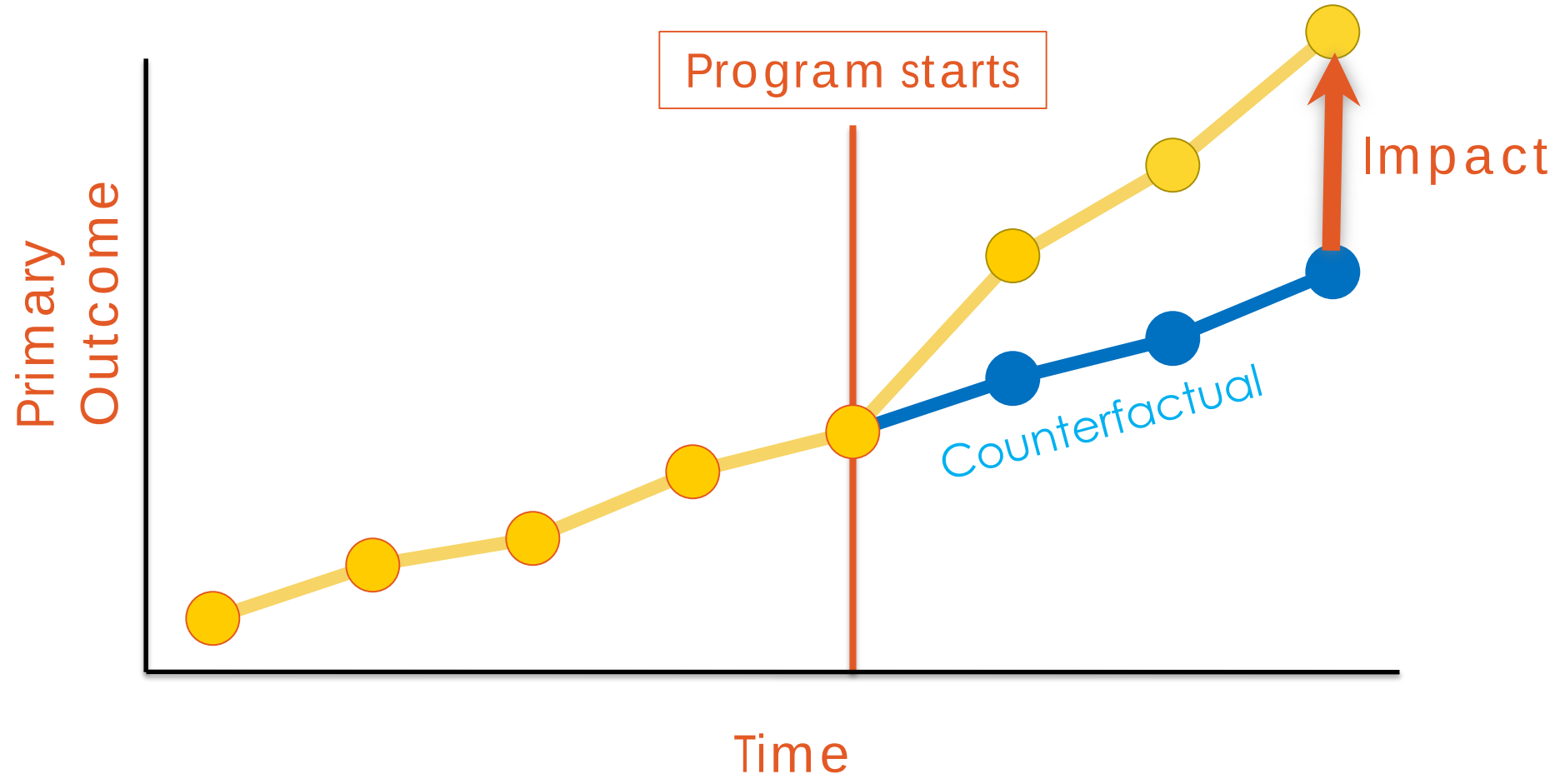

