

# From Evidence to Policy

## Overview of J-PAL SA's Work

---

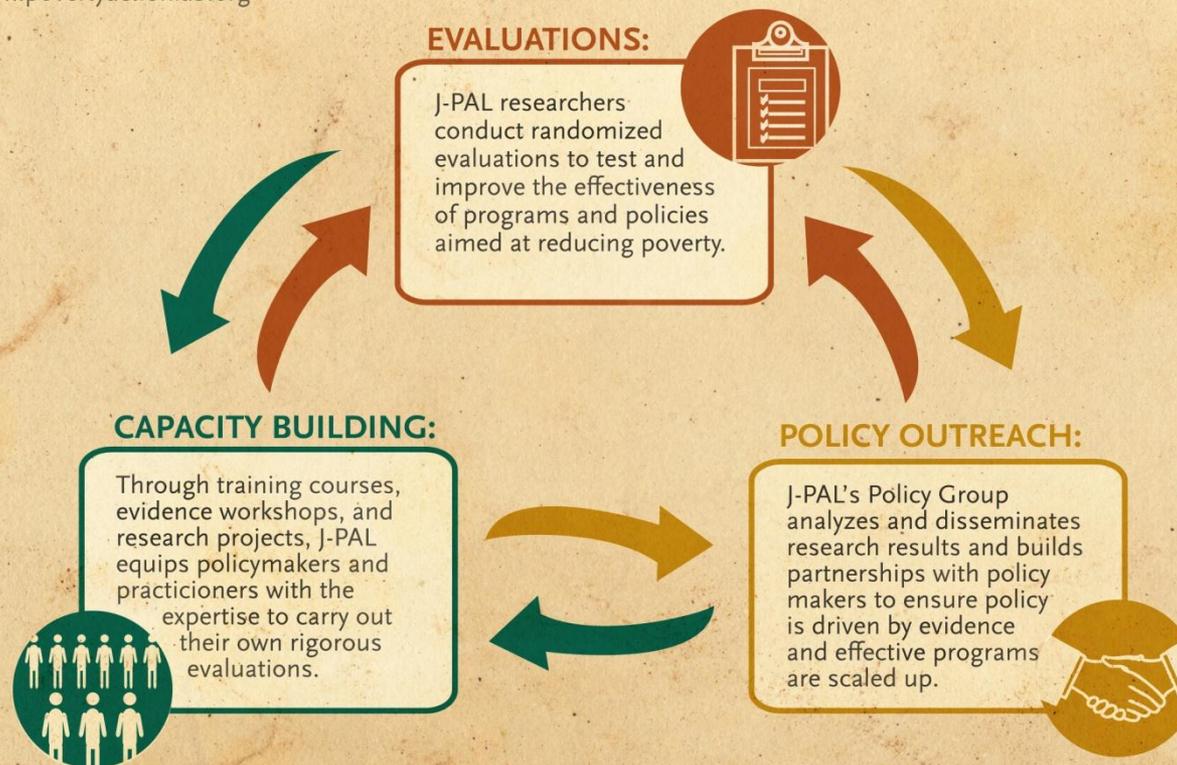
Diva Dhar and Sree Sen  
J-PAL South Asia at IFMR

19 July, 2013

# Approach

J-PAL'S MISSION IS TO ENSURE THAT POLICY IS DRIVEN BY **EVIDENCE** AND RESEARCH IS TRANSLATED INTO **ACTION**

[www.povertyactionlab.org](http://www.povertyactionlab.org)



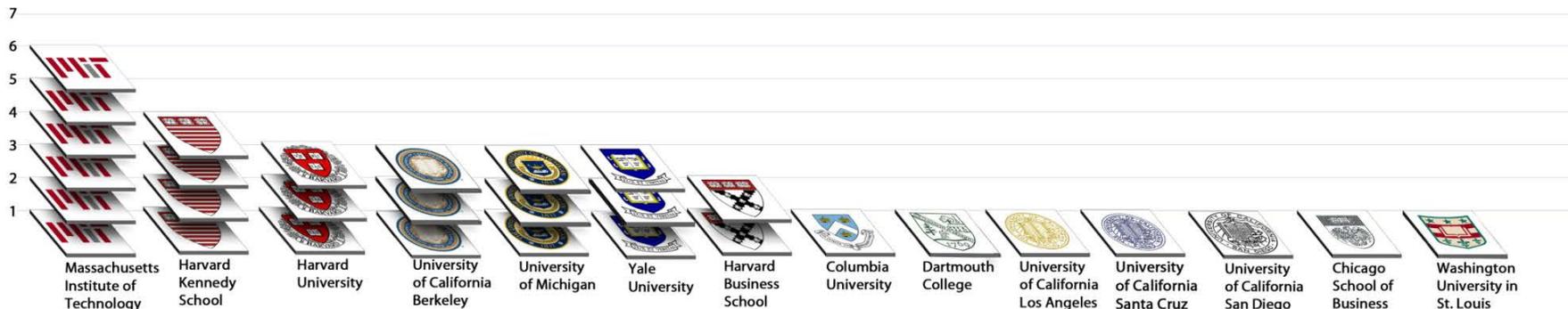
# J-PAL is a Centre at MIT's Department of Economics, with Regional Offices Worldwide



