

Lessons Learned from the Experiences
of Female Dairy Farmers in Women-Only
and Mixed Self-Help Groups and Cooperatives:

**Advancing Financial Inclusion
and Local Dairy Development in Northern Nigeria**

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Cover photo: Community entry and sensitization on ALDDN project at Rihogi in Kaduna State. (TechnoServe)



Women-only self-help group formation at Kurmi Sata in Kano State. (TechnoServe)

Executive Summary

Community-based organizations have long been viewed as an important tool in supporting local economic development in rural areas and other economically marginalized communities. Nevertheless, there are significant questions about which structures best enable these groups to support inclusive growth and in particular for women.

Drawing from the Advancing Local Dairy Development in Nigeria (ALDDN) project, this case study focuses on the experiences of female dairy farmers engaged through women-only, men-only, and mixed-sex self-help groups (SHGs) and cooperatives. The project worked from 2020 to 2025 across six northern Nigerian states, with the goal of fostering an inclusive local dairy sector that enhances livelihoods, improves nutrition, and empowers smallholder dairy farmers. Adopting qualitative research methods that include focus group discussions, in-depth interviews, and key informant interviews, the study captures insights on how the SHGs served as platforms for financial inclusion, knowledge transfer, and social empowerment for women dairy farmers.

The findings show that SHGs provide spaces where women develop leadership skills, access financial services, and strengthen social support networks, despite entrenched patriarchal norms and domestic responsibilities that constrain their full participation. Women-only groups were reported to provide better opportunities for women to develop and apply their leadership skills and also offered a broader range of support for members. However, barriers persist, including time poverty, limited asset ownership, and the sustainability of project activities and achievements. These findings underscore the need for gender-sensitive programming, sustained community engagement, and stronger institutional partnerships to maximize impact and foster systemic change toward women's empowerment in local dairy value chains.

KEY FINDINGS

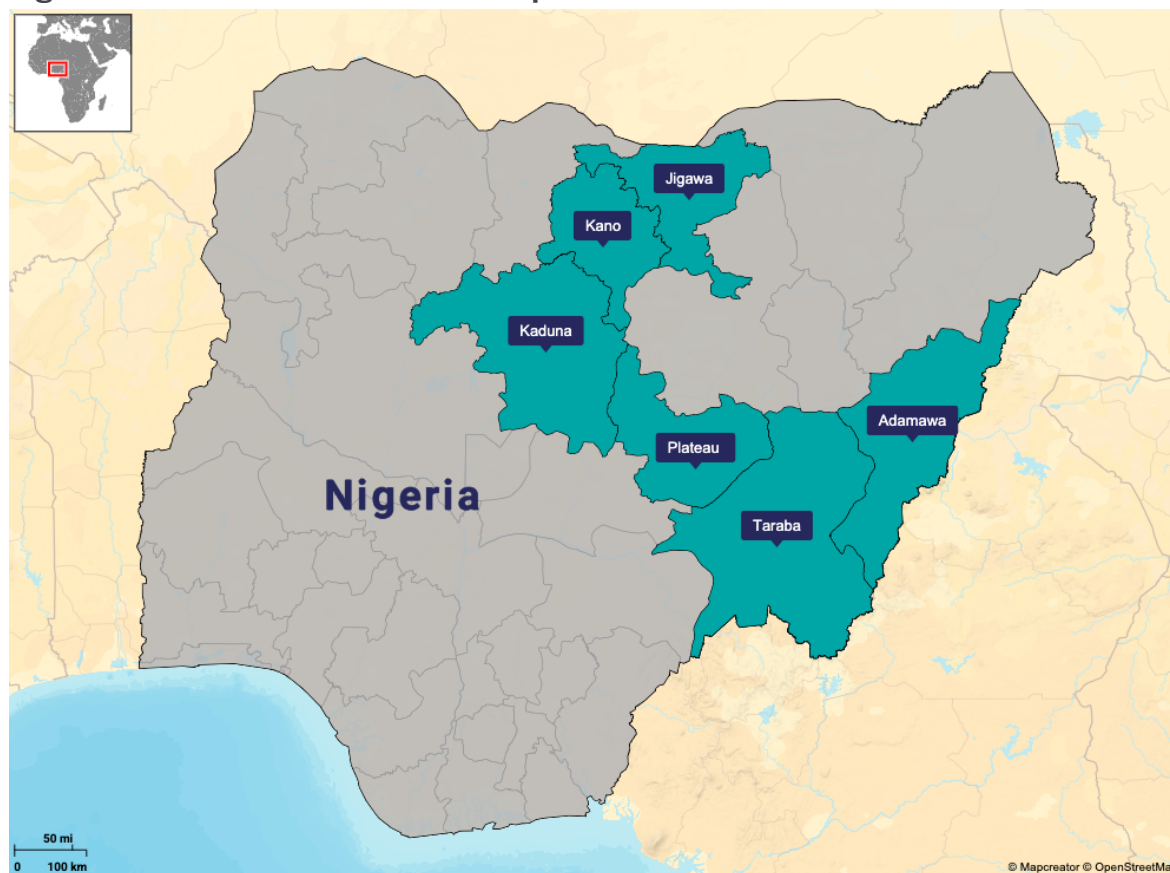
- ALDDN formed and strengthened 2,664 self-help groups (SHGs) and 233 cooperatives, collectively reaching over 63,000 farmers.
- Achieved strong gender representation across SHGs:
 - 41% women-only groups
 - 24% mixed-sex groups
 - 45% men-only groups
- Increased annual savings among SHG members by 346%