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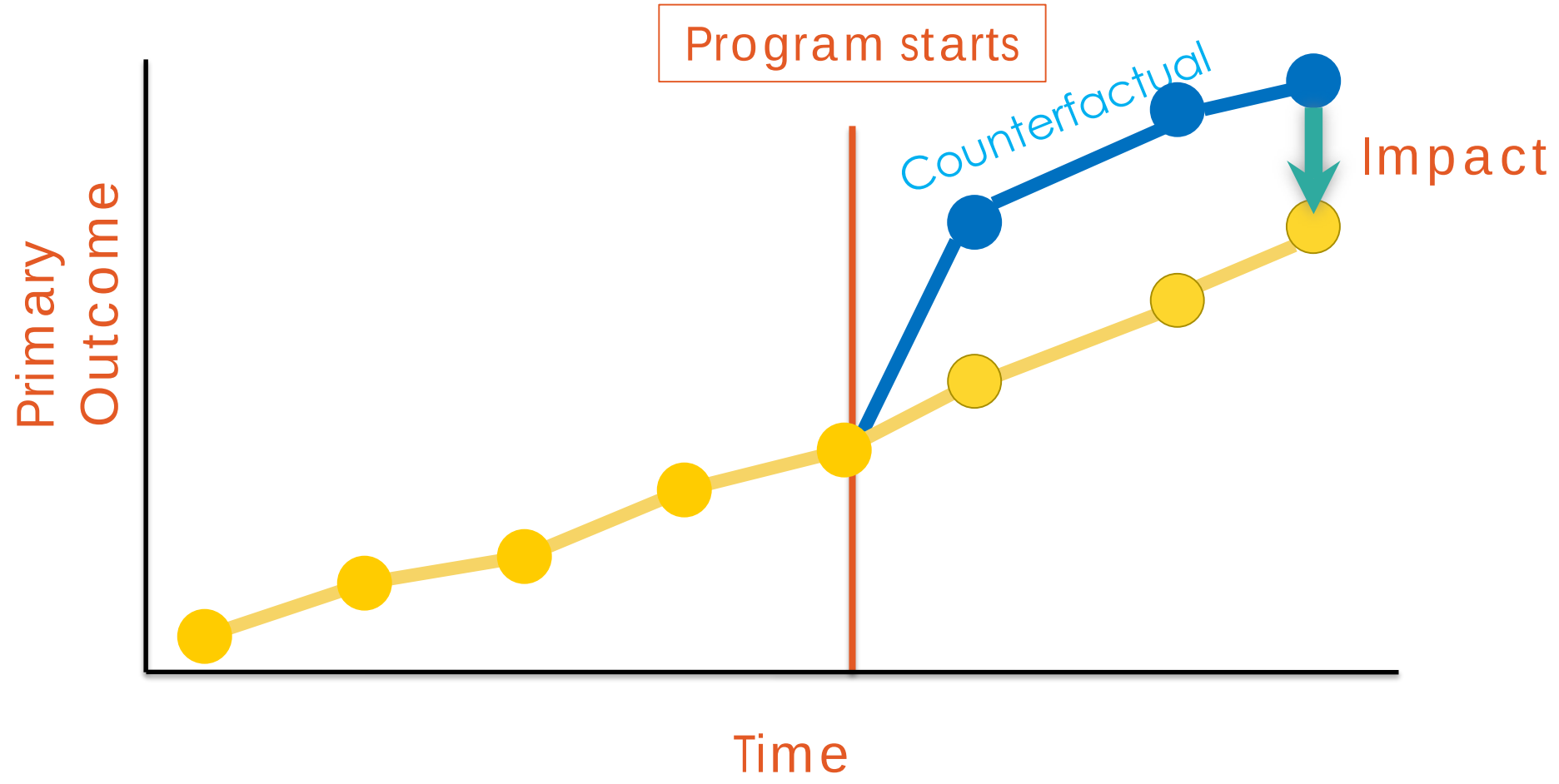

