

Welcome to the LORTA Impact Evaluation Workshop 2022!

- We will be beginning the webinar shortly.
- While you are waiting, be sure to follow us online to keep up with the latest news from the IEU!
- Please note that this webinar will be recorded.







HOUSEKEEPING







MUTE BUTTON

QUESTIONS

RAISEYOUR HAND





TODAY



Webinar 1 – What are LORTA and impact evaluations? What can LORTA offer to the projects approved by GCF?

Welcome speech and introduction to LORTA	Andreas Reumann (IEU)	20 mins
Welcome speech	Markus Froelich (C4ED)	20 mins
5-minute break		
Workshop team and agenda	Martin Prowse (IEU)	15 mins
Questions and answers session	Martin Prowse (IEU)	25 mins







LORTA Impact Evaluation Workshop 2022 Webinar 1

What are LORTA and impact evaluations?
What can LORTA offer to the projects approved by GCF?

Andreas Reumann, Head a.i., Independent Evaluation Unit (IEU), GCF

1 July 2022







1. Why?

We are all linked to the GCF through different projects.

But will the GCF achieve its goals?

Can we <u>attribute</u> change to your specific project?





Did the project cause a change?

Would the change have happened anyway?

If the project caused the change, how *much* was the change?

Are there other any other cost-effective ways to retrieve the same change?







Attributable impact/change







1. Why?

We are all linked to the GCF through different projects.

But will the GCF achieve its goals?

Can we <u>attribute</u> change to your specific project?

If so, how large is that change? For whom? For how long?

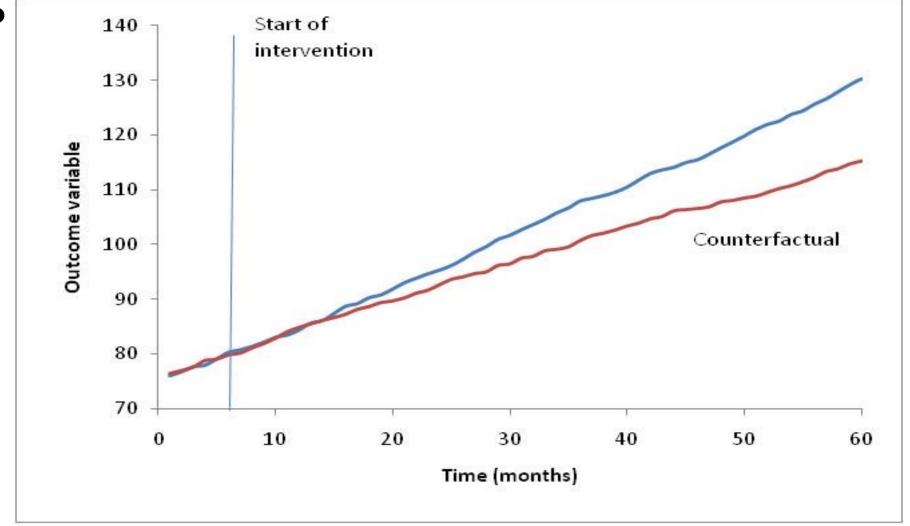
And how much change do we get for each GCF dollar?

We aim to help GCF stakeholders to measure impacts



Center for Evaluation and Development

2. How?







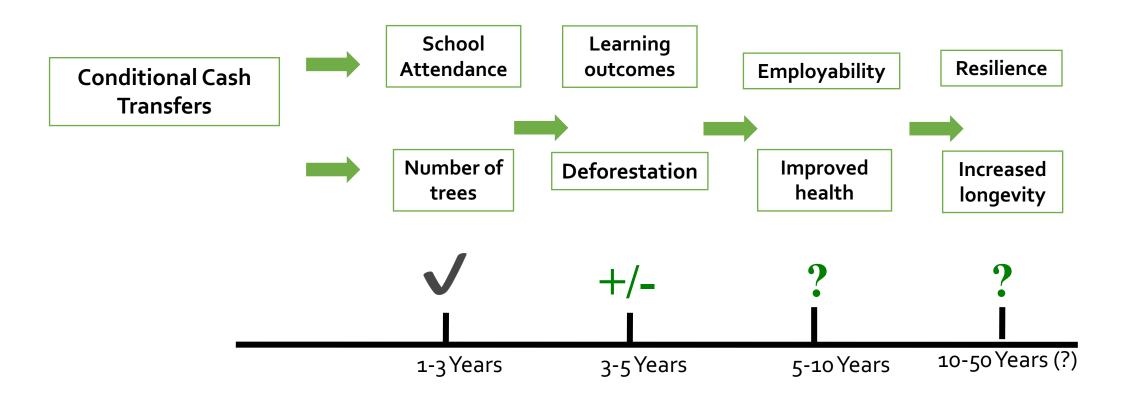
2. How?

- So, we build in an impact evaluation design from the start
- We can use a counterfactual (comparison) group
- Either through random assignment of project interventions
- Or by mimicking a comparison group a quasi-experiment
- All of which is based on an accurate theory of change



Center for Evaluation and Development

3. When?







3. When?

Implementation fidelity (delivery, uptake and use)

Measure outputs (1-3 years)

Outcomes (3-5 years)

And **impacts** (5-10 years)



WHAT IS LORTA?



- Learning-Oriented Real-Time Impact Assessment (LORTA)
- Started in 2018
- LORTA stands on three pillars:

Learning-Oriented

Provide lessons for the GCF, stakeholders, and the international community about what works and how in climate change adaptation and mitigation

Real-Time

Learn the project impact in real-time by integrating implementation tracking into impact assessment

Impact Assessment

Impact assessment/evaluation captures the extent to which changes in outcome indicators can be attributed to a particular intervention











Phase O

Annual design

workshop

Phase I

Formative engagement and design

Phase II

Phase II

Final evaluation and result dissemination

Phase IV

Academic publication

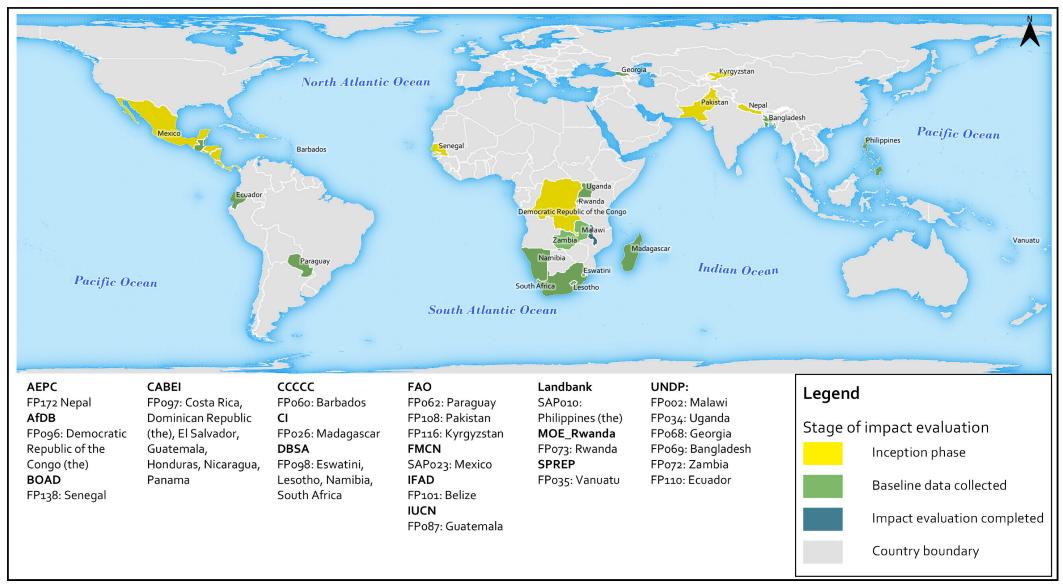
A selected few projects join the LORTA portfolio











Source: LORTA team & DataLab





OBJECTIVES OF THE LORTA DESIGN WORKSHOP (2022)



- Enhance the capacity of Accredited Entities in causal evaluation approaches.
- Support shortlisted projects embed realtime and causal counterfactual-based measurement systems within M&E plans.
- Understand the extent of commitment to measurement by project staff. Build a partnership!



Start the journey and plan for the year.







Thank you!

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#LORTA





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CENTER FOR EVALUATION AND DEVELOPMENT (C4ED)

Mannheim (Germany), Tägerwilen (Switzerland), Islamabad (Pakistan), Addis Ababa (Ethiopia), Kampala (Uganda), Dar Es Salaam (Tanzania)
Ouagadougou (Burkina Faso), Cotonou (Benin), Lusaka (Zambia)







- Markus Frölich
- Professor of Econometrics at University of Mannheim
 - J-PAL Affiliate
 - C4ED Director







C4ED: 15 YEARS HISTORY

- Center for Evaluation and Development started in 2008
 - at that time as "Center for Empirical Economics and Econometrics (CEEE)" at the University of Mannheim in Germany
- In 2015 spin-off from the University of Mannheim as non-profit limited liability company to increase operational flexibility
- Since 2018: initiate offices in South Asia and Africa
- Today: non-profit C4ED Group (10 companies), 120 employees
 - Majority of employees in Global South
 - Research hub in the North
 - Partner of J-PAL Europe on training and research





C4ED (Center for Evaluation and Development)

- was founded in order to help make development and climate change projects more effective, through the use of scientific Impact Evaluations
- focus on low- and middle-income countries (more than 60 countries), where climaterelated projects often combine adaptation and mitigation strategies
- → Impact Evaluation: Which programmes work and for whom?
- →Implementation Research: How can we make programs more effective? How shall projects be implemented to maximize impact?
- C4ED also provides support services such as: data collections; descriptive and diagnostic surveys; monitoring and evaluation systems; data science and data analytics





LORTA – GCF AND C4ED SUPPORT (since 2018)

- Evaluation requires collaboration between implementer & evaluator → since 2018,
 LORTA partnership between GCF/IEU and C4ED
- LORTA technical team (C₄ED+ IEU) helps projects with developing a (quasi)experimental evaluation design
- Developing evaluation design is complex → it needs to be rigorous but also with a feasible operational implementation
- Some of the econometric/statistical methods/data analysis are technically complex \rightarrow LORTA technical team can provide capacity-building on this and lead such activities
- Impact evaluation usually requires primary data collection → LORTA team can provide guidance (but funding for data collection needs to come from the projects)





LORTA: An example - Farmer field schools in Malawi (UNDP)

- Project: Participatory Integrated Climate Services for Agriculture (PICSA) uses historical climate records, participatory decision-making tools and forecasts to help farmers identify and better plan agricultural activities
- Implementation: Training delivered through a ToT approach. Extension officers are first trained and are responsible for leading training sessions to lead farmers (LFs), which then pass their learnings onto their peers (contact farmers, CFs).
- Design: Quasi-experimental design employing matching techniques. Outcomes of lead farmers in treatment districts are compared to outcomes of lead farmers in control districts (design was jointly developed by the project and the LORTA teams)
- Timeline: Baseline data collection in October 2018, before the PICSA trainings. PICSA refresher trainings occurred in September 2019. Endline data collection in October 2020 (quality checks provided by LORTA team to guarantee high quality data)







LORTA: An example - Farmer field schools in Malawi

- Results: The evaluation found significant positive impacts on the use of seasonal
 forecasts to plan farm decisions, changes to crop activity, maize yields, and an increase in
 well-being in terms of a reduction in work on other farms (analysis and dissemination of
 results was jointly performed by the project and the LORTA teams)
- Lessons learnt:
 - Recommendations from LORTA team improved the design and implementation of PICSA: enhance access to climate and weather information through various digital channels, especially relevant during the COVID-19 pandemic (LORTA team supported the monitoring)
 - PICSA is a relatively short-term intervention → refresher meetings are needed to enhance learning, mobilize knowledge exchange between LFs and CFs and affect decision-making (IE provides insights for future implementations/scale-up)





IMPACT EVALUATION & EVALUATION STANDARDS

- What is Impact Evaluation ? → in a few minutes
- Do we need Impact Evaluation?
 - Easy question: Of course, before scale-up we need to know what works!
 - Would you ever have taken a medical treatment/medical drug/covid vaccine if its safety and effectiveness had not been proven beforehand?
- Today: clear scientific standards in Impact Evaluation
- Nobel Prizes for impact evaluation (Credibility Revolution)
 - Nobel Price 2019: Abhijit Banerjee, Esther Duflo, Michael Kremer
 - Nobel Price 2021: Joshua Angrist, Guido Imbens, David Card



RANDOMIZED CONTROLLED TRIALS (RCT)



Nobel Prize 2019



Abhijit Banerjee, Esther Duflo, Michael Kremer



2019 Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel





QUASI-EXPERIMENTAL METHODS



• Nobel prize 2021: David Card, Joshua Angrist, Guido Imbens





WHAT IS IMPACT EVALUATION?



Different than Monitoring and Evaluation (M&E)!

