AgriHealth: Journal of Agri-food, Nutrition and Public Health. 5(1), 63-75, 2024
URL: https://jurnal.uns.ac.id/agrihealth/article/view/82781
DOI: http://dx.doi.org/10.20961/agrihealth.v5i1.82781
ISSN 2722-0656 (Print) 2722-0648 (Online)

The Perception of Emerging Cattle Farmers on Extension and Advisory Services in Improving the Welfare of Cattle in Sinthumule-Kutama Areas of Makhado Municipality, Vhembe District, Limpopo Province, South Africa

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Received: January 3, 2024; **Accepted**: May 2, 2024

Abstract

Livestock farmers in the Limpopo Province benefitted from the land reform projects. This led to an increase in the number of emerging cattle farmers who desired to move from small-scale to commercial cattle farming. These emerging cattle farmers had high expectations for government support through extension and advisory services to improve the welfare of their cattle. However, the study aimed to investigate the perceptions of 80 emerging cattle farmers concerning the importance of agricultural extension and the impact of extension advisors in improving the welfare of their cattle. The study was conducted in 18 villages of the Sinthumule-Kutama areas under Makhado Municipality. The study used quantitative and qualitative methods and simple random sampling. Questionnaires were used to collect primary data. The Statistical Package for Social Sciences (SPSS) tool was used for analysis, and the mean score was produced to address the study's objectives. The results indicated that farmers agreed on the importance of cattle welfare and that they are knowledgeable about it, and methods used by extension workers are essential. Furthermore, they decided that the extension activities contribute to their knowledge of cattle welfare. The paper concludes by making the following recommendations. Extension workers should collaborate with some of the farmers who are leaders within the community to manage cattle welfare when extension workers are not around. Cattle farmers of Sinthumule-Kutama are expected to be trained on livestock welfare.

Keywords: advisory services; agricultural extension; cattle welfare; emerging cattle farmers; perception

INTRODUCTION

Cattle farming is one of the favored traditions within South African rural societies. There are 3 distinct farming systems in South Africa in general and in Makhado Local Municipality, namely commercial and small-scale farming and subsistence or emerging farmers (DAFF, 2019). Commercial farming systems operate at a better level than the other farming sectors. According to Nkosi (2017), emerging farmers are from previously disadvantaged communities who lack technical know-how, farm and risk management skills, and access to formal markets with defined off-take agreements. On the other hand, Whitbread et al. (2011) described emerging farmers as subsistence and new farmers who make up the middle group to commercialize. They are semi-commercial and sometimes known as emerging commercial, distinguishing them from subsistence or small-scale farming. However, they differ markedly in the typical operation scale,

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Cite this as: Thononda, M., Zwane, E., & Letsoalo, E. M. (2024). The Perception of Emerging Cattle Farmers on Extension and Advisory Services in Improving the Welfare of Cattle in Sinthumule-Kutama Areas of Makhado Municipality, Vhembe District, Limpopo Province, South Africa. *AgriHealth: Journal of Agri-food, Nutrition and Public Health*, *5*(1), 63-75. doi: http://dx.doi.org/10.20961/agrihealth.v5i1.82781

production and market orientation methods, and quality. According to MacLeod et al. (2008), this new generation of farmers was introduced in the 1990s as previously disadvantaged people to commercial livestock production through land redistribution schemes.

Cattle are farmed in all provinces, but the most dominating livestock numbers include the Eastern Cape, parts of the Free State, KwaZulu-Natal, Limpopo, and the Northern Cape (DAFF, 2019). This is particularly important considering that a 3rd of livestock, especially cattle in the country, is owned by emerging farmers (Scholtz et al., 2008). One of the reasons for farming with cattle is because it provides a livelihood in the form of meat, hides, and milk. For example, meat consists of 20% of the protein a human needs (Njisane et al., 2020). The researcher observes that some farmers who farm with cattle do so to derive a social status in the community, especially by keeping many cattle. Emerging farming is one of the two distinct farming systems that have structured agriculture in Limpopo Province with 2 systems operating namely, emerging and commercial farming systems (Whitbread et al., 2011). According to Whitbread et al. (2011), the 2 systems are both noticed to be producing similar crops and livestock. They differ markedly in the typical operation scale, production and market orientation methods, and quality.