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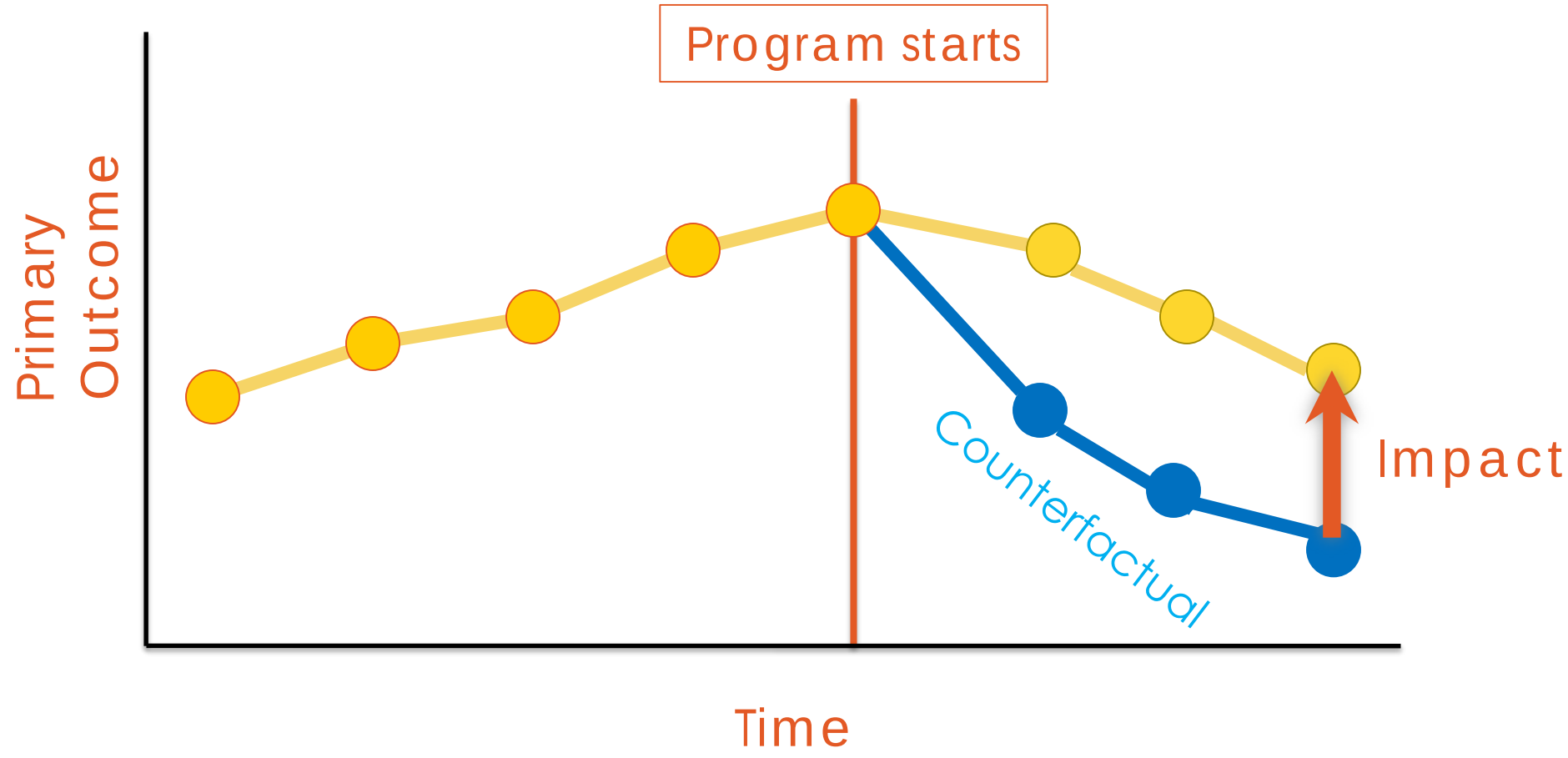