A) Definition of Impact and Measurement of Impact

$$E[Y^1-Y^0]$$

• Statistical methods for estimating impact and estimation of **statistical precision** (you get a **confidence interval instead of number**)

B) Thinking in counterfactuals

- Key performance indicators compare across time
- Counterfactual thinking compares to control group
- C) Identification design is important (data alone is not sufficient)
- D) Sample size is important (statistical uncertainty)





IMPACT EVALUATION & POTENTIAL OUTCOMES

Important: We are not trying to find the reasons for why something has happened \rightarrow

Instead: we have some intervention and want to learn if its effective or not

E.g., New fertilizers that aim at increasing yield

Test a new fertilizer type against a standard one (or a placebo)

Impact of D (fertilizer) \rightarrow Y (yield)

Potential outcomes: Y_{it}^{1} Y_{it}^{0} D_{it} o/1

Impact: $E[Y^1-Y^0]$





EXAMPLE: TRAINING PROGRAM FOR FARMERS

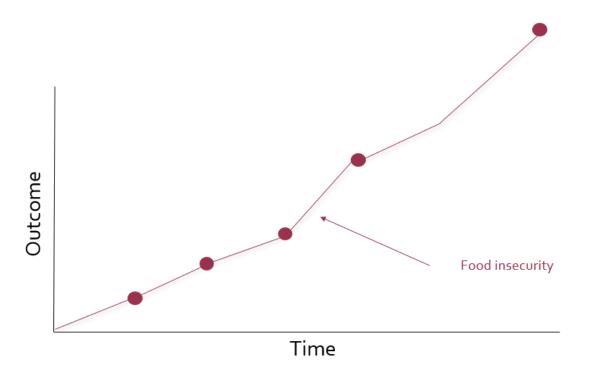
- Training program for farmers to adopt climate-smart agricultural practices (CSA) and reduce vulnerability to climate change (food insecurity)
- At the beginning: everybody is food insecure (by definition of eligibility)
- Program Target: only 30% of farmers are food insecure after one year
- After one year: 40% are still food insecure
- What is the impact of the program? (Was it successful?)
- KPI-Monitoring: Compare to KPI-Targets: Have targets been achieved?

BUT: This is NOT the impact! Impact is comparison to counterfactual

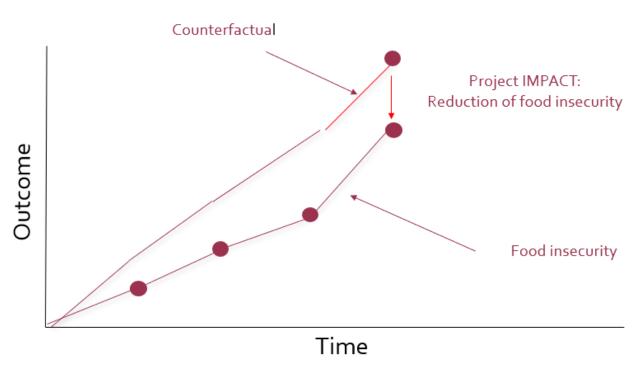




KEY PERFORMANCE INDICATORS (KPI)



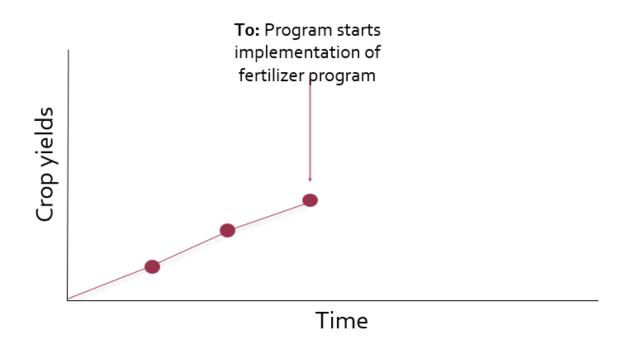
COUNTERFACTUAL AND IMPACT



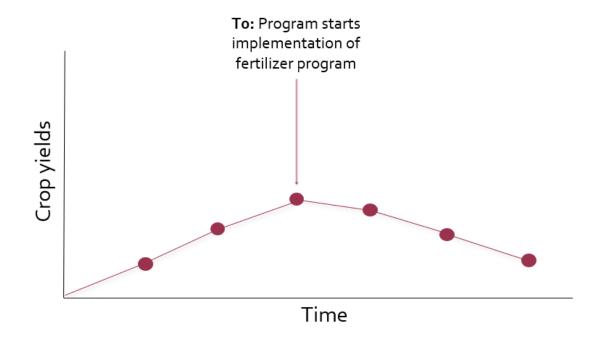




OTHER EXAMPLE: FERTILIZER AND CROP YIELDS



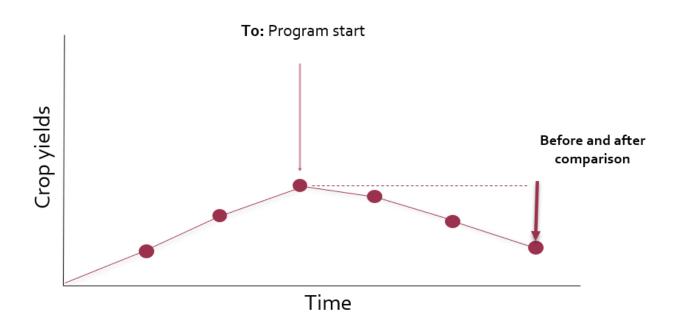
IS IMPACT NEGATIVE?

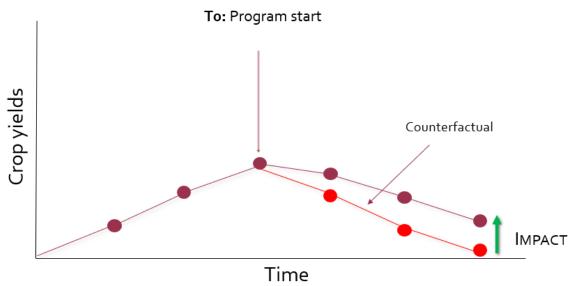






COMPARE TO COUNTERFACTUAL









IMPACT EVALUATION & IMPLEMENTATION LEARNING

- Impact evaluation permits to obtain quantified evidence if a project works, i.e., changes the lives of the beneficiaries and/or reduces carbon emissions
- Short- and long-term effects
 - Impact evaluation after one year (to see if projects work)
 - Impact evaluation after five years (to see if results sustainable)
- Impact evaluation can also be used to help make a program more effective
- Example: J-PAL KCAI funded project with NRSP for Energy Access
 National Rural Support Programme (Pakistan)



LEARNING FOR EFFECTIVE IMPLEMENTATION



Example: Villagers receive micro-loans for purchasing photovoltaic panels for productive purposes

- How can we convince poor villagers to buy photovoltaic panels?
 - without becoming over-indebted
 - while being financially sustainable
- What are the impacts on people beyond buying photovoltai panel?
- → Aim: **Develop** the best <u>microfinance product</u> with large social impact
- a) Randomly allocate price subsidies to stimulate initial demand
- b) Different re-payment options (can we insure villagers by tying repayment to energy production)?
- c) Take-up spillovers in village





IMPACT EVALUATION: COOPERATION BETWEEN IMPLEMENTING ORGANIZATION & EVALUATION TEAM

 Next webinars will explain various approaches and methodologies for impact evaluation

These consist of (technical) statistical methods and evaluation design

Evaluation design requires close collaboration with the implementer!





Thank you!

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#LORTA





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Workshop team and agenda





IEU MEMBERS



Andreas Reumann

Dr. Anastasia Aladysheva



Deborah Sun Kim

Dr. Martin Prowse











Mutukwa Musole

Dr. Nathan Fiala

Rishabh Moudgill Safaa Loukilli Idrissi

Saesol Kang

Yeonji Kim

















C4ED SPECIALISTS



Dr. Markus Frölich



Dr. Markus Olapade



Dr. Asmus Zoch



Dr. Viviana Uruena



Sinem Özdemir



Dr. Bethlehem Argaw



Dr. Clementine Sadania



Dr. Benjamin Chibuye



Dr. Matthias Stelter















GUEST SPEAKERS



THE LIST OF PARTICIPATING ENTITIES



#	AE name	Country	Type	Sector
1	Development Bank of Southern Africa	South Africa	Regional	Public
2	Environmental Project Implementation Unit, State Agency of the Ministry of Nature Protection		National	Public
3	Fiji Development Bank	Fiji	National	Public
4	Fondo para la Acción Ambiental y la Niñez	Colombia	National	Public
5	Fonds National pour L'Environnement	Benin	National	Public
6	Fundación Avina	Panama	Regional	Public
7	Instituto Interamericano de Cooperación para la Agricultura	Costa Rica	Regional	Public



THE LIST OF PARTICIPATING ENTITIES



#	AE name	Country	Туре	Sector
8	Ministry of Finance and Economic Management, Cook Islands Cook Island		National	Public
9	National Committee for Sub-National Democratic Development Cambodia		National	Public
10	National Rural Support Programme	Pakistan	National	Public
11	Peruvian Trust Fund for National Parks and Protected Areas	Peru	National	Public
12	Small Industries Development Bank of India India		National	Public
13	South African National Biodiversity Institute South Africa		National	Public
14	United Nations Development Programme Bhutan	Bhutan	International	Public



AGENDA



- **Webinar 2** *Tuesday, July 5* Theories of Change, evaluation questions and indicators
- Webinar 3 Friday, July 8 Experimental and non-experimental impact evaluation methods
- **Webinar 4** *Tuesday, July 12* Monitoring, timeline, budget and ethics
- Webinar 5 Friday, July 15 Rapid-fire presentations
- Webinar 6

 Tuesday, July 19

 Rapid-fire presentations, a guest presentation and closing remarks



THE LIST OF BREAKOUT GROUPS



Group 1	IE Specialist		
AE 1	Fiji Development Bank	Matthias Stelter	
AE 2	Ministry of Finance and Economic Management, Cook Islands	iviattinas Steitei	

Group 2		IE Specialist	
AE 1	Small Industries Development Bank of India	Bethlehem Argaw	
AE 2	National Rural Support Programme, Pakistan		





THE LIST OF BREAKOUT GROUPS



Group 3		IE Specialist	
AE 1	United Nations Development Programme, Bhutan	Martin Prowse	
AE 2	National Committee for Sub-National Democratic Development, Cambodia		
C		IE Consistint	
Group 4		IE Specialist	
AE 1	Inter-American Institute for Cooperation in Agriculture, Costa Rica	Anastasia Aladysheva	
AE 2	Fundación Avina, Panama		
Group 5		IE Specialist	
AE 1	Fondo para la Acción Ambiental y la Niñez, Colombia	Nathan Fiala	
AE 2	The Peruvian Trust Fund for National Parks and Protected Areas	Nathan Fidid	





THE LIST OF BREAKOUT GROUPS



Group 6		IE Specialist
AE 1	Development Bank of Southern Africa	Benjamin Chibuye
AE 2	Environmental Project Implementation Unit, State Agency of the Ministry of Nature Protection, Armenia	

Group 7		IE Specialist
AE 1	Fonds National pour L'Environnement, Benin	Clementine Sadania
AE 2	South African National Biodiversity Institute	





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Q&A time





Thank you!

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today



Webinar 2 – Developing Theory of Change, Evaluation questions and Indicators

What is a project's theory? Why evaluation questions are important? How to select outcomes?

Anastasia Aladysheva (IEU)

20 mins

Evaluating development projects in the context of climate change. Insights from FAO experience

Silvio Daidone (FAO)

20 mins

---- 5-minute break ----

Questions and Answers session

Asha Warsame (IEU)

30 mins

Quiz

Deborah Kim (IEU)

10 mins





LORTA Impact Evaluation Workshop 2022 Webinar 2 Theory of Change, Key Evaluation Questions and Indicators

Dr Anastasia Aladysheva, LORTA – Independent Evaluation Unit (IEU)

5th July 2022





DEFINITIONS



Theory of Change

• Theory of Change is an illustration of how and why a desired change is expected to happen in a particular context (results chain, logic model, logframe, project/programme theory, outcome mapping, impact pathway and investment logic).

Key Evaluation Questions

High-level questions that an evaluation is designed to answer.

Indicators

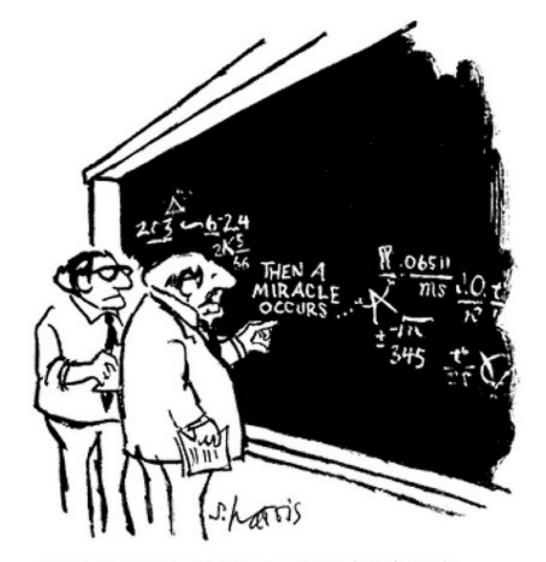
 Measurable information that is used to determine if a project is implemented as expected and achieving its outcomes.