Some factors limit emerging livestock farmers from growing into the commercial farming sector, and poor livestock welfare is one of them. Fraser and Broom (1990) stated that humans do not understand animal preferences regarding their health and the quality of their animal's life. There is a need for livestock producers to understand the welfare of their livestock because animal welfare is a science in its own right (Fraser and Broom, 1990). Animal welfare is a broader concept. Several studies on this concept of cattle welfare revealed several aspects that need to be considered in the welfare of cattle. For instance, for beef cattle, animal welfare during the transportation and slaughter of beef cattle affects the meat quality. It is critical to comply with proper procedures for transporting and slaughtering cattle (Castro de Jesús et al., 2021).

On the other hand, Njisane et al. (2020) argue that if animal welfare were fully taken care of to enable more animal products, this initiative could positively contribute to African food security. If these scientific steps could be implemented in Makhado Local Municipality, it could increase productivity regarding animal products for food security. In general terms, livestock welfare includes protecting animals from parasites and diseases. This can be done by vaccinating to prevent infection and by treating the infection diagnosed on the farm. Welfare also emphasizes the provision of clean water and essential nutrient supplements to the animals to maintain their health preferences.

Habiyaremye et al. (2017) reported that most livestock farmers lose their animals through different diseases because they are unaware and not knowledgeable about those diseases; therefore, this makes them not vaccinate and treat their animals against those diseases. In South Africa, common animal diseases found are anthrax, a black quarter (blackleg), rabies (mad dog disease), mastitis, tick fever, and listeriosis (Habiyaremye et al., 2017).

Diseases reported from Limpopo Province are African and Asiatic red water, heartwater, anaplasmosis, lumpy skin, and foot and mouth (Bassi et al., 2019). This shows that cattle must be vaccinated to protect them from bacterial and fungal diseases. Bassi et al. (2019) suggested that cattle need dipping to protect them from parasites such as flies, ticks, lice, mites, and roundworms. Due to the different cattle diseases reported in Limpopo Province, emerging cattle farmers must know about their cattle welfare to obtain high production yields. Most rural households in Limpopo Province were found to be poor by Madzivhandila (2015). Over 70% of rural households in Limpopo Province are involved in livestock and crop farming to produce food for themselves (Madzivhandila, 2015).

Makhado Local Municipality is one of the municipalities in Limpopo Province, characterized by most households practicing sustainable agriculture for food production (Statistics South Africa, 2007). These rural households are found to be lacking access to agricultural inputs (resources) such as irrigation, which makes their crop production highly dependent entirely on precipitation, and they also lack resources such as money, medication, and feeds, which makes their livestock production to rely on natural resources (Burrow, 2022).

One of the major challenges that South African emerging livestock farmers face is a lack of knowledge and skills. The lack of knowledge and skills of most emerging livestock farmers is

caused by the perception that farmers hold about agricultural extension and advisory services and poor access of farmers to information they need for their production because government extension officers do not support them enough. This makes those farmers to rely heavily on government welfare grants for source of income rather than from farming (DAFF, 2019). Van den Ban and Hawkins (1996) defined perception as the process by which individuals transform the information they receive from the environment into psychological awareness. Robbins et al. (2009) also defined perception as the process by which an individual organizes and interprets sensory impressions to give meaning to their environment.

This study defines perception as a farmer's view on agricultural extension and advisory services. This includes the contribution of agricultural extension programs to farmers' knowledge, the effectiveness of the approaches used by extension agents, and the importance of extension activities in improving the welfare of their cattle. This study believes that emerging cattle farmers do not perceive extension and advisory services similarly.

The perception of those who receive extension support will not be the same as that of those who do not receive support from extension agents. It is assumed that farmers with positive perceptions will adopt modern technologies brought to them and negative perceptions will influence farmers to reject modern technologies introduced to farmers (Parminter and Wilson, 2003; Nyokabi et al., 2023). It has an identified background and some pointers to non-consideration of welfare issues, and it also focuses on the emerging cattle farmers in Makhado Local Municipality. Its objectives were threefold: to describe the socio-economic characteristics of the emerging cattle farmers, their perception of the health welfare of their cattle, and to determine the contribution of advisory services towards the welfare of emerging cattle owners in the study area.