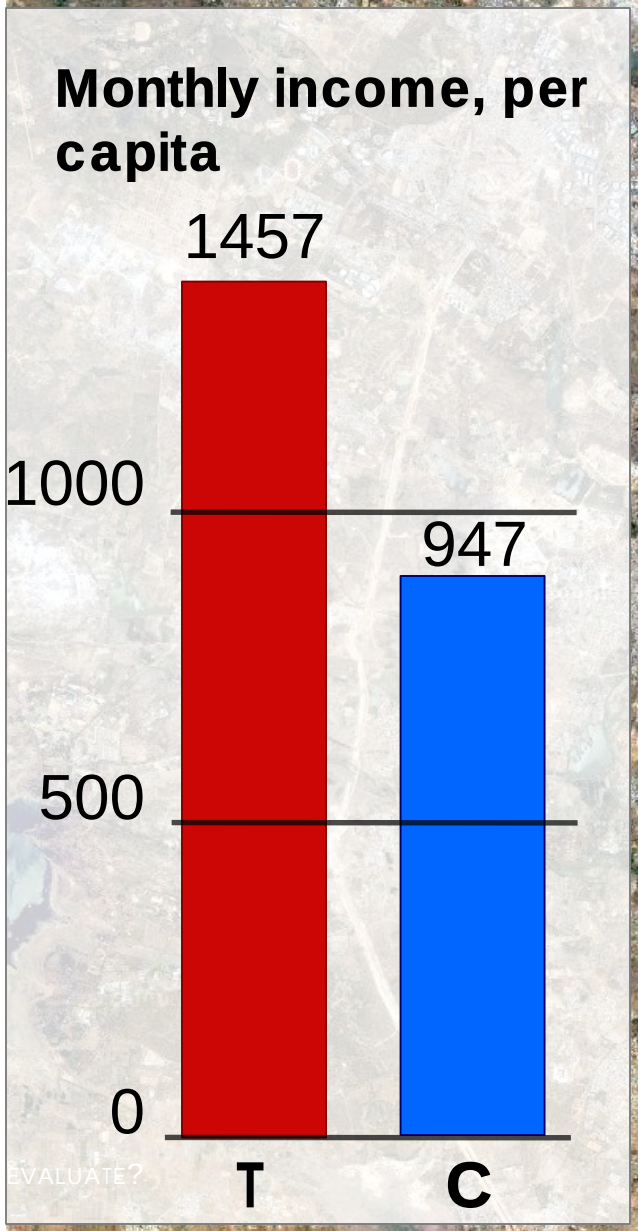
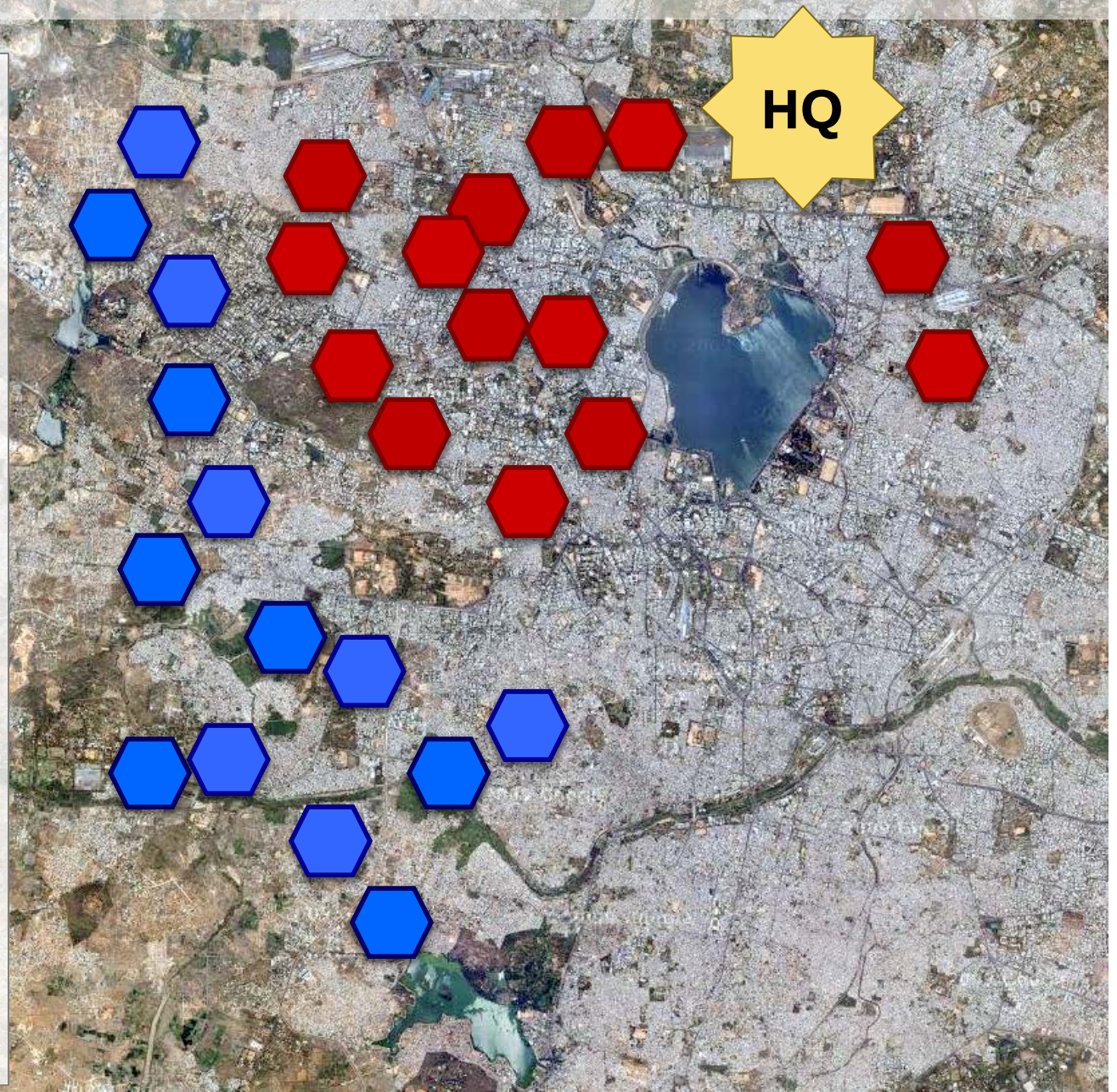