THEORY OF CHANGE (ToC)



Putting reality into a theory



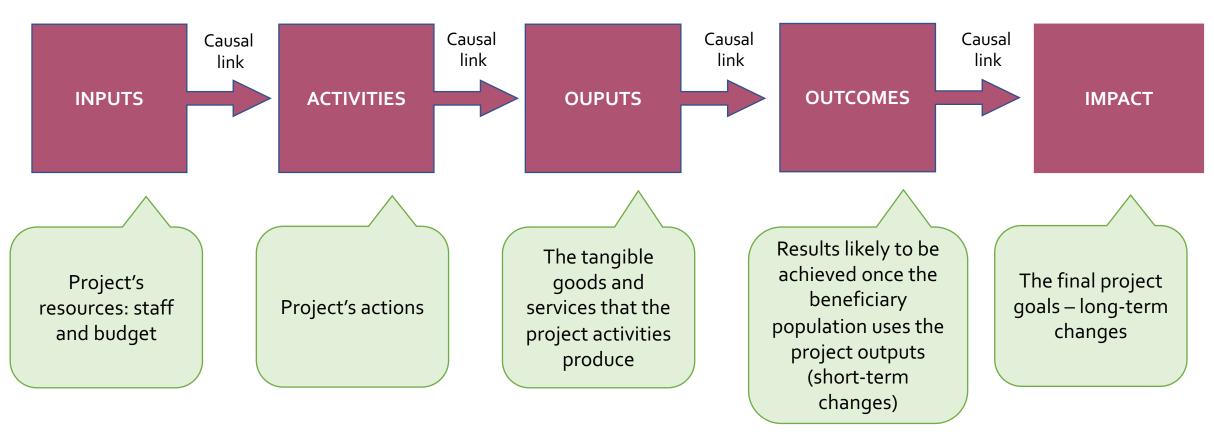
"I think you should be more explicit here in step two."





THEORY OF CHANGE (ToC)





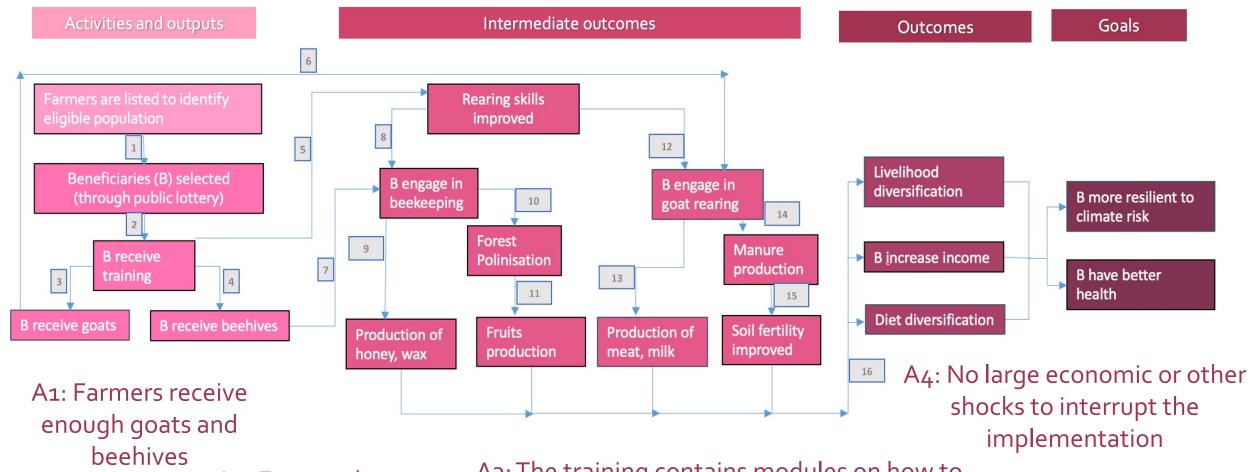
<u>Assumptions</u> on which the theory of change is based – these are in addition to the cause-effect relationships shown in the logic model and often involve assumptions about the context <u>Context</u> in which the intervention is implemented affect activities and results Potential <u>unintended results</u>, both positive and negative.





ZAMBIA UNDP SCRALA PROJECT





A2: Farmers have access to water and grazing land

A3: The training contains modules on how to manage beehives and goat rearing. The training contains practices with sufficiently skilled trainers.





BANGLADESH UNDP PROJECT

2

7



INPUTS

ACTIVITIES

OUTPUTS

OUTCOMES

IMPACTS

LH Component

- · Financial resources
- Human resources
 → hiring of NGOs (implementing partners)
- Census data → used for beneficiary selection

LH Component

 WLGs are reactivated (if already existed) or created with women from beneficiary households in target areas

1

(5)

6 >

Adaptive LH
 options are
 promoted to WLGs
 → each WLG
 chooses 3 LHs on
 which to receive
 training

LH Component

- Members of WLGs are trained on 3 LHs
- WLGs choose 2 LHs for which they receive input support (for 3 production cycles)

LH Component

 Women (members of WLGs) adopt alternative LHs

3

LH Component

- Women's income increases
- Women status improves (decision-making)
- Household income increases
- · Income is more stable
- Household food security improves
- Household preparedness to shocks improves (especially extreme weather events)

DW Component

- Financial resources
- Human resources
 → hiring of NGOs
 (implementing
 partners)
- Construction material

DW Component

 Construction of HHbased and community-based RWHS

DW Component

 HH-based and community-based RWHS are constructed

DW Component

- Beneficiary households have year-round access to clean drinking water closer to their houses
- women spend less time on fetching water





THEORY OF CHANGE



- What is the project?
- What outcomes does the project aim to achieve?
- What intermediate steps lead to those outcomes?
- What assumptions are associated with each link in the causal chain?
- How can we measure outcomes and impacts?



KEY EVALUATION QUESTIONS



UNDP PICSA project Malawi

TEMPORAL TOC STEP	#	Evaluation Question
Outputs	1	Did lead farmers attend the trainings?
	2	Did lead farmer households have access to weather information and agricultural recommendations via SMS?
Intermediate outcomes	3	Did lead farmer households make adaptations to their crop activities and livestock activities?
Long-term	4	Did lead farmer households increase yields?
outcomes	5	Did lead farmer households improve their well-being by reducing their work on other farms?
	6	Did lead farmer households improve their level of food security?



INDICATORS



- Specific narrowly defined, describes exactly what needs to be measured.
- Measurable can be aligned with a specific numeric or ranked value to show improvement over time.
- Achievable realistic and the project exists within the realm of what is possible to achieve.
- Relevant (and ethics) considering the context in which the project is operating.
- Time-Bound includes a date by which you expect to see the change, giving substance and life to the project as a whole.



INDICATORS



- Resilience to climate change
 - Based on indicators of poverty, water accessibility and quality, agricultural diversification, being affected by climate shock (flooding, heat wave)
- Food security
 - Perception (worry about food shortage)
 - Food expenditures
- Gender equality
 - Decision-making (intra-household bargaining)
 - Observe certain activities (economic)



CONCLUDING REMARKS







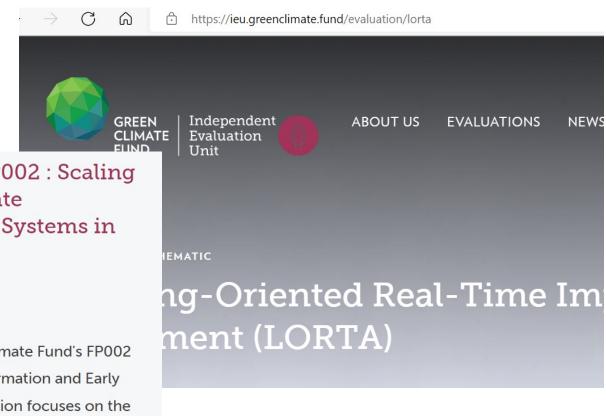




USEFUL LINKS



• https://ieu.greenclimate.fund/evaluation/lorta





Impact Evaluation Report for FP002 : Scaling up the Use of Modernized Climate Information and Early Warning Systems in Malawi

This report assesses the impact of the Green Climate Fund's FP002 "Scaling up the Use of Modernized Climate Information and Early Warning Systems in Malawi". The impact evaluation focuses on the Participatory Integrated Climate Services for Agriculture (PICSA) component of the projects and its impact on the climate resilience of farmers supported within FP002.





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---- 5-minute break ----

Questions and Answers session Asha Warsame (IEU) 30 mins

Quiz Deborah Kim (IEU) 10 mins







Evaluating development projects in the context of climate change Insights from FAO experience

Silvio Daidone & Nicholas Sitko, Food Agricultural Organization July 5, 2022 LORTA Workshop





OUTLINE OF THE PRESENTATION



- 1. Role of evaluation in FAO projects
- 2. Some past and current examples of FAO IE projects
- 3. Integrating project theory of change, project design, and project evaluation
- 4. PROEZA Paraguay



ROLE OF EVALUATION IN FAO PROJECTS



- Originally focused on process evaluation/monitoring
- Impact evaluation more often included in projects financed by Trust Funds (e.g. GCF)
- Impact evaluation supporting Government-driven programmes
- Support country-led processes (IE Task Force)
- Creating critical mass of evidence on what works



FAO IMPACT EVALUATIONS FOR POLICY DECISIONS



 Impact evaluations carried out to inform policy makers on a range of decisions

- Several types of impact evaluations:
- a. Effectiveness of a given program
- b. Innovations within a program
- c. Effectiveness of program implementation alternatives



Where/when did we start? From Protection to Production



- Provide insight into how cash transfers can contribute to sustainable poverty reduction and economic growth at household and community levels
- Key component of the <u>Transfer Project</u>
- Implemented by FAO and UNICEF in conjunction with partner governments
- Added value to impact evaluations of government run social cash transfer programs in seven countries
- PtoP: Initial funding from DFID (2011-2014), EU and FAO



Countries and programmes



Country	Programme name	Start year
Ethiopia	Tigray Social Cash Transfer Pilot Programme (SCTPP)	2011
Ghana	Livelihood Empowerment Against Poverty (LEAP)	2008
Kenya	Cash Transfer for Orphans and Vulnerable Children (CT-OVC)	2004
Lesotho	Child Grants Programme (CGP)	2010
Malawi	Social Cash Transfer (SCT)	2006
Zambia	CG model (CG) of the Social Cash Transfer	2010
Zimbabwe	Harmonized Social Cash Transfer (HSCT)	2011

Evaluation of existing Government programmes, not small experiments!





MIXED METHODS



A set of integrated tools used to evaluate the seven CTs

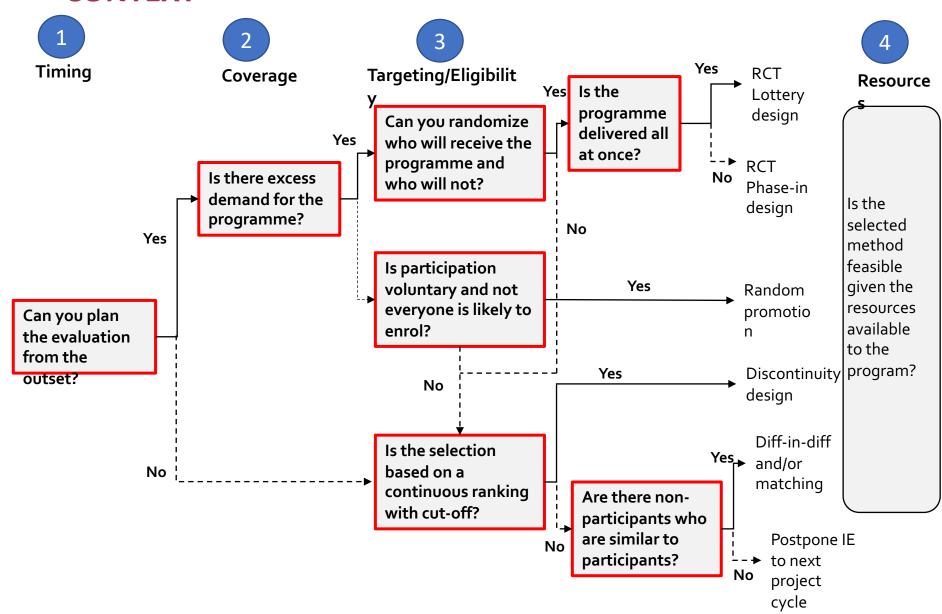
- Micro-econometric approach: ex-post evaluation of the programmes, comparing a sample of beneficiary households (the treatment group) vis-à-vis a sample of similar households eligible for the programme but not receiving it (the control/comparison group)
- Qualitative analysis: key informant interviews, focused group discussions, in-depth households case studies to explore the impact of CTs on household economic decision-making and the local economy
- <u>General equilibrium models</u>: Local Economy Wide Impact Evaluation (LEWIE) to assess the spillovers and the income/production multipliers of the CTs on the local economies
- Triangulation: Mixed methods recommended in GCF evaluations



CHOICE OF THE QUANTITATIVE APPROACH DEPENDS ON THE

F AO

CONTEXT





Evaluation design in PtoP countries



Country	Design	Level of randomization / matching	Ineligible sample	Baseline	Follow-up
Ethiopia	Non-experimental (PSM and IPW)	Households within village	Baseline only	2011	2013
Ghana	Non-experimental (PSM and IPW)	Household and region	No	2010	2012
Kenya	Experimental with PSM and IPW	Location	No	2007	2009-2011
Lesotho	Experimental	Electoral division	Yes	2011	2013
Malawi	Experimental	Traditional authority	Baseline only	2013	2014
Zambia	Experimental	Community Welfare Assistance Committee (CWAC)	No	2010	2012
Zimbabwe	Quasi-experimental (matched case-control)	Matched case-control	Baseline only	2013	2014



Lessons on the Political Economy of PtoP/Transfer Project Evaluations



- Building the overall credibility of an emerging social protection sector
- <u>Strengthening</u> the <u>case</u> for social protection as an <u>investment</u>, not a cost, influencing audiences beyond the welfare sector.

