NEADAP Report
Dairy extension by digital platforms

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Introduction

The Netherlands East Africa Dairy Partnership (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.

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 dairy advisory services by digital platforms. Find out other parts of the study through these links:

- Exploring dairy extension in East Africa: study methodology and findings
- Dairy advisory services: Cooperatives
- ***Dairy advisory services: Digital platforms (this report)***
- Dairy advisory services: Financial institutions
- Dairy advisory services: Input suppliers
- Dairy advisory services: Processors
- Back to the overview at NFPConnects

Key features of digital platforms

Provision of dairy advisory services through digital platforms and model farms is an emerging trend. To assess the capacity of these platforms to offer sustainable dairy advisory services, **NEADAP conducted a survey to which seven digital platforms responded.** There is important diversity in these different pioneer digital platforms. Most are focusing purely on dairy advisory services that target farmers and/or other dairy stakeholders and provide a space where members can exchange information. Two combine this service with a marketplace, creating business opportunities for users. **Though small, this sample does exemplify some general features to describe these emerging advisory channels**. **The sample was distributed as follows: Uganda (57.14%), Rwanda (28.57%) and Kenya (14.29%). No examples of digital platforms were found in Tanzania, Ethiopia or Burundi.**

The digital platforms range from startup: 0–3 years old (28.57%), to growth phase: 4–7 years (28.57%) and 8–11 years (28.57%); to established: 12–15 years (14.29%).

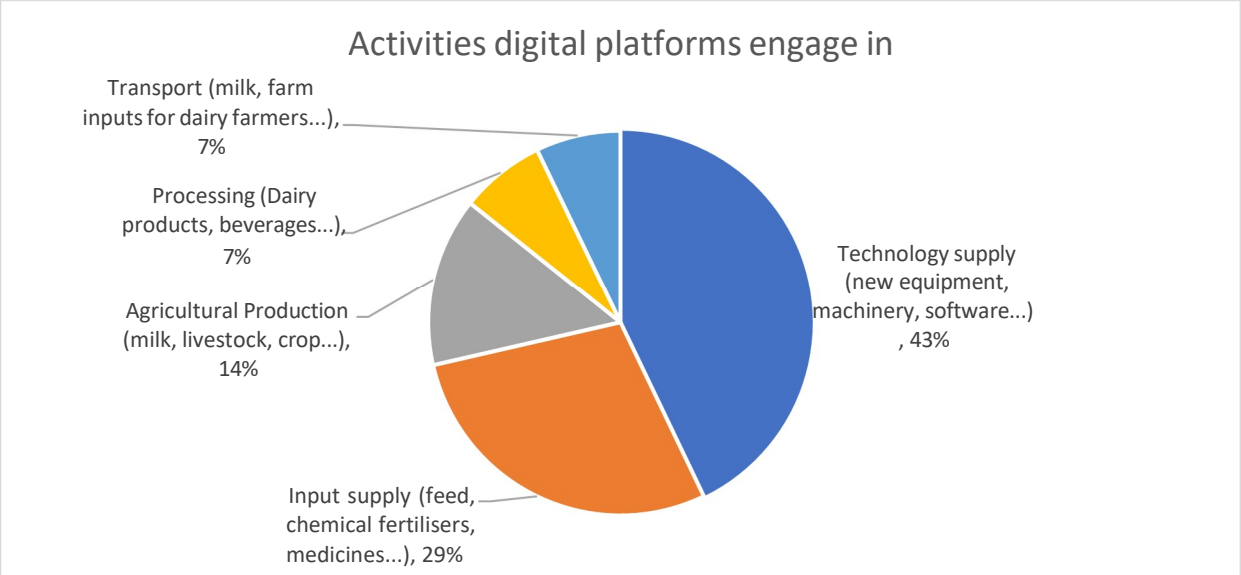

Figure 1: Activities digital platforms engage in

The digital dairy advisory service providers are engaged in technology supply (43%), input supply (29%), agricultural production (14%), transportation (7%) and processing (7%). The staff composition in these organizations is as follows: 1–5 members (14.29%), 6–10 members (57.14%), 11–30 members (14.29%) and 31–50 members (14.29%). **Noticeably, a majority of the staff in the digital platforms with 1–5 staff members are females (57.14%) and are younger than 30 (57.14%).**

Digital platforms cover multiple topics fairly evenly in their advisory service delivery as shown in Figure 2 with rec**ords and record keeping (16%) and animal health and nutrition (13%) taking the biggest proportion in the pie chart**.

