Kenya Evidence Forum - June 14, 2016
Using Evidence to Improve Policy and Program Designs
Maximizing the returns to large scale infrastructure investments

Example from the Nzoia Irrigation Program

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Recap of the previous talks...

- Sanitation and Electricity investment challenges??
- Irrigation project??

Area of improvement....
- Operation and Maintenance
- Water efficiency and productivity
- Distribution of resources
- Market access, etc. etc.
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KWSCRIP Impact Evaluation team

Ministry of Water and Irrigation

PMU

Bunyala scheme

HISTORY
- Naivasha Workshop in April 2012
- Project approval in June 2013

WORLD BANK GROUP

DIME

Water GP
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IE STRATEGY

1) To measure impact of irrigation in the long-term
   - building new irrigation scheme takes time!

- From subsistence farming to commercial farming
- The impact of irrigation on:
  - Crop choices
  - Yields
  - Food security
  - Profitability
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IE STRATEGY

2) Test how to achieve the impact of irrigation in the Mid-term
   - learning from the already operating scheme

• The most effective combination of microcredit and training in improving the returns of irrigation.
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PROPOSED IE DESIGN

- Evaluation 1: Irrigation Infrastructure
  - What is the impact of irrigation on crop choices, yields, food security and profitability?
  - To evaluate the impact of overall irrigation project (Phase I).
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PROPOSED IE DESIGN

- Evaluation 2: Farmer Training & Access to Microcredit

  - What combination of training and microcredit is most effective in improving the returns of irrigation?

1) Treatment Group 1: Farmers who receive both training & access to credit
2) Treatment Group 2: Farmers who receive only training
3) Treatment Group 3: Farmers who receive only access to credit
4) Control: Farmers who receive neither training nor access to credit
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EXPECTED OUTPUT

- To improve the operation in Bunyala Irrigation Scheme
  - Process of IE helps to think through other operational challenges

- To inform the implementation plans of the broader Nzoia Irrigation Scheme.
  - Does not need to wait for the completion of the construction (end of project) to inform policy