• <u>Supporting learning</u> around programme design and implementation to inform programme improvements (targeting, transfer size)

Shaping policy discussions beyond the national context and <u>informing</u> <u>regional</u> social protection <u>agendas</u> (for instance African Union Expert Consultation on Children and Social protection Systems, Cape Town 2014)





KEY FACTORS SHAPING THE ROLE OF EVALUATION IN INFLUENCING POLICY AND PROGRAMMES

evaluations being embedded in national policy processes

ii. relationship-building and multidisciplinary research teams

iii. messaging and packaging of evidence

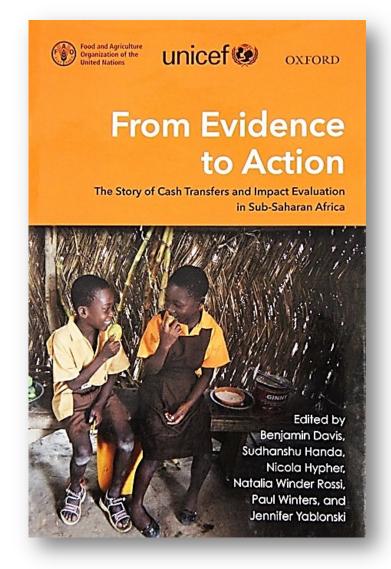
iv. the creation of a regional learning agenda



Independent Evaluation

FROM EVIDENCE TO ACTION: THE STORY OF CASH TRANSFERS AND IMPACT EVALUATION IN SUB-SAHARAN AFRICA





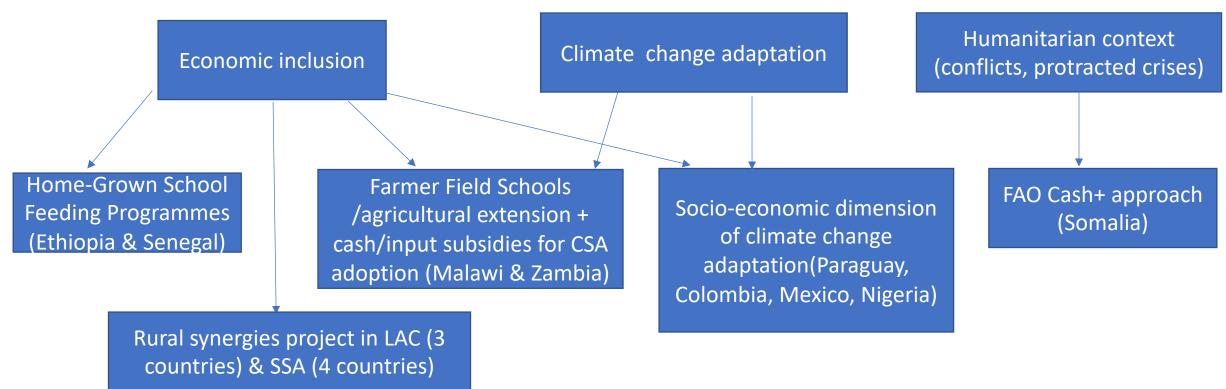


More recent and on-going FAO



IMPACT EVALUATIONS

- Going over and above impacts of CTs only
- Combining social protection (broadly defined) and rural development interventions









INTEGRATING PROJECT THEORY OF CHANGE, PROJECT DESIGN, AND PROJECT EVALUATION IN FAO PROJECTS

- Clarity concerning project design and objectives
- Be transparent/explicit on the theory of change: inputs, activities, outputs and results/goals (assumptions and measurement)
- Measure project impact on indicators of interest:
 - Role of questionnaire design
 - Determining an adequate sample size (power calculations)
 - Geo-referencing data & link to spatial information
- Monitor key results: is the project off- or on-track?



GCF FUNDED PROJECTS — THE CASE OF PROEZA IN PARAGUAY



- First project included into LORTA
- Climate change mitigation & adaptation (payment for environmental services)

 Two technical LORTA missions and multiple remote stakeholders meeting to discuss the IE and get wide consensus





PROEZA THEORY OF CHANGE & CHOICE OF INDICATORS

Inputs Activities Outputs Outcomes Goals Funds People Seedlings Reforestation Climate Human capital trained distribution change Technology Income stability adaptation & Receipt of **Technical** mitigation cash assistance to Income transfers farmers diversification Households' resilience Conditional Increase in transfers income and assets Food security



CURRENT STATE WITH THE IMPACT EVALUATION

- 1. COVID-19 delayed project approval, implementation and IE
- 2. Pilot phase conducted in the first half of 2022. Caseload to increase from July 2022
- 3. Targeting and ranking districts for their socio-environmental risk
- 4. Communities' randomization recognized as technically viable. Politically still difficult to accept
- 5. Programme in indigenous communities evaluated with qualitative methods & satellite images only for forest area
- 6. Finalized baseline questionnaire. Baseline data collection starting in August 2022





Thanks for listening!

Silvio.Daidone@fao.org

Transfer Project: https://transfer.cpc.unc.edu/

PtoP: https://www.fao.org/economic/ptop/home/en/

FAO Social Protection: https://www.fao.org/social-protection/en/

From Evidence to Action: https://www.fao.org/3/l5157E/i5157e.pdf



TODAY



Webinar 2 – Developing Theory of Change, Evaluation questions and Indicators

What is a project's theory? Why evaluation questions are important? How to select outcomes?

Anastasia Aladysheva (IEU) 20 mins

Evaluating development projects in the context of climate change. Insights from FAO experience

Silvio Daidone (FAO)

20 mins

---- 5-minute break ----

Questions and Answers session Asha Warsame (IEU) 30 mins

Quiz Deborah Kim (IEU) 10 mins







5-minute break





TODAY



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Q&A time







Thank you!

ieu.lorta@gcfund.org

@GCF_Eval
#LORTA





TODAY



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Asha Warsame (IEU)

30 mins

10 mins

Quiz

Deborah Kim (IEU)





QUIZ



Please go to Mentimeter

https://www.menti.com/

Please check the chat box for the passcode.





Welcome to the LORTA Impact Evaluation Workshop 2022!

- We will be beginning the webinar shortly.
- While you are waiting, be sure to follow us online to keep up with the latest news from the IEU!
- Please note that this webinar will be recorded.







HOUSEKEEPING







MUTE BUTTON

QUESTIONS

RAISEYOUR HAND





TODAY



Webinar 3 - Experimental and non-experimental impact evaluation methods

Moderator	Viviana Uruena (C4ED)	5 mins
Presentation on experimental and non- experimental impact evaluation methods	Martin Prowse (IEU)	30 mins
5-minute break		
Experience in evaluating climate projects within the King Climate Action Initiative (JPAL)	Claire Walsh (JPAL)	30 mins
Questions and answers session		20 mins
Quiz	Deborah Sun Kim (IEU)	5 mins





Quiz

TODAY



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Martin Prowse (IEU)

30 mins

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Questions and answers session

Deborah Sun Kim (IEU) 20 mins

5 mins





LORTA Impact Evaluation Workshop 2022 Webinar 3

Experimental and non-experimental impact evaluation methods

Martin Prowse, Evaluation Specialist, Independent Evaluation Unit (IEU), GCF

8 July 2022





IMPACT EVALUATION



What is impact evaluation?

- Evaluation of an intervention, a policy and/or a project
- The difference between outcomes with and without the intervention
- Randomized evaluations are a type of impact evaluation method

Why use experimental methods to evaluate impact?

- To determine whether an intervention creates an attributable, causal change in the outcome, to what magnitude and how (the causal mechanism)
- To learn how a program works in a real-world setting, can identify intervention strategy works best
- To help inform policymakers to make evidence-based decisions





How can we find a good comparison?



Key issues:

1. Self selection

- Participation is voluntary
- Those who choose to take part differ systematically from those who do not

2. Program targeting

- Participants are chosen because they are different
- Those participating in the intervention and those not participating differ in observable and unobservable ways

In both cases we are unable to use a random sample of comparison units to measure impact



Independent Evaluation Unit TYPES OF RCT's



Simple Lottery Design/ Classical RCT

Phased-in RCT

Randomized controlled trials

Random encouragement design

Cluster randomization design

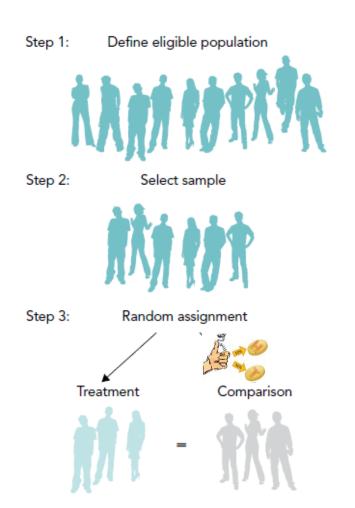




Independent Evaluation

CLASSICAL RANDOMIZED CONTROLLED TRIAL





Ineligible

! Not all participants have to be included in the sample for the RCT

Selecting a random sample from the eligible population allows findings to be extrapolated to the eligible population (and reduces costs)

Randomize the treatment within the random sample

! Data on treatment and control group is needed



Independent Evaluation Unit TYPES OF RCT's



Simple Lottery Design/ Classical RCT

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PHASED-IN RCT

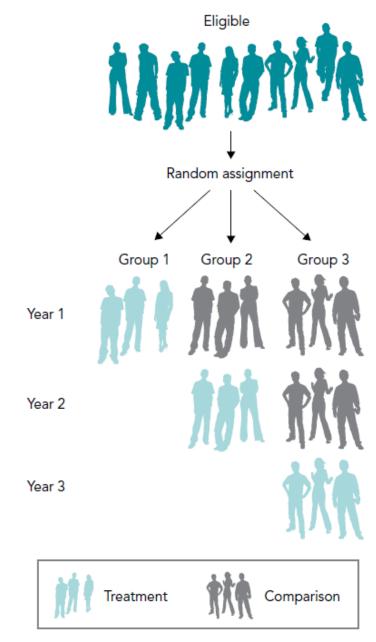


If randomization is deemed unethical, a phased-in design is politically more acceptable

Not all beneficiaries will be covered immediately, but will receive the intervention over time

> Randomize the order of program implementation

A phase-in design can replicate how interventions are rolled out within a country or region









Independent Evaluation Unit TYPES OF RCT's



Simple Lottery Design/ Classical RCT

Phased-in RCT

Randomized controlled trials

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Cluster randomization design





RANDOM ENCOURAGEMENT DESIGN

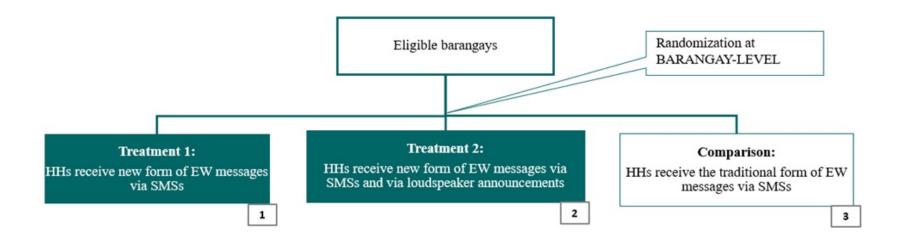


Encouragement design can be used for programs and policies that are universally available but not universally adopted

Instead of randomizing "treatment", randomize your mobilization activities!

