

# SELEVER Study Data

Aulo Gelli<sup>1\*</sup>, Elodie Becquey<sup>1</sup>, Rasmané Ganaba<sup>2</sup>, Jessica Leight<sup>1</sup>, Jessica Heckert<sup>1</sup>, Lieven Huybregts<sup>1</sup>, Laetitia Toé<sup>3</sup>, Josué Awonon<sup>1</sup>, Ampa D. Diatta<sup>1</sup>, Loty Diop<sup>1</sup>, Marco Santacroce<sup>1</sup>, Abdoulaye Pedehombga<sup>2</sup>, Alain Hein<sup>2</sup>, Henri Somé<sup>2</sup>

## Introduction

The SELEVER study was a cluster randomized controlled trial aiming to evaluate the effects of an integrated agriculture–nutrition intervention package (including poultry value chain development, women’s empowerment activities, and a behavior change communications strategy to promote improved diets and feeding, care, and hygiene practices) on the diets, health, and nutritional status of women and children in rural Burkina Faso (1).

Four rounds of data collection were carried out in rural communities of three regions of Burkina Faso: Boucle du Mouhoun, Centre-Ouest and Haut-Bassins between March 2017 and August 2020. The first round (**Baseline**) took place between March and June 2017 during the post-harvest season in a sample of 1800 households. The second (**Follow-up**) and third (**Follow-up 2**) rounds took place during the lean season in 2017 (September-October) and 2019 (September-October) in a subsample of 1080 households. The last survey round (**Endline**) took place between March and August 2020 (including a break due to covid-19 restrictions).

## Survey Instruments

Data collection was carried out using several questionnaires:

The **Household** questionnaire collected household and individual level information using several modules. Respondents were the household head and the most informed household members on each module. Details on poultry-related data collection have been published elsewhere (2,3).

---

<sup>1</sup>International Food Policy Research Institute (IFPRI), 1201 Eye St. NW, Washington, DC 20005, USA

<sup>2</sup>AFRICSanté, Bobo-Dioulasso, Burkina Faso

<sup>3</sup>Department of Food Technology, Safety and Health, Ghent University, Coupure links 653, 9000 Ghent, Belgium

\* Corresponding author. E-mail address: a.gelli@cgiar.org

The **Dietary intake** questionnaire was used to collect 24-hour recall data from mothers and 2–4-year-old children (one pair of mother and child in each household). Details on the dietary data collection method have been published elsewhere (4).

The **Child development** questionnaire was used to collect data on 2-4-year-old children (one child per household) using the DMC-II approach (5).

The **Anthropometry and phlebotomy** questionnaires collected information on mothers and children (one pair per household) anthropometry and hemoglobin status. Details on anthropometry data collection have been published elsewhere (6).

The **WEIA** questionnaire (7) collected information on agriculture and nutrition related decision making, self-efficacy, mobility, time use and access to capital, and attitude towards domestic violence. Data were collected among the most important adult man and adult woman in each household.

- The **Market** questionnaire collected information on prices of the most frequent food items in the three regions.

- The **Village** questionnaire collected relevant information on infrastructures (schools, health facilities, etc.) available in the villages of the study areas, on insecurity and presence of armed groups.

## Data description

All questionnaires and datasets collected through questionnaires are shared, as well as two additional datasets providing information on sample weights and communes random allocation across treatment arms. Considering, the last round of data collection (**Endline**) was interrupted during 3 months by the covid-19 pandemic restrictions a specific dataset provides information on villages for which data collection was carried out after the Covid-19 break.

All datasets shared are in a Stata format and details on their content are shared below.

All datasets have been anonymized to remove any personal identifiable information of households and individuals. Names of villages, communes and regions were also removed.

Questionnaire	File name	Content
Household <sup>1</sup>	Household.zip	<p><b>Household:</b> Assets, housing, food security, WASH (Water, Sanitation and Hygiene) practices, food and non-food expenditures, malaria practices, humanitarian aid, access to credit, household plot sizes and production diversity, livestock and poultry raised by household members, poultry production, revenues and practices, shocks during the past 12 months, revenues from all income generating activities of household members.</p> <p><b>Household members:</b> Age, education, income generating activity, exposure to SELEVER related activities (not collected at baseline).</p> <p><b>Index child 2-4 years of age and their youngest sibling:</b> Index child infant and young child feeding indicators, symptoms presented by index child in the past 3 days.</p> <p><b>Index mother/ caregiver:</b> Index child mother's knowledge on IYCF practices and health, postpartum depression status (Edinburg scale (8)) and nutritional practices.</p> <p><b>Index child's father:</b> Index child father's knowledge on IYCF practices and health.</p>
Anthropometry and phlebotomy <sup>1</sup>	AnthropoPhlebo.zip	Index mother/caregiver and child anthropometry and hemoglobin level.
Child development <sup>2</sup>	DMC.zip	Index child DMC-II fine motor, gross motor and language scores.
Dietary intake <sup>1</sup>	Diet.zip	Index mother and child dietary intake over the past 24 hours.
Markets <sup>1</sup>	Market.zip	Market price data from markets around villages in study area.
WEIA <sup>1</sup>	WEAIMen.zip & WEAIWomen.zip	Pro WEIA related indicators: autonomy in income, self-efficacy, attitudes about domestic violence, input in productive decisions, access to and decisions on credit, control over use of income, work balance, group membership, respect among household members
Village <sup>3</sup>	Village.zip	<p>Infrastructures in villages of the study area: Schools, health facilities, roads.</p> <p>Presence of NGOs and humanitarian programs in the village</p> <p>Insecurity and presence of armed groups</p>
	SampleWeights.dta	Sample Weights. Incp1 should be used for the full sample at baseline and endline for household and WEIA questionnaires. Incp2 should be used at all rounds for diet and anthropometry questionnaires, and at follow-up and follow-up2 for household and WEIA questionnaires.
	Treatment.dta	Random allocation of communes of the study area in three arms: 1- Control, 2 – SELEVER and 3- SELEVER + WASH.
	PostCovid19BreakVillages.dta	Villages in which data collection was carried out after a 3-month break due to the covid-19 pandemic at <b>endline</b> in 2020.