- ⇒ **Women predominantly engage in dairy farming activities traditionally assigned as domestic roles** that include milking, processing, hygiene, and sales, with SHGs providing training that enhances these skills and introduces business and financial management capabilities.
- ⇒ **Participation in SHGs enhances women's financial inclusion through access to savings, credit facilities, and digital financial literacy**, which in turn supports income diversification and greater economic autonomy.
- ⇒ **Women-only SHGs offer unique benefits by creating safe spaces for women to build leadership skills**, take on executive roles, and foster collective agency, while mixed-sex groups generally reflect prevailing patriarchal leadership with men chairing.
- ⇒ **Despite increased income and enhanced decision-making roles, men often retain ultimate control over major household economic decisions** due to enduring sociocultural norms, even while there are some indications of shifts toward joint decision-making.
- ⇒ **Persistent challenges for women include irregular attendance at SHG meetings due to their unpaid domestic responsibilities**, limited access to productive assets, loan repayment risks, and concerns about the sustainability of groups post-project closure.

Introduction

The Advancing Local Dairy Development in Nigeria (ALDDN) project, funded by the Bill & Melinda Gates Foundation and implemented by TechnoServe in partnership with SAHEL, is a five-year initiative (2020-2025) designed to catalyze an inclusive and vibrant local dairy sector in Northern Nigeria. The project targeted 60,000 smallholder dairy farmers across six states: Kano, Kaduna, Adamawa, Plateau, Taraba, and Jigawa, with a focus on improving livelihoods, nutrition, and the empowerment of women within these communities. Key objectives included increasing demand for locally sourced milk, enhancing milk productivity and quality, fostering financial inclusion oriented toward women, and advocating for supportive policy environments around dairy farming.

Figure 1: States where ALDDN was implemented



The ALDDN project employed an integrated approach targeting several complementary components. It helped organize farmers into self-help groups (SHGs) – community-based collective organizations serving as platforms for savings, credit access, training, and social support among members – and cooperatives. Integrating a village savings and loans association (VSLA) methodology into these groups, it also supported investment in dairy infrastructure and facilitated financial inclusion and income diversification. The project delivered technical productivity support, promoted hygiene and nutrition, and engaged in policy advocacy to create an enabling environment. By employing these strategies, the project sought not only to improve economic outcomes but also to challenge and transform traditional gender roles in Northern Nigeria’s dairy sector.

OBJECTIVE OF THE LESSONS LEARNED REPORT

The report aimed to document and analyze the experiences and perspectives of women dairy farmers participating in women-only, men-only, and mixed-sex SHGs and cooperatives under the ALDDN project. It assesses how these group platforms have influenced the financial inclusion, economic empowerment, social dynamics, and broader roles of women in local dairy development. By highlighting lessons learned over the life of the intervention, the report intends to inform future agricultural development projects seeking to sustainably advance women's economic empowerment in different agricultural value chains.