An example of a suitable encouragement is an information campaign for an ongoing program

→ Randomly generate variation in take-up between the two, otherwise equal, groups





Independent Evaluation Unit TYPES OF RCT's



Simple Lottery Design/ Classical RCT

Phased-in RCT

Randomized controlled trials

Random encouragement design

Cluster randomization design





CLUSTERED RCT



- Interventions often utilise groups, clubs or association
- In such cases individual treatment is not possible
- Instead, we randomize at the 'cluster' level, even when we collect data on a lower level
- Has implications for sample size calculations

Household-level randomization



Village/community-level randomization







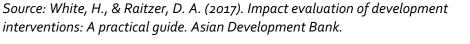
STEPS FOR RANDOMIZATION



How to implement an RCT:

- 1. Identify the evaluation question
- 2. Identify the intervention (isolate treatment/s of interest)
- 3. Discuss spillover effects
- 4. Determine level of randomization, treatment and analysis
- Decide on the type of randomization

- 6. Identify your eligibility group
- 7. Draw the sample for analysis
- 8. Randomize
- Collect baseline & check balance
- 10. Ensure the integrity of the design & monitor





IMPACT EVALUATION



Experimental impact evaluation

- Experiments use a counterfactual framework to ensure observable and unobservable characteristics of T and C groups are, on average, balanced through random assignment of the intervention
- But experiments are not always desirable or practical

Quasi-experimental impact evaluation

These use a counterfactual framework by creating an <u>artificial comparison group</u>



QUASI-EXPERIMENTAL METHODS



1. Difference-indifference

2. Propensity score matching

Quasi-experimental methods

3. Regression discontinuity design (RDD)

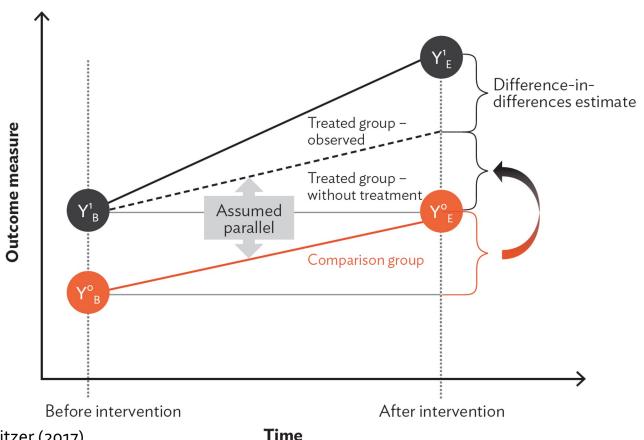
4. Instrumental variable regression (IV)





Difference-in-differences

Uses panel data (tracks the same unit through time)



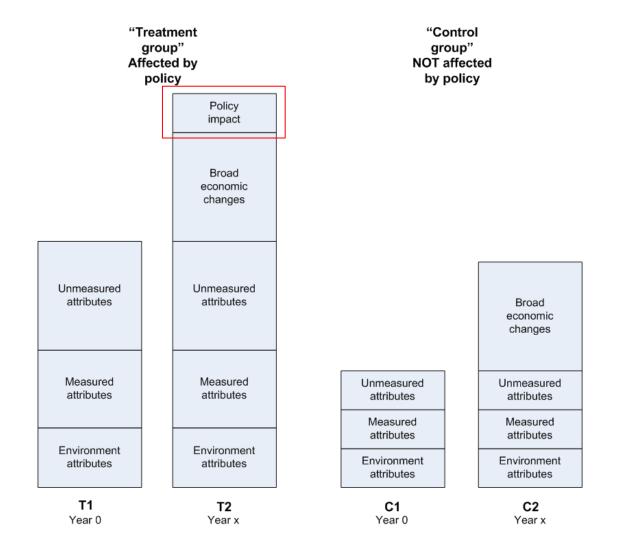
- If we assess the T group before and after the intervention, we do not control for selection bias or programme targeting
- We might also not pick up the effects of wider factors that changed around the time of the intervention
- But if we track both T and C group through time, we can control for these wider factors







Difference-in-differences



- DiD assumes that differences between T and C groups are constant through time (attributes)
- So, in this graphic here, we can see that T and C groups differ in terms of (un)measured and environment attributes (as there is no randomisation)
- But we can also see that these attributes stay constant through time
- Importantly, both groups are subject to the same broad economic changes through time (this is the parallel trend assumption)

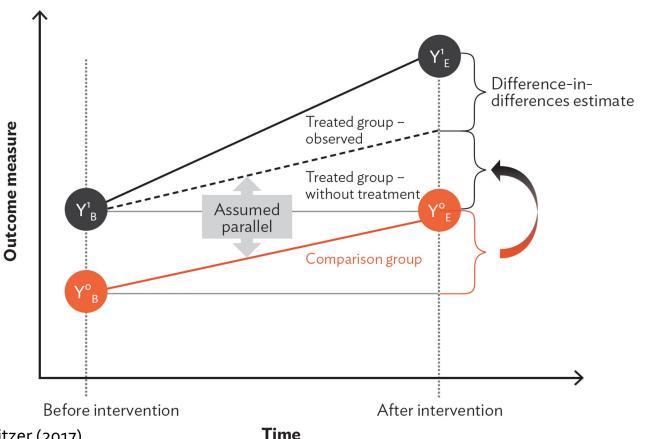






Difference-in-differences

Uses panel data (tracks the same unit through time)



- Program impact is the difference between the T group and the <u>comparison group</u> through time
- The method requires baseline data before the intervention affects beneficiaries
- The parallel trend assumption can be tested if there are multiple data points prior to the intervention



QUASI-EXPERIMENTAL METHODS



1. Difference-indifference

2. Propensity score matching

Quasi-experimental methods

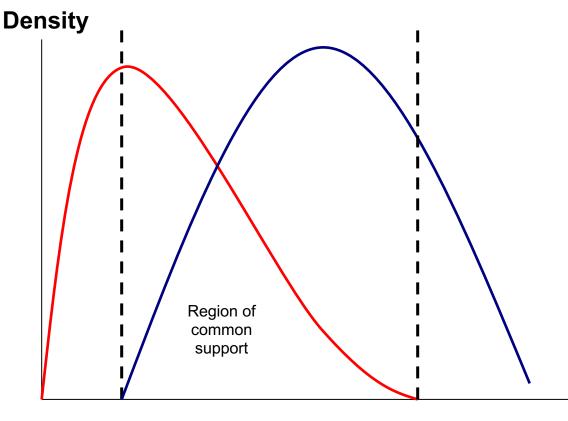
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Propensity score matching



- PSM models the probability of participating in the program on the basis of observed characteristics unaffected by the program
- PSM allows you to construct an <u>artificial</u> comparison group
- In propensity score matching, each T unit is matched with one or more C units based on the probability for that unit to participate in the programme based on observable characteristics
- But only those that fit into the range of common support are matched

Propensity score

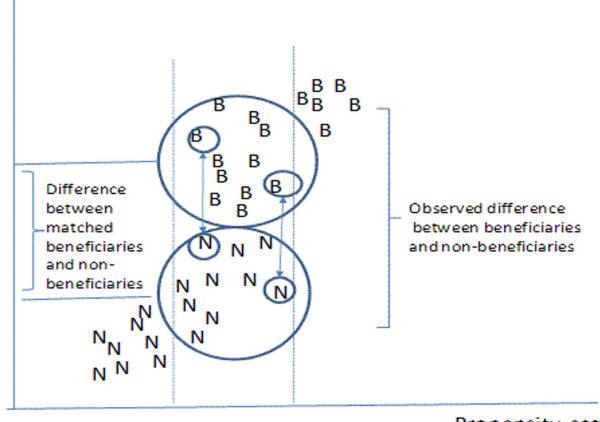
High probability of participating given X



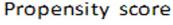




Propensity score matching



- In this illustration we can see that only the units within the range of common support (dashed vertical lines) are used to generate an estimate of impact
- Units can be matched in a variety of ways with different methods (1-1, caliper, kernel, direct) applied as a sensitivity check
- Matching must be based on pre-treatment characteristics which are unaffected by project participation, with as many key relevant predictors included as possible (at multiple scales)

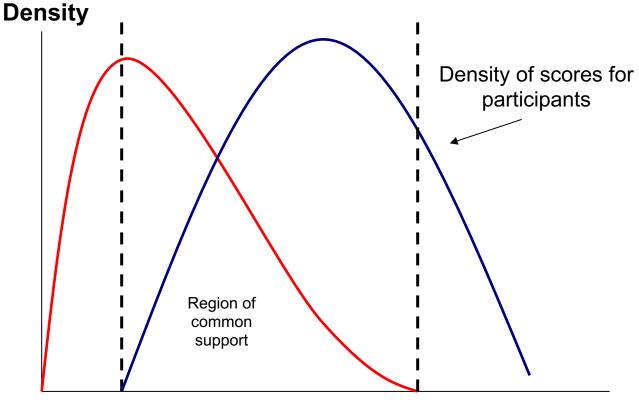








Propensity score matching



- The same data source should be used for both T and C groups
- The larger the sample, the better the matching will be
- Data should include district, community, household and individual variables
- Can be used on end-line data using time invariant characteristics and recall, if baseline is not available
- Key shortcoming only uses observables (so ignoring unobservables such as risk preferences)

0White and Raitzer (2017)

Propensity score

High probability of participating given X





QUASI-EXPERIMENTAL METHODS



1. Difference-indifference 2. Propensity score matching

Quasi-experimental methods

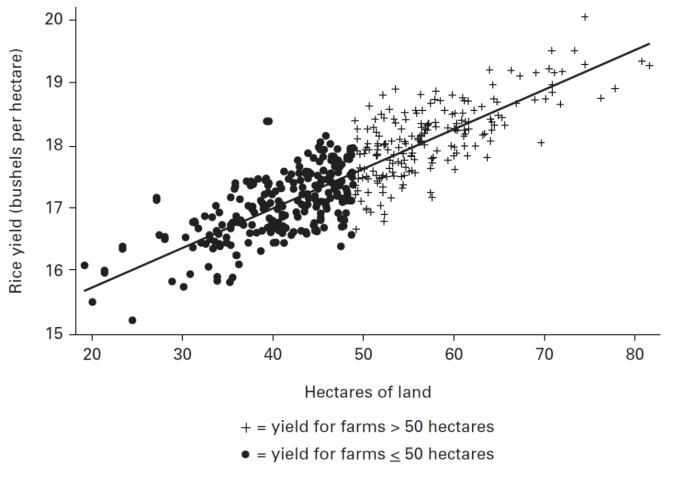
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Regression discontinuity design

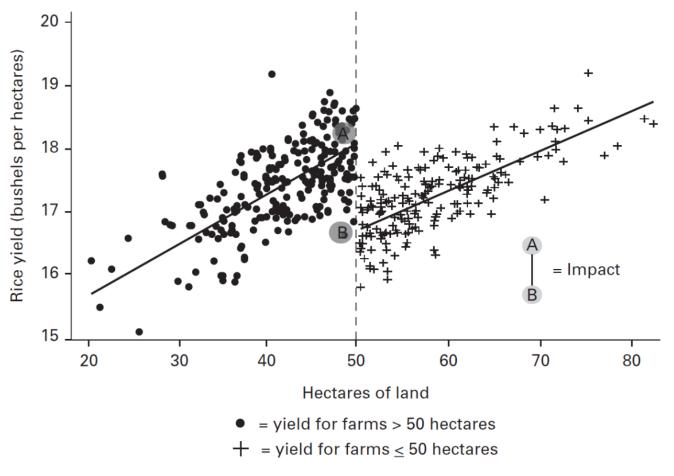


- Many programs use a continuous index (such as a vulnerability score, credit rating score, test score) for eligibility
- RDD uses the **threshold** for eligibility as the way to create an artificial comparison group
- RDD assumes that the units very close to the threshold are similar (in this way it creates a local RCT above and below the threshold)
- Balancing tests (e.g. t-tests) on observables are applied until differences between T and C groups start to widen (and the maximum bandwidth is then set)





Regression discontinuity design



- The impact of the intervention is the outcome indicator above and below the threshold
- This example here illustrates how the hypothetical impact of a fertilizer subsidy for farms <50 hectares
- Different bandwidths can be used for sensitivity analysis
- RDD controls for both observables and unobservables
- Different types of thresholds can be used (spatial, time sensitive)



QUASI-EXPERIMENTAL METHODS



1. Difference-in-difference

2. Propensity score matching

Quasi Experimental methods

3. Regression discontinuity design (RDD)

4. Instrumental variable regression (IV)







Instrumental variable regression

- This approach uses an additional variable (the IV) that is highly correlated with program participation, but is not correlated with unobservable characteristics affecting outcomes
- It uses this additional IV variable to 'clean' the treatment variable by separating out and discarding the part of the treatment variable that is correlated with the error term
- The new untainted treatment variable is now uncorrelated with the error term and is independent of unobservable characteristics that are affecting outcomes, leading to more accurate estimates





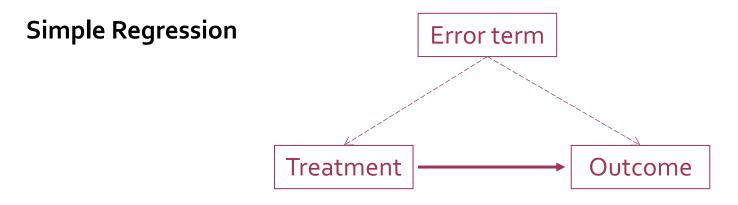
Instrumental variable regression

- How can we find a relevant IV for an impact evaluation?
- An IV needs to influence project take-up (such that it predicts the treatment, relevant instrument)
- But does not affect the outcomes through any channel except through the project (such that it is a *valid instrument*)
- Examples are project specific it can be hard to find a valid instrument! Within an RCT, if we
 have contagion between T and C groups an ideal IV is the randomised treatment variable (to
 generate LATE)



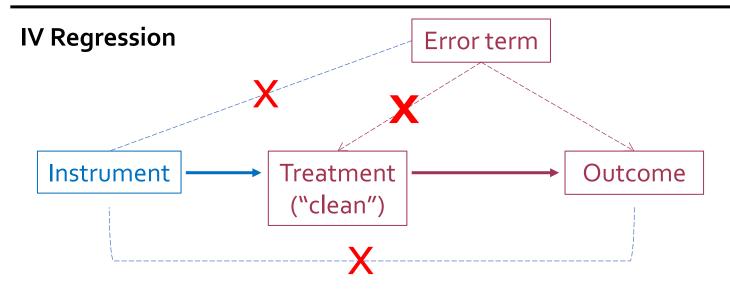


Instrumental variable regression



<u>Intuition</u>: some factors influence both treatment <u>and</u> outcome at the same time.

