

# 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*

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**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.<sup>1</sup> Many of these families depend on insecure and fragile livelihoods. Globally nearly half of all deaths in children under 5 are attributable to undernutrition, translating into the loss of about 3 million young lives a year.<sup>2</sup> 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. The baseline survey found the program has effectively targeted nutritionally vulnerable households. The randomized evaluation is ongoing.**

## Key Facts

*According to baseline findings:*

- More than 6 out of 10 households (62%) are food insecure
- More than 15% of children under 5 are acutely malnourished
- More than 3 in 10 children are chronically malnourished
- More than 6 out of 10 children (68%) are anemic

## 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).<sup>3</sup> Childhood mortality was more than double the global average: 814 out of every 1,000 children born die before their fifth birthday.<sup>4</sup>

## 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 is being 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:

<sup>1</sup> <http://www.worldbank.org/en/news/press-release/2018/09/19/decline-of-global-extreme-poverty-continues-but-has-slowed-world-bank>

<sup>2</sup> <https://data.unicef.org/topic/nutrition/malnutrition/>

<sup>3</sup> USAID fact sheet 2018. <https://www.usaid.gov/sites/default/files/documents/1864/Burkina-Faso-Nutrition-Profile-Mar2018-508.pdf>

<sup>4</sup> 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).

**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**.

## Baseline Findings

In May-June 2018, Innovations for Poverty Action collected baseline data on 7,083 households, including anthropometric measurements of 10,301 0-to-59 months old children in 168 villages. The data analysis shows that, as intended, the study is targeting households vulnerable to food and nutrition insecurity. In the sample, more than 6 out of 10 households (62 percent) are food insecure and only 23 percent have a sufficiently diversified diet. Also, more than 15 percent of children under 5 are acutely malnourished and more than 3 in 10 children are chronically malnourished. The prevalence of anemia is also high: more than 6 out of 10 children (68 percent) are anemic. In addition, the random assignment is validated by the data: the different village groups have on average the same characteristics (significantly similar characteristics before the start of the program).

The data collected on the food consumption score compared to the general Standardized Monitoring and Assessment on Relief and Transitions (SMART) 2017 survey shows that our sample has a lower score, especially when it comes to those who are the most affected (poor score).

We also found that people in our sample eat an average of five dietary groups per week, without a significant difference between the two regions.

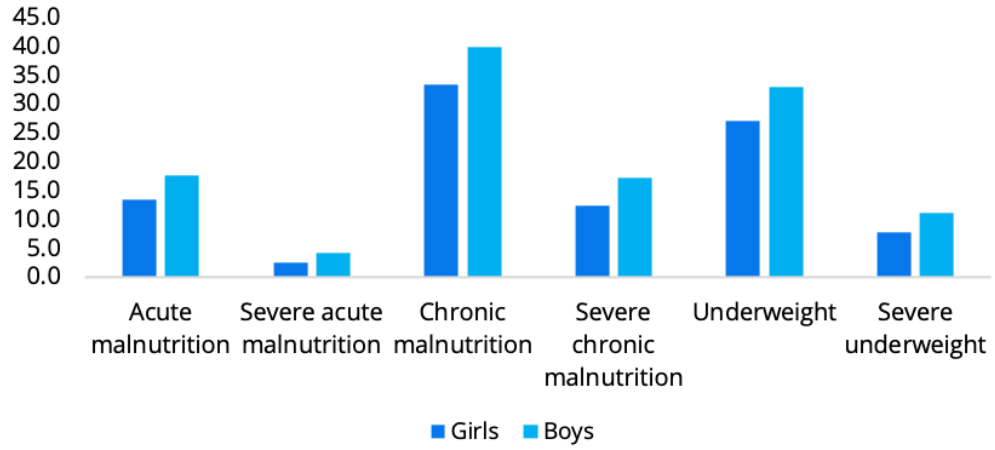
When comparing the malnutrition indicators collected during the baseline and during the SMART 2017 survey, it also appears that for each indicator and each of the two regions, our sample is more malnourished than the general population of the region.

We also found that boys were more affected by malnutrition than girls. This provides evidence that the program has effectively targeted nutritionally vulnerable households.