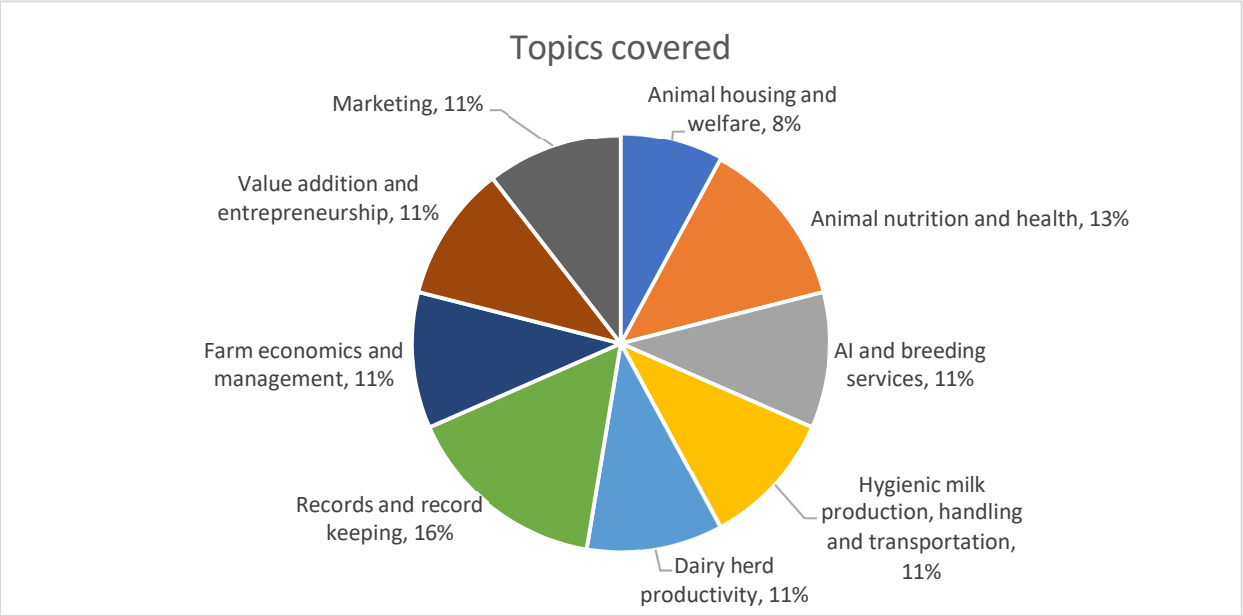

Figure 2: Advisory topic areas

They deliver most of their advisory services via a combination of on-farm demonstrations (25%), online (25%), in person (25%), traditional media (13%) and peer-farmers exchange (13%), as shown in Figure 3.

