ECONOMIC DEVELOPMENT & INSTITUTIONS

March 2022 Synthesis Seminar

Session 3 – Randomised Control Trials (RA3) Synthesis

Presenter: Edward Miguel, University of California, Berkeley

UNIVERSITÉ DE NAMUR

PARIS SCHOOL OF ECONOMICS
ECOLE D'ÉCONOMIE DE PARIS

Oxford Policy Management

CEGA
Center for Effective Global Action

ADE
Evidence for better policy
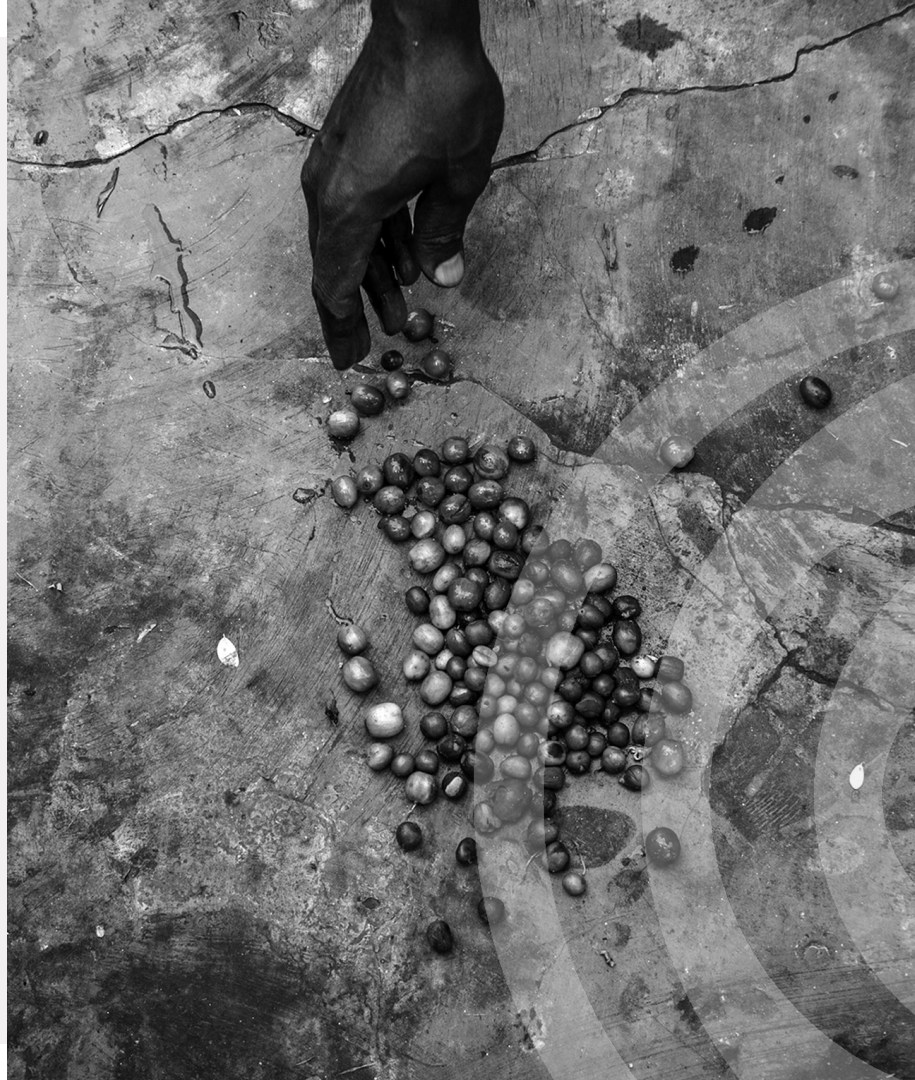
UKaid
from the British people