Scope and Methodology of the Study

Employing qualitative methods, data were collected across ALDDN's implementation area through six focus group discussions, 30 in-depth interviews, and 10 key informant interviews encompassing female and male farmers from different SHG types, project staff, traditional leaders, and dairy milk processors. Through gender-disaggregated data collection and analysis, the study captures the varied experiences, benefits and challenges experienced by women dairy farmers within these groups.

The methodology incorporates a combination of community ethnographic inquiry and triangulation of views across stakeholder categories through the collection of qualitative and quantitative data. This ensures a comprehensive understanding of the sociocultural, economic, and institutional dynamics shaping women's participation and empowerment in the dairy value chain.

Table 1: Participant's Sample Frame

PARTICIPANTS			
	In-Depth Interview (IDI)	Key Informant Interview (KII)	Focus Group Discussions (FGDs)
ALDDN Project Staff		6	
Dairy Milk Processors		4	
Women-Only SHGs	6		3*
Women from Women-Men SHGs	6		3*
Men from Women-Men SHGs	6		
Traditional Council Member	6		
Men from Men-only SHGs	6		
Total	30	10	6

* Note: Each focus group included between 6 - 8 people.

Contextual Background

ROLE OF WOMEN IN LOCAL DAIRY FARMING IN NORTHERN NIGERIA

Women in northern Nigeria undertake a number of roles within the dairy value chain, including milking, milk processing (e.g., pasteurization, butter production), maintaining hygiene of containers and equipment, and selling milk to local aggregators or processors. These activities are traditionally viewed as extensions of women's household duties, often unpaid and undervalued. Young women tend to assist with farm sanitation and errands related to dairy handling, reinforcing intergenerational labor division within households. Sociocultural norms and patriarchal structures limit women's economic agency by restricting their ownership and decision-making capacity in dairy farming enterprises.

Women's roles in livestock production highlight a global tradition that characterizes farming practices as primarily based on family consumption and small-scale enterprises. Women are responsible for animal care, especially feeding and milking, as well as household responsibilities, including caring for children and the elderly¹. The working hours of women in these traditional care roles are reported to exceed the daily working time defined in developed countries².

The participation of female dairy farmers in northern Nigeria is often characterized by the utilization of traditional milk processing methods, which often leads to low productivity. Amid growing populations and dairy demand, however, there is a need for **better technology** and practices that improve **milk yields** and reduce losses.³

“... Adult women are responsible for the cleaning and washing of milk collection containers. They also convey the milk produced from farmyards to the aggregators. And the milk destined for the market is pasteurized by adult women ...” — *Female dairy farmer, KogomTah, Plateau*

“... The young women are responsible for maintaining proper farm sanitation with proper sweeping and cleaning. They also run errands for home activities, conveying collected milk to aggregators on behalf of adult women ...” — *Female dairy farmer, Tammawa, Kano*

¹ Arce, C., Díaz-Gaona, C., Sánchez-Rodríguez, M., Sanz-Fernández, S., López-Fariña, M. D., & Rodríguez-Estévez, V. (2022). The role of women on dairy goat farms in southern Spain. *Animals*, 12(13), 1686.

² Arce, C., Díaz-Gaona, C., Sánchez-Rodríguez, M., Sanz-Fernández, S., López-Fariña, M. D., & Rodríguez-Estévez, V. (2022). The role of women on dairy goat farms in southern Spain. *Animals*, 12(13), 1686.

³ Anandan, K., Subbaraj, P. K., Jeyakumar, V., Thella, S. R., & Selvaraj, P. (2025). Milk Pit: IoT-Integrated Milk Analyzer with Cloud-Connected Mobile Application. 2025 3rd International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT).

However, women in northern Nigeria have less access to services and finances required to make this transition. **Of the 33 million women who live in rural Nigeria, 16 million rely exclusively on informal financial services⁴.** In recent years, **the gender gap in financial access has widened**, increasing from 10.2% in 2012 to 12% in 2020, and is projected to persist above 10% until 2027⁵. Rural women face particular challenges due to limited collateral, lack of financial literacy, and social norms that hinder women's control over household finances. This exclusion undermines women's capacity to access credit, savings, insurance, and digital financial tools necessary for economic advancement.

The ALDDN project prioritized closing this gap by integrating digital financial literacy, facilitating bank account ownership, and embedding VSLAs in SHGs to provide accessible credit and savings mechanisms.