MATERIALS AND METHOD

Study area

The study was carried out in Sinthumule-Kutama rural areas in 2022. The study areas are found near the town of Louis Trichardt, which is located under the jurisdiction of Makhado Local Municipality in the Vhembe District. The municipality is one of the 4 local municipalities of Vhembe District of Limpopo Province. The study area is reflected in Figure 1.

Study design

The study used both qualitative and quantitative research design. The reason for using

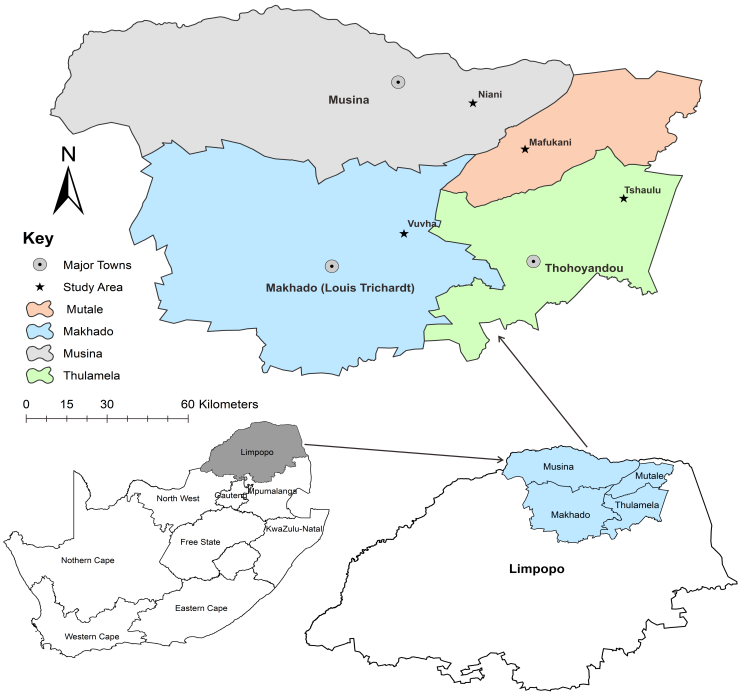

Figure 1. The study area of Makhado Municipality

qualitative is that it is helpful when a researcher wants to quantify behaviors, opinions, attitudes, and other variables and make generalizations from a larger population (Cleland, 2017). The study also used the quantitative design to articulate facts and reveal patterns in research (Cleland, 2017). This type of research method involves using statistical mathematic tools to derive results. The study adopted quantitative design because it has helped the authors to answer "what perception farmers hold towards agricultural extension and advisory services".

Population and sampling

Moser et al. (2024) identified 7 types of sampling strategies. However, purposive sampling selection was used in determining the initial 18 villages with emerging cattle farmers. DAFF (2019) reported that the population of cattle farmers in the Sinthumule-Kutama areas was 940 for 18 villages. Krejcie and Morgan (1970) sample size estimation table was used to estimate the sample for the study. According to Krejcie and Morgan (1970), sample size estimation, a population of 940 farmers requires a sample size of 274 emerging farmers at a 0.5% margin error. The sample size of all Sinthumule-Kutama Villages was 274 for the 18 villages. However, due to limited resources and time considerations, the researcher focused on 9 villages randomly selected from 18. From the 9 villages randomly chosen by the researchers, only 67 emerging farmers were interviewed for this study. The sample indicated in Table 1 was calculated using Equation 1.

Data collection

Primary data was collected using semi-structured questionnaires (with both closed-ended and open-ended questions).

Data analysis

There are different systems of data analysis. However, this study used the Statistical Package for Social Science (SPSS) version 26 of 2022. The mean score was used to analyze the perception of emerging cattle farmers on extension and advisory services. Seven statements regarding perception were presented to emerging cattle farmers to enable them to rank them on a scale of 5 (1 = very poor; 2 = below average; 3 = average; 4 = above average; 5 = excellent). The average mean score for every statement about perception was 2.5.