Contents

Review of RA3

Review of Green Paper takeaways

Additional synthesis takeaways

EDI RA3 stats

30
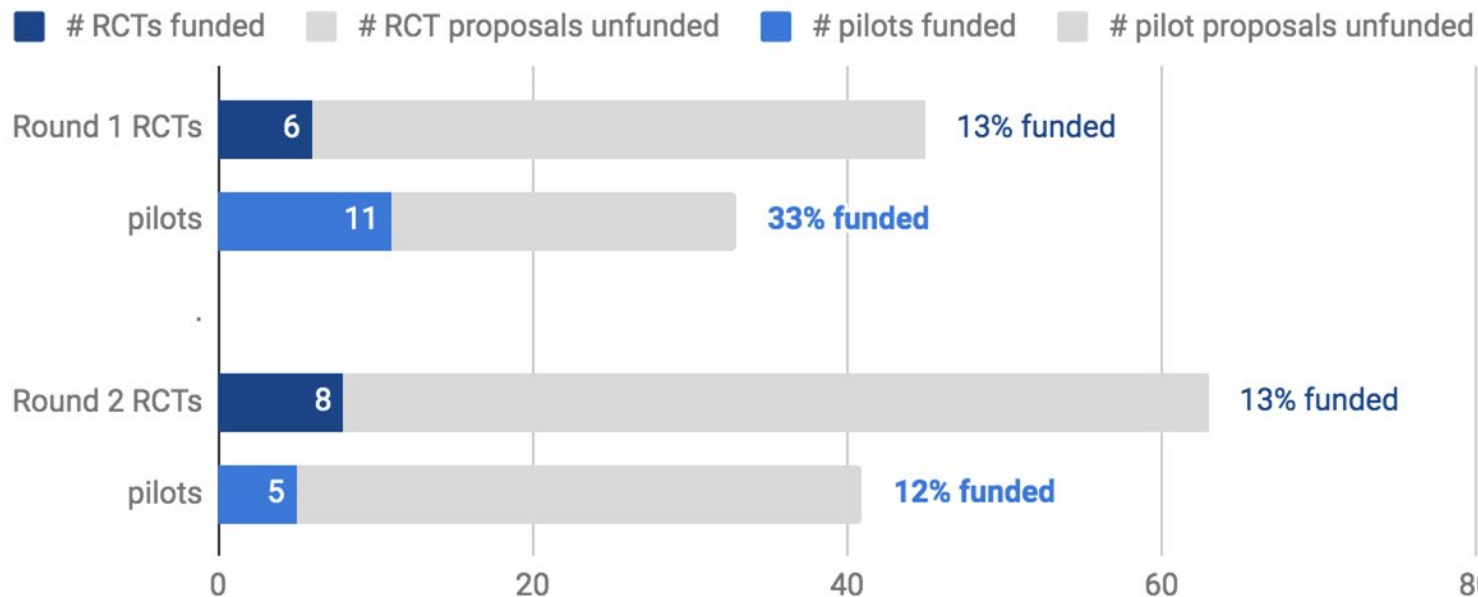funded
studies

>5.7M
disbursed
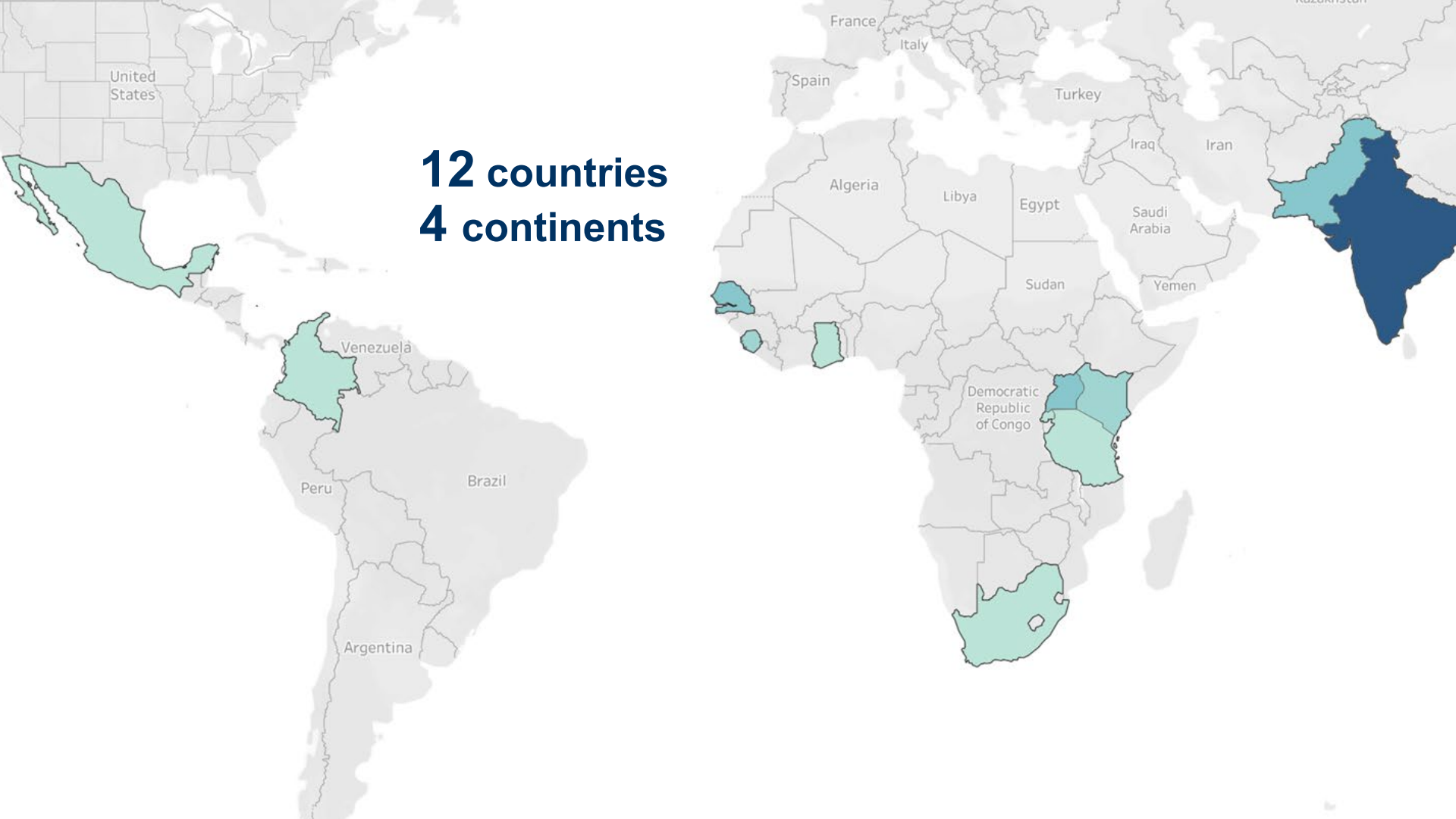to projects

16
working
papers

TRUBETTA CHONG

EDI RA3 Competition Rounds (2017, 2018)

12 countries
4 continents

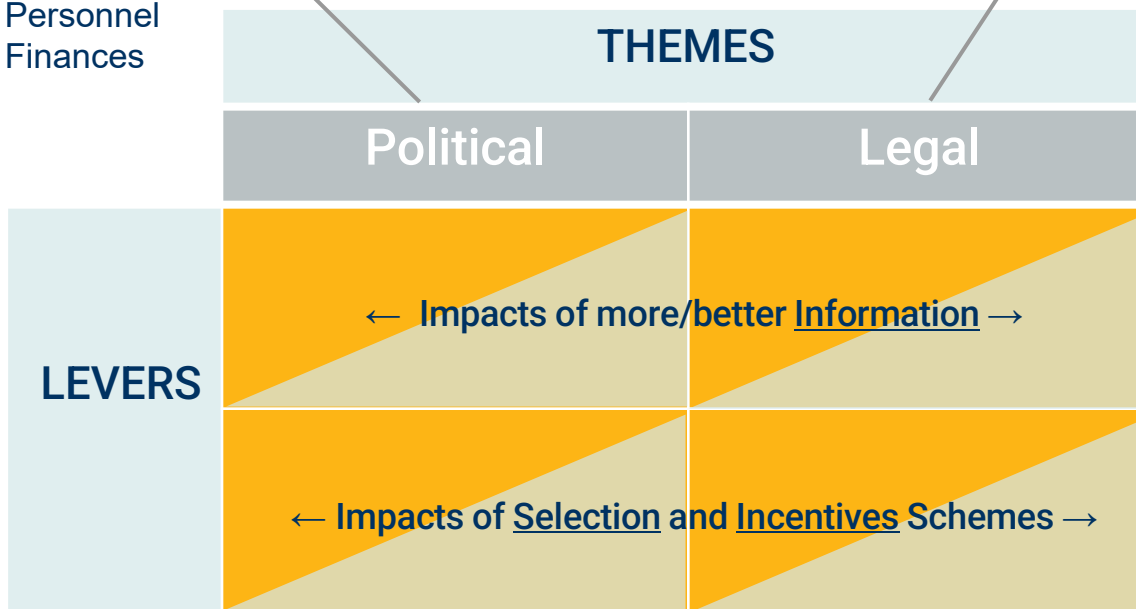# White Paper written 2016: "How do we organize the economic study of institutions?" with 200 empirical studies, 40 open Qs

Political Institutions
- A. Representation & Accountability
   - a. Electoral Rules
   - b. Transparency
   - c. Political Norms
- B. State Capacity
   - a. Personnel
   - b. Finances

Legal Institutions
- A. Property and Titling
- B. Awareness and Access
- C. Courts
- D. Quality of Enforcement