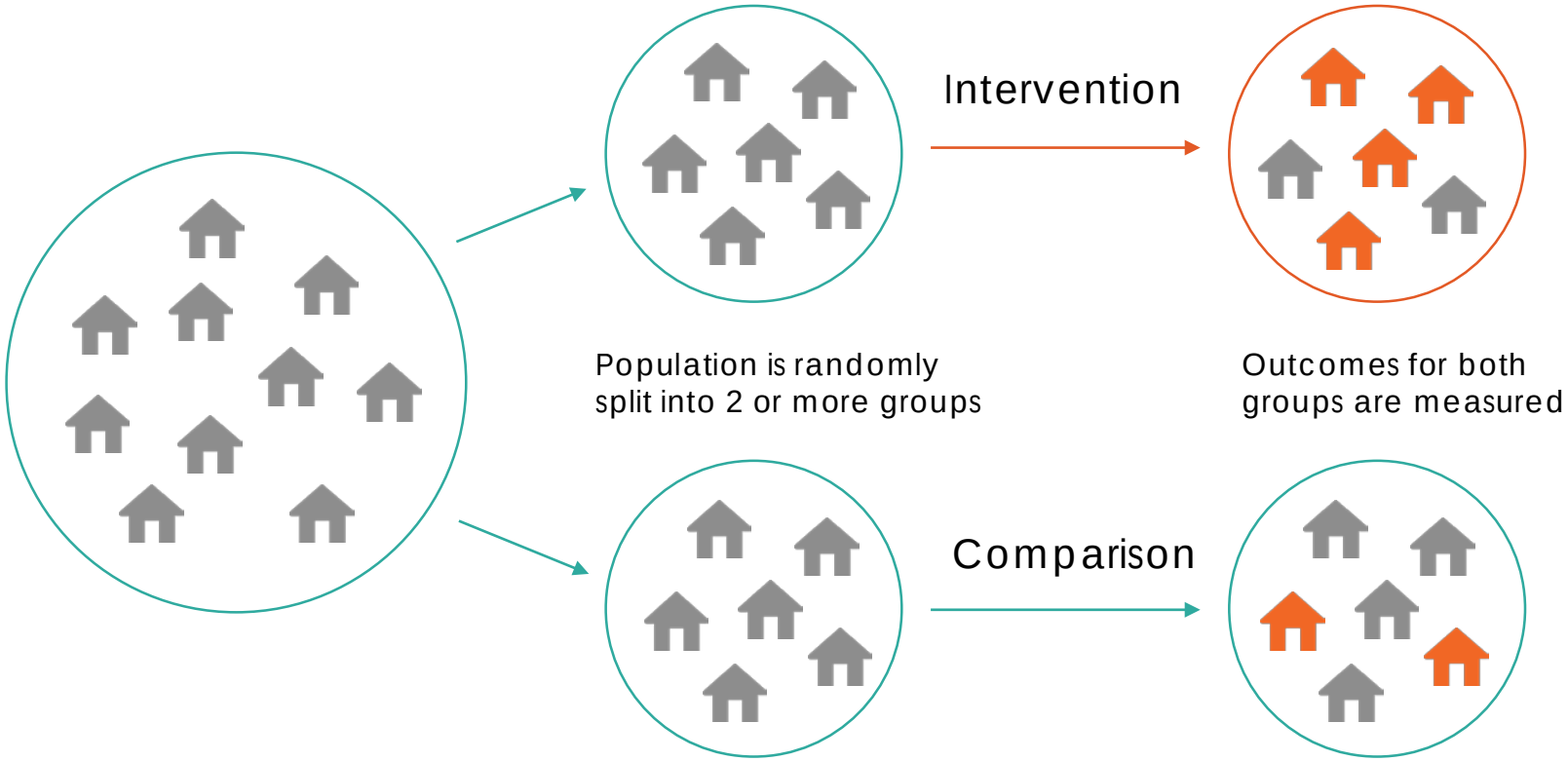
Non-random assignment





Randomized evaluations provide a highly rigorous estimate of program impact

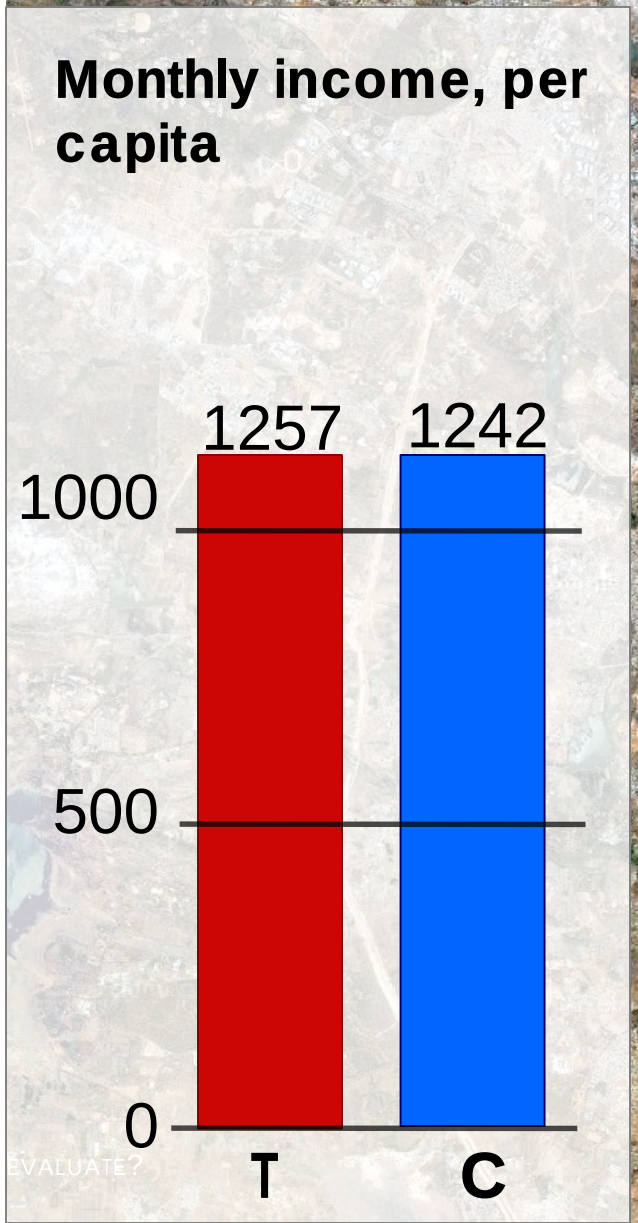
Before the program starts, eligible individuals are randomly assigned to two or more groups so that they are statistically identical before the program.