In this case, if the mean score is greater than 2.5, then that represents the opinion of farmers that agricultural extension and advisory services are important and needed in that statement regarding cattle welfare. In contrast, a score of less than 2.5 means that the opinion of farmers suggests that agricultural extension and advisory

$$\text{Number of respondents per village} = \frac{\text{Total ECF in a specific village}}{\text{Population all ECF of Sinthumule-Kutama Villages}} \text{ x sample size} \quad (1)$$

e.g., Number of farmers who were interviewed at village 1 (Madombidzha) = $\frac{33}{940} \times 274 = 9.6$

Where ECF in the ratio stands for emerging cattle farmers.

Table 1. Size of the study sample

Sinthumule-Kutama Villages	Number of emerging cattle farmers	Number of (farmers) interviewed
Madombidzha	33	9
Tshiozwi	26	7
Ha-Ramantsha	23	6
Tshilwavhusiku	30	8
Madabani	27	7
Ha-Madodonga	44	12
Tshikwarani	21	6
Zamenkomste	26	7
Maebani	18	5
Total	248	67

services are unnecessary and unimportant in that specific statement regarding cattle welfare.

RESULTS AND DISCUSSION

The socio-economic characteristics

The majority of emerging cattle farmers of Sinthumule-Kutama were female (60%) and 40% were found to be male. Most female farmers mentioned taking over cattle farming from their late husbands, while some inherited their cattle from their parents. Most of those females are engaged in cattle farming because they are unemployed, and farming is part of their source of income as they were traditionally not allowed to go to school or work back then. Most male farmers bought their cattle with their salary; some used their pension money, while few inherited their cattle from their late parents. As far as the age of the respondents is concerned, the majority (80%) were older than 50 years, and those with more than 60 years were found to be receiving the government social grant. Slightly more than 10% of the farmers were of the age category 40 to 49, followed by 5% of the age category 30 to 39. Slightly below 5% of the cattle farmers were young. Regarding marital status, of most emerging cattle farmers, 45% were married, while 28% of the farmers were widowed. About 21% of the farmers were single, while only 6% were divorced.

The educational level of respondents showed that 24% of the farmers did not go to school at all. About 26% had primary education, while 25% of the respondents completed secondary schooling. Only 19% of the farmers managed to complete tertiary education, while below 5% of the respondents managed to go through non-formal education and these are the farmers who went for the Adult Basic Education and Training (ABET) and some also stated that they were taught by their family members on how to read and write. Despite the poor socio-economic status of the respondents, they were able to look after the welfare of their cattle using different skills that they had learned from their ancestors.

Perception of extension advisors on livestock welfare

The 2nd section discusses emerging cattle farmers' perception of improving cattle welfare through agricultural extension and advisory services. Emerging cattle farmers were asked to discuss their opinions regarding agricultural extension and advisory services to help them improve their cattle welfare. Some of the findings are presented in Table 2.

Table 2 shows emerging farmers' perception of agricultural extension and advisory services in improving their cattle welfare. It uses a five-point Likert scale to measure their perceptions of agricultural extension and advisory services. Seven statements regarding perception were presented to emerging cattle farmers to rank on a scale of 5 (1 = very poor; 2 = below average; 3 = average; 4 = above average; 5 = excellent). The average mean score for every statement about perception is 2.5. In this case, if the mean score is more significant than 2.5, then that represents the opinion of farmers that agricultural extension and advisory services are important and needed in that statement regarding cattle welfare. In contrast, a score of less than 2.5 means that the opinion of farmers suggests that agricultural extension and advisory services are unnecessary and unimportant in that specific statement regarding cattle welfare.

The alignment of farmers' perspectives with the assertions in Table 2 underscores a noteworthy consensus regarding the pivotal role

Table 2. Perception of emerging farmers on agricultural extension and advisory services in improving their cattle welfare

Statements (n = 67)	Mean	Standard deviation
Farmer's accessibility of cattle welfare information/knowledge	1.29	.455
Perception of farmers on their knowledge of cattle welfare	3.21	.896
Importance of cattle welfare in farming	3.85	.695
Frequency of visits by extension agents	2.14	1.209
Effectiveness of approaches used by extension agents	2.76	1.265
The importance of agricultural extension and advisory services according to emerging farmers	3.23	1.350
Farmer's viewpoints on their participation in extension activities	2.05	.840

of agricultural extension and advisory services in enhancing cattle welfare. This convergence of viewpoints emphasizes the perceived importance and signifies a recognition among farmers of the indispensability of such services. Moreover, the agreement with the statements implies a nuanced understanding among farmers of the multifaceted benefits that effective agricultural extension and advisory services can afford, ranging from improving livestock health and productivity to optimizing agricultural practices for sustainable outcomes (Kröbel et al., 2021). This resonance between farmers' perceptions and the stated affirmations highlights a collective acknowledgment of the instrumental role of agricultural extension and advisory services in fostering resilience and productivity within the agricultural sector, particularly concerning cattle husbandry.