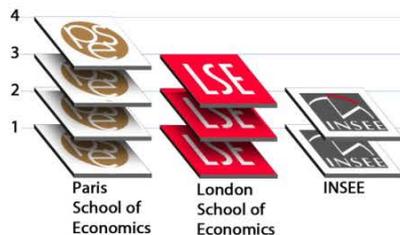


# J-PAL's Research Affiliate Network: Over 88 researchers in 34 universities

## United States



## Europe



## Latin America

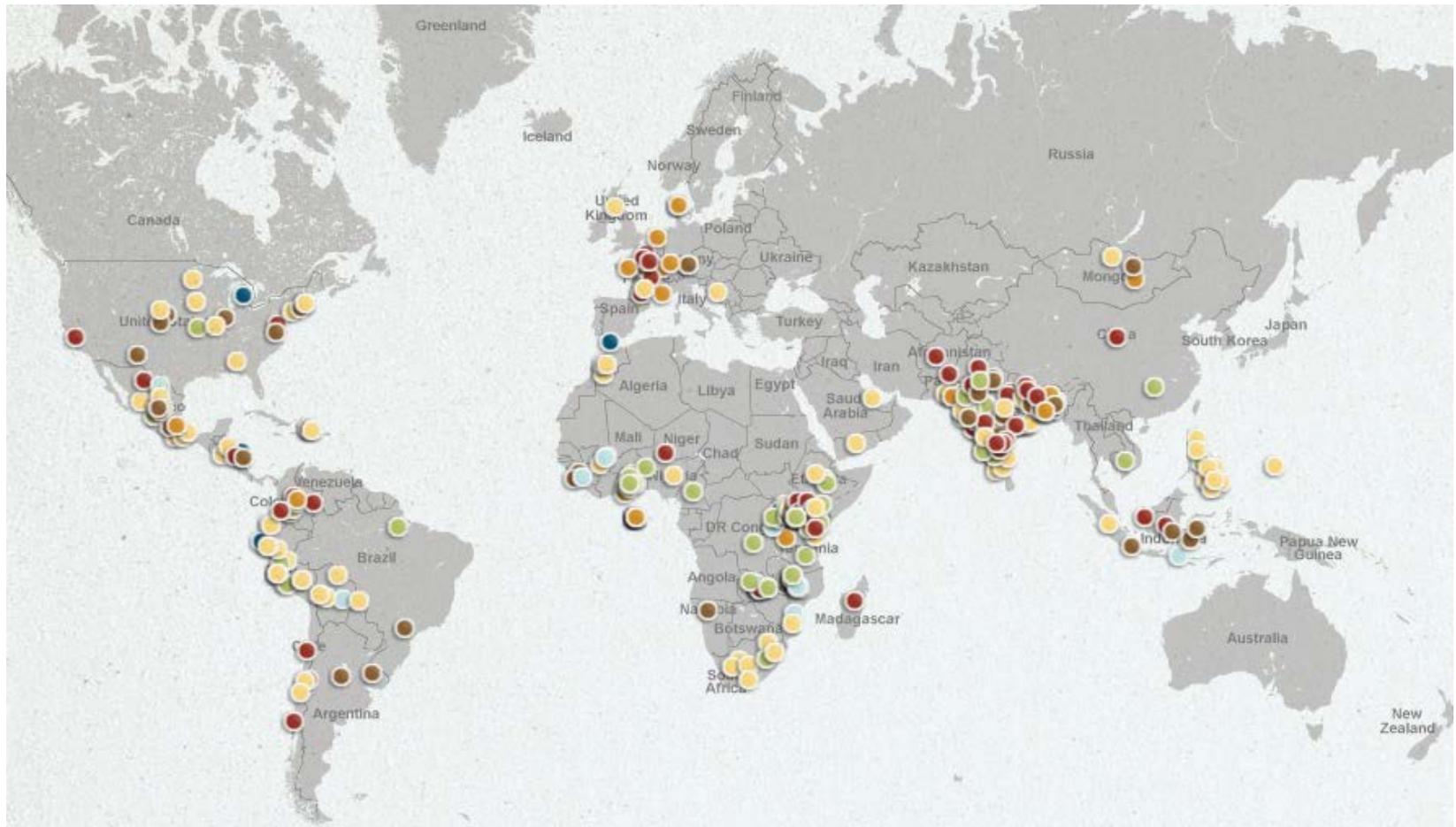


## South Asia



# Global Research

408 evaluations in 52 countries...and 6 global offices





# J-PAL South Asia: A Brief History

---

- J-PAL South Asia office set up in 2007 at the Institute for Financial Management and Research, Chennai
- Over 90 completed and ongoing projects across South Asia: education, finance & microfinance, environment & energy, health, political economy & governance, labor markets and agriculture
- Scientific Directors: Esther Duflo (MIT), Iqbal Dhaliwal (Ex-IAS – 1996 batch)



# J-PAL Professors Working in South Asia

---



**Abhijit  
Banerjee**  
MIT



**Esther  
Duflo**  
MIT



**Sharon  
Barnhardt**  
IIM-A



**Karthik  
Muralidharan**  
UCSD



**Rohini  
Pande**  
Harvard



**Aprajit  
Mahajan**  
Stanford

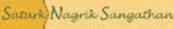


**Mushfiq  
Mobarak**  
Yale



**Seema  
Jayachandran**  
Northwestern

# Collaborations with Governments and NGOs across South Asia

GOVERNMENTS								
	MINISTRY OF ENVIRONMENT AND FOREST, GOVERNMENT OF INDIA	GOVERNMENT OF ANDHRA PRADESH	GOVERNMENT OF BIHAR	GOVERNMENT OF KARNATAKA	GOVERNMENT OF GUJARAT	GOVERNMENT OF HARYANA	GOVERNMENT OF RAJASTHAN	GOVERNMENT OF PUNJAB
NGOs								
	PRATHAM	SPANDANA	SEVA MANDIR	SELF-EMPLOYED WOMEN'S ASSOCIATION	BANDHAN MICROFINANCE	GRAM VIKAS	SATARK NAGRIK SANGATHAN	NAANDI FOUNDATION
DONORS								
	OMIDYAR	DEPARTMENT FOR INTERNATIONAL DEVELOPMENT	U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT	MACARTHUR FOUNDATION	FORD FOUNDATION	AZIM PREMJI FOUNDATION	UNICEF	3IE



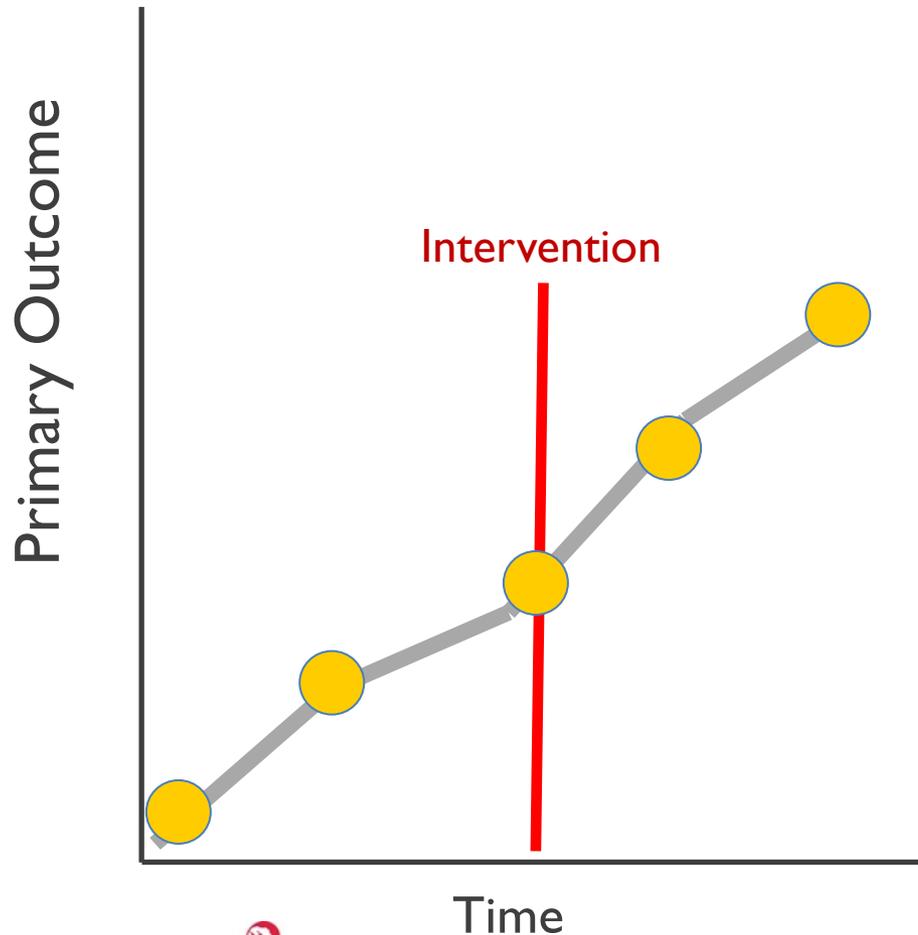
## CLEAR: Regional Centers for Learning on Evaluation and Results

- Global initiative coordinated by the World Bank Independent Evaluation Group
- The CLEAR South Asia Regional Centre has been hosted by J-PAL South Asia at IFMR since May 2011
- Established a partnership with the Centre for Economic Research (CERP) in Pakistan and works closely with Innovations for Poverty Action (IPA) in Bangladesh
- CLEAR's Strategic Vision:
  - Building evaluation skills of practitioners, program implementers, and donors
  - Strengthening M&E systems and practices for strategic clients
  - Building a culture of evidence based decision-making and strengthening demand for evaluations

# IMPACT EVALUATION AND RANDOMIZED CONTROL TRIALS

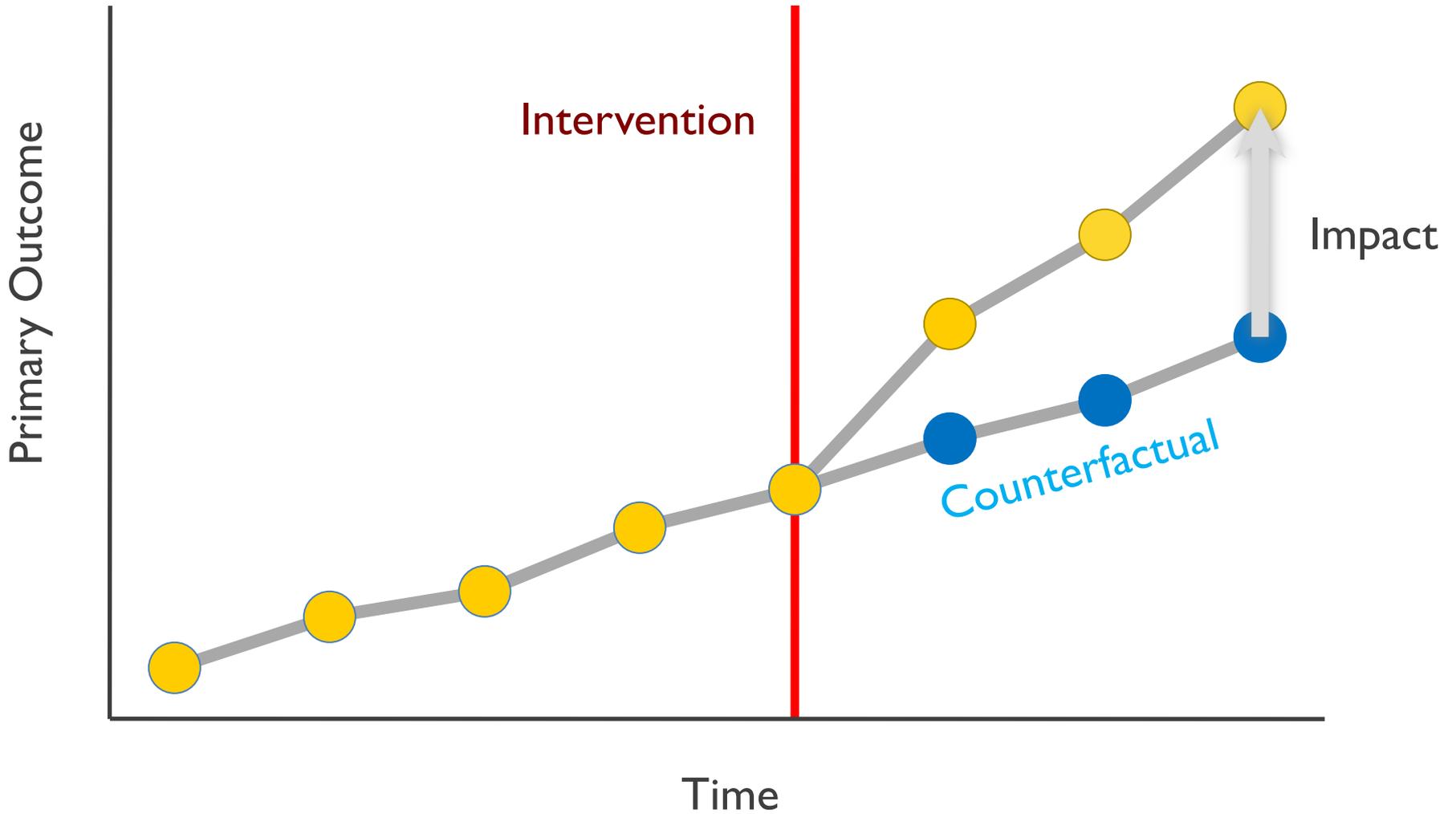
# Impact: What is it?

