Overview and status of A4NH work on Theories of Change (August 22, 2014)

In early 2013, the CRP on Agriculture for Nutrition and Health (A4NH) began developing its results framework following guidance from the CRP-ID0 working group. The process contributed to a shared understanding within A4NH of how agriculture contributes to nutrition and health and how that contribution can be measured in the form of IDOs (Figure 1).

The next step in the development of the results framework is to articulate theories of change (TOCs) that lay out the logical links between research outputs and IDO impacts, and assemble available evidence about whether the links are likely to occur. TOCs can be used to assess the overall logic and plausibility of development-oriented research and identify gaps where further work is needed. Together with results from ex ante impact assessment and other analyses and consultations, TOCs can help guide research planning and the design of interventions. They also can provide a framework for M&E and, ultimately, for ex post impact evaluation.

TOCs need to be developed at a unit of analysis below CRP. We considered developing TOCs around flagships (level n-1), however each A4NH flagship produces multiple types of outputs (e.g., technologies, knowledge, institutional innovations) that contribute to more than one IDO (Figure 2) through different types of impact pathways (Figure 3). The same is true, though to a lesser extent, for research clusters (level n-2).

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1 This document was prepared by Nancy Johnson in response to comments on the A4NH extension proposal. For more information, please contact Nancy at n.johnson@cgiar.org
2 SLO=System Level Outcome and IDO=Intermediate Development Outcome
Figure 2. A4NH Program Impact Pathways adapted from the original A4NH proposal, 2011*

*ANH refers to programs that integrate nutrition and/or health components with agricultural components.

Figure 3. Pathways by component Flagship

Source: A4NH Gender Strategy, November 2012
Rather than use an organizational unit, we decided to develop TOCs around major research outputs, which represent a results perspective. For advanced research such as biofortification, some outputs (e.g., biofortified varieties) already exist and are being disseminated. For research at an earlier stage, outputs are still in the process of development but we have an idea of what they will ultimately look like and who their users are expected to be. Table 1 provides examples of outputs by flagship and pathway.

Table 1. Examples of theories of change by flagship and type of impact pathway (bold=draft TOC document available)

<table>
<thead>
<tr>
<th>Flagship</th>
<th>Value chain pathway</th>
<th>Program pathway</th>
<th>Policy pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Chains for Enhanced Nutrition</td>
<td>Evidence from evaluations influences design of value chain interventions by NGOs</td>
<td>Varieties disseminated through food aid or nutrition programs</td>
<td>Results of research used to influence national nutrition and food policy or international food standards (CODEX)</td>
</tr>
<tr>
<td>Biofortification</td>
<td>Varieties disseminated through formal and informal seed systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture Associated Diseases</td>
<td>Farm-level technologies to mitigate aflatoxin risk</td>
<td>Training and certification schemes for traders in informal markets for meat, milk and fish</td>
<td>Research results used to influence national and regional policy on food safety regulations</td>
</tr>
<tr>
<td>Integrated Programs and Policies</td>
<td>Evidence from program evaluations influences design of integrated agriculture-nutrition programs implemented by NGOs</td>
<td></td>
<td>Evidence from evaluation used to influence government and donor policy</td>
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</table>

Developing TOCs is an ongoing process that needs to be done for major outputs or output categories as they emerge. To be useful, TOCs also need regular updating based on experience and new information. The A4NH evaluation unit is currently leading the development of TOCs but the intention is to institutionalize the use of TOCs in research planning and in M&E. The strategy for achieving institutionalization is through developing examples of what a TOC is, how it can be developed, and what can be learned from it. There is a large amount of generic guidance available, but few practical examples, especially for research. This is a gap that we hope to fill with our TOC work. In addition to making the TOCs available as they are developed, A4NH plans to produce a publication on how we have used TOC and what we have learned.
Status of four ongoing TOC processes

Draft TOCs are available for four of A4NH’s main outputs (in bold in Table 1). The process and status of each TOC is described below. Please check our web site for the most up-to-date versions of the TOCs as they are developed.

