

NEADAP Report

Exploring dairy extension in East Africa. Study methodology, questionnaires and findings: key features, services, success factors

Authors: Kevine Otieno: informkevo@gmail.com | Annabelle Daburon: annabelle.daburon@wur.nl

Introduction

NEADAP is committed to supporting dairy advisory services in East Africa. As part of this work, we explored the existing diversity of extension models in the six countries of NEADAP and provided representatives of different dairy advisory services with an opportunity to reflect on their success factors and their own capabilities and performance so they could identify areas for improvement.

From November 2022 to January 2023, NEADAP surveyed dairy advisory services in Kenya, Uganda, Tanzania, Ethiopia, Rwanda and Burundi to discover their key features, what kinds of services they provide and what factors help or hinder their success. After the survey, from February through to April 2023, case studies were carried out in Uganda and Kenya, focusing on three case studies each from three different types of dairy advisory services. These findings were validated during follow-up stakeholder workshops attended by a subset of the case study respondents and key informants.

Building on this initial analysis and data, we will organize a collaborative process that brings together professionals from East Africa to gain a better understanding of dairy advisory services in the different countries and explore strategies to foster a sustainable and impactful dairy extension service ecosystem. This collaborative effort will shed light on the priority investments required to strengthen different types of dairy extension services and how they can mutually benefit from one another. Ultimately, our aim is to create a roadmap for decision-makers to foster an environment conducive to dairy farmers thriving and experiencing the positive impact of these services.

This document gives more detail about the study methodology and findings. Find out other parts of the study through these links:

- [**Exploring dairy extension in East Africa: study methodology and findings: key features, services offered, success factors. \(this report\)**](#)
- [Dairy advisory services: Consultants](#)
- [Dairy advisory services: Cooperatives](#)
- [Dairy advisory services: Digital platforms](#)
- [Dairy advisory services: Financial institutions](#)
- [Dairy advisory services: Input suppliers](#)
- [Dairy advisory services: Processors](#)
- [Back to the overview at NFPCconnects](#)

The study methodology

NEADAP wanted to establish what dairy advisory service providers currently exist in Kenya, Uganda, Tanzania, Ethiopia, Rwanda and Burundi and what makes them successful. To do this, NEADAP:

1. **Conducted a survey (Nov 2022 to Jan 2023):** This allowed NEADAP to map the organisations involved in dairy extension and advisory services in the six countries and identify different types of dairy service providers and their key features. For each type, the study tried to capture the critical success factors for a sustainable dairy advisory service from the point of view of the professionals themselves.
2. **Carried out case studies (Feb 2023 to Apr 2023):** In two of the countries, Uganda and Kenya, dairy advisory service providers were selected to be further studied. In each country, three case studies were undertaken of each of three types of dairy advisory service, so that all six categories of service were studied.
3. **Held workshops (March 2023 to April 2023):** The case study findings were validated during stakeholder workshops attended by a subset of the case study respondents and with key informants.

Survey

In each of the six countries Kenya, Uganda, Tanzania, Ethiopia, Rwanda and Burundi, a semi-structured questionnaire was administered by a local dairy expert who was called the 'focal point' in that country. Kobotoolbox was used to survey a sample of dairy advisory service providers for each country.

The Dairy Advisory Service Mapping in East Africa questionnaire (annex A) asked about:

- the structure of the organisation (staff, management, activities, etc.), particularly in relation to its dairy advisory activities
- business model (type of service, customers, perspectives, etc.)
- SWOT (strengths, weaknesses, opportunities, threats).

In Burundi, the questionnaire was translated into French and the answer was translated into English for analysis. In Ethiopia, the questionnaire was translated into Amharic and the answers into English for analysis.

Sampling for the survey

A sample of diverse advisory services was identified in the six countries with the main aim of maximizing the diversity of advisory service models in the database. The respondents were identified by:

- **Focal point network:** This was the local dairy expert who coordinated the administration of the questionnaire in each country.
- **NEADAP network:** The NEADAP community was requested to submit suggestions of advisory services in the six countries.
- **Other:** Desk research was conducted to identify dairy advisory service providers, especially the emerging digital extension service providers

- **Snowball method:** Respondents in the initial list were asked to provide leads to additional dairy advisory service providers within their networks. This facilitated outreach to the relevant respondents outside NEADAP's reach.

To guide the sampling strategy, ten categories of advisory services were purposively identified: input suppliers, processors, consultants, public, cooperative, financial institutions, and "other" (to capture advisory service that did not fit in any of the previous categories). The final categories that were used for the study were consultants, cooperatives, data platforms, financial institutions, input suppliers, and processors. The category "public" was not used because they are out of scope for NEADAP, which focuses more specifically on the private sector. The category of "data platforms" was included separately because it was well represented within the "other" category in the survey responses.