---

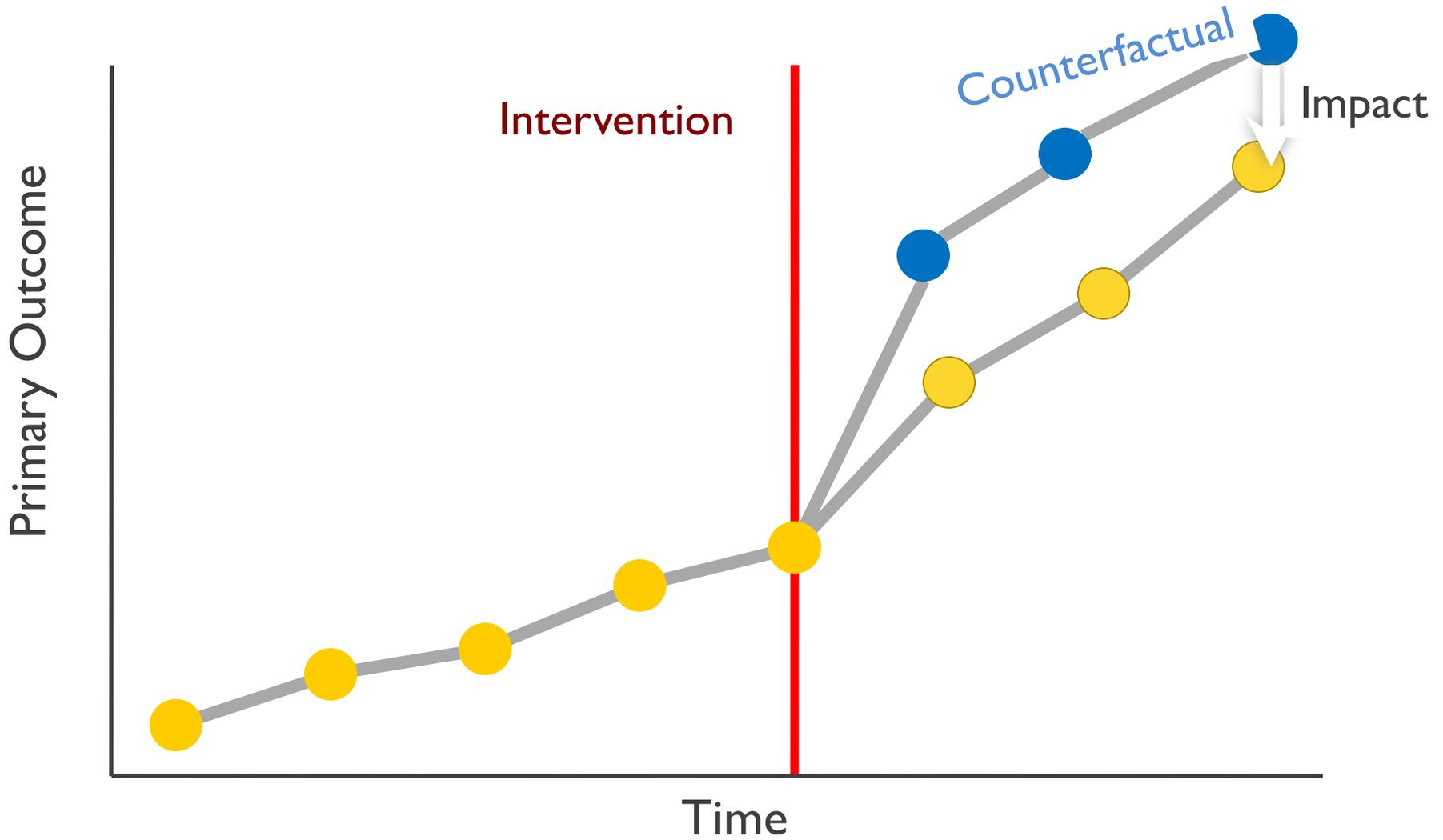


- A. Positive
- B. Negative
- C. No impact
- D. Don't Know

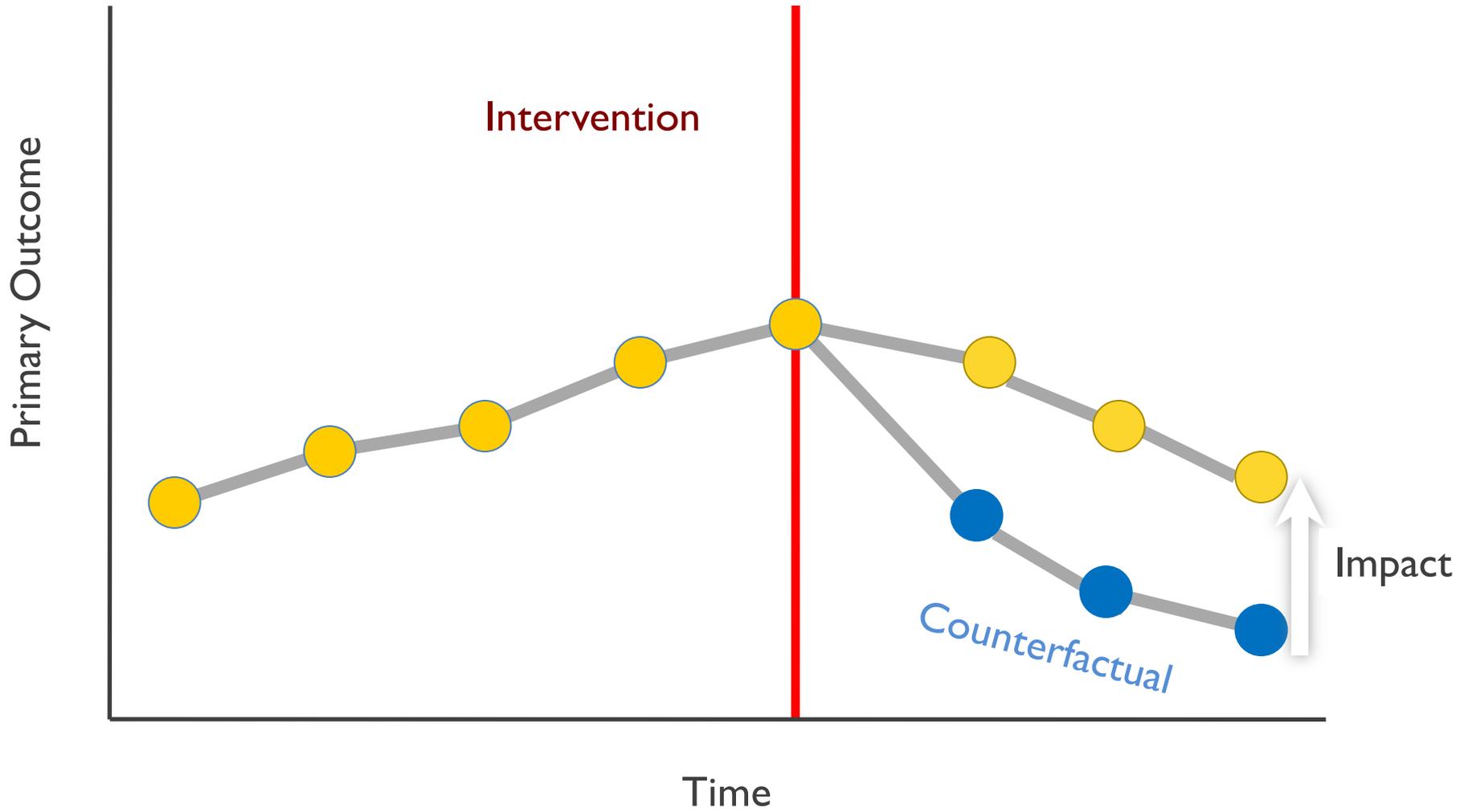
# Impact: What is it?



