

# Field Experiments in Economics

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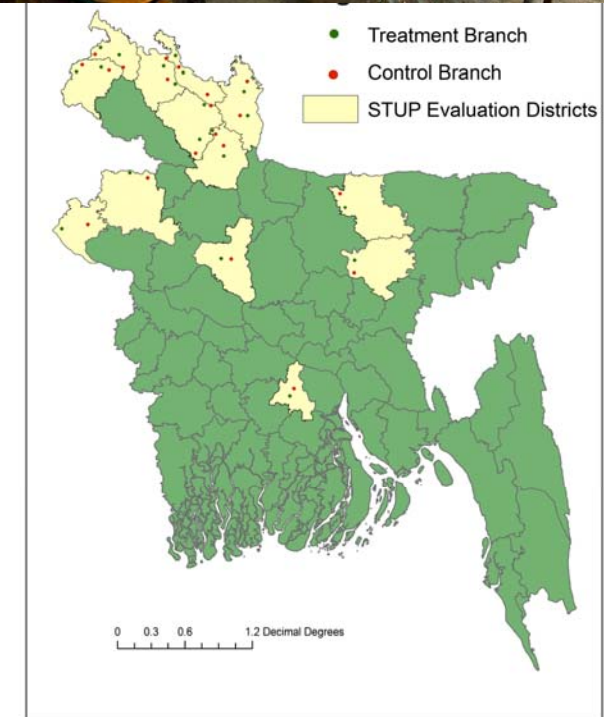
# Economics and Experiments

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- ▶ Testing economic models (and policies) often requires identifying and testing causal mechanisms
  - ▶ e.g. does increasing schooling increase earnings?
  - ▶ e.g. does providing capital (credit or grants) to firms improve their productivity?
- ▶ Field experiments can help with demonstrating if a causal relationship exists between Y and X
  - ▶ But, they have challenges and limitations too, as with any empirical methodology

# Challenges of Field experiments

- ▶ Step 1: Finding a partner organization (NGO, government, firm...) willing to implement the experiment
  - ▶ Example: providing assets and training to poor women in Bangladesh
  - ▶ We started collaborating with the NGO BRAC in Bangladesh in 2007
    - ▶ Randomly select which areas they would target first (in 2007) as part of their “ultra-poor” program – gives livestock and training to women
    - ▶ Control areas targeted in 2011
    - ▶ Evaluation was demand-driven, the scale and design were guided by both policy and research questions



# Challenges of Field experiments

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- ▶ Step II: identifying the right sample
  - ▶ Direct effects (on targeted individuals)
  - ▶ Indirect effects (on the household (e.g. children), community, markets)
  
- ▶ Step III: Data collection
  - ▶ Baseline (2007)
  - ▶ Followup surveys (2009 and 2011)
  - ▶ Costs can be high, depending on sample size and distribution



# Challenges of Field experiments

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- ▶ Step IV: Measuring the effects
  - ▶ Easy
  - ▶ Threats to internal validity:
    - ▶ Attrition over time
    - ▶ Convincing control group to answer your (boring) questions
  - ▶ External validity?



# Rewards of Field experiments

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- ▶ Clean identification of causal mechanisms
- ▶ Original data, allows testing novel mechanisms
  - ▶ e.g. social networks
- ▶ Can have large implications
  - ▶ e.g. in Bangladesh, asset transfer led to higher wages in the labor market for women



# Experiments with Firms

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- ▶ Different incentives required to convince firms to participate in research
  - ▶ Potential to improve productivity, profits
- ▶ Personnel economics – Bandiera et al, 2007
- ▶ Capital (or labor) subsidies – De Mel et al, 2009
- ▶ Improving management in firms – Bloom et al, 2013



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Thank you!

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