A goal of five examples of each category were recruited for a total 35 respondents per country. If a given category could not meet the quota, the other categories were expanded to maintain the sample size of 35 respondents per country. In each organization sampled, extension agents were purposively selected (and recruited with consent) to answer the questionnaire.

Case studies

The aim of the case studies was to identify the constraints and establish the critical success factors necessary for setting up and running a successful dairy advisory service in East Africa, from the point of view of the providers themselves in two countries, Uganda and Kenya.

It is important to use a framework to guide assessment of organizational capacity. One such method is the Five Capabilities (5C) framework (Huisman & Ruijschot, 2013). Five interlinked capabilities, none of which is sufficient by itself, overlap in the assessment of organizational capacity to deliver a sustainable dairy advisory service.

1. **The capability to act and commit:** This capability measures the ability of the organization to plan, decide and execute these decisions collectively to commit and act on its mandate.
2. **The capability to deliver on development objectives:** This capability assesses if the organization has the ability to develop, implement and monitor its operations with the chief aim of ensuring growth of the organization and the sector in which it operates.
3. **The capability to adapt and self-renew:** This capability measures the ability of the organization to put in place monitoring and evaluation structures and learn from its results to remain adaptive to environmental changes and remain innovative in delivery of dairy advisory services.
4. **The capability to relate to external stakeholders:** This capability assesses the ability of the organization to collaborate with key sector players to achieve a sustainable dairy industry.

5. **The capability to achieve coherence:** This capability assesses the ability of an organization to act as a unitary body in its mandate to deliver core products and services.

Under each of the above capabilities, an assessment established the capability of the organization when it first started delivering dairy advisory service compared to its capability at the time of the survey. The overall output is an aggregate score of each of the capabilities, which is used as an internal assessment tool to identify areas that need readjustment to keep the organization performing optimally.

Drawing on the 5C approach, criteria were identified to capture the diversity of services and the critical success and hindering factors from the perspective of professionals in the two focus countries (see [Case study questionnaire](#), annex B). A semi-structured self-assessment questionnaire was developed that was completed by case study representatives.

Sampling for the case studies

The case studies were conducted in Kenya and Uganda. The original survey questionnaire suggested 10 categories of dairy advisory service. Based on the responses to the initial survey, six categories were prioritized as case studies. For each of these six categories, three case studies were selected. Three categories were assessed in Kenya (processors, financial institutions, digital platforms) and three in Uganda (input suppliers, consultants, cooperatives). The selected respondents were drawn from the initial mapping pool.

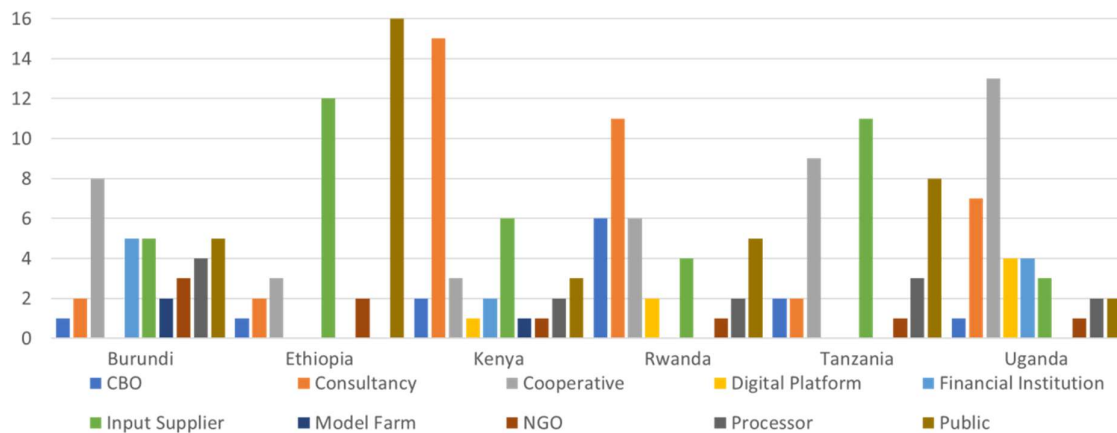
Workshops

To validate the case study findings, six workshops were organized, one for each category of dairy advisory service. Each workshop gathered representatives and key informants with extensive knowledge on the category of dairy advisory service. During the workshop, a participatory process helped to validate and enrich the findings collected during the case study data collection on critical success factors.

The full study methodology is described in [Study Methodology file name/link to the document on the web].