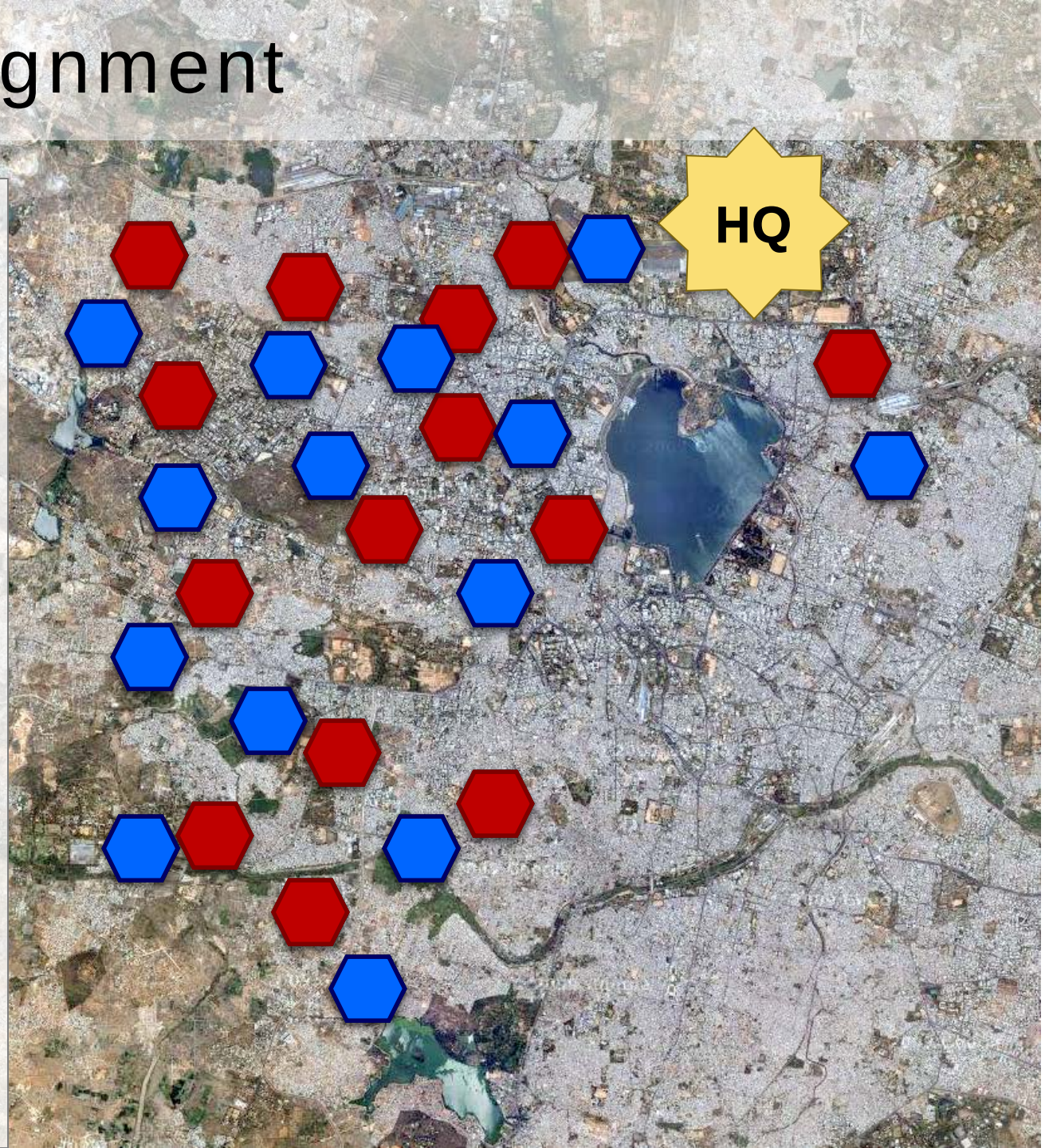


Two groups continue to be identical, except for treatment

Any differences in outcomes between the groups can be attributed to the program

Random assignment





Randomized Evaluation Example

