Extension Journal

International Journal of Agriculture Extension and Social Development

Perception of livestock farmers towards social media as an information source in Andhra Pradesh

¹Mithun G, ²Triveni G, ³Sharma GRK, ⁴Swetha Kanti S, ⁵Ganga Raju G and ⁶Punya Kumari B

¹Ph.D. Scholar, Department of Veterinary and Animal Husbandry Extension Education, College of Veterinary Science, Tirupati, SVVU, Andhra Pradesh, India

²Associate Professor, Department of Veterinary and Animal Husbandry Extension Education, College of Veterinary Science, Proddatur, SVVU, Andhra Pradesh, India

³Professor and University Head, Department of Veterinary and Animal Husbandry Extension Education, College of Veterinary Science, Tirupati, SVVU, Andhra Pradesh, India

⁴Assistant Professor, Department of Veterinary and Animal Husbandry Extension Education, College of Veterinary Science, Tirupati, SVVU, Andhra Pradesh, India

⁵Professor and University Head, Department of Livestock Production Management, College of Veterinary Science, Tirupati, SVVU, Andhra Pradesh, India

⁶Professor and Head, Department of Animal Genetics and Breeding, College of Veterinary Science, Tirupati, Andhra Pradesh, India

Corresponding Author: Mithun G

Abstract
Information has become the fifth key factor of production, a crucial element in livestock farming decisions. India's livestock sector contributes significantly to GVA, supports millions and leads in milk production. Andhra Pradesh excels in egg, meat and milk production. With digital expansion, social media platforms are increasingly bridging the extension gaps through real-time, participatory communication. An ex-post-facto research design was employed to examine livestock farmers perception of social media in Andhra Pradesh. The state, comprising Rayalaseema, Coastal and North Coastal regions, was purposively sampled to include nine districts with the highest livestock populations. From each district, three mandals were randomly selected, yielding 27 mandals overall. A total of 540 respondents were selected, comprising 180 dairy farmers, 180 sheep/goat farmers and 180 backyard poultry farmers with 20 farmers drawn from each mandal. Only farmers with prior exposure to at least one social media platform were considered for the study. Perception levels were assessed through 18 statements rated on a five-point Likert scale with positive items scored from strongly agree (5) to strongly disagree (1) and negative items reverse-scored. Data collection was conducted using a structured interview schedule and analysed with appropriate statistical tools. Results indicated that 64.63 percent of farmers held a medium perception of social media while 18.70 percent exhibited high and 16.67 percent low perception (Mean = 70.62; SD = 8.10). The predominance of medium perception reflects cautious but emerging acceptance, shaped by literacy and resourcefulness, yet constrained by digital skill gaps and connectivity limitations.

Keywords: Perception level, social media, information source, livestock farmers, livestock farming, correlation, socio-profile characteristics

Introduction
In the 21st century, information has become the fifth critical factor of production, alongside land, labour, capital and entrepreneurship. Within livestock farming, access to timely and context-specific information is crucial for informed decision-making on feeding, breeding, disease control and marketing. Traditionally, farmers have relied on veterinarians, extension workers, dealers and peer networks; however, these sources are often limited in reach and consistency, especially in remote areas. India has one of the largest livestock populations globally, exceeding 535 million and the sector contributes 4 percent to GDP while supporting over 70 million rural households. It plays a vital role in employment with women contributing disproportionately to daily management. India remains the world's largest milk producer, generating over 239 million tonnes in 2023-24 while Andhra Pradesh ranks first in eggs, third in meat and sixth in milk production (DAHD, 2023) [2]. Despite this growth, challenges such as poor veterinary access, low awareness of scientific practices, weak market linkages and climate risks persist. At the same time, rural India is undergoing rapid digital transformation with 806 million internet users and 491 million social media accounts projected by 2025 (Data Reportal - Global Digital Insights, 2025) [1]. Platforms like WhatsApp, Facebook and YouTube provide real-time, interactive and localised advisory services that bridge the gaps of conventional extension, as evidenced during the COVID-19 lockdown (Thakur & Chander, 2017)

[8].

