

# **Program Evaluation Activities**

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**AERC**  
**Mombasa, May 2009**

## Evidence-based policy recommendation

- How can we use Randomization to enhance policy?
- Think of policy recommendations to support small farmer's agriculture  
We have seen many in this conference; others in speeches and papers
- Can we think of one specific randomized experiment which would support one of these policy recommendations?

## Matching Methods & Propensity Scores

Exercise: Examples of program assignation.

- Plausible that they qualify for PSM?
- If yes, what variables would you use to do the matching?

- A microfinance in Guatemala offers micro-credit to small farmer households. In order to evaluate the impact of taking credit on the welfare of the households, can we construct a comparison group of households with the PSM method using the existing LSMS?

- An NGO has provided clean water sources in 85 villages widely spread over Burkina Faso. The only criteria for eligibility for the program were distance to the available drinking water source, the quality of the water during the dry season, and some vaguely defined “need”, in terms of poverty, prevalence of diarrhea among kids, etc.

## **Discontinuous eligibility**

- Brainstorm a program which has a threshold cut-off
- What is the threshold? Is it enforced?

## Checking the validity of the use of double difference

Consider Klaus Deininger's study of the impact of land certification in Ethiopia.

Panel data, 4 rounds 1999, 2001, 2004, and 2007 on 900 households  
Certification was initiated in Feb. 2003, to be extended to the whole region of interest. The unit of intervention is the village.

In the last round of 2007, 50% of the farmers have had their certification for 12 months.

Klaus measures the effect of certification on investment with a two-year panel (i.e, a double difference):

$$Inv_{it} = \beta T_{it} + X_{it} \alpha + \mu_i + \nu_t + \varepsilon_{it} \quad \text{for } t = 2004, 2007$$

What test would you do to support the validity of the method?