Impact evaluations of agricultural innovations

The agricultural thematic window
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Dr. Jyotsna Puri (Jo)
Deputy Executive Director and Head of Evaluation
3ie
1. TIMELY AND NEEDED
Agricultural productivity remains low
Pastoralism is marginalized

Figure 6: Agropastoral zones in Africa
IMPACT EVALUATIONS REMAIN WOEFULLY INADEQUATE
2. WHAT DO WE WANT FROM THE WINDOW?
Aims for the Agricultural Window

- High quality studies produced
- Policy makers and implementing agencies notice
- Better policy gets made.

- Higher agricultural productivity,
- Greater food security,
- Increased welfare of (smallholder and women) farmers.
80% OF PEOPLE WHO GO HUNGRY ARE INVOLVED IN FOOD PRODUCTION

MOST ARE WOMEN, SMALL-SCALE FARMERS AND LABOURERS
Example of a critical mass of studies that made a difference

Source: David B. Wilson, 2006, A systematic review of drug court effects on recidivism.

Figure 1. Odds ratios and 95% confidence intervals for all offenses by study.
Impact evaluations questions

• How can information be better delivered to improve farmer decisions in use of inputs and technologies (five).

• Contractual arrangements for increased market power, food security, marketed surplus and returns (four).

• Cost effective mechanisms to improve use of technologies and inputs (seven).

• Efficacy of ISFM for increased agricultural productivity and incomes (two).
3. WHAT ARE HIGH QUALITY STUDIES?
What is an impact evaluation?

The holy grail statement:

A *xxxx* program *caused* a 7% increase *(amount of change and direction of change)* in the *income* *(some measure)* of the *included* population.
What are 3ie high quality studies?

- Plan ahead; Use other sources of data.
- Discussed plan with implementers
- Strong theory of change (formative work)
- Use process evaluations & monitoring data
- MAIN outcomes and indicators in a pre-analysis plan
- Robust identification designs
- Ensure sample size and power (for TOT)
- High fidelity qualitative data, baseline and endline data and analysis
- Well written *timely*

Because Murphy’s law works!
4. WHAT DO WE WANT TO INFORM? WORKING TOWARDS A SET OF INDICATORS
A typical (naïve) theory of change

- Better agr methods identified
- Increased information
- Knowledge
- Better farming practices
In practice - theory of change

Better agr methods identified → Increased information → Knowledge increased → Better farming practices
The adoption S-curve
An example from social funds

The value of the indicator at each step in the causal chain is necessarily lower than the previous step.

Suggested meta-level indicators
For discussion

Some proximate indicators:
- **Awareness** of technology/practices
- **Uptake** of technology (implications for ITT, TOT and power)
- **Use** of technology and practices and **access** to markets.

Some ultimate indicators:
- Percentage change in *productivity or yield, agricultural output, reduced waste* (farm income or revenue??)
- **Cost-effectiveness** measures
- **Heterogeneity** and sub-group analyses (e.g. are women farmers as productive? Why? Why not?)
Process here on

- Discussions and expectations for technical quality, value for money and policy engagement.
- Revised documents
- Signed contracts
- In some cases, initial formative/pilots may be suggested especially if take-up or efficacy is critical.
- Working group
Thank you.

www.3ieimpact.org
jpuri@3ieimpact.org