# Impact: What is it?



# Impact: What is it?



# How to Measure Impact?

---

- **Impact** is defined as a comparison between:
  - The outcome some time after the program has been introduced
  - The outcome at that same point in time had the program not been introduced
- This is known as the “**Counterfactual**”



# Counterfactual

---

- The **Counterfactual** represents the state of the world that program participants would have experienced in the absence of the program (i.e. had they not participated in the program)
- **Problem:** Counterfactual cannot be observed
- **Solution:** We need to “mimic” or construct the counterfactual

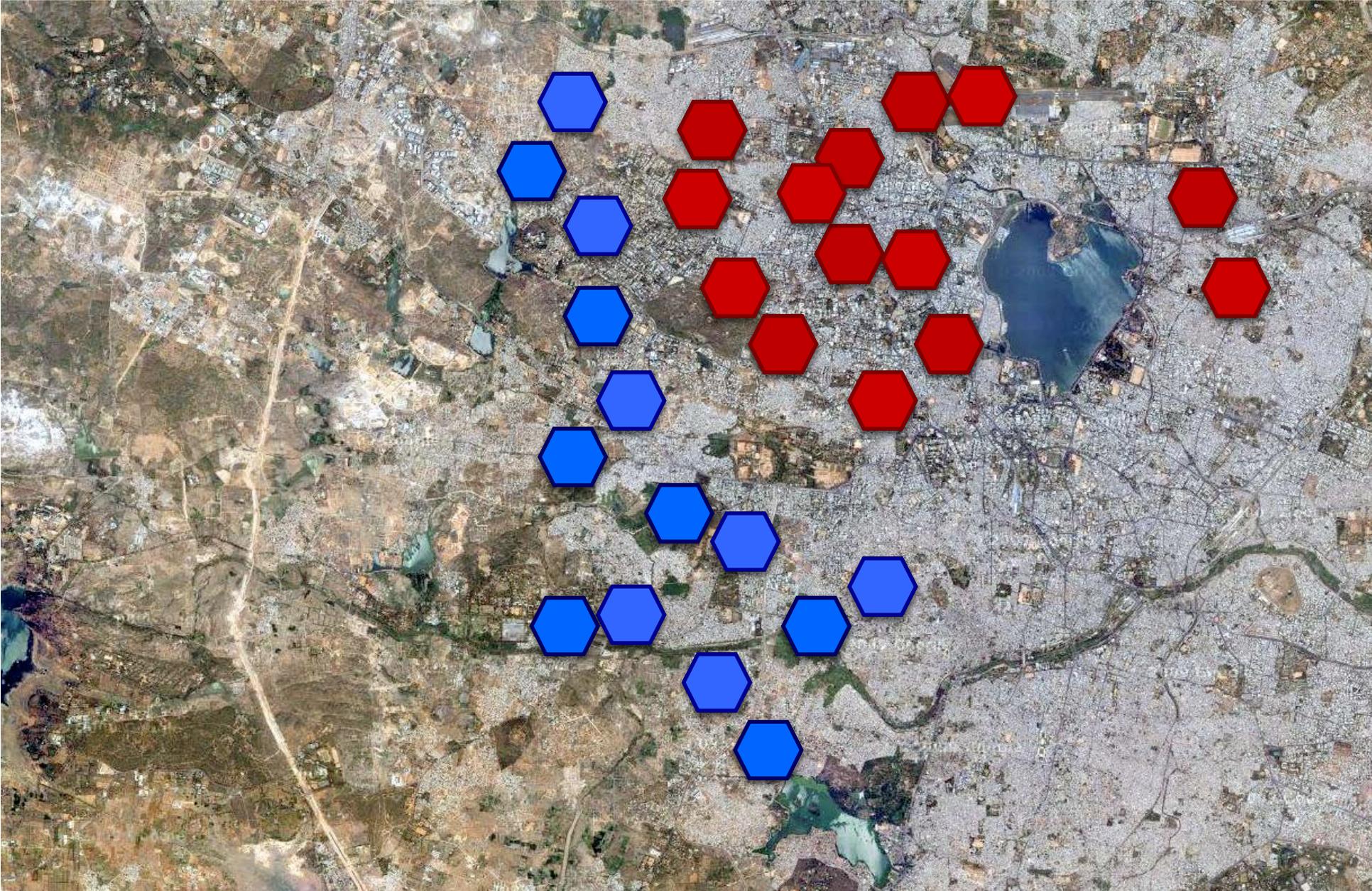


# Constructing the Counterfactual

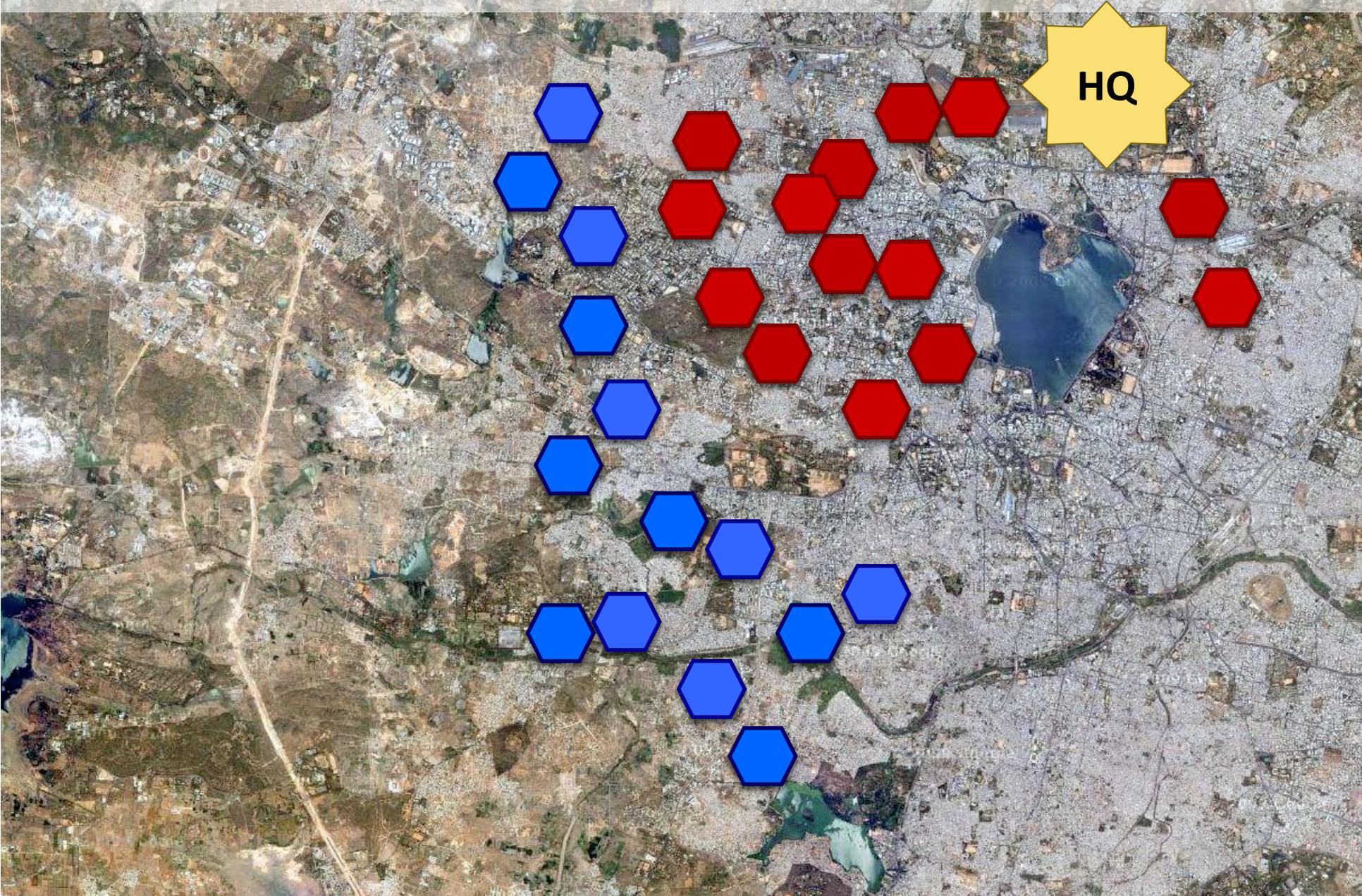
---

- 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.