Opinion of farmers on the importance of cattle welfare in farming

The findings from the study reveal a significant consensus among farmers regarding the paramount importance of animal welfare in cattle farming, as evidenced by the robust mean score of 3.85. This numerical representation underscores a prevailing sentiment among emerging cattle farmers, suggesting a collective acknowledgment of the imperative role that agricultural extension and advisory services play in augmenting cattle welfare standards. Indeed, the data suggest that providing such services is not merely desirable but rather deemed essential by cattle farmers to enhance their husbandry practices. The pronounced emphasis on cattle welfare within the farming community underscores a growing awareness of ethical considerations and best practices, further underscoring the need for tailored extension activities to support farmers in achieving optimal standards of care. Consequently, these findings imply a potential correlation between farmers' recognition of the significance of cattle welfare and their willingness to engage in extension activities aimed at improving their husbandry practices, thereby highlighting the pivotal role of agricultural extension services in fostering informed decision-making and sustainable agricultural practices within the cattle farming sector.

From a scientific perspective, the emphasis on cattle welfare within the farming community reflects an evolving understanding of the intricate relationship between animal well-being and agricultural practices (Beaujouan et al., 2021). Ethical considerations in animal husbandry have gained prominence due to growing awareness of animals' cognitive and emotional capacities, including cattle. Best practices in cattle farming now encompass not only considerations of productivity and profitability but also the promotion of humane treatment and quality of life for livestock (Gray and Fordyce, 2020). Scientific research supports that optimal cattle care standards encompass various aspects, including nutrition, housing, health management, and behavioral enrichment (Rowe and Mullan, 2022). For example, studies have demonstrated the importance of providing adequate space, comfortable resting areas, and access to clean water and nutritious feed to promote cattle's physical and psychological well-being. Furthermore, implementing preventive health measures, such as vaccination protocols and parasite control strategies, can mitigate disease risks and improve overall herd health (Nuvey et al., 2022).

Moreover, scientific evidence highlights the benefits of implementing behavioral enrichment strategies to address the natural behavioral needs of cattle, such as social interaction and foraging behavior (Zobel and Nawroth, 2020). Enrichment activities, providing access to pasture, environmental enrichment devices, or rotational grazing systems, enhance cattle welfare and contribute to environmental sustainability and resource efficiency within farming operations (Delaby et al., 2020). The call for tailored extension activities is justified in light of these scientific insights. Such activities can disseminate evidence-based knowledge and practical guidance to farmers, enabling them to implement effective strategies for optimizing cattle welfare while maintaining economic viability. Tailored extension programs may include workshops, training sessions, farm visits, and educational materials to address cattle farmers' specific needs and challenges (Antwi-Agyei and Stringer, 2021).

Furthermore, expanding the discussion could delve into the role of governmental policies, industry standards, and consumer preferences in shaping attitudes and practices related to cattle welfare within the farming community (Jia et al., 2023). They are additionally exploring

the potential socio-economic implications of prioritizing cattle welfare. Such improvements in market access, enhanced product quality, and consumer trust would provide further context for understanding the broader significance of this emphasis within the agricultural sector.

Opinion of farmers on the importance of agricultural extension and advisory services

The agreement among farmers regarding the importance of agricultural extension and advisory services in cattle farming, as indicated by the mean score of 3.23, reflects a recognition of the invaluable role that extension agents play in enhancing cattle production practices. From a scientific standpoint, agricultural extension services serve as conduits for disseminating evidence-based knowledge, technological innovations, and best management practices to farmers, facilitating informed decision-making and improving farm productivity. Scientific research supports the notion that access to timely and accurate information is crucial for optimizing cattle production outcomes. Extension agents equipped with expertise in animal husbandry, including nutrition, health management, breeding, and pasture management, can provide farmers with tailored recommendations and practical solutions to address specific challenges and goals within their operations (Daum et al., 2022).

