Sinergies between research and policy advocacy to improve Food Security and Nutrition

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Outline

• Undernourishment in the world and Guatemala
• About the project
• Some results
• What more
Undernourishment in the world

90% of children with chronic undernourishment live in 34 countries

Source: Lancet Series, 2013
Undernourishment in Guatemala

Undernourishment in Guatemala

• Guatemala is within the 36 high-burden countries for stunting (49%)
• Important investments on food security and nutrition have been made during the last two decades
About the Project

• Focused on smallholders farmers (family farming)
• 4 different territories of Guatemala (10 locations)
• 8 prioritized by the biggest FSN national program

• The research component seeks to:
  a) Characterize smallholder farmers
  b) Model the food system dynamics of these families
  c) Evaluate FSN polices and practices
Results: farmers characterization

Survey (household level):

- Housing conditions
- Agricultural production
- Income
- Natural resources use
- Participation on capacity building programs
- Anthropometric data
Results: farmers characterization

Percentage of families having tap water access
Results: farmers characterization

Household's willingness to shift from food production to market oriented production:

- **San Martín Jilotepeque**
  - Territorio 1
  - Do not know: 10%
  - No: 40%
  - Partially: 50%
  - Yes: 0%

- **San Martín Sacatepéquez**
  - Territorio 2
  - Do not know: 10%
  - No: 40%
  - Partially: 50%
  - Yes: 0%

- **Aguacatán**
  - Territorio 3
  - Do not know: 10%
  - No: 40%
  - Partially: 50%
  - Yes: 0%

- **San Juan Chamelco**
  - Territorio 4
  - Do not know: 10%
  - No: 40%
  - Partially: 50%
  - Yes: 0%
Results: farmers characterization

Participation on child care capacity building programs
Results: farmers characterization

Stunting incidence for preschoolers children (percentage)
Results: Food system models

1. Stakeholders identification and selection

2. Interviews

3. Causal loop diagrams

4. Individual diagrams written on Vensim

5. Integration of stakeholders diagrams

6. Sub models
Results: Food system models

The models identify:
- Variables
- Relationships
- Feedbacks

The models help to:
- Identify and order potential effective policies
- Test these policies actions
Results: Food system models
## Results: FSN policies evaluation

<table>
<thead>
<tr>
<th>Policy</th>
<th>Territory 1</th>
<th>Territory 2</th>
<th>Territory 3</th>
<th>Territory 4</th>
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<tbody>
<tr>
<td>Agricultural productivity</td>
<td>+++</td>
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<td>Education</td>
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<td>Employment</td>
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<td>Family planning</td>
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<td>Diet diversification</td>
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<td>Access to water</td>
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<td>Women empowerment</td>
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<td>Health</td>
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What for?

• Quantification and simulations

• In order to:
  • Identify effective policies for different territories
  • Identify the scalability of the policy interventions
  • Recommend policy interventions (advocacy component)

• Institutional inputs to do permanent policy advocacy and continue research
Thank you