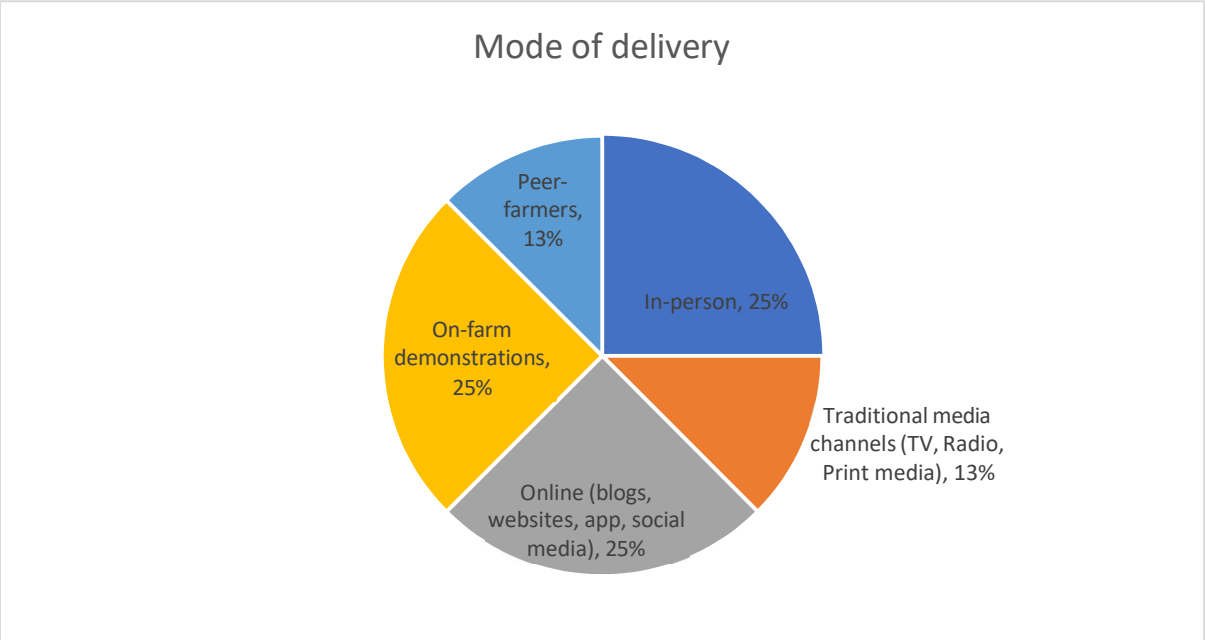

Figure 3: Mode of advisory service delivery

The audiences served by digital platforms are mostly male (71.43%) and middle-aged (85.71%). The target clients of the digital platforms are small-scale specialized dairy farms (focusing on dairy production) (29%), medium-scale specialized dairy farms (21%), small-scale mixed crop and dairy farms (21%) and medium-scale mixed crop and dairy farms (21%).

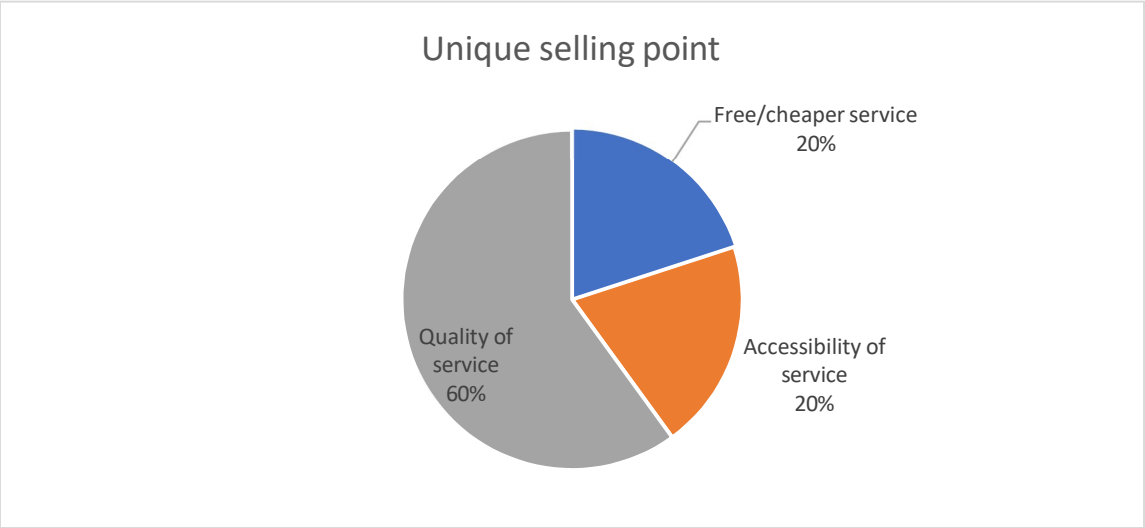

Figure 4: Unique selling point

Quality of service takes precedence is the leading reason (60%) for why customers remain loyal to the digital service provider. This is followed by accessibility (20%) and affordability (20%) of their services.

SWOT analysis

Strengths (answers = 8)	Weaknesses (answers = 7)
• **experienced staff (50%)** • **strategic plan (25%)** • client relations (13%) • service packaging / adaptability (13%)	• **fund constraints (71%)** • **few staff (14%)** • inexperience (14%
Opportunities (answers = 8)	**Threats (answers = 7)**
• ***increased*** **investments in dairy value chain (25%)** • ***networking*** **(25%)** • *increasing* demand for dairy extension services (13%) • *new technology-digitalization (13%)* • *political* goodwill (12%) • *social capital and trust with clients and partners (12%)*	• **resource constraints (29%)** • **poor infrastructure (29%)** • limited skilled employees (14%) • poor technologies (14%) • new entrants (14%)

Self-assessment of critical success factors for dairy advisory service provision by digital platforms

The capacity of digital platforms to offer dairy advisory services can be assessed and monitored via the Five Capabilities (5C) framework (Huisman & Ruijmschoot, 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.