# Non-random Treatment and Comparison Groups

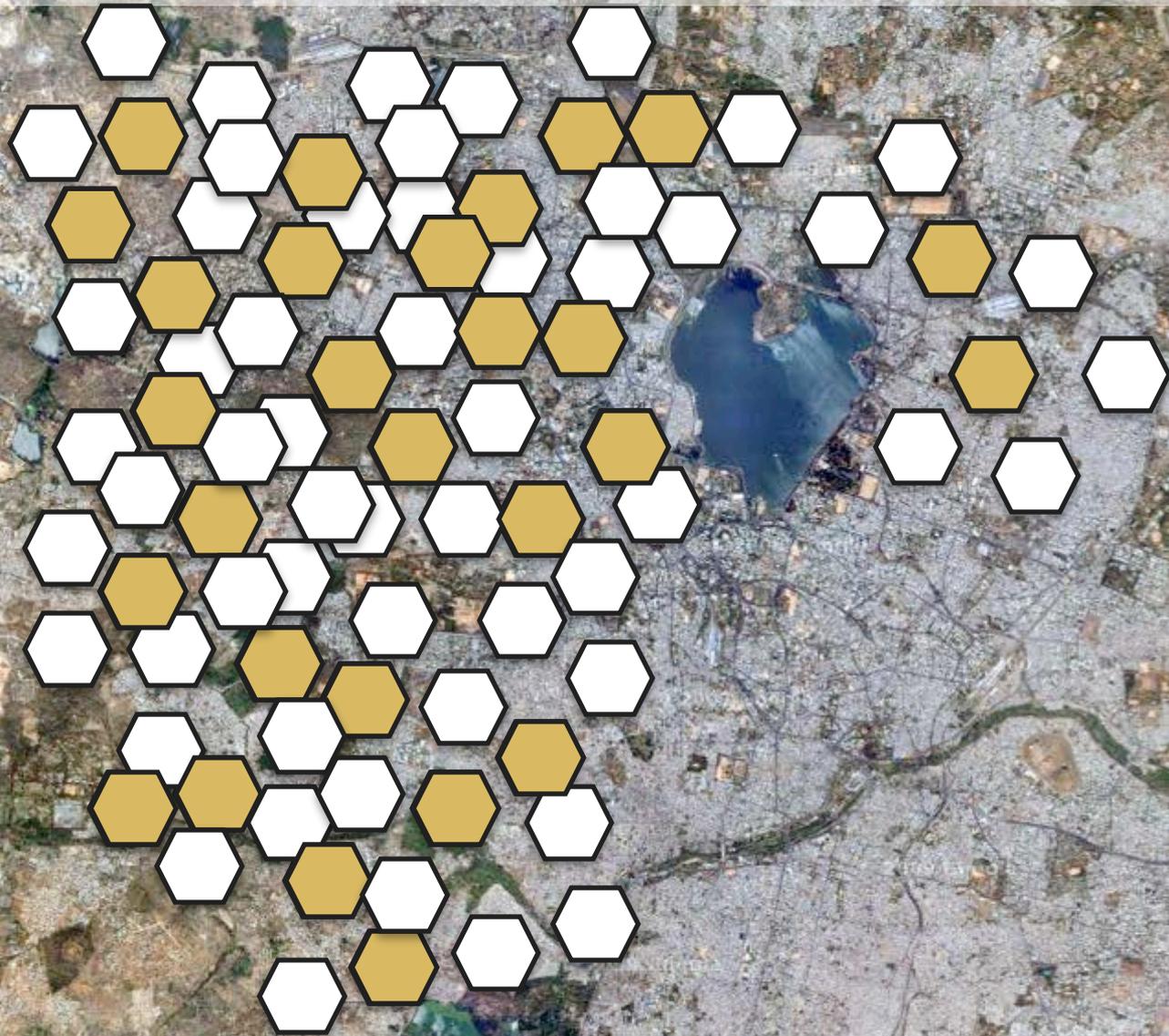


# Non-random Treatment and Comparison Groups



# Random Sampling and Random Assignment

Randomly  
*sample*  
from area of  
interest

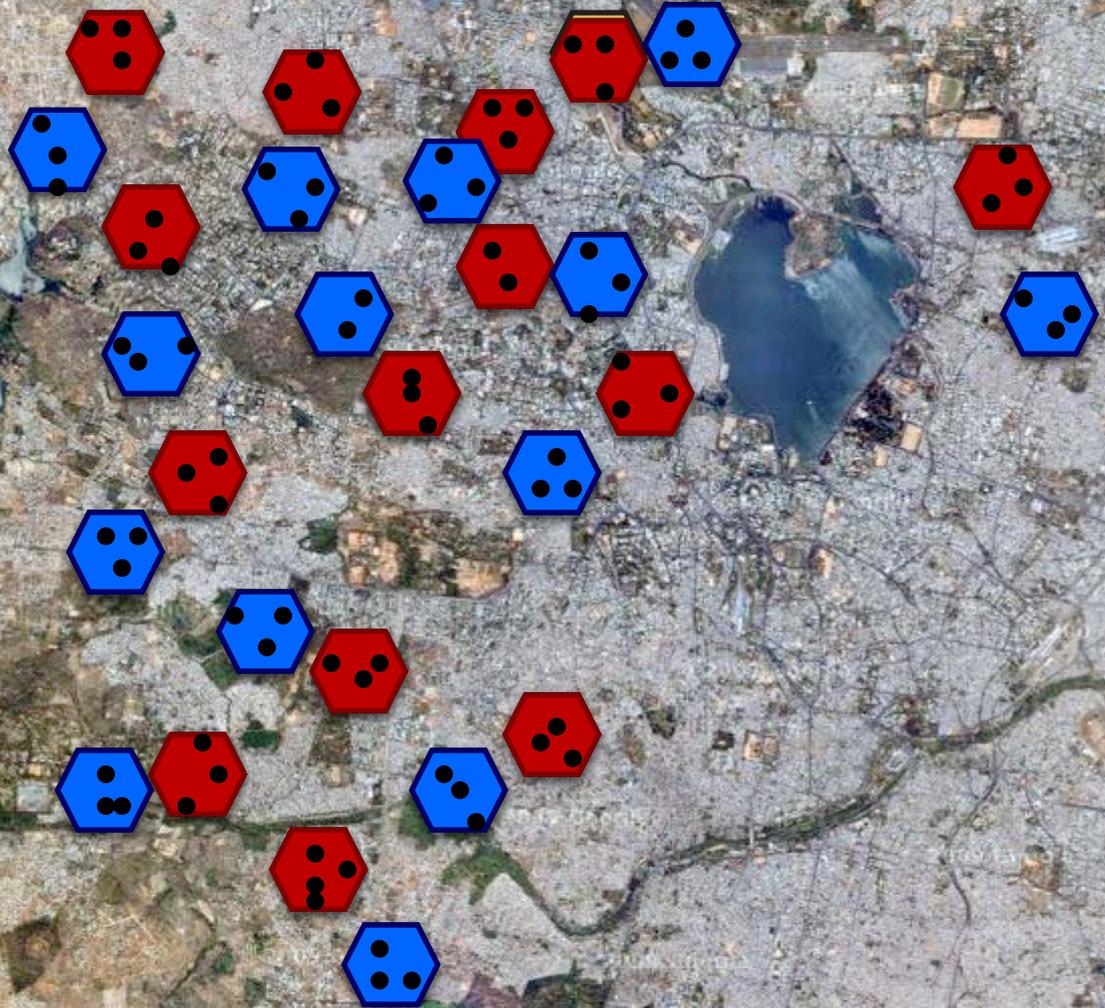


# Random Sampling and Random Assignment

Randomly **sample**  
from area of  
interest

Randomly **assign**  
to **treatment**  
and **control**

Randomly **sample**  
from both  
treatment and  
control



# Randomised Evaluations

Individuals, villages, or districts are *randomly* selected to receive the treatment, while other villages serve as a comparison

Groups are **Statistically Identical** before the Program

=



Any Difference at the Endline can be Attributed to the Program

Two groups continue to be identical, except for treatment. Later, compare outcomes (health, test scores) between the two groups. Any differences between the groups can be attributed to the program.



