Measuring Integration

Developing Common Metrics for Integrated Agriculture-Nutrition Interventions

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Valerie Rhoe Davis, Senior Technical Advisor, Catholic Relief Services

William A. Masters, Professor, Friedman School of Nutrition Science & Policy, Tufts University

Feed the Future Innovation Lab for Collaborative Research on Nutrition

www.nutrition.tufts.edu | sites.tufts.edu/willmasters
Motivation

• Agriculture is a major influence on nutrition
Motivation

• Agricultural interventions can help hit nutrition targets
Motivation

- Ag. interventions are now integrated in nutrition projects
Measuring integration in ag.-nutr. interventions
motivation | context | approach | results | implications

Context
• Agricultural assistance is now similar size as aid for health

Note: Health includes nutrition. Agriculture includes forestry and fisheries. Values are billions of constant US dollars at 2012 prices (both axes).
Measuring integration in ag.-nutr. interventions

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### Context

- Agriculture and nutrition are very different

**Some stylized differences between agriculture and nutrition**

<table>
<thead>
<tr>
<th>Agriculture (food production)</th>
<th>Nutrition (food utilization)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical intermediate results and primary outcomes</td>
<td>Productivity, income &amp; ending poverty</td>
</tr>
<tr>
<td>Typical assessment and evaluation methods</td>
<td>Diets, disease &amp; ending malnutrition</td>
</tr>
<tr>
<td>Typical targeting of interventions</td>
<td>RCTs on stations &amp; farms, then economics of adoption and impact</td>
</tr>
<tr>
<td></td>
<td>RCTs in communities, then epidemiology of prevalence and status</td>
</tr>
<tr>
<td></td>
<td>Public investment for specific locations</td>
</tr>
<tr>
<td></td>
<td>Service delivery to specific beneficiaries</td>
</tr>
</tbody>
</table>
Approach

- Programs must take account of both ag. and nutrition
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Here is SPRING’s simplest ag-nutrition causal framework

Source: Agriculture-Nutrition causal pathways framework, derived from Gillespie et al. by Anna Herforth and Jody Harris with SPRING, 2014
For example, a value chain project can affect child nutrition

Source: Agriculture-Nutrition causal pathways framework, derived from Gillespie et al. by Anna Herforth and Jody Harris with SPRING, 2014
Similarly, in Stuart Gillespie’s more complex framework
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Here is the full CRS program framework, with more detail
Zooming in, we can see specific CRS ag.-nutrition interventions.
Our goal is to measure integration between program elements.
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What dimensions of program integration can we measure?

“Breadth” is the number of distinct program elements being integrated.
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What dimensions of program integration can we measure?

“Depth” is how the various distinct program elements are integrated
“Breadth of integration” is the range of program elements being coordinated
“Depth of integration” is how the various program elements are coordinated by the implementing organization(s).
For example, these three programs differ in both depth & breadth of integration.

- **Program A**
  - Agriculture for consumption
  - Nutrient consumption

- **Program B**
  - Agriculture for consumption
  - Nutrient consumption
  - Nutrient intake

- **Program C**
  - Agriculture for income and consumption
  - Food expenditure
  - Nutrient consumption
  - Nutrient intake
  - Non-food expenditure
  - Healthcare expenditure
  - Health status
  - Non-food income
The CRS pilot study: Objectives and Methods

- **Objectives:** Could these metrics be useful for real projects?
  - Can they classify and describe projects in a meaningful way?
  - Can program managers use these measures to guide their work?

- **Methods:** How could one implement these new metrics?
  - We examined all CRS projects funded between 2008 and 2013 whose proposals explicitly involve “integrated” or “integration” between agriculture and nutrition.
  - Found 17 projects implemented in Africa, Asia and Latin America.
  - Two consultants independently classify each project’s design using the CRS framework with identified interventions from these 17 projects, in terms of “breadth” and “depth”.
  - The consultants generally reported identical scores; in a few cases, ambiguities were clarified by field staff.
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The CRS pilot study: Numerical findings

Breadth and depth of integration in a sample of 17 CRS programs

<table>
<thead>
<tr>
<th>Breadth of program (number of elements)</th>
<th>1-2</th>
<th>3-5</th>
<th>6+</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Depth of integration between elements</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Co-location of program elements</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2. Partnership among organizations</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>3. Cross-training and multifunctionality</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

The CRS pilot study: Implications

- **Grounding the Ag-Nut Pathways**: Explicit interventions within each elements helps CRS teams to better understand the pathway’s elements.

- **Linking across the pathways**: The grounding allows our teams to ask how our interventions are linked, are their breaks within the pathway, and who is receiving the different elements.

- **Implementing integrated programs**: Depth & Breadth scores provides the foundation on how well integrated at the higher-levels; need to dig down to better understand the level of integration on the ground.

- **Understanding impact**: Next step is to better understand if more integration leads to better impacts. If integration by same implementer or across implementers vary in impact.
Thank You