Village savings and loans association (VLSA) meeting in Kaduna State. (TechnoServe)

⁴ Gender Centre of Excellence CBN. (2023). Gender Centre of Excellence, Central Bank of Nigeria. Situational Analysis of Women's Financial Inclusion in Nigeria: FWFIN Framework for Advancing Women's Financial Inclusion. Nigeria: Central Bank of Nigeria Retrieved from <https://www.inclusiontimes.com/report-launch-situational-analysis-of-womens-financial-inclusion-wfi-in-nigeria/>

⁵ Ogunrinde, O. Y. (2024). The Role of Financial Inclusion in Women's Economic Empowerment: Evidence from Nigeria. *Financial Studies*, 28(1).

Experiences of Women Dairy Farmers in Self-Help Groups

THE ROLE OF SHGS IN DRIVING BENEFITS TO WOMEN DAIRY FARMERS

Across the ALDDN project, 2,664 SHGs were formed or strengthened, including 1,092 women-only groups, 1,186 men-only groups, and 386 mixed-sex groups, collectively reaching over 63,000 farmers. Self-help groups (SHGs) primarily adopted the VSLA methodology, emphasizing voluntary saving contributions and access to small loans, promoting financial inclusion and income diversification.

A recurring theme from the findings is that participation in the groups, whether women-only or mixed, promoted a savings culture, better dairy incomes, and livelihood diversification opportunities. Women-only SHGs also provided participants with opportunities to nurture and exercise their business-management and leadership skills.



Account opening sensitization in Adamawa State. (TechnoServe)

BENEFITS OF SELF-HELP GROUPS FOR WOMEN

Access to Knowledge and Training

Women members reported that SHGs were critical for accessing knowledge and training opportunities not otherwise available without the ALDDN project's intervention in their communities. As presented in Table 1, women's participation in SHGs provided them with access to financial literacy programs, which increased members' understanding of savings culture, loan management, income diversification, and basic bookkeeping. Vocational skills training supported the development of alternative income streams beyond dairy, contributing to enhanced household resilience for the women.

Table 2: Results for women's participation in the project's interventions

Activities	N (%)
Female farmers trained on dairy hygiene practices <i>Training covered dairy hygienic milking practices that cover safe production, high-quality milk that improves both public health and farmers' livelihoods.</i>	50,252 (49%)
Female farmers trained on financial literacy <i>The training covered three modules that are:</i> <i>(1) Savings: Aimed at helping them understand the concept of savings, its benefits, and the VSLA model for both SHGs and Cooperatives;</i> <i>(2) Record Keeping: Emphasizing the importance of maintaining meeting and savings records, as well as basic bookkeeping and budgeting; and</i> <i>(3) Access to Loans, Repayment, and Insurance: Focusing on access loans through SHG and Cooperative VSLAs, loan repayments, and insuring agricultural businesses.</i>	39,438 (40%)
Female farmers trained on income diversification <i>The income diversification training was specifically designed for female dairy farmers to help them identify alternative streams of income beyond dairy farming. The training covered poultry production, sheep and goat rearing, as well as vegetable cultivation, including small backyard gardens for growing leafy vegetables for household consumption.</i>	17,692 (40%)
Women assisted with the opening of bank accounts <i>Women on the ALDDN project were provided information and linkage with banks for ease of bank account ownership.</i>	4,222
Women farmers who received loans through the ALDDN project <i>Loans were accessed through the SHG's contributions by the female dairy farmers.</i>	1,064

Female SHG members affirmed that the training improved their economic agency through improved decision-making around dairy farm management and household financial affairs. The training contributed to improvements in milk processing, hygiene practices, and market access. These are espoused in the excerpts from the female FGDs and IDI participants:

“... By being an active member of this self-help group and cooperative, I have benefited from home gardening intervention where I learn how to farm spinach, carrots, lettuce and cabbage...” — Female dairy farmer, Tamawwa, Kano

“... We benefited from capacity building to improve milk production, maintenance of proper domestic, animal and farmyard hygiene; cooperative benefits include market linkage with processors ... The community has also benefited from solar borehole and milk collection containers and infrastructure from the processor ...” — Female dairy farmer, Rubwoi, Plateau

Increased Financial Inclusion

Participation in SHGs directly facilitated women's access to formal financial systems, including the opening of bank accounts for 4,222 women, and female ownership of bank accounts, often facilitated by project staff and partnered financial institutions on the project. Women reported better financial management skills and formal banking access, particularly as part of initiatives supported by dairy value chain partners and the ALDDN project.