<sup>1</sup>Four rounds of data collected.

<sup>2</sup>Two rounds of data collected (baseline and endline).

<sup>3</sup>Three rounds of data collected (Follow-up, Follow-up2, endline).

## FUNDING

The SELEVER trial was funded by Bill & Melinda Gates Foundation (grant no. OPP1149709) and the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH), led by IFPRI (sub-grant no. A4NH- 202004.040.500).

## ACKNOWLEDGEMENTS

We would like to acknowledge the inputs into the study design of Dereck Headey and Melissa Hidrobo from the International Food Policy Research Institute, of Hans Verhoef from the London School of Hygiene and Tropical Medicine, and of Romain Kenfack, Sita Zongouri and Hannah Guedenet from Tanager. We would like to also acknowledge the study teams, participants, and data collectors for their time and contribution to data collection.

## REFERENCES

1. Gelli A, Becquey E, Ganaba R, Headey D, Hidrobo M, Huybregts L, et al. Improving diets and nutrition through an integrated poultry value chain and nutrition intervention (SELEVER) in Burkina Faso: Study protocol for a randomized trial. *Trials* [Internet]. 2017 Sep 6 [cited 2022 Apr 21];18(1):1–16. Available from: <https://trialsjournal.biomedcentral.com/articles/10.1186/s13063-017-2156-4>
2. Leight J, Awonon J, Pedehombga A, Ganaba R, Gelli A. How light is too light touch: The effect of a short training-based intervention on household poultry production in Burkina Faso. *J Dev Econ* [Internet]. 2022 Mar;155:102776. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S030438782100136X>
3. Leight J, Awonon J, Pedehombga A, Ganaba R, Martinez E, Heckert J, et al. The impact of an integrated value chain intervention on household poultry production in Burkina Faso: evidence from a randomized controlled trial. *J Dev Eff* [Internet]. 2022 Apr 3;14(2):108–24. Available from: <https://www.tandfonline.com/doi/full/10.1080/19439342.2021.1968932>
4. Becquey E, Diop L, Awonon J, Diatta AD, Ganaba R, Pedehombga A, et al. A Poultry Value Chain Intervention Promoting Diversified Diets Has Limited Impact on Maternal and Child Diet Adequacy during the Lean Season in a Cluster Randomized Controlled Trial. *J Nutr* [Internet]. 2022 May 1 [cited 2022 Sep 13];152(5):1336–46. Available from: <https://pubmed.ncbi.nlm.nih.gov/35170739/>
5. Prado EL, Abubakar AA, Abbeddou S, Jimenez EY, Somé JW, Ouédraogo JB, et al. Extending the Developmental Milestones Checklist for use in a different context in Sub-Saharan Africa. *Acta Paediatr*. 2014;103(4):447–54.
6. Gelli A, Collishaw A, Awonon J, Becquey E, Diatta A, Diop L, et al. Effects of an integrated poultry value chain, nutrition, gender and WASH intervention (SELEVER) on hygiene and child morbidity and anthropometry in Burkina Faso: A secondary outcome analysis of a cluster randomised trial. *Matern Child Nutr* [Internet]. 2023 Oct 27;19(4). Available from: <https://onlinelibrary.wiley.com/doi/10.1111/mcn.13528>
7. Malapit H, Quisumbing A, Meinzen-Dick R, Seymour G, Martinez EM, Heckert J, et al. Development of the project-level Women's Empowerment in Agriculture Index (pro-WEAI). *World Dev* [Internet]. 2019 Oct;122:675–92. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0305750X19301706>
8. Cox JL, Holden JM, Sagovsky R. Detection of Postnatal Depression. *Br J Psychiatry* [Internet]. 1987 Jun 2;150(6):782–6. Available from: [https://www.cambridge.org/core/product/identifier/S0007125000214712/type/journal\\_article](https://www.cambridge.org/core/product/identifier/S0007125000214712/type/journal_article)

### INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

1201 Eye St, NW | Washington, DC 20005 USA

T. +1-202-862-5600 | F. +1-202-862-5606