Moreover, studies have shown that engagement with extension activities positively correlates with improved farm performance and adopting sustainable practices. By attending workshops, field days, training sessions, and one-on-one consultations facilitated by extension agents, farmers can acquire new skills, learn about emerging trends and technologies, and network with peers, ultimately enhancing their capacity to manage cattle more effectively (Gwaka and Dubihlela, 2020). Furthermore, the perception of agricultural advisors as valuable resources may be influenced by the demonstrable benefits that arise from their guidance and support (Dilleen et al., 2023). For instance, research has shown that farmers who receive regular visits and support from extension agents are more likely to adopt recommended practices, experience higher productivity levels, and achieve better economic returns on their investments in cattle farming. Expanding on this discussion scientifically could involve examining the effectiveness of different extension approaches and methodologies in promoting behavior change and knowledge acquisition among farmers (Zossou et al., 2020). Additionally, exploring the impact of socio-economic factors, such as access to extension services, educational attainment, and farm size, on farmers' perceptions and engagement with extension activities would provide valuable insights for designing more targeted and equitable extension programs in the context of cattle farming (Tama et al., 2021).

Opinion of farmers on their knowledge of cattle welfare

The findings from the study underscore an intriguing insight: farmers generally perceive themselves as well-versed in matters of cattle welfare, as evidenced by the average score of 3.21. This self-assessment implies a recognition of the value of agricultural advisors in supplementing their understanding of cattle welfare intricacies. Yet, it also raises a pertinent question about the potential implications of their receptiveness to support from extension agents. With confidence in their expertise, farmers may be less inclined to seek assistance from these agents, assuming they possess adequate knowledge. This underscores the delicate balance between self-assurance and recognizing external expertise within agricultural communities.

The primary focus is on the nuanced dynamics between farmers' self-assessment of their expertise in cattle welfare and their reliance on agricultural advisors and extension agents. Firstly, it highlights the farmers' acknowledgment of the importance of agricultural advisors in enhancing their comprehension of the complexities surrounding cattle welfare (Wynands et al., 2022). This underscores one of the main goals: emphasizing the value of external expertise in augmenting farmers' understanding and practices (Ogunyiola and Gardezi, 2022). Secondly, it raises a crucial question regarding the potential impact of farmers' perceived self-assurance on their willingness to seek support from extension agents. This inquiry delves into another critical objective: how farmers' confidence in their knowledge might affect their receptiveness to external assistance (Trogrlić et al., 2021).

The further issue elucidates that farmers, buoyed by their confidence in their expertise, may become less inclined to actively seek help from extension agents actively, assuming they possess sufficient knowledge (Raja et al., 2024).

This observation underscores the delicate balance between farmers' self-assurance and recognition of the need for external guidance, thereby emphasizing the importance of striking a harmonious equilibrium between these aspects within agricultural communities. Thus, the overarching goals encompass highlighting the significance of external expertise, examining the impact of farmers' self-assessment on their receptiveness to support, and stressing the importance of maintaining a balanced perspective within agricultural contexts (Khurram et al., 2023).

Opinion of farmers on the effectiveness of approaches used by extension agents

The research outcomes shed light on an encouraging trend: farmers acknowledge the effectiveness of extension agents' methodologies and express a collective vote of confidence with a mean score of 2.76. This consensus among emerging cattle farmers suggests a palpable appreciation for the role of agricultural extension and advisory services in enhancing cattle welfare practices (Manoli et al., 2024). Such validation underscores these services' pivotal role in enhancing farmers' knowledge and operational efficacy within cattle husbandry.

This positive sentiment bodes well for the continuity of farmer participation in extension activities (Mubaya et al., 2023). The satisfaction expressed with the approaches employed by extension agents serves as a potent motivator for continued engagement. Farmers are likely to persist in attending these activities, buoyed by the assurance that their needs are being met effectively and that the strategies employed are conducive to improving cattle welfare (Blair et al., 2023). This symbiotic relationship between farmers and extension services reinforces the importance of tailored, effective approaches in driving positive outcomes within agricultural communities (Ragasa, 2023).