# Key Advantage

---

- Because members of the groups (treatment and control) **do not differ systematically** at the outset of the experiment,
- Any difference that subsequently arises between them can be **attributed** to the program rather than to other factors.



# How can RCTs Help Us?

---

- 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?



# When does Randomization Make Sense?

---

- When **budgets** are **limited** (not all eligible people can be immediately served).
- When a program is in a **pilot** stage (and we're still learning whether it works).
- When programs are **phased in over time** (we select who gets it first).
- An “encouragement design” to take-up an existing program.
- Often randomization is considered the fairest way to select who receives a program.



# When NOT to do an RE

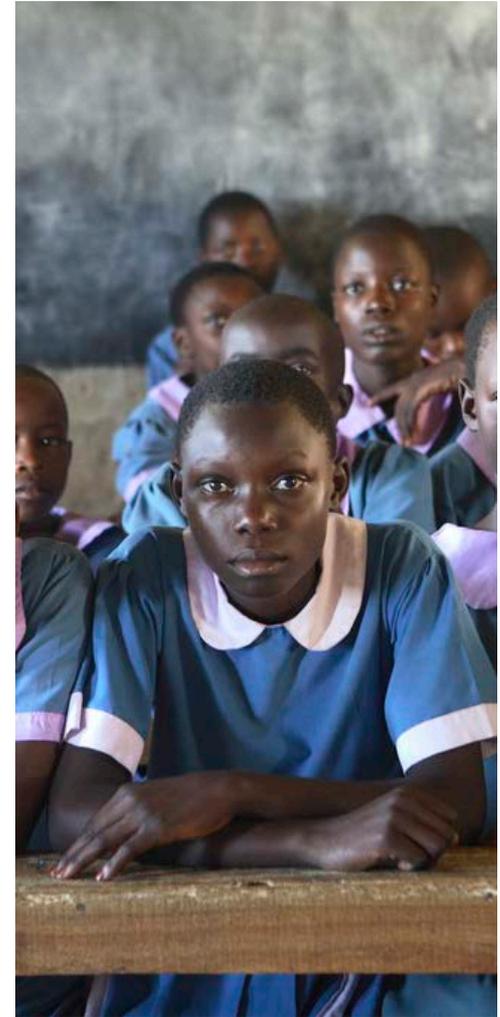
---

- 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

# J-PAL EVALUATIONS IN THE GENDER SPACE

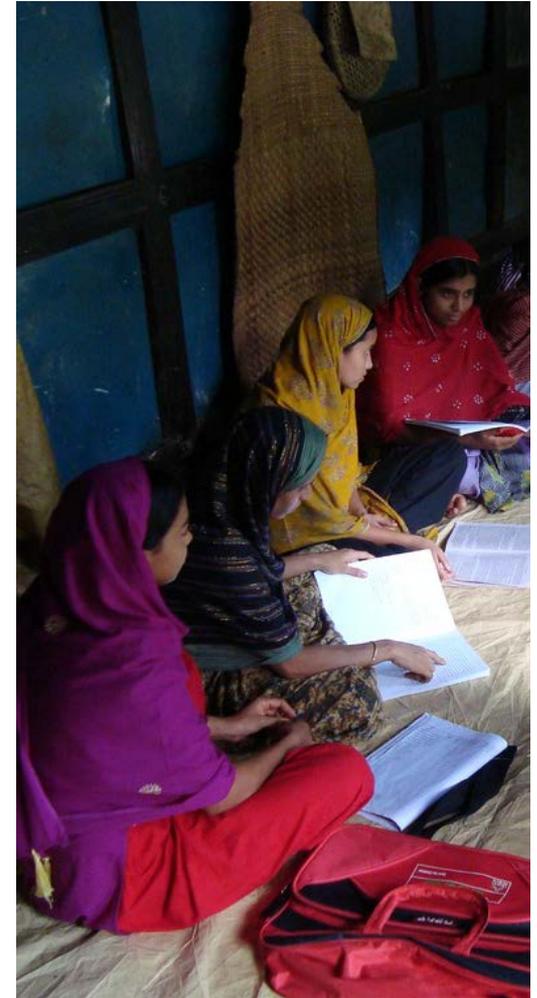
# Examples of J-PAL Research Worldwide

- Effect of merit-based girls' scholarship program on attendance and academic achievement in Kenya;
- Impact of financial training and assistance to adolescent girls on future earnings, education and aspirations in Uganda and Tanzania;
- Effect of educating husbands on the dangers of maternal mortality on male acceptance of family planning methods in Zambia



# Examples of Research in South Asia

- Effect of providing BPO recruiting services to young women on investments in girls' education and health around Delhi (incl Haryana)
- Impact of women policy makers on the provision of public goods in West Bengal and Rajasthan
- How providing peer-group support, literacy, financial training, nutritional incentives to delay marriage can empower adolescent girls in Bangladesh
- Effect of providing literacy to mothers of young children in rural India



## Example: Recruitment / Placement Services for Young Girls

---

- Objective: Provide economic opportunity and boost potential earning capacity for adolescent girls
- Program: Bringing recruiters from BPO services to randomly selected rural communities around Delhi
- Findings: Increased human capital investment in younger girls, including nutrition, health and education, shift in gender-related practices, aspirations and attitudes, increase in age of marriage



# Example: Empowerment of Adolescent Girls in Rural Bangladesh

---

- Objective: Empowerment and holistic development of adolescent girls, increased age of marriage, changes in attitudes and aspirations
- Program: Literacy and social competency, financial literacy skills provided through peer educated “Safe Spaces”, as well as nutritional incentives to delay marriage.
- Outcomes of interest: education, health, nutrition, income generation, savings/investment, decision-making, attitudes, awareness, marital and reproductive outcomes.

Current J-PAL evaluation in Gender

# BREAKTHROUGH PROJECT



# Context in Haryana

---

- Gender Inequality is a very policy relevant issue
- Haryana has the lowest sex ratio figures in the country – 830 (Census 2011)
- Rampant practice of Sex Selective Elimination (SSE)
- Lack of rigorous scientific evidence in this area on which programs work.



# Breakthrough Intervention

---

- J-PAL is Evaluating a School Based Intervention by Breakthrough
- Details of the Program
  - Teacher training and capacity building for mobilization and education of youth on gender inequality, empowerment of girls, and SSE.
  - Establishment of Breakthrough youth clubs in schools and organization of interactive awareness building activities and events such as plays, puppet shows, poster competitions and fairs involving both boys and girls
  - Launch of a media and communications campaign using innovative print, audio-visual and digital (online/cell-phone based) media and online forums for youth discussion
  - Cultivation and capacity building of youth champions to engage peers and communities and ensure sustainability of the program

# Research Questions

---

## ■ Impact on Gender Attitudes

- What is the impact of the Breakthrough school-based gender awareness and mobilization intervention on students' gender attitudes and practices?
- Are there spillover effects on the attitudes of participating students' siblings?

## ■ Behavior Change

- Does attitudinal change translate into behavioral change?
- Does the intervention succeed in reducing support for sex-selective elimination among the participating students in the long run?