The critical factors that can lead to digital platforms successfully delivering dairy advisory services, as well as factors that hinder this success, were queried during a workshop with the digital platform representatives engaged in advisory service provision.

1. The capability to act and commit

This capability measures the ability of the digital platform to plan, decide and execute these decisions collectively (as an organization) in order to commit to and act on its mandate.

Critical success factors

- Human resource (professionalism, expertise/qualification of staff)
- Reliable management
- Conversion rate (how customers pay for and subscribe to service delivery)
- Number of services requested
- Simple and adapted solution of the service (e.g. chat allowing exchange with and between farmers)

Hindering factors

- Government offering free extension services
- Low adoption rate of technology and training
- Poor network coverage and smartphone access
- Inadequate product packaging (poor linking of product to a service)

2. Capability to deliver on development objectives

This capability assesses if the digital platform has the ability to develop, implement and monitor its operations to ensure its growth and the growth of the sector in which it operates.

Critical success factors

- Blending advisory services with a physical product
- Hands-on experience
- Standardization information

- Follow-ups on adoption and impact

Hindering factors

- Right platform to deliver the services
- Lack of funding
- Corruption
- Cultural bias (e.g. some cultures would not allow women to have jobs in artificial insemination)

3. Capability to adapt and self-renew

This capability measures the ability of the digital platform to implement monitoring and evaluation structures and learn from the results so as to stay adaptive to environmental changes and remain innovative in dairy advisory service delivery.

Critical success factors

- Monitoring data user and technology (to customize the experience and improve service)
- Utilizing local knowledge and extension staff
- Changing target group
- Investing in marketing
- Adapted IT solutions

Hindering factors

- Inadequate finances
- Poor network coverage
- Digital illiteracy

4. Capability to relate to external stakeholders

This capability assesses the ability of the digital platform to collaborate with key sector players in order to achieve a sustainable dairy advisory service industry.

Critical success factors

- A business model that stands out and makes it sustainable
- Attractive service in term of quality and content
- Transparency of results and work done
- Credibility (previous engagement with clients or partners)
- Number of users using the service (more client base or customer reach)

Hindering factors

- Lack of transparency
- Misalignment of needs
- Internal tension within the organization
- Infrastructure (internet network, road coverage)
- Lack of networking opportunities

5. Capability to achieve coherence

This capability assesses the ability of a digital platform to be united in its mandate to deliver core products and services.

Critical success factors

- Training and capacity building
- Policy directions to create teamwork
- Organizational internal management
- Human resources (putting the right people in the right assignment)

Hindering factors

- Tension in the team between dairy experts and IT-developer experts who do not share a common language
- Lack of training
- Lack of sufficient policies in place
- Leadership styles affect how the team works together (bureaucracy)

Figure 5 summarizes the average capacity of three digital platforms, considered by the sector as successful, that responded to a detailed survey to deliver sustainable dairy advisory services (0 is very poor; 5 is very strong). Via a questionnaire, these digital platforms did a self-assessment and compared their capacity when they first started delivering dairy advisory services (two of them were established between 8 and 11 years ago and another less than 3 years ago) and their current capacity at the time of the survey.

The results show that successful organizations perceive themselves as having strong to very strong capabilities in the five domains. Since their creation, they have progressed in their ability to deliver on objectives and to connect to external stakeholders, two essential pillars of their success.