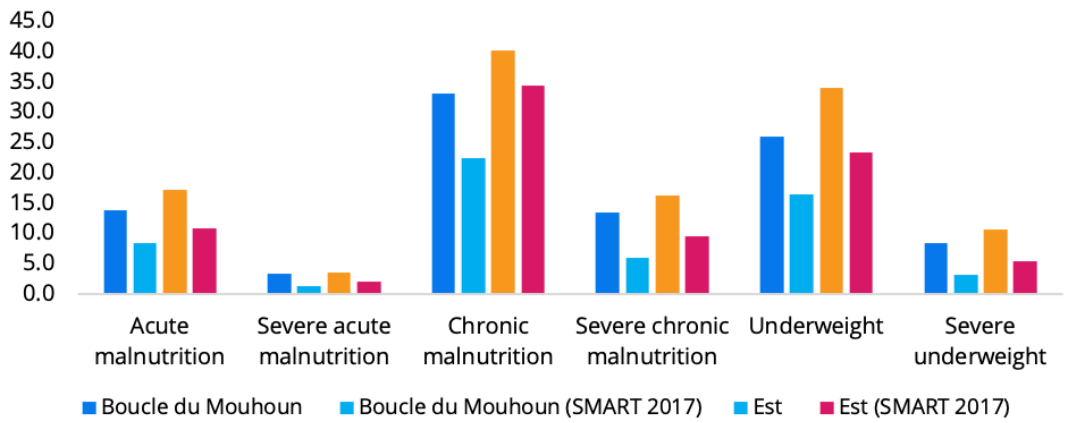
Finally, we found that more than 60% of our sample was affected by anemia, with a difference by region, but not by gender.

Group One (C)	Group Two (CA)	Group Three (CAN)	Comparison Group
Community-based	Community-based	Community-based	Community-based
Cash grant	Cash grant	Cash grant	
	Asset	Asset	
		Nutrition	

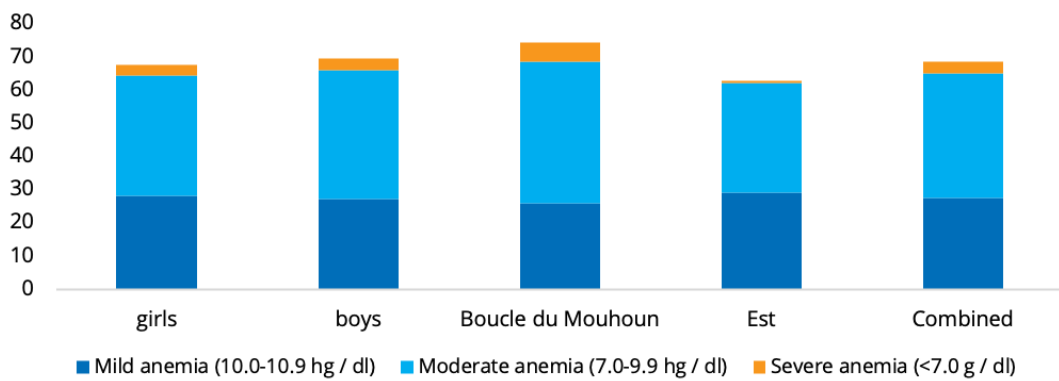
### Prevalence of malnutrition by gender



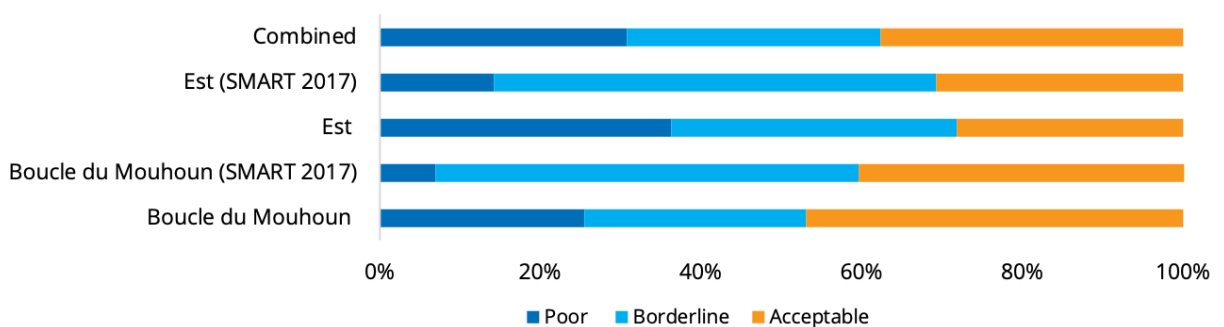
### Prevalence of malnutrition by region