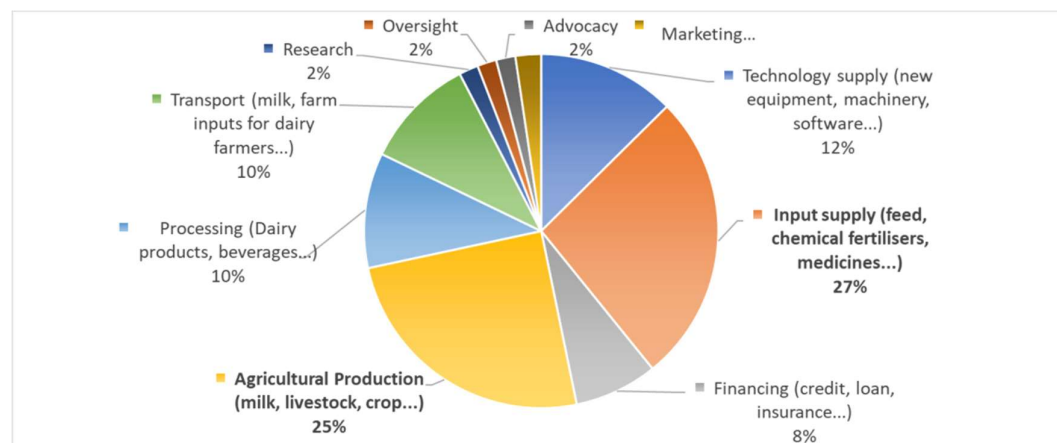
Key features, services offered, success factors

This part of the report describes the results from the survey of dairy advisory services in Kenya, Uganda, Tanzania, Ethiopia, Rwanda and Burundi.



Responses were received from 216 dairy advisory service organizations. The categories of dairy advisory service that were most common in the survey responses were cooperatives, input suppliers, public service and consultancies. Emerging advisory service models such as digital platforms are found in Kenya, Uganda and Rwanda. Financial institutions offer dairy advisory services in Kenya, Burundi and Uganda.

The organizations participating were engaged in multiple activities (answers = 342) apart from their dairy advisory role; input supply (27%) and agricultural production (25%) are the most represented.



As part of the survey, respondents were asked to describe the strengths, weaknesses, opportunities and threats their organizations face. This is known as a SWOT analysis.

| | |
|---|--|
| <p>Strengths (answers = 239)</p> <ul style="list-style-type: none"> • experienced staff (37%) • client relations (24%) • service tailoring (11%) • access to funds (10%) • strategic plan (10%) | <p>Weaknesses (answers = 204)</p> <ul style="list-style-type: none"> • weak funding and business model (66.7%) • inefficiency within the organization (9.8%) • lack of dairy experience (8.3%) |
| <p>Opportunities (answers = 236)</p> <ul style="list-style-type: none"> • investments in the dairy value chain (37%) • increasing demand (24%) • networking (11%) • new technologies (10%) | <p>Threats (answers = 238)</p> <ul style="list-style-type: none"> • constrained access to resources (28%) • natural calamities (18%) • high operational costs (12%) • new entrants (competition) (8%) • limited skilled employees (8%) |

Support for dairy advisory services should prioritize strengthening soft skills: business models and networks.

The organisations investigated identify several key factors that helped them to achieve their milestones (answers = 163):

- the reliability of the organization to farmers (16%)
- stakeholders' involvement to complete the dairy extension offer of the organization (using service providers to match farmers' needs) (13%)
- skilled, qualified and committed staff (13%).

To become more effective, they would prioritize (answers = 271):

- increased investments in physical capital (19%)
- the capacity building of their staff to provide more efficient dairy extension (17%)
- strengthened stakeholder involvement to match farmers' needs (15%).

Conclusion:

- **Cooperatives, input suppliers, public service and consultancies dominate** dairy advisory services that are non-specialized in dairy extension.
- **New forms of advisory services are emerging:** digital platforms and financial institutions, particularly in Kenya, Uganda, Rwanda and Burundi.
- **Fragility:** The weak business model of dairy advisory services is their main weakness, and they have challenges in accessing resources
- **Strength:** Experienced staff, networking and stakeholder engagement are critical success factors.

Acknowledgements

The NEADAP team would like to express our heartfelt gratitude and appreciation to the following individuals and organizations who contributed significantly to the successful completion of this research: Peter Kalinda (Uganda), Esperance Niyonsaba and Privat Barajenguye (Burundi), Kipchirchir Julius Kosgei (Kenya), Target Business consultants (Ethiopia), Dr John Baptist Musemakweli (Rwanda), Paschal Lala Tekwi (Tanzania). We would also like to extend our thanks to all the team members who worked behind the scenes, ensuring the smooth execution of this research. Your collaboration and commitment have been crucial to the accomplishment of this study. Last but not least, we are deeply grateful to all the participants who took the time to engage in our survey. Without your valuable input, this research would not have been possible. Your willingness to share your perspectives and experiences is sincerely appreciated.

Annexes

- a. Mapping questionnaire
- b. Case study questionnaire