

Edinburgh Research Explorer

Sustainability of Poulet du Faso

Citation for published version:

Allan, F, Wong, JT, Ducrotoy, M, Borne, P-M & Le Guen, M-E 2024, Sustainability of Poulet du Faso..

Link:

Link to publication record in Edinburgh Research Explorer

Document Version:

Publisher's PDF, also known as Version of record

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policyThe University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.









Sustainability of Poulet du Faso

Fiona Allan¹, Johanna Wong¹, Marie Ducrotoy², Pierre-Marie Borne² and Marie-Elodie Le Guen²

June 2024

The Poulet du Faso initiative aimed to improve the genetics and control of infectious diseases of local chickens, by crossing local cockerels with exotic hens, and kick-starting large-scale production of vaccinated day-old-chicks. The initiative has been highly successful in developing a sustainable distribution network adapted to local conditions. This brief describes key features that contributed to the initiative's continued success, for future projects to consider.

Takeaway messages

Through capacity building and the development of a new value chain that is adapted to the local context, the initiative generated economically sustainable employment and incomes. A network of mutually dependent and interlinked viable and sustainable businesses have been created and continue to operate years after the end of the initiative/project. Key features of how this sustainability was established are:

- Poulet du Faso established a clear understanding of the local market needs in Burkina Faso. The initiative met these needs in its creation of optimised poultry production, with batch rearing of day-old chicks and selection for faster growth.
- From the outset, the Poulet du Faso initiative was designed with an exit strategy that enabled it to continue beyond the end of the project. As the funders acted more like investors than donors, entrepreneurs were encouraged to take ownership of their objectives and develop viable and sustainable business models.
- Realistic and well-managed timelines were key components of the project management.
 Staff were trained and coached throughout, and by encouraging ownership of the project, talented staff were retained.
- Innovative approaches were used; genetic selection of the female line rather than the male, and innovative vaccination of day-old chicks.
- Specialisation of every stage was provided to create an entirely new value chain, in order to best serve the famers.

Features for economic sustainability

1. Understanding and meeting market needs: This initiative delivered what the farmers wanted chicks, improved productivity, and local chicken meat. Due to longstanding experience in Burkina Faso, Ceva had a strong understanding of the local market needs, as well as the challenges, and suitable solutions. Customer analysis was conducted to establish the most appropriate marketing methods for the Burkina Faso context. Thus, the initiative tapped into local pride in the traditional 'poulet bicyclette', with the Poulet du Faso brand name reflecting the local values. The created product looked and tasted very similar to the local equivalent, but with optimised productivity.

The optimised productivity involved two key features:

- **Batch rearing** of chicks instead of self-perpetuating traditional flock management. Where traditional systems yield max 200 chickens per year (typical small-scale farm has 10 females, each yielding max 20 chicks that reach market weight annually), small scale farmers batch rearing purchase around 500 chicks.
- Genetic **selection for faster growth**, reducing time to market weight from 6-12 months to 2-3 months.

² Ceva Santé Animale SEBI-Livestock

¹ SEBI-Livestock

With increased productivity, four or five annual cycles of 500 day-old-chicks provided opportunity to derive income from the sale of 1,900 chicks (2,000 x 0.95%, allowing for 5% mortality), an almost ten-fold increase, increasing farmer earnings, as well as producing more chicken meat for consumption.

Adopt a business approach from the outset: To ensure sustainability, it was important to consider the program as a start-up company from the outset, aiming to be financially autonomous. Use appropriate wording from the beginning i.e., there are investors, not funders; there is a business to run, not a project; there are technical-commercial agents, not champions or ambassadors. Investing in an innovative business is highly risky; entrepreneurs should adopt a dynamic and proactive approach. Funders should act like investors, de-risking the initial major investments that are required, but asking for results in return (Table 1) – this encourages a proactive mindset to develop a sustainable business model. The economic sustainability of the change caused by the project is demonstrated by the continued and improved profit margin after the project ended. There must be the mindset that for the business to be successful, the only option is to take action, to generate profit. Mentoring in economic management can help to make this paradigm shift. Finally, the marketing strategy must be consistent to reach targets, and the team must be technically and commercially fully operational.

Project cost (funders investment) (USD)	3.6 million
Profit margin per day-old-chick produced (USD)	1.40
Total day-old-chicks produced in project	3.5 million
Total profit margin realised by farmers (USD)	4.9 million
Return on investment (within project period)	1.34

Table 1. Key elements of return on investment calculation.

2. Adaptive and strict management: The dedicated and strict operational management of the initiative meant that there were no delays during the initial phase, allowing focus on the exit strategy in the final two years. Operations were managed with high attention to details, using checklists, Gantt charts, weekly meetings, reports and monthly visits from Ceva. Local management had agile and adaptive responses to changes in the field.

Staff were carefully selected and provided with necessary training and mentoring. Talented staff were retained by encouraging them to take ownership of the project's legacy.

Realistic timelines were established at the project proposal stage, based on previous experience. Strictly maintaining the timeline was key, especially for the selection centre as selection was annual with only four rounds possible during the project's duration.

- 3. Innovation: A novel approach was used in introducing the genetic improvement via the female line. Selecting an exotic slow-growing productive female to cross with a local male had never been tried at scale in traditional poultry farming improvement. Additionally, innovative vaccine technology allowed for vaccinating day-old chicks at the hatchery, providing the earliest protection and improved performance, and drastically reducing the number of on-farm vaccinations needed.
- 4. **Approach across the whole value chain and specialisation:** In order to best serve the farmers the key beneficiaries the project developed an entirely new value chain providing specialisation at each stage:
 - Chicks were produced at the hatchery, instead of the farm.
 - A distribution centre was created, with established links between the hatchery and farms.

SEBI-Livestock Sustainability Brief

- Animal health solutions were provided as vaccination at the hatchery and training of distribution centre agents. Animal health products were also made available locally.
- Separate brooder ('mother-units') and finishing units; the brooder units had specialist technical expertise for this sensitive stage compared to the lower technical requirements of older 'teen' chicks in the finishing units (Figure 1).

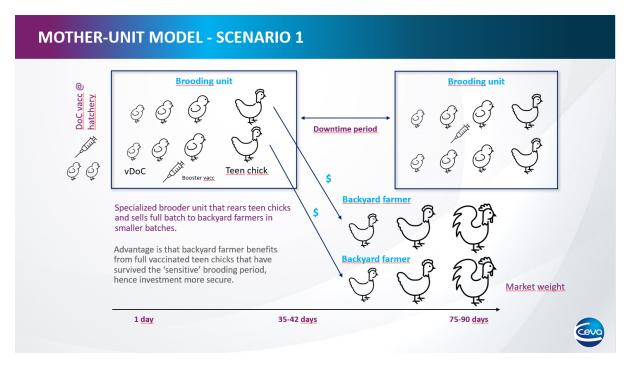


Figure 1. Mother-unit model demonstrating specialist rearing expertise for this sensitive stage of production.

Read the Learnings Brief

Learnings from Poulet du Faso (2024). <u>https://www.research.ed.ac.uk/en/publications/learnings-from-poulet-du-faso</u>

Read the full report

Le Poulet du Faso: A Success Story Improving Traditional Poultry Genetics and Health in Burkina Faso (2022). https://www.ceva.com/commitments/le-poulet-du-faso-a-success-story-improving-traditional-poultry-genetics-and-health-in-burkina-faso/



Contact us: sebi@ed.ac.uk sebi-livestock.org

SEBI-Livestock is based at: The Royal (Dick) School of Veterinary Studies and The Roslin Institute









SEBI-Livestock Sustainability Brief