If this is not accounted for – i.e. they are captured in both the treatment variable and the *error term* – they 'pollute' the relationship between the treatment and the outcome.



<u>Intuition</u>: an instrumental variable is correlated with outcomes *solely through* the treatment variable.

This IV is used to 'clean' the treatment variable by removing its correlation with the error term, thus isolating the (unpolluted) relationship between treatment and outcome.



TODAY



Webinar 3 - Experimental and non-experimental impact evaluation methods

Moderator

Viviana Uruena (C4ED)

5 mins

Presentation on experimental and non-experimental impact evaluation methods

Viviana Uruena (Martin Prowse (IEU)

5-minute break

Experience in evaluating climate projects within the King Climate Action Initiative (JPAL)

Questions and answers session

Claire Walsh (JPAL)

20 mins

Deborah Sun (IEU)







5-minute break





TODAY



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Quiz	Deborah Sun Kim (IEU)	5 mins





Evaluating the efficacy of climate change mitigation interventions using RCTs

Claire Walsh

Project Director, King Climate Action Initiative at J-PAL Associate Director of Policy, J-PAL Global



Outline

- About J-PAL and the King Climate Action Initiative (K-CAI)
- Challenges and approaches to measuring impact of climate change mitigation programs
 - a. Examples of randomized evaluations in climate change mitigation

Goal: show that it is possible to design and implement impact evaluations of climate change mitigation programs and share lessons learned from common challenges

J-PAL is a global network of researchers and research centers working to reduce poverty and combat climate change by ensuring that policy is informed by scientific evidence





We fund innovative new research and help carry out affiliates' research projects on the ground.



Policy outreach

We synthesize results, build partnerships, lend technical assistance, and embed staff to apply insights from research in policy.



Education & Training

We lead executive trainings and develop education programs to build a culture of evidence-informed policy.

Climate change threatens to undo decades of progress in poverty alleviation



Evidence-informed climate policy is crucial

- Policymakers need more evidence on the real-world impacts of potential climate solutions on people and the environment
- Through innovative measurement and partnerships, randomized evaluations can answer important climate questions
 - Partners: utilities, companies, governments, and regulators to evaluate policies and technologies at scale
 - Measurement: Remote and real-time outcome measurement technology (e.g. satellite and remote sensing data), administrative data

The King Climate Action Initiative: combating climate change and poverty with evidence



Mission: Innovate, evaluate, and scale evidence-informed climate solutions with policymakers worldwide



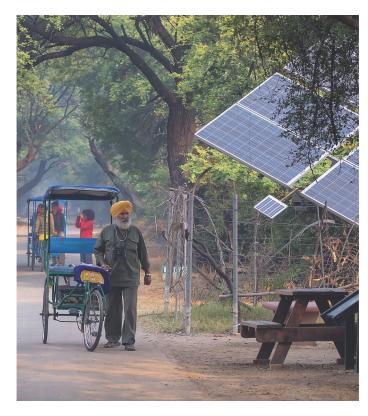
Launched in 2020

Goals: Raise the standard for evidence of effectiveness in climate policy

Reach at least 25 million people with effective climate solutions by 2030

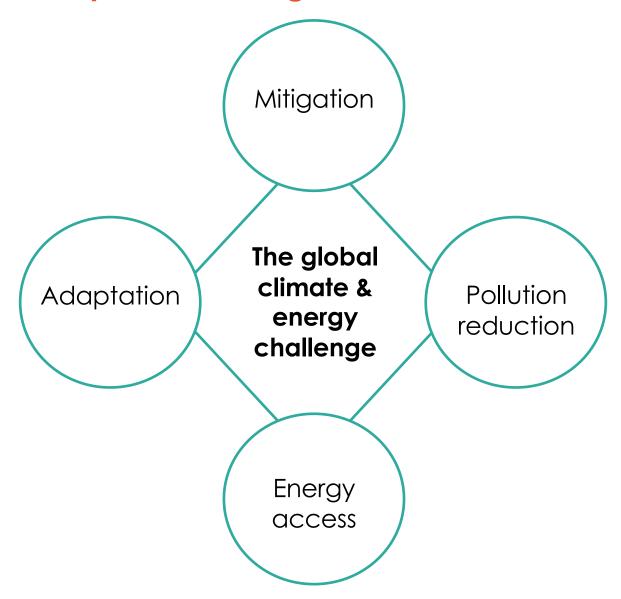
Cut emissions equivalent to \$125M

So far launched **30+ research and 6** scaling projects in 20 countries





K-CAI focuses on four pillars of the global climate and energy challenge



K-CAI generates evidence and collaborates with policy partners to scale evidence-informed climate solutions

Research projects

Co-design and evaluate potential solutions through pilots and randomized evaluations

Scaling projects

Provide partners with technical support to adapt and scale effective solutions using existing evidence

K-CAI Fellows

Cadre of fellows based in priority countries developing research and scaling partnerships

Across our work, we prioritize solutions that benefit people in poverty

Outline

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Some common challenges

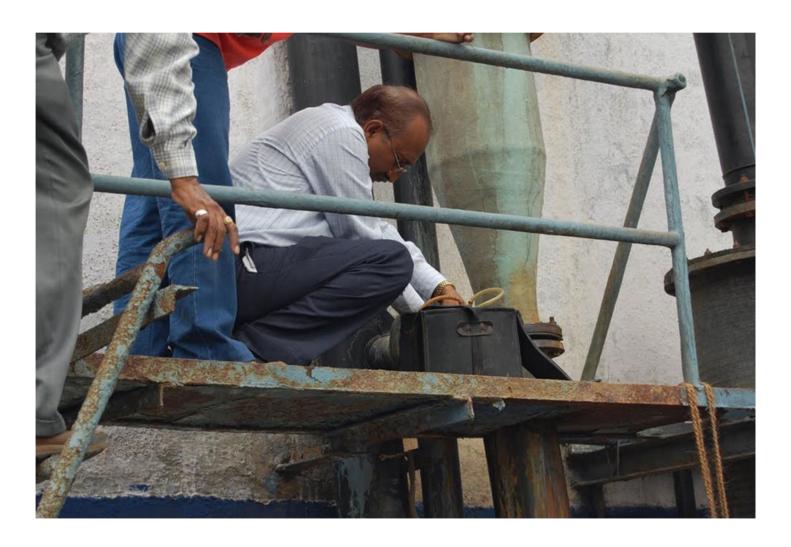
- 1. Evaluating large-scale interventions
- 2. Accessing objective outcome measures for environmental outcomes
- 3. Accounting for displacement effects and spillovers
- 4. Low take-up of emissions reducing technologies
- 5. Designing evaluations to unpack mechanisms of impact



Challenge 1: Evaluating large-scale interventions

The interventions with highest potential to reduce emissions are often larger-scale government or corporate interventions

Partnering with regulators: Adapting and scaling emissions trading schemes to reduce air pollution in India



Researchers: Michael
Greenstone, Rohini Pande,
Nicholas Ryan, Anant
Sudarshan

Policy Partners: Gujarat and Punjab Pollution Control Boards, Ministry of Environment, Forests, & Climate Change

Funding Partners: MacArthur Foundation, USAID, 3ie, Shakti Sustainable Energy Foundation

Partnering with companies: Improving fuel management to reduce carbon emissions in the shipping industry



Researchers:

Robert Metcalfe

Partners:

Bernhard Schulte Shipmanagement Signol Limited

Partnering with SMEs: adoption of energy-efficient stitching motors in Bangladesh

- New motor cuts electricity use from sewing machines by 75%
- Can informing small and medium clothing manufacturing managers about energy efficient motors increase adoption?
- Does the motor reduce energy energy costs?

consumption (and CO2 emissions) and SMEs



Garment factory worker in Bangladesh. Photo: Sk Hasan Ali | Shutterstock.com

Researchers: Eric Verhoogen, Ritam Chaurey, <u>Yunfan Gu, Gaurav Nayyar, Siddharth Sharma</u>



Challenge 2: Objectively measuring environmental outcomes

Impact evaluators often specialize in surveys, but surveys are suboptimal for measuring environmental outcomes

Approaches to measuring environmental outcomes beyond self-reports

1. Energy use

- a. Data use agreements/partnerships with utilities
- b. Interventions that track energy use (PAYG solar, smart plugs/meters)
- c. Energy bills from firms or households

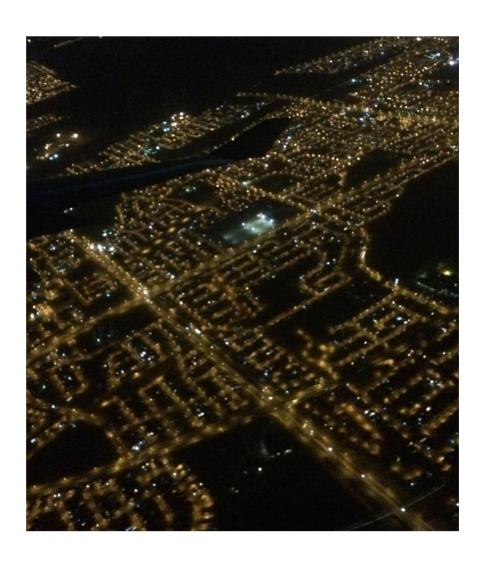
2. Carbon, GHG, pollution emissions

- a. Measure intermediate outcome and apply standard conversion factors
- b. Data use agreements/partnerships with regulators and/or firms
- c. Continuous emissions monitoring, sensors
- a. Satellite data

3. Deforestation/sequestration

- a. Satellite data
- b. Spot checks, enumerator observation
- c. Soil carbon content

Using energy billing data to measure the impact of an energy reform



Partner: City of Cape Town

Researchers: Kelsey Jack, Grant Smith

- 4,175 utility customers randomly assigned to switch to a prepaid meter from a post-paid meter
- Electricity use fell by 14% the following year
- Revenue from consumption falls but more is recovered on time and at a lower cost
- Cost of meters recovered in less than 1 year
- Customers with a history of delinquent payments showed greatest improvement in payment
- Now measuring impacts of reform on welfare of low-income consumers



Challenge 3: Accounting for displacement and spillover effects

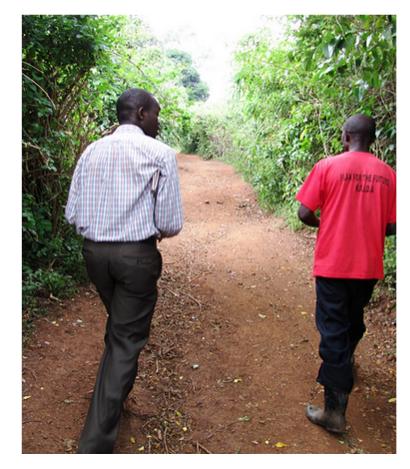
Behavioral responses by people and firms can influence the effectiveness of mitigation policies: Try to use administrative and remote sensing data to measure them directly

In Uganda, researchers used satellite data to measure displacement effects of payments for ecosystem services

121 villages randomly assigned to PES offer: Annual payment \$33 per hectare for avoiding cutting trees

- Take up was 32%
- Tree cover declined by 4% in treatment villages compared to 9% in control
- Used satellite data to measure displacement of deforestation onto other land and found no increase in deforestation on other land
- \$0.57 per ton CO2 delayed
- Benefit of delayed carbon emissions was 2.4 times costs

Now: Ongoing evaluation to inform PES program in Mexico



Researchers: <u>Seema Jayachandran</u>
<u>Charlotte Stanton Joost de Laat Eric</u>
Lambin

When studying renewable energy adoption, it is important to track substitution between energy sources to calculate effects on emissions

In 100 villages, randomly assigned villages to be offered microgrid power at full price (200 INR/month) or half price (100/month)

Low take-up: 0% for full price, 9% half price

Small amount of power increased access to lighting and phone charging, but no impacts on income, health, savings

Energy market more competitive than expected:

- Diesel generators, kerosene, imperfect grid
- People waiting for grid expansion



Researchers: Robin Burgess, Michael
Greenstone, Nick Ryan, Anant Sudarshan

Partner: Husk Power Systems



Challenge 4: Low-take up of emissions reducing technologies

What if people and firms don't take up the emissions reducing technology?

