The Impact of a Nutrition-Focused Livelihoods Program on Child Health and Nutrition in Burkina Faso

Evaluation of the PROMIRIAN and RESIAN programs under the European Union’s Trust Fund

Researchers: Adrien Bouguen, Andrew Dillon
Partners: Terre des Hommes, Action Against Hunger, Save the Children, GRET, Wupakuwe, Tin-Toa, Helvetas
Funders: European Unions’ Trust Fund
Location: Boucle du Mouhoun and Est regions
Study sample: 168 villages
Timeline: 2017-2020
Type of evaluation: RCT

Over 700 million people live on less than US$1.90 per day.¹ Many of these families depend on insecure and fragile livelihoods. Globally nearly half of all deaths in children under five are attributable to undernutrition, translating into the loss of about three million young lives a year.² Recent research has shown that holistic livelihoods programs, such as the Graduation Approach can have a wide range of benefits for these poor families, from increasing household consumption and income to improving food security and mental health. The Graduation model provides families with a range of services, including income-generating assets, training, access to savings accounts, consumption support, and coaching visits, and variations of the model have been successfully replicated in several contexts. The aim of this research in Burkina Faso is to rigorously evaluate whether an adapted Graduation program design, which focuses on strengthening the household’s ability to cope with crises, leads to improvements in child nutrition and household food security. This brief summarizes findings from the midline survey, which suggest that the program successfully reduced child malnutrition and increased household consumption, food diversity, and investments in durable goods after one year. Some impacts were present across multiple program groups, while others were only present among households that received the full multi-dimensional set of interventions.

Evaluation Context
Burkina Faso, like most of sub-Saharan Africa, has made significant progress in the last 10 years in reducing extreme poverty. Despite this, more than 40 percent of people in Burkina Faso live on less than US$1.90 per day, the international benchmark for extreme poverty. Agriculture, much of it seasonal, employs nearly 80 percent of the active labor market, leaving many parts of the country vulnerable to food insecurity during the lean season. 21 percent of children under five suffer from chronic malnutrition (stunting or low height-for-age) and 10 percent suffer from acute malnutrition (wasting or low weight-for-height).³ Childhood mortality was more than double the global average: 814 out of every 1,000 children born die before their fifth birthday.⁴

Details of the Intervention
Innovations for Poverty Action is working with researchers to evaluate the effects of variations of the Graduation model on poor rural households’ economic activities, wealth, and nutrition. The program will be implemented by a consortium of local nonprofits led by Terre des Hommes (TDH) and Action Contre la Faim (ACF). To select the poorest members of participating communities, the project team conducted a census of all individuals in the poorest neighborhoods in the selected communities and used a short set of questions. Households receive a combination of four interventions:

² https://data.unicef.org/topic/nutrition/malnutrition/
⁴ UNICEF Data: monitoring the situation of children and women. https://data.unicef.org/country/bfa/
1. **Community-based interventions:** Participating households are offered commune-level interventions to improve the commune/village governance and collective behavior and to raise awareness about malnutrition. Governance interventions will include developing accountability mechanisms in town halls, early warning committees and surveillance systems. Nutrition interventions include malnutrition awareness campaigns and training mothers to recognize the signs of malnutrition.

(Note: Community-based interventions are not randomly distributed. All villages, including the comparison group, receive community-based interventions).

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<thead>
<tr>
<th>Group 1 (C)</th>
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<th>Comparison Group</th>
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<td>Community-based</td>
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<td>Nutrition</td>
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2. **Cash grant:** Participating households are offered a total of 20,000 West African Francs (about US$35) each month over the duration of the lean season (July to September) in the first year, and 15,000 West African Francs (about US$25) each month the following year.

3. **Asset + farm support:** Participating households are offered the option to choose from livestock vouchers which can be exchanged for sheep or chickens, or seed vouchers which can be exchanged for improved seed varieties. Vouchers are valued to purchase approximately 3 sheep or 11 chickens, or improved seeds. Participants receive farm training according to the asset they've chosen: animal husbandry, or water and soil conservation and restoration techniques.

4. **Nutrition (fortified food):** Participating households are offered an allotment of enriched flour each month for any pregnant or nursing women, or young children aged 6 to 23 months. Households are also given materials to grow small gardens for personal consumption.

One hundred and sixty-eight villages have been randomly assigned to either the comparison group, which receive the community-based component only, or to the participation group. The households in the participation villages have then been randomly assigned to one of the following groups. (Note: all households take part in the community-based intervention).

| Cash grant: Participating households receive the financial component in addition to the community-based component. |
| Cash grant + Asset: Participating households receive the financial component and the asset component in addition to the community-based component. |
| Cash Grant + Asset + Nutrition (full program): Participating households receive the financial component, the asset and farm support, and the fortified food, in addition to the community-based component. |

**Findings After One Year**

Households used cash transfers to increase spending on food, healthcare, and education. Respondents were surveyed about their last 20,000 CFA transfer. On average, the households spent 12000-14000 CFA more on food, 1200-1300 more on health, and 300-700 CFA more on education expenses than households in the comparison group.

Cash transfers were used largely to increase consumption (Figure 1). On average, annual consumption of households who received the transfers increased by 54000 CFA—representing about 80 percent of the annual value of the transfer.

The programs did not have significant impacts on food security, measured subjectively. There was no difference in households' feelings about their own food security across the groups.

However, food diversity—an objective measure of food security—improved for households whose initial food diversity was poor (Figure 3).
About 30 percent fewer households who received the program had poor food diversity than those in the comparison group. There were not statistically significant changes in the proportion of households with limited or acceptable food diversity.

**Investment in durable goods increased, relative to the comparison group, among households that received the full graduation package (Figure 4).** In the Cash Grant + Asset + Nutrition group, households increased investment in durable goods by an average of about 12000 CFA. This group's package had a higher monetary value and addressed multiple constraints faced by rural households simultaneously.

**Households that received the full graduation package also saw declines in both chronic and acute child malnutrition (Figure 5).** Declines in the other program groups were statistically insignificant.

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**Figure 1: Uses of Last Cash Transfer**

![Figure 1: Uses of Last Cash Transfer](image1)

**Figure 2: Value of Each Intervention (CFA)**

![Figure 2: Value of Each Intervention (CFA)](image2)
**Figure 3:** Household Food Diversity Levels (Percentage)

![Bar chart showing household food diversity levels for different groups.](image)

**Figure 4:** Investment in Durable Goods (CFA)

![Bar chart showing investment in durable goods.](image)

**Figure 5:** Percentage of Children with Severe Malnutrition (Anthropometric Measures < -3 SD)

![Bar chart showing percentage of children with severe malnutrition.](image)

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