# Research Questions

---

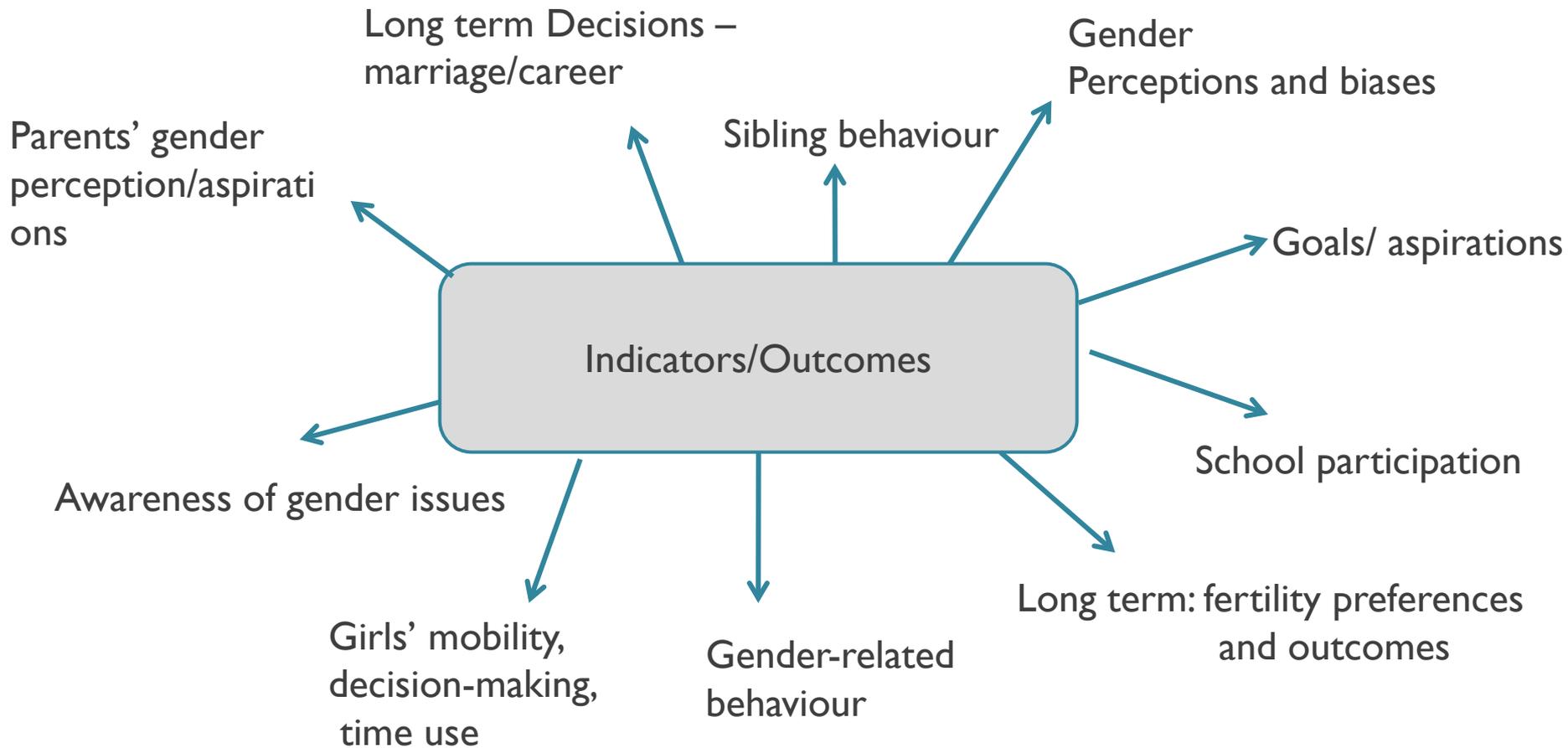
## ▪ Heterogeneity of the Impact

- Does the intervention have a different impact on male and female students?
- Does the intervention differentially affect students whose parents have less progressive gender attitudes or are more educated?
- Does the impact vary for students from different caste backgrounds?
- Other dimensions?

## ▪ Cost Effectiveness

- In comparison to other programs, is this intervention a cost-effective method of addressing the SSE problem in Haryana?

# Measurement: Indicators



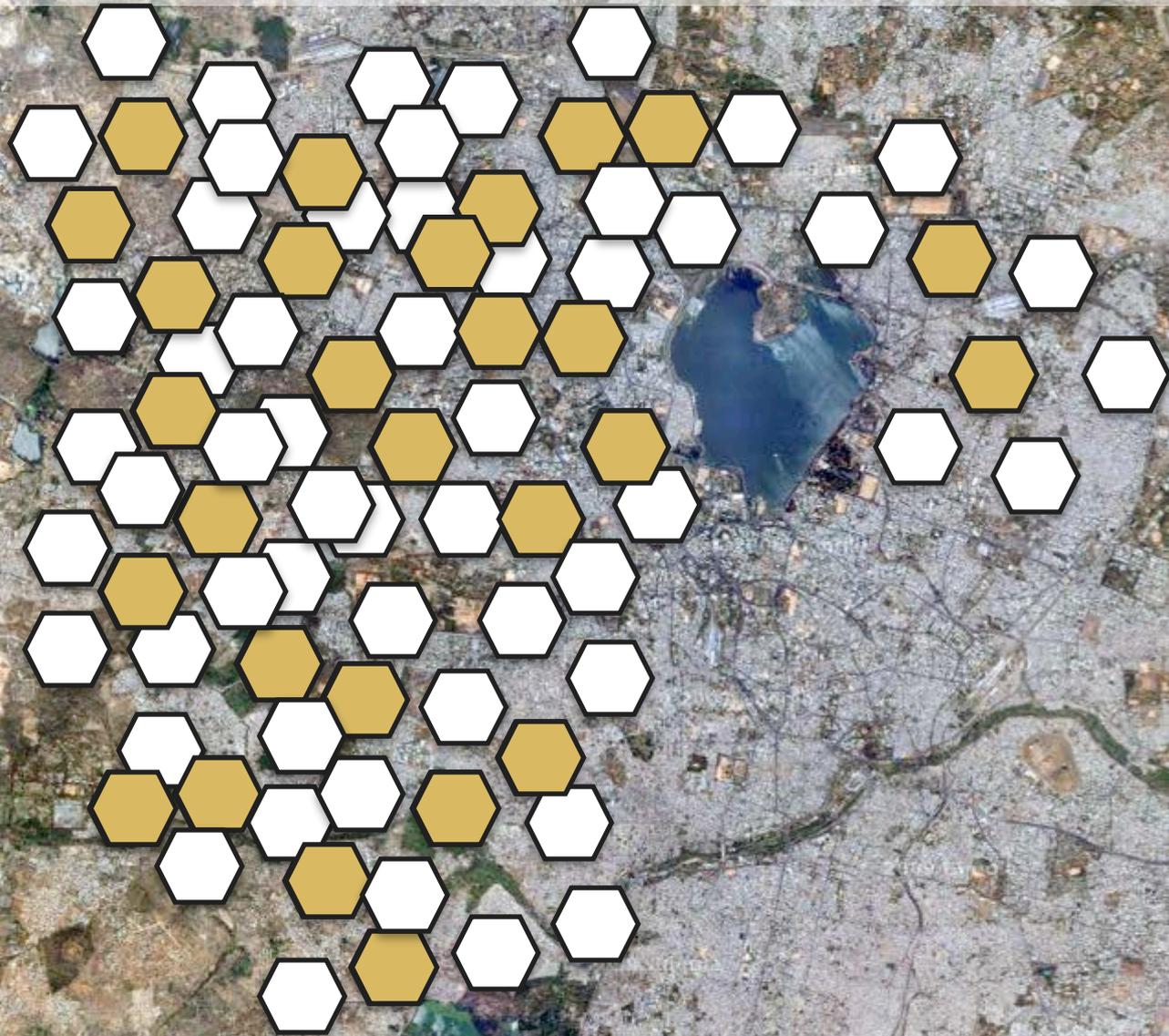
# Research Design

---

- Randomized Controlled Trial design
- 4 districts of Haryana with below average CSR – Rohtak, Sonapat, Panapat, Jhajjar.
- Unit of Randomization: Schools
- Sample Size: 300 Schools with a minimum of 50 students
  - Selected from among the ~900 high schools and secondary schools in these districts
- Sampling Frame: Children in 6<sup>th</sup> to 7<sup>th</sup> Standard now
  - 7<sup>th</sup> to 9<sup>th</sup> Standard during Breakthrough intervention
- From each school, 45 students (half boys, half girls) will be randomly selected for the study (stratified by class) -> data collection for 13,500 students overall