THEMES	
Political	Legal

LEVERS

← Impacts of more/better Information →

← Impacts of Selection and Incentives Schemes →

Plan for reviewing lessons learned from RA3

01 By research topic as defined in the White Paper
- Study 1
- Study 2
- Etc.

02 By conceptual takeaway
- Study 1
- Study 2
- Etc.

A3 Green Paper (Oct 2021) Overview - by Research Topic

What the RA3 Green Paper IS

- Takes stock of how RA3-funded research contributes to research priorities identified by the EDI White Paper
- Synthesizes lessons from funded research & distills cross-cutting themes
- Defines how the research frontier has shifted

What the RA3 Green Paper is NOT

- Not a comprehensive review of the literature since 2016
- Not a final word on the evidence; several studies ongoing and much of the evidence is preliminary

1. Political Institutions

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1a. Representation and accountability

Is there a tradeoff between broadening <u>representation</u> and politician quality?

- Casey, Kamara, and Meriggi (AER, 2021)
- Novel experiment that randomly varied the amount of voter participation in primaries
- Shared voter preferences with parties
- Results show parties more likely to select voters' most preferred candidates

>> Why weren't parties collecting this information in the first place? Do "elected" politicians perform differently in office? If scaled-up, how would it affect who chooses to run for office in the first place? (extensive margin)

State capacity

Do financial <u>incentives</u> crowd out intrinsic motivation?

- Previous evidence mixed, "no" in Mexico and Zambia but "yes" in Uganda
- Leaver et al. (AER 2021) - Rwandan primary schools, 2 stage RCT
    - Recruitment stage: Pay for performance or fixed wages
    - Contract offer stage: Pay for performance or fixed wages
- Pay for performance <u>did</u> change selection
    - Equal quality, lower prosocial motivation
    - <u>But</u> if anything, performance pay still improved student learning

>> What about effects on students' soft skills or own intrinsic motivation? Selection effects on the extensive margin? (over the longer-term?)

How do different policy tools <u>interact</u>?

- Deserranno, Kastrau, and Leon-Cilotta (working paper, 2021)
  - <u>Complementarities:</u> Steeper pay gains in hierarchy improve performance if promotion is meritocratic, otherwise it backfires; and vice versa
- Deserranno, Kastrau, and Leon-Ciliotta (working paper, 2020)
  - Performance pay at different levels of the bureaucracy
  - Complementarities again: CHWs + supervisors > either in isolation
- Dodge et al. (working paper, 2021)
  - Give PayDash app to either higher-ups, frontline bureaucrats, or both
  - Here <u>substitutes</u>: District + sub-district = either in isolation
  - Bureaucrats shared information between levels to improve performance, not just to monitor/punish
  - Substitute away from using officer transfers as a costly incentive tool

Can technological <u>innovations</u> improve tax enforcement?

- Mittal, Reich, and Mahajan (SIGCAS, 2018)
  - Develop <u>machine-learning (ML)</u> tool to identify bogus firms in Delhi
  - Theoretically ML algorithm would prevent US$15-45 million of tax fraud
  - What would field efficacy be? How much substitution of evasion occurs?
- Bachas et al. (working paper, 2021)
  - Systematic use of data to target audits in Senegal
  - Inspectors use a rule-based approach on some properties, discretion on others
  - Discretion selected larger firms and uncovered equal evasion, leading to greater fine collection
  - Auditors exerted less effort on risk-score cases, and more on cases chosen through their own discretion: <u>implementer buy-in</u> matters

Legal institutions

How does weak enforcement affect the actual vs. intended impacts of a policy?

- Field and Vyborny (working paper, 2020)
  - RCT training marriage registrars in Pakistan on expanded women's legal rights in marriage
  - Improved knowledge and reduced procedural violations <u>but</u> no improvements in women's outcomes (marriage contract terms). Again, implementer buy-in to a reform matters.
- Cogneau et al. (working paper, 2021)
  - Document only 9% of potential property tax is collected in Senegal
  - Weak enforcements leads to a more <u>regressive tax</u> than de jure
  - Payers in lower value deciles pay more than they should while payers in higher deciles pay less than they should

Lawyers: A market for lemons?

- Sadka, Seira, and Woodruff (working paper, 2020)
    - Plaintiffs in Mexican labor courts are overconfident and have limited knowledge of the law or likely outcomes
    - Lawyers take advantage of this asymmetry
    - RCT provided personalized ML outcome predictions of their case
    - Increased settlement rates for cases that would have lost
    - Improved payouts and ability to pay bills
    - Broader system-wide benefit: reduced court backlog
    - Agency issues: positive effects only occurred when the worker received the information directly; lawyers apparently did not effectively share the information with their clients

Does community policing work?