- --Pricing interventions and subsidies to increase take-up
- --Application assistance, nudges, reducing barriers to enrollment

In Michigan, researchers provided reminder calls and extensive application support to get sufficient take-up of an energy efficiency program

- Randomly encouraged households to take up the Weatherization Assistance Program (WAP)
- Models predicted energy savings of \$9,000

Results:

- Take up was only 6% despite intensive encouragement
- WAP reduced energy consumption by 10–20% among participating households
- Weatherization produced 36% of the expected energy savings
- No evidence of a rebound effect



Researchers: Meredith Fowlie, Michael Greenstone, Catherine Wolfram



Challenge 5: Unpacking mechanisms of impact

Important to understand why something works or doesn't work:

- --Multiple treatment arms
- -- Complementary qualitative research



Using multiple treatment arms to unpack mechanisms of impact for a PES program to reduce stubble burning

- Lower PES (30 villages): US\$10.71 per acre for up to ten acres on the condition that they not burn their paddy fields.
- Higher PES (28 villages): US\$21.42 per acre for up to ten acres on the condition that they not burn their paddy fields.
- Lower PES + 25 percent advance (31 villages): Farmers were offered the lower PES agreement, and if they accepted it, received 25 percent of the amount per acre upon signing.
- Lower PES + 50 percent advance (31 villages): Farmers were offered the lower PES agreement, and if they accepted it, received 50 percent of the amount per acre upon signing.
- Comparison (51 villages): Farmers engaged in business as usual, with no PES offer.
- Unpacking whether size of payment is important, and whether liquidity constraints are driving burning behavior



Researchers: <u>Kelsey Jack, Seema</u>
<u>Jayachandran, Namrata Kala, Rohini Pande</u>

Partner: Government of Punjab, India

Some common challenges and how researchers have tried to address them...

- 1. Evaluating large-scale interventions
 - a. Partner with governments and firms (regulators, utilities, firms)
 - b. Use administrative data to measure energy and emissions outcomes
- 2. Getting objective outcome measures for environmental outcomes
 - a. Satellite and other remote sensing data
 - b. Energy use data from utilities
 - c. Emissions data from regulators, CEMS, satellites

Some common challenges and how researchers have tried to address them...

- 3. Accounting for displacement effects and spillovers
 - a. Measuring spillovers and displacement effects directly
 - b. Renewables: Collect data on all energy sources
- 4. Low take-up of emissions reducing technologies
 - a. Pricing interventions and subsidies to measure WTP
 - b. Application assistance, nudges, removing barriers to enrollment
- 5. Designing evaluations to unpack mechanisms of impact
 - a. Multiple treatment arms
 - b. Complementary qualitative research



Thank you!

http://www.povertyactionlab.org/kcai

Contact <u>kcai@povertyactionlab.org</u> if you are interested in learning more about our work or exploring collaboration.





TODAY



30 mins

Webinar :	a - Ex	perimenta	l and non-ex	perimental	impact eval	luation methods
Webillar)	permienta	i uliu lioli ca	permientar	iiiipact cva	

Moderator

Viviana Uruena (C4ED)

5 mins

Presentation on experimental and nonexperimental impact evaluation methods

6-minute break

Claire Walsh

(JPAL)

Questions and answers session20 minsQuizDeborah Sun Kim (IEU)5 mins

Experience in evaluating climate projects within

the King Climate Action Initiative (JPAL)







Q&A time





TODAY



Webinar 3 - Experimental and non-experimental impact evaluation methods

Viviana Uruena Moderator 5 mins (C₄ED) Presentation on experimental and non-Martin Prowse 30 mins experimental impact evaluation methods (IEU) 5-minute break Experience in evaluating climate projects within Claire Walsh 30 mins the King Climate Action Initiative (JPAL) (JPAL) Questions and answers session 20 mins **Deborah Sun** Quiz 5 mins Kim (IEU)





Quiz





Thank you!

ieu.lorta@gcfund.org

@GCF_Eval
#LORTA





Welcome to our LORTA Webinar!

- We will be beginning the webinar shortly.
- While you are waiting, be sure to follow us online to keep up with the latest news from the IEU!















HOUSEKEEPING









MUTE BUTTON

QUESTIONS

RAISEYOUR HAND





today



Webinar 4 – Monitoring, timeline, budget and ethics and evaluation standards

Presentation on Monitoring	Alexander Mewes (C4ED)	20 mins
Presentation on Timeline and budget	Saesol Kang (IEU)	20 mins
Presentation on Ethics and evaluation standards	Rishabh Moudgill (IEU)	25 mins

5-minute break

Questions and answers session	Anastasia Aladysheva (IEU)	25 mins
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Webinar 4

Monitoring for an Impact Evaluation

LORTA TEAM — Independent Evaluation Unit July 2022

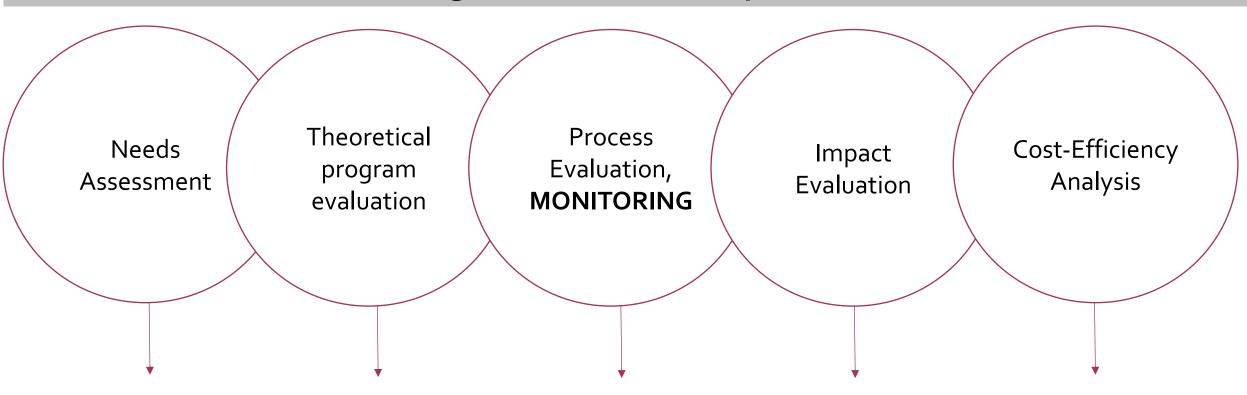




Monitoring

LORTA Webinar 4 - 2022

Monitoring, Evaluation, and Impact Evaluation



What is the challenge?
What is the objective of the program?

How, in theory, can we solve the challenge?

Does the program work as planned?

Are the impact objectives being met?
To what extent?

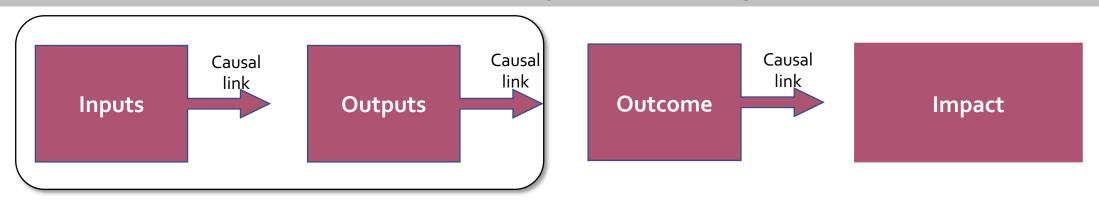
Given its effect and cost, how does this program compare with other alternatives?



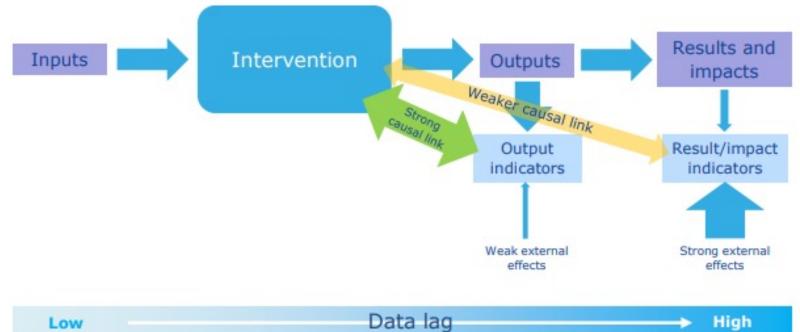
Monitoring

LORTA Webinar 4 - 2022

Theory of Change and Monitoring



Monitoring, Evaluation, and Impact Evaluation



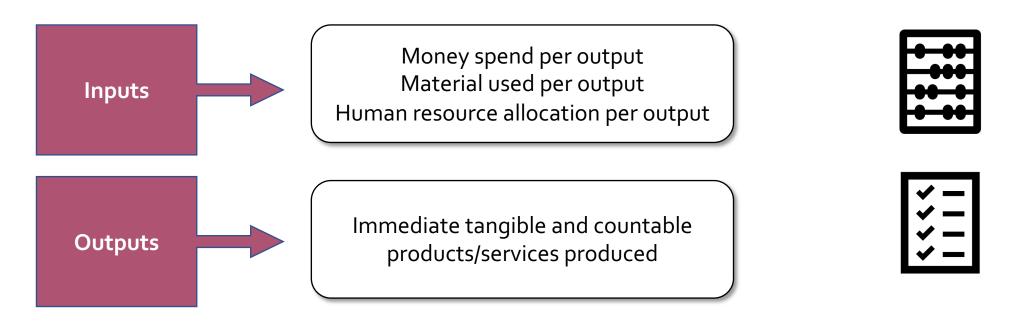
Source: 'Better Regulation' Toolbox, European

Commission, 2021, p. 359



What needs to me monitored?

LORTA Webinar 4 - 2022







How many resources were spent on which output?

How many resources are still available for which output?

To what extend is the project close to achieving the output target?

How is the project proceeding?

Who received what kind of intervention/activity? (e.g. trainings)





Why do we need monitoring?

LORTA Webinar 4 - 2022

Example of an impact evaluation with missing monitoring data

A team of evaluators assess the impact of a training on sustainable agriculture

First observations:

- Highly qualified trainers are conducting the trainings
- Curriculum meets the highest scientific standards
- Curriculum is based on the farmers' needs
- Every farmer received a unique ID before training

Final result of the impact evaluation:

- ➤ No effect of the training on the participant's knowledge about sustainable agriculture is detectable in one training center!
- No increase in the application of sustainable agriculture techniques detected in the same training center!

Why?

- After consulting the trainers, it turns out that most of the farmers could only attend 4 of the 20 days of training due to extremely bad weather
 - No monitoring data on attendance was collected during the trainings





Setting up a Monitoring Plan

LORTA Webinar 4 - 2022

Overarching questions

What do we want to monitor?
How do we want to monitor it?
When do we want to monitor it?
Who does the monitoring?