### Anemia per Region and Gender

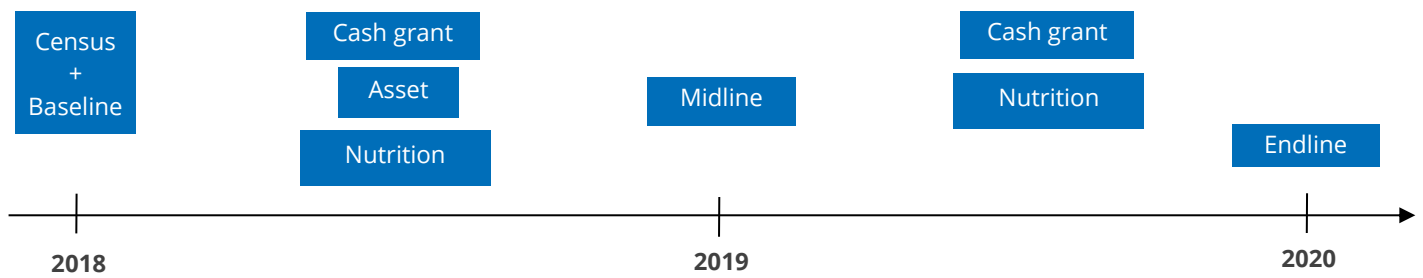


### Food Consumption Score (percentage of sample)



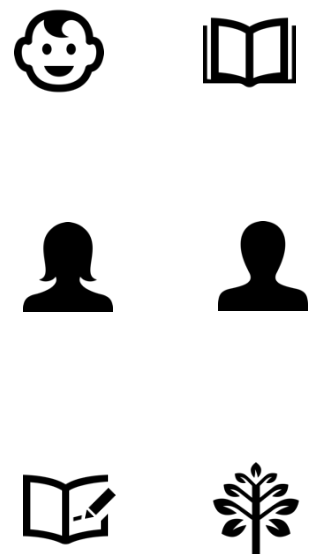
## Evaluation Timeline

The evaluation team is gathering information on household income, assets, nutrition, health, child growth, consumption, and food security to evaluate the impact of the different program packages on participants' well-being following the timeline below:

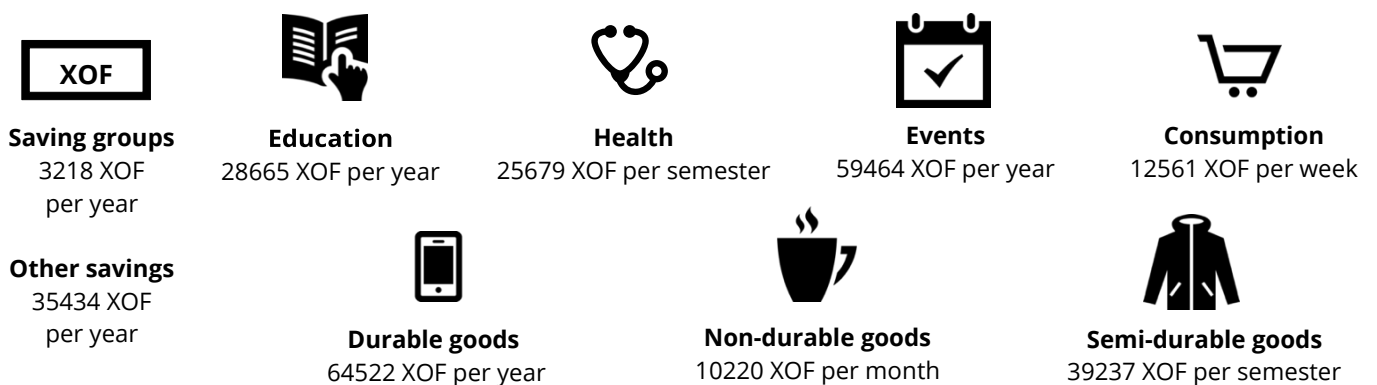


## Socio-Demographic Characteristics of the Sample Households

- 95 percent have a child under 5 years old
- 73 percent have a lactating woman
- 20 percent have at least one pregnant woman
- Average of eight members per household, including two 0-5-year-olds and 1.5 6-10-year-olds
- 89 percent of heads of household are men
- 66 percent are monogamous
- 92 percent of 0-17 years old live with their mother, 87 percent with their father
- 90 percent of household heads cannot read nor write in any language
- 23 percent of 3-25-year-olds report attending a formal school this year
- 33 percent of parents report not sending their children to school because of their young age, 21 percent for financial reasons, and 14 percent because of a refusal from the family
- Almost all households own agricultural land and more than 86 percent of the 15+ year-olds work in agriculture
- Less than 1 percent report having any paid employment other than a family business (including the family farm)
- 14 percent of households report owning a non-agricultural business



## Average Spending per Household



The evaluation is ongoing; results forthcoming.

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