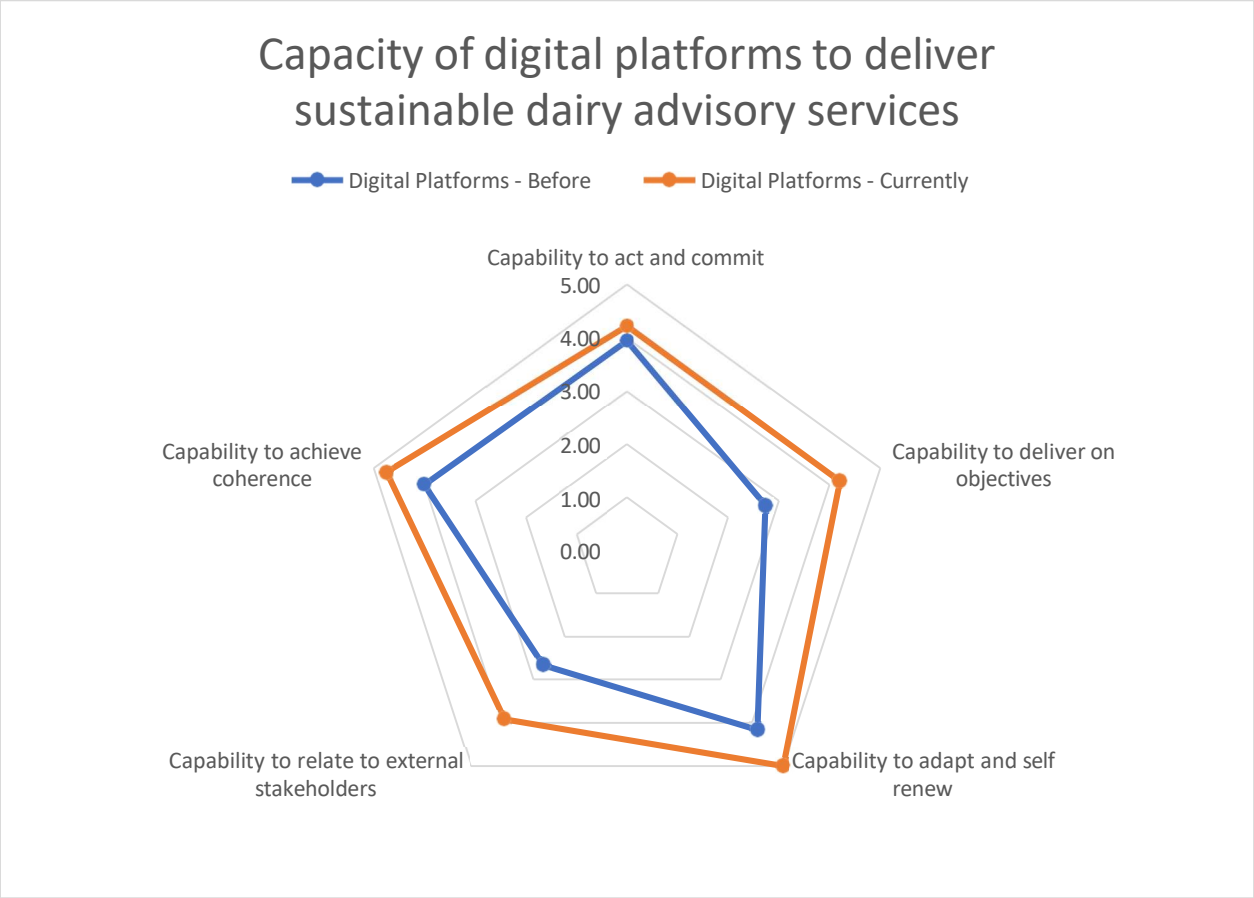

Figure 5: Digital platform 5C analysis

Recommendations from professionals for professionals

During a workshop, the digital platform themselves identified several critical factors that a digital platform should prioritize in the early stages of setting up a dairy advisory service:

- Business model (target customer, who will pay, sustainability)
- Identify the right platform (where to host the service, e.g. app, USSD, YouTube)
- Have an organization set up, legal entity and compliance
- Good content developers
- Marketing plan and digital marketing
- Funding.

Recommendations drawn from results for decision-makers

- Enhance funding opportunities for digital start-ups in the dairy value chain, since inadequate funding is cited as a major constraint in the development of this model of dairy advisory service.
- Provide more networking opportunities for digital platform dairy advisory service providers to connect and share knowledge and find partners and investors.
- Digital platforms can revolutionize payments, marketplaces, capacity building and networking opportunities for dairy stakeholders. Furthermore, it can attract youth to the dairy sector. Decision-makers (policy, donors, development actors, etc.) should engage further in better understanding these platforms – their potential and pitfalls – and adapt upcoming strategies accordingly.
- Digital inequities are a major threat for digital platforms to become a vehicle to sustainable dairy development. Decision makers should adopt digitalization strategies addressing this phenomena.

Questions for your organization

We invite you to reflect on the capabilities of your organization:

- What was the capability status of your dairy advisory service when it started?
- What has improved since then?
- What capability is still lacking?

You can use the pdf questionnaire (see intro – methodology report) to guide you in a more detailed reflection.