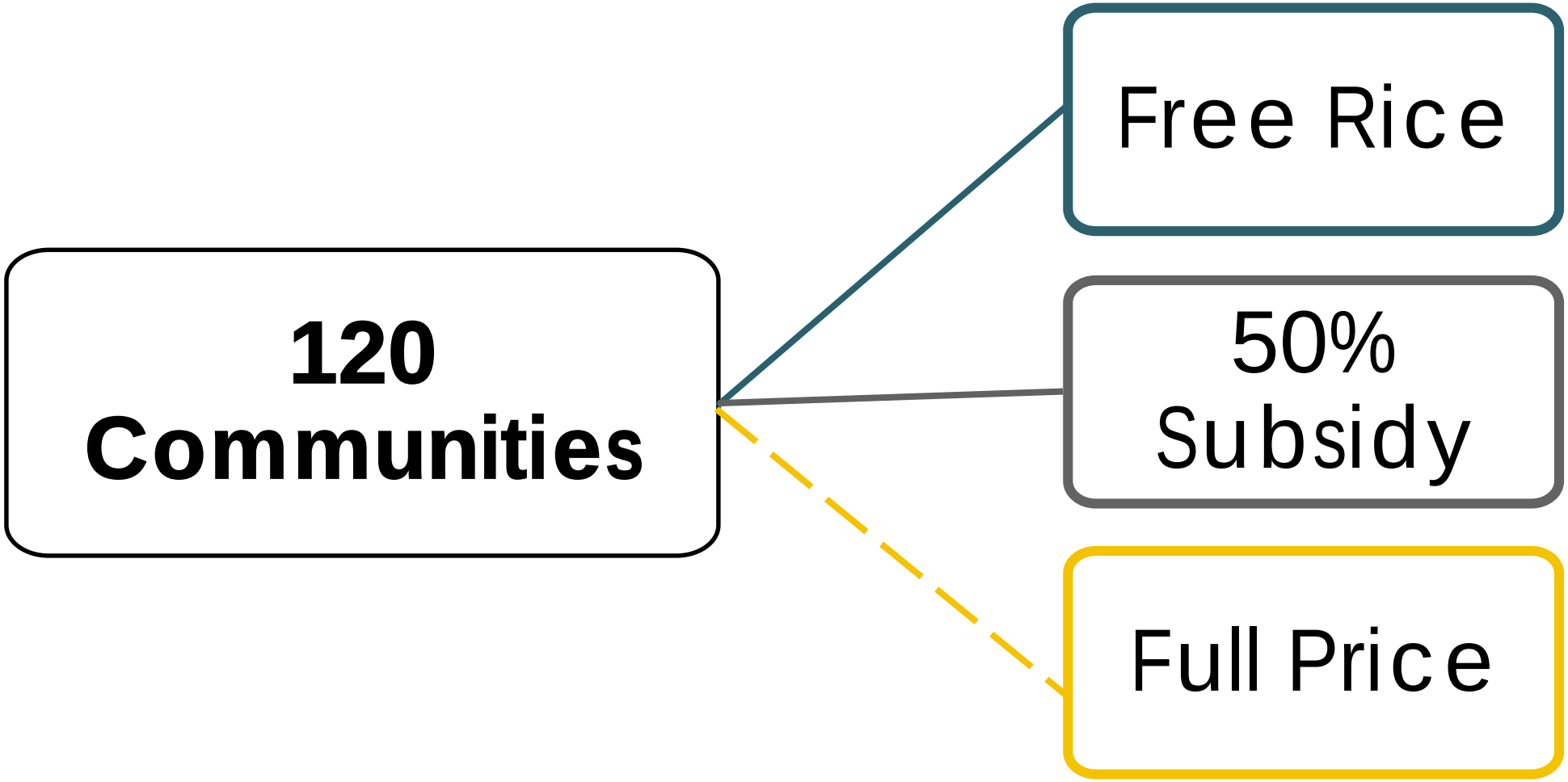
NERICA in Sierra Leone

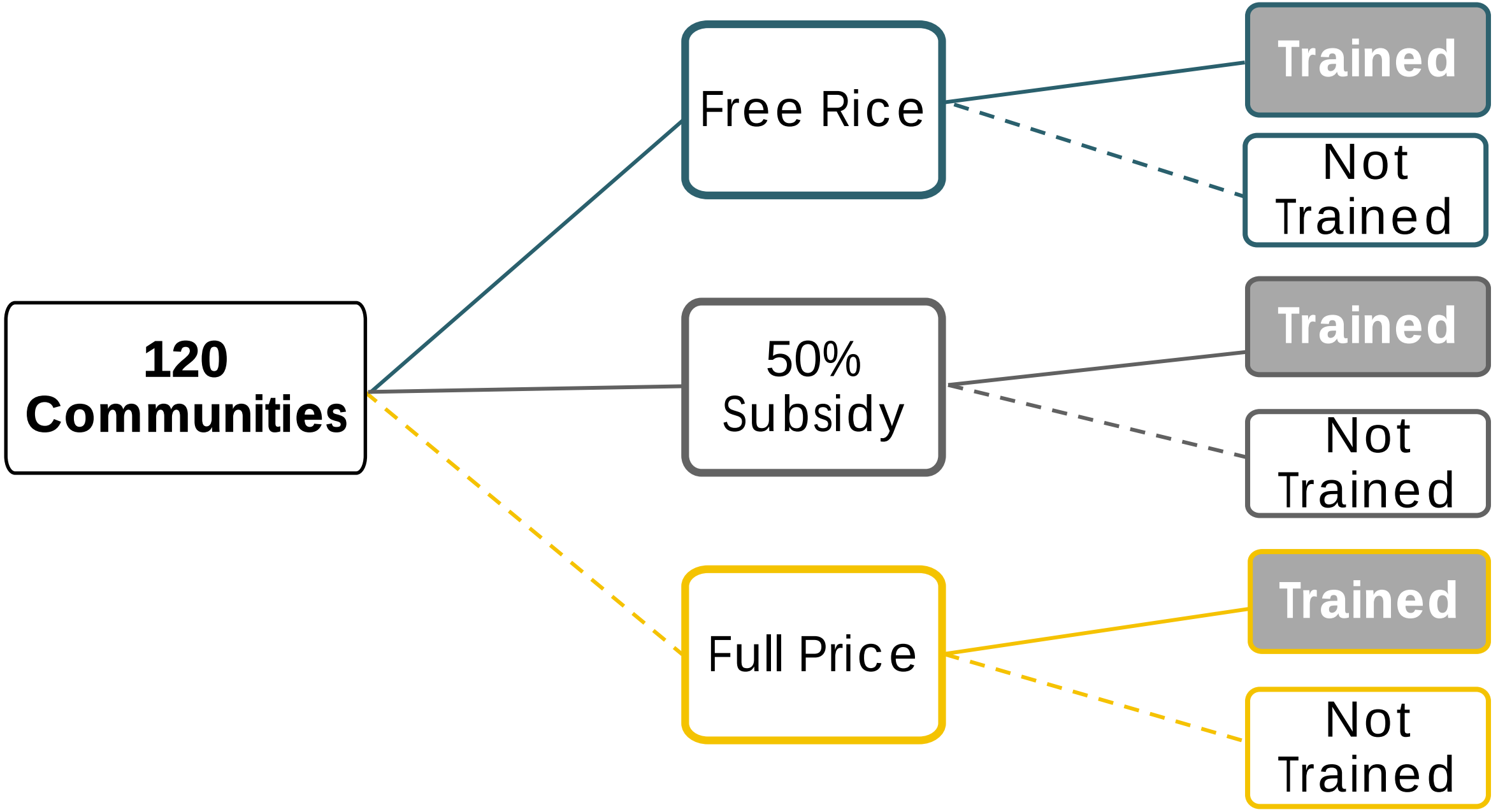
NERICA in Sierra Leone

- Problem: Adoption of high-yielding crop varieties has been low
- Potential solution: Offer subsidies and trainings to increase take-up and yield