# Random Sampling and Random Assignment

Randomly  
*sample*  
from area of  
interest

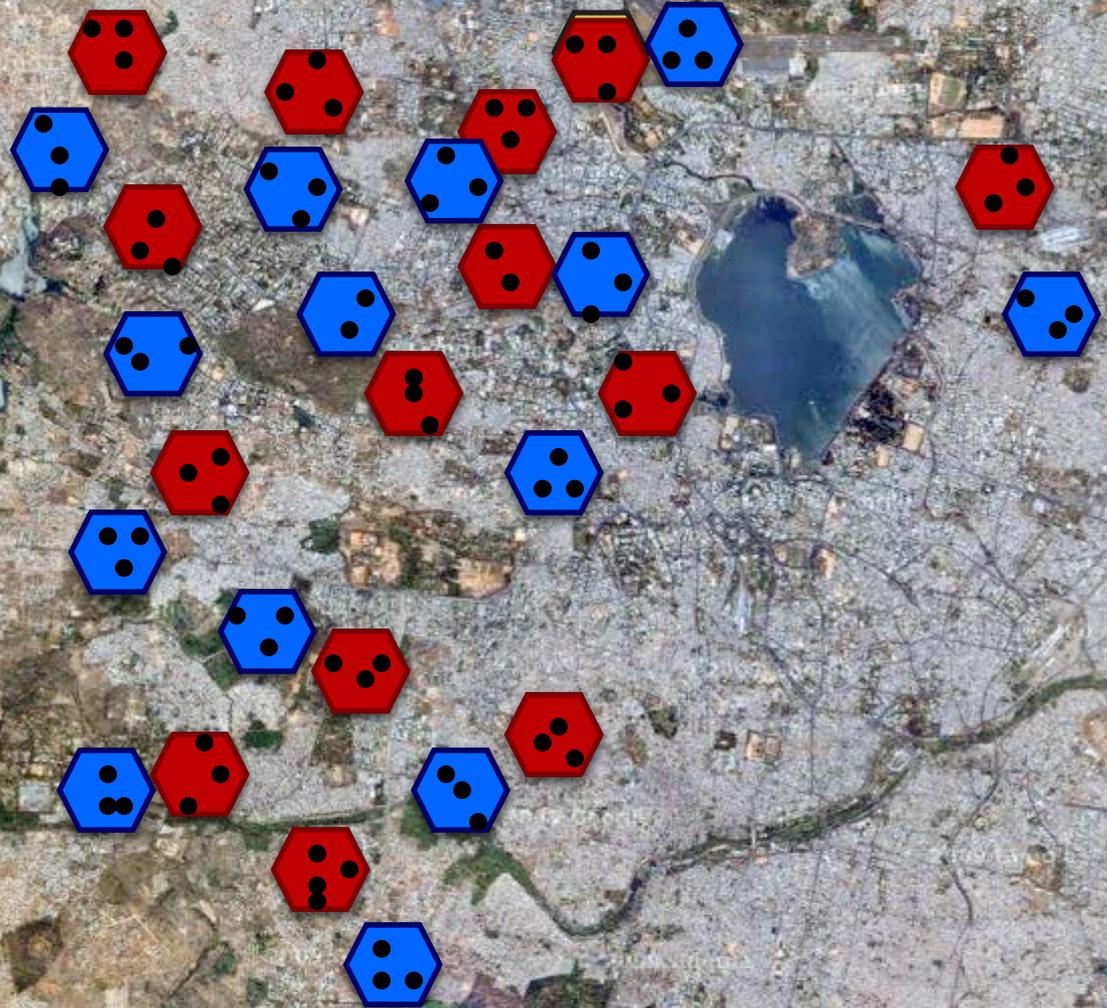


# Random Sampling and Random Assignment

Randomly **sample**  
from area of  
interest

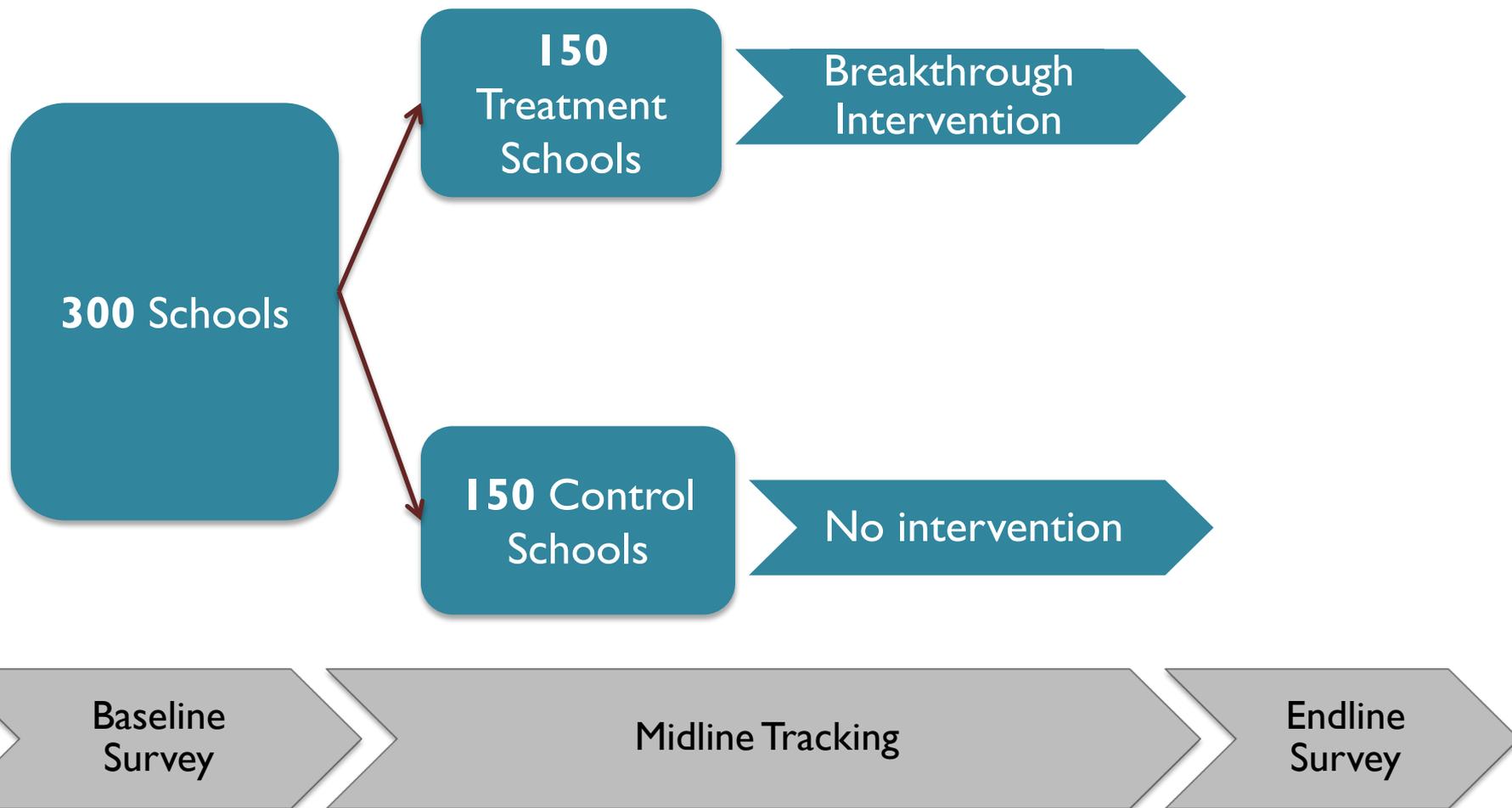
Randomly **assign**  
to **treatment**  
and **control**

Randomly **sample**  
from both  
treatment and  
control



# Research Design

---



# Measurement Instruments

---

- Quantitative and Qualitative
  - Survey – student, household
  - Vignette
  - Implicit Association Test
  - Structured Teacher interviews
  - Focus Group Discussions with students

Measure of Social Psychology

# IMPLICIT ASSOCIATION TEST

# How does it work ?

---

- Automatic association between mental representations of objects/concepts in memory
- Importance?
  - IATs measure the response time
  - Help reveal “inner” attitudes which people are unwilling to reveal publicly or are themselves unaware of

लड़का  
या  
बुरा



लड़की  
या  
अच्छा

कष्ट

अच्छा

लड़का

बुरा

लड़की



अच्छा

लड़का

बुरा

लड़की

सुखी

# Timeline

Formative Research	July 2013	August 2013
Baseline survey	August 2013	October 2013
Development of Breakthrough communication materials	September 2013	March 2014
Piloting of Breakthrough intervention	October 2013	March 2014
Breakthrough outreach and training to school teachers and principals <ul style="list-style-type: none"> <li>- Letters sent to school from government</li> <li>- Meetings with school principals</li> <li>- Trainings with school teachers</li> </ul>	September 2013  September-October 2013  October, 2013  November 2013-February 2014	February 2014

# Timeline (Continued...)

---

Breakthrough intervention implementation <i>in schools</i>	April 2014	April 2016
Midline tracking exercise	December 2014	January 2015
Endline-I survey	May 2016	July 2016
Preliminary analysis of endline data	September 2016	December 2016
Policy dissemination event	February 2017	

# How the Results of the Evaluation Can be Used

---

- Inform policy/program creation and scale up for Breakthrough and a number of external stakeholders such as governments, donors and civil society organizations.
- Contribute to an evidence base of what works and what is cost effective

# Thank You