Example of a monitoring plan for inputs

Input	Unit of Measurement	Frequency of measurement	Budget	Related Output	Person Responsible

Example of a monitoring plan for outputs

Output	Indicator	Type of Indicator	Unit of Measurement	Frequency of Measurement	Target	Person Responsible





TODAY



25 mins

Moudgill (IEU)

Webinar 4 – Monitoring, timeline, budget and ethics and evaluation standards

Presentation on Ethics and evaluation standards

Alexander Presentation on Monitoring 20 mins Mewes (C₄ED) Saesol Kang Presentation on Timeline and budget 20 mins (IEU) Rishabh

5-minute break

Questions and answers session	Anastasia Aladysheva (IEU)	25 mins
Information about rapid-fire presentations	Anastasia Aladysheva (IEU)	15 mins
Quiz	Deborah Kim (IEU)	5 mins





Webinar 4

Timeline and Budget of an Impact Evaluation

LORTA TEAM — Independent Evaluation Unit July 2022







GENERAL REMARKS





- Impact evaluation and project implementation are intertwined
- For rigorous impact evaluation, it is important to plan the IE design at the beginning of the project, before the start of implementation



Timeline – Example



						E	3ase	line	-Yea	ır 20	021 - Mo	nth	ıs										
	Jan	F	eb	М	ar	Ар	r	1	May		Jun		Jul	,	Aug	Se	ep	Oct	Т	No	ΟV	Dec	
Preparation of Scoping Mission																							
Scoping mission																							
Desk review																							
Writing of IE design report																							
Preparation of survey tools																							
Preparation data collection																							
Pre-test and training																							
Data collection																							
Project Implementation to start (earliest)																							
Data cleaning																							
Data analysis																							
Writing of IE Baseline report																							
Dissemination of findings																							



TIMELINE



- Evaluation phases:
 - I. Baseline (if needed): BEFORE or AT THE START OF project implementation
 - II. Midline (optional)
 - III. Endline: After project ends
- Decision for baseline and midline depends on the selected evaluation design as well as project interests and resources
 - RCT → baseline data collection is highly desirable but not strictly necessary
 - DiD → baseline and endline mandatory
- Should be determined *together* with an IE specialist





Timeline of one evaluation phase



8-12 months

- Formation of a core evaluation team
- Documentation review
- 3. Scoping mission
- 4. Evaluation design and TOC
- 5. Sampling
- 6. Data collection tools(e.g. questionnaire, KIIs, FGDs and case studies if needed)
- 7. Data collection
- 8. Data cleaning and analysis
- 9. Reporting of results
- 10. Dissemination of results

Repeated for every evaluation phase





Possible hitches and glitches







- Ethical clearance and local research permissions
- Procurement takes time
- Holiday/festivals/elections
- Missing/incomplete data

- 1. Plan sufficient time for activities!!
- 2. Local knowledge for timing is important !!
- 3. Get contact information of respondents!!



Possible hitches and glitches





2. Unforeseeable challenges

- Natural disasters, pandemics, local conflict
- Delays in project implementation
- Change in project team/contact person of local partner

- 4. Be prepared for changes and include buffer!!
- 5. Be flexible and innovative!!
- 6. Get documentation for everything!!



Timeline – Example for Baseline



		Baseli	ne -Yea	r 2021 -	Month	IS							
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Preparation of Scoping Mission													
Scoping mission													
Desk review													
Writing of IE design report													
Preparation of survey tools													
Preparation data collection													
Pre-test and training													
Data collection	At baseline, data collection												
Project Implementation to start (earliest)					shoul proje	_	_						
Data cleaning									\				
Data analysis													
Writing of IE Baseline report													
Dissemination of findings													

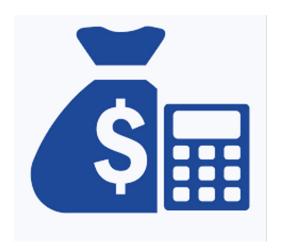


Budget



Determining factors:

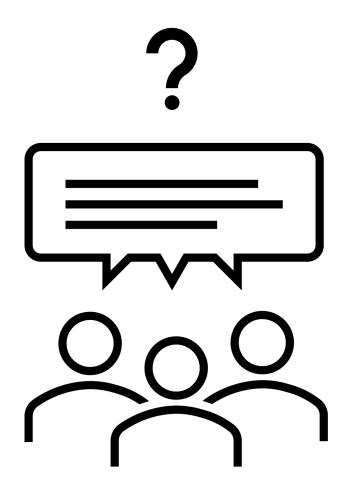
- Overall living cost/price level in a country
- Sample size and numbers of evaluation points
- Transport
- Security
- Number of *languages* spoken in project region
- Outsourcing data collection to an external firm





CHALLENGES IN SETTINGS WITH MULTIPLE LANGUAGES

- Working with multiple languages increases cost and time needed to prepare a survey
- To preserve the context and nuances of questions, stakeholders can hold a plenary session to agree on the wording in every language
- The final content of questionnaires can be agreed upon based on discussions with researchers, enumerators, and potential respondents





Budget –External Firms





- Specialized firms usually produce higher-quality data
- Gives project team more time
- Ensures independence of impact evaluation
- Often no choice since procurement is required and best practice

- Procurement takes time
- Cost is usually higher (including for coordination)
- Less flexible and might be risky
- Still necessary to check data quality and analysis

For procurement:

It is important to have someone knowledgeable to judge the quality of technical proposals !!

Detailed TORs are important !!



Budget items for data collection



Examples of budget items		
Staff Cost	Field coordinator, supervisor, enumerator, moderator (qualitative), translator	
Training Cost	Training venue, catering, training stipend for participants, accomodation	
Transport	Car hire, fuel, driver, bus fare, motorcycle during training and data collection	
Other	Tablets, incentives, printing of training material, communication/internet cost, venue for focus group discussions (qualitative)	



TODAY



Webinar 4 – Monitoring, timeline, budget and ethics and evaluation standards

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Webinar 4

Ethics and Evaluation Standards for Impact Evaluation

Rishabh Moudgill — Independent Evaluation Unit July 2022







OVERVIEW



Introduction to GCF Evaluation Policy



Introduction to GCF Evaluation Standards



Limitations and Critique of Ethics in RCTs



Specific Standards relating to Impact Evaluations





GCF EVALUATION POLICY

- Paragraph 22: "AEs may conduct impact evaluations for GCF funded activities, in collaboration with the GCF."
- Paragraph 53: "The IEU will be responsible for advising, guiding and assisting realtime impact assessments/evaluations for a selection of the funded activities portfolio, such as LORTA.."
- Paragraph 58 (d): "Overall evaluation budget should be up to 5% of the project budget which can include impact assessments and evaluations.."
- Paragraph 58 (e): "The long-term aim is that approximately 30 % of the Fund's projects and programmes approved annually by the Board will include real-time impact assessments as part of their evaluation plans.."



GCF Evaluation standards

- 15 Evaluation Standards
- 2 Appendices

Standards specifically pertaining to ethics in IEs:

- 1. Ethics
- 2. Respect and Beneficence
- Confidentiality and 'Do No Harm'
- 4. Gender and Indigenous Peoples

- 1 Independence
- 2 Impartiality and Objectivity
- 3 Utility and Value Added
- 4 Ownership and Participation
- 5 Credibility and Rigour
- 6 Transparency
- 7 Learning
- 8 Human Rights, Gender Equality and Environmental Considerations
- 9 Confidentiality
- 10 Cost-effectiveness
- 11 Ethics
- 12 Integrity
- 13 Accountability
- 14 Competence
- 15 Respect and Beneficence



STANDARD ON ETHICS

- UNEG defines ethics as "the right or agreed principles and values that govern the behaviour of an individual within the specific, culturally defined context within which an evaluation is commissioned or undertaken" (UNEG Norm o6, 2016)
- Participants in evaluations must be treated with respect and dignity, which entails robust procedures to protect their privacy and sensitive information
- Evaluations must practice free, prior and informed consent
- Evaluators should apply ethical review processes when planning primary data collection with potentially vulnerable people
- There should be a mechanism for reporting potential ethical problems created by the evaluation or identified by the evaluation, and appropriate actions should be taken in both cases



STANDARD ON **RESPECT AND BENEFICENCE**

- Respect involves engaging with all stakeholders of an evaluation in a way that honours their dignity, well-being and personal agency
- All stakeholders should be treated fairly while having access to the evaluation process and product
- Familiarity with the cultural values, social values and characteristics of the recipients and intended beneficiaries
- Beneficence requires explicit considerations of risks and benefits alongside warranting to maximize benefits and 'do no harm'





STANDARD ON CONFIDENTIALITY AND 'DO NO HARM'



- Evaluations must obtain free, prior and informed consent from the participants to use private information
- Confidentiality of evaluation participants should be protected throughout the evaluation process
- For Accountability, evaluators should report potential or actual harms observed through the appropriate channels



CONSIDERATION OF DIMENSIONS RELATED TO **GENDER AND INDIGENOUS PEOPLES**

- Using tailored and sensitive methodologies
- Data collection should be sensitive to the intersecting factors

 Evaluation recommendations should be sensitive to how they will impact women, Indigenous Peoples and other stakeholders

 The evaluation report should be available and accessible to the community



LIMITATIONS

Belmont Report: Three pillars of ethical RCTs.

- Respect for persons
- 2. Beneficence
- 3. Justice

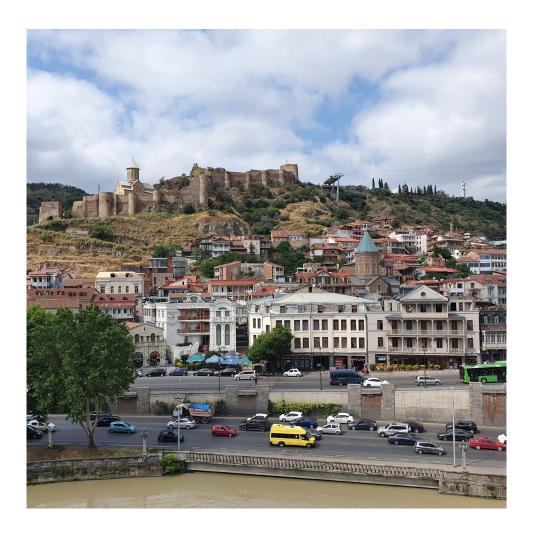
Critique:

- One size fits all
- Consideration of other factors (culture, gender, ethnic etc.)
- Prioritization among the three principles





CRITIQUE OF ETHICS OF RCTS



What if the intervention is not legal?

Accountability in case of adverse outcomes?

High cost of RCTs, relative to other methods

RCTs can distort research agendas, with obvious or banal questions and high costs

Findings of RCTs compared to advocacy of results

Power: who designs an RCT and who is the beneficiary?





In Conclusion



Policy provides an enabling environment



Ethics are quite central to RCTs



Consideration of ethics can enhance effectiveness and utility





TODAY



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TODAY



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Q&A time





TODAY



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NEXT WEEK - PLAN



Live at 9 pm KST!

• All teams will be presenting their slide decks with the deliverables from their breakout

sessions

- Mandatory slides:
 - Project background (1st slide)
 - 2) Brief impact evaluation design (2nd slide) Ex) ToC, experimental/non-experimental method, and timeline and budget
 - 3) Three key takeaways from the workshop (3rd slide)
- Each presentation will consist of a maximum of 3 slides.
- Each presentation <u>SHOULD NOT</u> take more than **5 minutes**
- Each presentation will be followed by 5 minutes of question-and-answer session
- Each team will act as a discussant for one presentation of a different team.
- These presentations will help the LORTA team in the shortlisting of projects



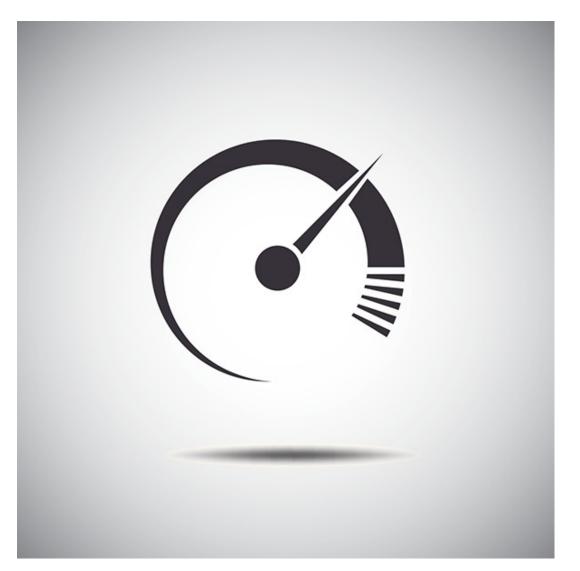


NEXT WEEK - PLAN

 All project teams need to submit their slide decks by Thursday, July 14, COB

 The project teams need to submit the name of the presenter before the rapid-fire session

 The participants will receive course completion certificates in the next few weeks





PRESENTATIONS ON FRIDAY, 15 JULY

#	Team 1	Team 2
1.	United Nations Development Programme, Bhutan	Small Industries Development Bank of India
2.	Fundación Avina, Panama	The Peruvian Trust Fund for National Parks and Protected Areas
3.	Development Bank of Southern Africa	Ministry of Finance and Economic Management, Cook Islands
4.	Environmental Project Implementation Unit, State Agency of the Ministry of Nature Protection, Armenia	Fonds National pour L'Environnement, Benin

PRESENTATIONS ON TUESDAY, 19 JULY

#	Team 1	Team 2
1.	National Committee for Sub-National Democratic Development, Cambodia	Fiji Development Bank
2.	Inter-American Institute for Cooperation in Agriculture, Costa Rica	South African National Biodiversity Institute
3.	Centre de Suivi Ecologique, Senegal	National Rural Support Programme, Pakistan
4.	Fondo para la Acción Ambiental y la Niñez, Colombia	Central American Bank for Economic Integration, Honduras



Quiz





Thank you!

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@GCF_Eval
#LORTA