**Reaching the Nutritionally Vulnerable through Production and Consumption of Biofortified Staple Crops: Theories of Change for Three Crop x Country Combinations.** This document was prepared by the A4NH evaluation team, led by Nancy Johnson, and the HarvestPlus communication and impact teams with support from John Mayne. Since the focus of the document is on HarvestPlus’ delivery activities, the target audience includes the country managers who lead delivery and the Monitoring Learning and Action (MLA) team that is in the process of being formed by HarvestPlus. The draft document was developed in close collaboration with the country managers in each of the three case study countries, and a draft was presented to all HarvestPlus country managers in February 2014, where it was well-received. Drafts of the country studies were provided to the HarvestPlus Strategic Gender Assessment (SGA) team, and the team provided comments based on their findings.

Preliminary findings highlight the strength of evidence related to the impact of biofortification on nutrition and need for more work (in program design and in research) around the expected role of output markets and in targeting and understanding the farm households that are expected to be producers and consumers of biofortified crops. Work is ongoing to identify and prioritize the implications of the TOC for M&E and for research.

**The Potential of Farm-Level Technologies and Practices to Contribute to Reducing Aflatoxin Exposure: A Theory-of-Change Analysis.** This document was developed by A4NH and an ILRI consultant who is supporting the cross-center and cross-CRP aflatoxin working group. Members of the working group have provided input into the document and it is in the process of being shared more widely for comments. The target audience for this work is mainly aflatoxin researchers and research planners in A4NH and other CRPs who are in the process of developing a collaborative research agenda whose outputs will contribute to the A4NH health IDO (reduce exposure to aflatoxin). The TOC also has implications for how more can be learned about the potential for impact from ongoing efforts to scale up existing technologies. The draft TOC has also been provided to the panel of the CRP-commissioned external evaluation (CCEE) on food safety that is currently underway.

Preliminary insights from the analysis highlight the challenges of achieving impact on exposure to aflatoxin through markets that currently recognize and reward low-aflatoxin grains (such as poultry value chains or food aid) and highlight the need for a better understanding of the extent to which adoption of improved farming and post-harvest practices that improve yield and grain quality can generate economic as well as health benefits among smallholders.

**A Theory of Change for a Food Safety Intervention in Livestock Value Chains in Developing Countries.** Work on improving food safety in animal source foods is a collaboration between A4NH and the CRP on Livestock and Fish (LaF). This TOC was initially developed based on project documents and on the outputs from participatory ToC workshops in the LaF sites in Tanzania, Uganda, and Vietnam in 2013. The draft, based on dairy in Tanzania, was circulated and presented to participants at a 2-day workshop in February 2014. Based on input from the workshop, the document was substantially revised. One of
the main outputs of the workshop was the recognition that the food-safety intervention developed and tested for informal dairy markets in Kenya, and later in India — a training, certification, and branding scheme focused on traders — could serve as a model for other value chains, in which other value chain actors play a similar “aggregator” role as milk traders. As compared to the other TOCs, more work is needed to assemble existing evidence for the anticipated outcomes and links between them.

The target audience for this TOC is primarily the researchers and partners currently working on food safety in A4NH and LaF. It will also serve as a basis for working with LaF to ensure that food safety is appropriately incorporated into research planning and M&E. A draft has been provided to the food safety evaluation panel.

**How Does Evaluation Evidence Influence the Way International NGOs Design and Implement Integrated Agriculture-Nutrition Programs?** The previous TOCs focus on farmers, consumers and other value chains actors. This TOC looks at capacity and behavior change among staff in NGOs. Since this is not an area where CRP researchers have experience and expertise, A4NH contracted TANGO International, a company that works closely with NGOs on program design, implementation and evaluation, to develop the TOC. TANGO conducted a survey and a series of interviews with staff of international NGOs and other key informants to better understand how new knowledge gets incorporated into NGO program design and implementation, and what factors support and constrain the process.

While there are many interesting insights in this draft document, it is still at an early stage of development and is likely to be substantially revised due to additional analysis by TANGO and input from A4NH and partners. The first internal discussion within A4NH will occur September 2014 after which a new draft will be shared for broader feedback. The TOC will inform a baseline study that will be conducted in late 2014/early 2015. TOC and related products will be inputs into the CCEE on the cluster of work on integrated programs, which is planned for 2015.