- Blair, Grossman, and Wilke (working paper, 2021)
  - RCT on community policing intervention in rural Uganda
  - Multiple aspects: officer trainings, town hall meetings, door to door visits, and community watch teams
  - But no effect on crime, sense of security, or perceptions of police
  - Null results likely from low compliance, officer transfers, lack of monitoring
- Arias et al. (working paper, 2021)
  - RCT on town hall meetings in Medellin, Colombia
  - Context already has strong community policing program
  - Improved perceptions of police but no effects on crime or officers' beliefs
  - Null results likely from low power, officer transfers, limited additive impact

What does stronger donor conditionality do?

- Wolfram et al. (working paper, 2021)
    - Kenya's Last Mile Connectivity Project, mass electrification
    - Natural, quasi-random variation in donor (WB or AfDB)
    - Combined with experimental variation in announcement of audits to help disentangle mechanisms (ex ante contracting vs. ex post auditing)
    - Both WB's stringent conditions and audits improved construction outcomes modestly and by similar magnitudes
    - But WB's conditionality caused significant delays of nearly one year, and led to fewer actual connections per community – at similar cost to the AfDB projects

Takeaways from RA3 Green Paper

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Information availability is necessary, but not sufficient, for improving monitoring and performance

- Cognitive, time, and capacity costs with generating, accessing and analyzing information can be prohibitive

  - Technological innovations that analyze existing data and make it actionable can improve tax collection (Mittal, Reich, and Mahajan, 2018 on VAT collection in Delhi), service delivery (Dodge et al, 2021), and legal outcomes (Sadka, Seira, and Woodruff, 2020)

  - However, there may be tradeoffs between technological innovations and bureaucrat autonomy and transparency (Bachas et al., working paper, 2021)

Under conflicts of interest, *who* receives information matters – and <u>effects vary</u> across contexts

- In the plaintiff-lawyer relationship, only information received directly by the plaintiff improved outcomes (Sadka, Seira, and Woodruff, 2020)

- Information on voter preferences more likely used in politically "safe" constituencies, and where politician and citizen preferences are aligned so no conflict of interest (Casey, Kamara, and Meriggi, 2021)

- No additional benefits to providing information to different levels of a bureaucracy when the different levels share the same incentives (Dodge et al, 2021)

In contexts with <u>multiple constraints</u>, addressing one problem in isolation may not be enough

- Improving legal knowledge of implementers had limited room to improve outcomes for women in the absence of complementary reforms to shift cultural norms (Field and Vyborny, 2020)

- Incremental policing reforms do not reduce crime or improve security without complementary changes that increase resources or reduce the frequency of officer transfers (Blair, Grossman, and Wilke, 2021; Arias et al. 2021)

>> Important to identify the necessary complementary interventions in that specific context

Some key patterns emerging from the review

- Research clusters around state capacity and quality of enforcement
- Notable lack of experimental evidence in other areas, e.g.,
  - Role of political norms and culture
  - An exception: ongoing Prillaman et al (2022) study on civic education and female political participation in India (funded by EDI)
  - State procedures (e.g., management practices)
  - Design of the legal system

>> Need to redouble efforts designing and funding RCTs and other empirical research in these areas

Additional synthesis takeaways (Jan 2022)

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What are the institutional levers of change and the conditions under which these levers are best acted upon?

- The **incentives that people face within an institution** will shape impact of interventions
- An **individual who champions reforms** avoids diffused responsibility, free-riding, and coordination issues
- **Governments are increasingly data-rich but remain information-poor**: administrative data already collected by governments is often quite good, but not integrated or used well (often due to resource, time or human capital constraints)

In which areas did RA3 essentially <u>confirm</u> existing research?

- **Do extrinsic incentives crowd out intrinsic incentives for public sector workers? And does it matter?**
  - Mixed existing evidence. Leaver et al. (AER 2021) and Deserranno, Kastrau, and Leon-Ciliotta (Working paper, 2021) show that extrinsic incentives help performance regardless of intrinsic incentive effects

- **Ex ante rules vs ex post audits**
  - Berkouwer et al. (working paper 2021) show both ex ante stringent donor conditionality and ex post audits are somewhat effective in their context, but donor conditionality causes lengthy delays

Any salient insights on the research process?

- **Funding can go a long way:** some RA3 interventions were low-cost (i.e., information provision, or simple resource reallocation)

- **RCTs done at scale in partnership with governments** can be cost-effective:
  - The government has already allocated resources to program implementation and evaluation. **Research that builds on these existing investments have a lot of value added**
  - Such research could have high internal and external validity

- **Resources, processes, and skills brought in by researchers help create local capacity:** e.g., digitizing existing data and building data collection infrastructure or skills transfer to government staff (e.g., ML methods)