- **What levels of subsidies are most effective?**
- **Does agronomic training help increase yields?**

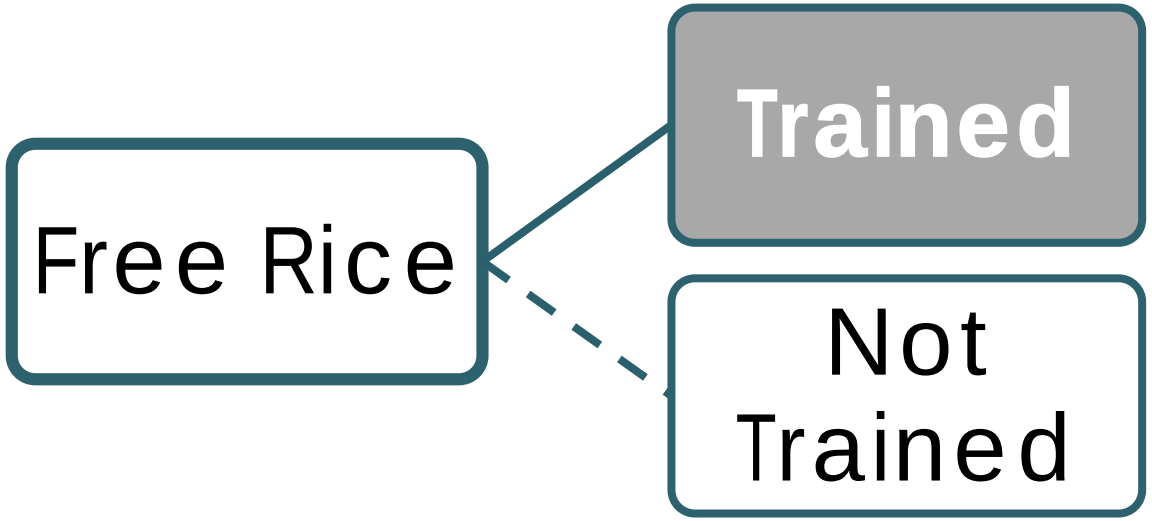
120 Communities


120
Communities
Free Rice
50%
Subsidy
Full Price


120 Communities
Free Rice
Trained
Not Trained
50% Subsidy
Trained
Not Trained
Full Price
Trained
Not Trained

Yields only increased with training

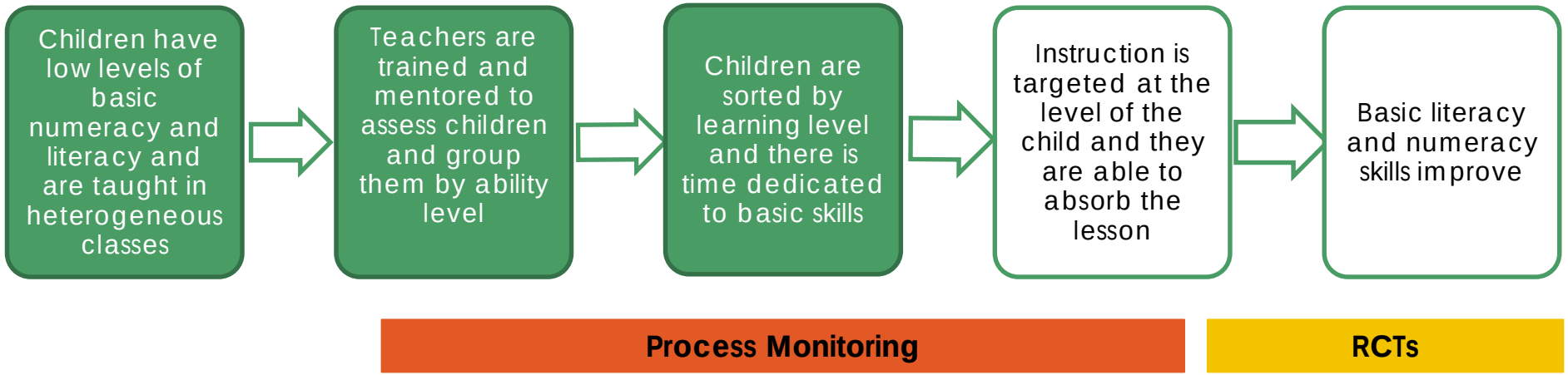
- Yields increased by 15 percent for trained farmers but decreased for those without training
- Randomized design disentangled intervention components
  - Demonstrated yield increases when cultivated properly
  - Revealed cost to ignoring extension



How to use randomized evaluations in policy decisions?

Theory of Change

- Process monitoring determines if a program is running in the way it is supposed to run
- Impact evaluations determines if a program creates a change in an outcome(s)



Producing Globally Informed and Locally Grounded Programmes

Synthesize and package evidence from randomised evaluations in a way that is helpful when thinking through implementation details.

Scope context and work with local stakeholders to create a programme that maintain effectiveness, while working within the country's constraints.

Monitor that the programme is working in the way that it was designed to.