

EVALUATION BRIEF

PREVENT IMPACT EVALUATION BASELINE STUDY

This evaluation brief provides a summary of the findings, conclusions and recommendations of the PREVENT Impact Evaluation Baseline Study. For more information please email m.e@galvmed.org.

ABOUT PREVENT

In 2021, GALVmed and [Ceva Santé Animale](#), with the support of the [Bill & Melinda Gates Foundation](#), launched PREVENT, a 4-year initiative to **improve the efficiency and sustainability of small-scale poultry production** in sub-Saharan Africa. [PREVENT](#) (PRomoting and Enabling Vaccination Efficiently, Now and Tomorrow) is designed to address low productivity in small-scale poultry production through two major interventions:

- **Hatchery vaccination:** PREVENT aims to create an efficient sector of medium-sized hatcheries by equipping up to 36 hatcheries across 11 countries in sub-Saharan Africa with the necessary equipment and expertise to provide customers with chicks vaccinated against the major infectious poultry diseases.
- **Market Development:** the initiative is working with, and through Field Technicians (FTs) to support the creation of viable markets for sales of Vaccinated Day-Old Chicks (VDOCs) within the small-scale producers (SSPs) segments.

Additionally, one of the objectives of the PREVENT project seeks to bring a pragmatic level of understanding of [gender dynamics](#) within the poultry sector and the implications for women of poultry production intensification. This stream of work is conducted in close collaboration with the [International Livestock Research Institute \(ILRI\)](#).

IMPACT EVALUATION BASELINE STUDY

The evaluation is a [theory-based approach](#), and is designed to directly assess the causal impact of PREVENT. The specific purpose of the evaluation is to answer four questions:

1. To what extent will improved inputs (VDOCs) and better flock management enable the measurable progression of small-scale producers (SSPs)?
2. What is the status of the African small-scale sector in terms of proportions of SSPs between Sector 4 (Backyard) and Sector 3 (Semi-intensive and commercial) producers?
3. What are the consequences for gender equality as small-scale poultry production intensifies?
4. What are the unintended consequences of PREVENT?

There are four research streams, three exclusively in Tanzania and Nigeria: a quantitative impact evaluation, an FT monitoring study, and a qualitative gender study. Across all PREVENT countries, a fourth stream involves a modeling study to estimate the Net Economic Benefits (NEB) for SSPs purchasing VDOCs and the numbers reached. **This report presents the baseline findings of the quantitative impact evaluation.** A quasi-experimental methodology has been used to track SSPs at two points in time: baseline and endline. In each country, 1,800 SSPs were interviewed, split evenly between treatment and control, and with samples of Sector 4 (backyard production) and Sector 3 (semi-intensive and commercial production).

Study purpose: Assessing the quantitative impact of PREVENT on poultry production, intensification, and household welfare.

Methodology: A quasi-experimental approach, utilising Coarsened Exact Matching (CEM) to compare SSPs supported and not supported by PREVENT.

GALVmed function: Monitoring & Evaluation

Dates: April - August 2023

Location: Tanzania and Nigeria

Consultant study lead: Oxford Policy Management (OPM)

Local implementing partner: OPM & ILRI

KEY FINDINGS

Household characteristics and chicken production

- The **majority of chicken caretakers are women**, particularly in Tanzania where this is true for 76% of households, and to a lesser degree in Nigeria where this is true for 58% of households.
- In both countries and across both sectors, the majority of households have **acceptable diets**.
- **Use of veterinary services is low**, particularly in Nigeria.
- Current **VDOC uptake is low**, including for Sector 3 SSPs in both countries, with only 38% of Sector 3 SSPs in Nigeria, and 35% in Tanzania having purchased VDOCs within the last 3 months prior to the baseline survey.
- The baseline survey has coincided with a **challenging time for chicken production** in both countries. Flock sizes have recently reduced in response to external factors, including inflationary pressures on chicken feed driven by global events.
- Intensified chicken production requires **access to a range of inputs**, some of which may be missing for some SSPs in both countries.
- SSPs in both countries are **highly exposed to shocks***. Over 50% of SSPs in Nigeria and over 70% in Tanzania were impacted by a shock, and many were impacted by multiple shocks within the year.

Gender dynamics

For this study, the [Women's Empowerment in Livestock Index \(WELI\)](#) has been used as a tool to assess the empowerment of women in the livestock sector, and evaluate parity with men in their household.

- **Work balance** is an area of disempowerment for women in both countries and is likely one of multiple limiting factors preventing women in Sector 4 from increasing their flock size, especially in Nigeria.
- In Tanzania, **mobility** is an area of disempowerment for men and women and is a concern for access to VDOCs as well as other critical inputs such as veterinary products and services.
- In Nigeria, **ability to own land and other assets** is a major area of disempowerment for women in the poultry sector in the study sites visited.
- Women reported being able to **input into productive or livestock decisions**.

**Shock is any unexpected and adverse event that causes loss in the income of the household, decrease in household consumption, and loss in the households' assets, including those that are climatic, crop, livestock related, economic and idiosyncratic in nature.*

CONCLUSIONS & RECOMMENDATIONS

- **Poultry production strategies differ between Nigeria and Tanzania.** In Tanzania, Sector 3 SSP operations are managed at the household level, dependent on unpaid family labour. In contrast, Nigerian SSPs largely operate as formal businesses, employing paid workers. These divergent approaches represent ends of the spectrum in poultry management strategies across sub-Saharan Africa, with implications for gender roles and M&E outcomes.
- Chicken production can be a **profitable activity**, particularly as chicken production intensifies with Sector 3 SSPs in both countries generating annual income from chicken production that compares well with current levels of GDP per capita.
- Considered the baseline evidence of an **acceptable household diet**, it is unlikely that PREVENT will support major improvements in this regard.
- The **scarcity of veterinary services** poses a threat to the long-term effectiveness and impact of the programme.
- **Shocks and spiralling input costs**, in particular the increasing costs of chicken feed, could have a negative impact to chicken production and intensification.
- The **initial assumption that women are involved in chicken production is satisfied** at least at baseline, with the majority of chicken caretakers being women. Women also report control over income, and input into decision making.

- **There is room for PREVENT to have impact and expand the market for VDOCs** through more intensified marketing via FTs. Farmer meetings suggest a viable route into increasing VDOC uptake.
- The adoption of VDOCs and information about VDOCs is low across both countries (expected at baseline), suggesting that **increasing the penetration of VDOCs presents an opportunity to enhance the productivity** of chicken production.
- An **end-line study** will be conducted to capture the changes resulting from the project's implementation.

Study Limitations: *The baseline findings offer valuable insights into the poultry production dynamics of Nigeria and Tanzania. Nevertheless, several limitations merit attention. These include the quasi-experimental design's innate susceptibility to overlooking confounding variables, the restricted scope of the study to two countries, potentially limiting generalizability, the reliance on self-reported data prone to response bias, and the constrained timeframe possibly overlooking long-term trends. Despite these limitations, the study remains instrumental in understanding the impact of the PREVENT initiative and informing strategies for enhancing hatchery production in sub-Saharan Africa.*