For instance, women participants in SHGs highlighted that milk collection processes are now streamlined through the groups, with men assisting in delivery and prompt payments being deposited into members' bank accounts. This not only ensures financial transparency but also enhances trust and stability in the income flow of female dairy farmers and adoption of digital payments for milk sales and increases income generation. Likewise, SHGs fostered a savings culture through structured weekly contributions, which served as collateral for loan access within the groups and from formal institutions.

“...We didn't have the habit of saving before, but with the emergence of ALDDN and this self-help group/Cooperative, our mindset towards savings has drastically changed positively and has impacted our lives...” — *Female dairy farmer, Hayewa, Kano*

Women's membership in SHGs facilitated easier access to loans as well as access to financial education, allowing women to better manage their incomes. These financial inclusion efforts served to enhance women's capacity to invest in livestock and cover household needs, empowering them toward greater economic autonomy. However, loan default risks and the limited presence of financial institutions in some rural areas prevented the full utilization of credit facilities.

“... Yes I have seen a lot of changes, you know we the Fulani our women are not supposed to frequent the market regularly, rather it's the men that do that but with the introduction of this group's women are saving and have access to loans to help them start business ... like myself, my wife will cook food sometimes without asking for money, and this gives me lots of joy and fulfillment. Many women have commenced home gardening around the house; they sell some and use some to cook at home ...” — *Male traditional ruler, Zaria, Kaduna*

BENEFITS OF WOMEN-ONLY SHGS

Opportunities to Develop and Apply Leadership Skills

In addition to the benefits cited above, women-only SHGs brought additional opportunities for participants in the form of safe spaces for dialogue and exploration of new roles. They created important spaces where women could meaningfully assume leadership roles such as chairperson and secretary, enhancing their confidence and collective autonomy. This contrasts with the realities in mixed-sex groups, where men predominantly occupy leadership positions like chairperson. When women held leadership roles, they were often confined to roles associated with women, like secretary.

“... Participating in this group gives us a safe space and supportive environment where we can share our experiences and concerns without fear of judgment and intimidation ...”

— Female Farmer, Gazewa, Kano

“... there are usually conflicting opinions, we will not be comfortable in expressing ourselves in mixed-sex groups, and men are the chairpersons, but there are female executives ...”

— Female Farmer, Birnin Kudu, Jigawa

This segmented leadership structure undermines the full realization of women's economic agency. Power imbalances also manifest in household decision-making regarding income utilization and dairy farming activities, where men remain the primary decision-makers, though incremental shifts toward joint decision-making are emerging.

“... Yes, there are lots of differences in contributing to decision-making at their home ... Back then, most women didn't contribute to decision-making, but due to training and awareness, they have changed positively. They don't wait for their husbands to do things for them; they do help themselves and also the family ...” — Male traditional ruler, Adamawa

This underlines the importance of women-only SHGs in nurturing female leadership capacity within these communities. The women-only SHGs also fostered peer learning around advocacy, negotiation, and group governance, helping women to challenge gendered power imbalances related to social groups and households. Notably, differences emerged in how leadership dynamics were perceived across the different group types, with single-sex groups, particularly among women, placing a stronger emphasis on emotional support and caregiving, such as visiting sick members or ensuring that no one was left behind.

“... Beyond economic gains, women's confidence has grown; they now voice their opinions in community meetings and lead small enterprises. From dairy farming, they've expanded to manufacturing soap and other daily necessities, making these products locally accessible. This saves time and money for villagers who previously had to travel to Mbamnga ...”