Opinion of farmers on the frequency of visits by extension agents

The findings suggest that farmers disagreed with the notion that extension agents make frequent visits to their farms, as reflected by an average score of 2.14. This suggests that farmers' opinions underscore the necessity for extension agents to visit frequently, as these visits play a crucial role in cattle farming. Upon observing the state of the farm, they can provide recommendations on which methods and strategies to adopt to enhance the welfare of farmers' cattle. This demonstrates that farmers are dissatisfied with the current support and assistance their extension agents provide. This may lead individuals to perceive that agricultural extension and advisory services are not effectively assisting them in enhancing the welfare of their cattle due to infrequent visits (Valerio et al., 2024).

Opinion of farmers on their participation in extension activities

Farmers vehemently contested the notion of their minimal involvement in extension activities, highlighting a significant disparity between their reported engagement levels and the perceived average, with the mean score falling below the benchmark of 2.05. The objections were fueled by concerns over the implications of their perception of agricultural extension and advisory services. This discrepancy holds profound implications, particularly regarding the perception among newly established cattle farmers (Slayi et al., 2023). Their growing belief that extension agents are neglecting their duty to bolster cattle welfare may be traced back to the absence of their participation in extension events (Gatdet, 2022). Such perceptions underscore the need for clearer communication and outreach strategies and emphasize the critical role of active farmer involvement in shaping effective agricultural extension initiatives (Olayemi et al., 2021).

Farmers' viewpoints on the accessibility of cattle welfare information

Farmers disagreed that they had heard enough and crucial information about cattle welfare, with a mean value of 1.29. Farmer's opinion on their access to information regarding cattle welfare was poor. This suggests extension agents are unimportant as they do not give farmers important information regarding their cattle welfare improvement.

Most farmers said they had heard about cattle welfare, but the information was insufficient. This might have contributed to farmers' opinions towards agricultural extension and advisory services, as they believe that agricultural advisors are not giving them enough information regarding cattle welfare (Abdullah et al., 2021). Therefore, the capacity of extension workers needs to be increased to achieve changes in farmers' mindsets. Garcia et al. (2023) reported that

follow-up and retraining with extension workers are vital to continued success in improving farmers' knowledge and technical skills.

The findings reveal that farmers further agreed that the approaches used by extension agents are effective, with a mean score of 2.76. This indicates that the opinion of emerging cattle farmers suggests that agricultural extension and advisory services approaches are benefiting and helping them improve their cattle welfare. This statement was supported by Hayes et al. (2017) and Nuraini et al. (2022). Opinions of farmers based on 5 statements suggest that agricultural extension and advisory services are regarded as very important and was needed by emerging cattle farmers. This shows that emerging cattle farmers of the Sinthumule-Kutama areas view agricultural advisors as important in their cattle farming. For example, their statements had a mean ranking scale greater than 2.5.

Farmers' opinions might have been influenced by the services farmers receive from the extension agent concerning their cattle welfare, including services such as medication and training. Livestock farmers were found to perceive the quality of extension services rendered negatively; hence, the study focused on only female farmers (Forbang et al., 2019). Based on a benchmarking study, Sumner et al. (2020) indicated that benchmarking improved farmers' perception of their veterinarian's capacities to advise on calves and strengthened the social influence of the veterinarian.

According to Mampane (2019), small-scale farmers have negative perceptions of using the projects advised by extension advisors. Assefa et al. (2008) supported this study, and Onumah et al. (2023) revealed that farmers' perception is very important in cattle production as it can act as a constraint. It can influence farmers to adopt or not to adopt new technologies brought to them.

CONCLUSIONS

The article has tested whether the socio-economic situation of Sinthumule-Kutama livestock emerging farmers had any significant role in their perceptions of livestock welfare. The result is that they did not. Seven statements based on the perception were tested and 4 showed positive results supported by scholars. One limitation is that less than 5% of the youths were involved. Youth participation is critical for the future success and sustainability of the cattle welfare program. The finding implies that the inadequacy of knowledge and skills in cattle welfare poses a sustainability challenge. Therefore, the writers suggest different ways to implement cattle welfare in the future.

ACKNOWLEDGEMENTS

The authors thank the Centre of Rural Community Empowerment, the Limpopo Department of Agriculture and Rural Development, and the Sinthumule Traditional Council for allowing the team to conduct the study in 2022.

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