— Male traditional ruler, Kano

Access to Social Support and Welfare

Unlike other SHGs, women-only SHGs provided vital social networking that facilitated mutual support in times of need, covering health expenses, social ceremonies, and childcare. These networks contributed to increased social capital, enhancing women's status and cohesion within the community and supporting resilience against socio-economic shocks. This is elucidated in the submissions from the IDIs below:

“... We are saving in the SHG for the social fund and investment...” — *Female Farmer, Kaduna*

“... We have two different savings: credit/loan savings and social funding ... used when a member is sick, gives birth, or has a wedding ...” — *Female SHG Leader, Rubwoi, Plateau*

“... If a member is not present during the meeting and we didn't hear from her, we always visit after the meeting to make sure she/they are fine. And also when any member is travelling, she will provide a person who will replace her ...” — *Female Farmer, Kogom Tah, Plateau*

Challenges with Women-only Groups

Despite their advantages, women-only SHGs face persistent challenges largely tied to sociocultural norms and women's domestic responsibilities. Irregular attendance, because of conflicts with women's household responsibilities, undermines consistent participation, which affects group savings and loan sustainability. Incidentally, as shown in Figure 2, men also cited low attendance as a challenge. However, in the case of men's groups, low attendance was most often the result of a lack of interest in the group. Limited access to productive assets and collateral further restricts women's capacity to fully leverage financial inclusion.

“... I wish women could benefit more, because women are poor, while men have money and inheritance rights to land to access loans and diverse sources of income than women ...”
— *Female Farmer, Kogom Tah, Plateau*

... Women own the milk and not the cow ... there is insufficient food for the cow, and this reduces milk production, resulting in decreased income and savings, and we cannot take loans if we do not save ...” — *Female Farmer, Rubwoi, Plateau*

Moreover, sociocultural biases sometimes constrain women's broader economic participation and household leadership, limiting the translation of group gains into transformation at the family and community levels. There is also concern about the sustainability of women-only SHGs after the end of external project support enjoyed through the ALDDN project. The submissions from the SHGs leaders in the excerpts below validate the findings:

“... We want more training to diversify further beyond what we are doing now ...”
— *Female SHG Leader, Rubwoi, Plateau*

“... Some of the disadvantages we have in our single-sex self-help groups are a lack of skills or expertise that are more common among the opposite sex, and these slow down our progress ...” — *Female SHG executive, Rubwoi, Plateau*

Lessons and Recommendations

- **Self-help groups provide an effective avenue for bundling training and services that can enhance women's economic empowerment.** ALDDN used SHGs as an extension delivery model, layering in additional financial services. This meant that women who participated not only gained valuable knowledge that increased milk productivity and related income, but also the tools to control that income through new bank accounts.
- **Single-sex spaces enable women to serve in a range of leadership roles.** ALDDN's experience with women-only SHGs demonstrates the value they hold for creating opportunities to serve in a range of leadership roles, including as a chairperson, and developing women's leadership skills free from the norms and bias that can exist in mixed groups.
- **Women-only groups provide additional support to their members.** In contrast to mixed-groups, women leveraged the women-only SHGs to serve their needs and interests. Specifically, women supported each other in tangible and intangible ways in the face of different shocks and stresses.
- **While mixed-sex groups can challenge existing gender norms and attitudes, it is not guaranteed.** Women gain communication and negotiation skills by interacting with men in mixed-groups, and group cohesion is fostered through joint responsibilities. However, these groups can reflect traditional gender hierarchies, especially in leadership roles and additional work to shift the mindsets of men must be planned for and implemented.
- **Together, technical training, financial inclusion, and participation in groups benefits women and can shift attitudes in favor of them.** This is likely because these work to build women's knowledge and skills in ways that result in an increase in their own self-confidence while enabling them to contribute financially to the household.

Conclusion

The ALDDN project's learnings affirm that self-help groups formed with the adoption of VSLA methodology and cooperatives are indispensable vehicles for advancing financial inclusion and economic empowerment among women dairy farmers in underserved communities of Northern Nigeria. Although systemic patriarchal and sociocultural barriers persist, the project's interventions have achieved meaningful shifts in women's economic roles and leadership opportunities within their communities.

Sustaining and scaling these gains requires a holistic approach that integrates investment in infrastructure, capacity building, and transforming attitudes that promote male allyship that supports women's economic empowerment, supportive policies, and community-level advocacy. These combined efforts will contribute to fostering economic empowerment for women in the dairy sector and catalyzing broader rural development and poverty reduction in Nigeria.

Diverse stakeholders, including government, private sector, civil society, and development partners, are encouraged to commit to embedding gender equity within agricultural value chains and to provide sustained support for the empowerment of women as pivotal agents of change and growth in Nigeria's dairy industry.