However, barriers such as digital illiteracy, poor connectivity, high data costs and lack of trust hinder wider adoption (Malik & Ansari, 2024) [3]. This study addresses a critical research gap by analysing perception of livestock farmers regarding their use of social media. The findings have academic, practical and policy relevance offering insights to strengthen digital extension, support targeted interventions and align with national programs and sustainable development goals focused on poverty reduction and inclusive innovation

Methodology

An ex-post-facto research design was employed to explore livestock farmers' perception of utilising social media as an information source. The study took place in Andhra Pradesh which is geographically divided into three distinct regions: Rayalaseema, Coastal and North Coastal. From each region, three districts with the highest livestock populations were purposively selected, totalling nine districts. Within each district, three mandals were chosen through simple random sampling method. This process yielded a total of twenty-seven mandals across the nine districts. From each mandal, 20 respondents were selected, comprising dairy, sheep/goat and backyard poultry farmers in equal proportion. Thus, the final sample consisted of 540 livestock farmers, comprising 180 dairy farmers, 180 sheep/goat farmers and 180 backyard poultry farmers. To ensure relevance, only farmers with prior acquaintance and experience using at least one social media platform or application were included in the study.

A structured interview schedule was designed to collect primary data. Farmers were presented with 18 carefully constructed statements designed to measure their perception of social media. Responses were captured on a five-point Likert scale with positive items scored from 5 (strongly agree) to 1 (strongly disagree) while negative statements were reverse-scored. The collected data were systematically coded and analysed using appropriate statistical techniques.

Results and Discussion

The results of Table 1 confirmed that majority of the livestock farmers (64.63%) had a medium perception towards social media as an information source while 18.70 percent exhibited a high perception and 16.67 percent fell into low perception category (Mean = 70.62, S.D. = 8.10).

Table 1: Perception level wise categorisation of livestock farmers

S. No	Category	Frequency	Percentage
1.	Low	90	16.67
2.	Medium	349	64.63
3.	High	101	18.70
	Total	540	100
	Mean	70.62	
	S.D	8.10	

The predominance of medium perception indicates that most farmers are moderately aware of social media's potential in livestock farming but have not fully adopted it yet, possibly due to limited exposure, partial understanding of its uses or cautiousness about technology adoption.

Farmers with high perception tend to be more literate, resourceful and proactive in seeking timely information. In contrast, respondents with low perception may face barriers such as poor digital literacy, limited internet access or a preference for traditional information sources including peer networks and extension personnel.

The correlation analysis revealed in Table 2 on perception level of livestock farmers towards social media in Andhra Pradesh showed that certain profile characteristics were significantly associated while others showed a non-significant relation. Variables such as age, gender, social status, family size, landholding, farming experience, annual income, achievement motivation and economic motivation were non-significant, indicating that the penetration of affordable smartphones and rural connectivity programs has transcended demographic and socio-economic boundaries, enabling both small and marginal farmers, regardless of age or gender, to access platforms like WhatsApp, Facebook and YouTube. These revelations were supported by the conclusions drawn by Manjusree *et al.,* (2022) [4] and Sethy and Mukhopadhyay (2020) [6].

Table 2: Relationship between the perception level of livestock farmers regarding social media and their profile characteristics

S. no.	Independent variable		Correlation coefficient (r)	Significance
1.	Age		0.071	Non-significant
2.	Gender		-0.024	Non-significant
3.	Socio-economic status	Education	0.386**	Significant
		Social status	0.059	Non-significant
		Family size	-0.018	Non-significant
		Land holding	0.097	Non-significant
		Experience in livestock farming (years)	0.088	Non-significant
		Herd size	0.291*	Significant
		Material possession	0.334**	Significant
		Annual income	0.067	Non-significant
4.	Media ownership		0.362**	Significant
5.	Achievement motivation		0.081	Non-significant
6.	Social media exposure		0.498**	Significant
7.	Information seeking behaviour		0.421**	Significant
8.	Scientific orientation		0.355**	Significant
9.	Market orientation		0.298*	Significant
10.	Economic motivation		0.062	Non-significant
11.	Credibility		0.389**	Significant
* Correlation is significant at 0.05 level (2-tailed)				
** Correlation is significant at 0.01 level (2-tailed)				

On the other hand, education (r = 0.386**) showed a positive and significant relationship, indicating that educated farmers could better interpret, evaluate and apply digital information. Herd size (r = 0.291*) was positively correlated, as larger herd owners depend more on timely information for animal health, feeding and marketing, making them receptive to social media advisories. Material possession (r = 0.334**) and media ownership (r = 0.362**) also exhibited significant relationships, reflecting that better access to digital devices, smartphones, television and internet connectivity increased favourable perception.

Social media exposure (r = 0.498**) showed the strongest positive association, indicating that frequent interaction with platforms, especially WhatsApp groups run by dairy cooperatives and farmer associations in Andhra Pradesh, directly influences positive attitudes. Information-seeking behaviour (r = 0.421**) was also strongly related, indicating that proactive farmers who actively search for solutions perceive social media as a valuable tool to address extension gaps. Scientific orientation (r = 0.355**) and market orientation (r = 0.298*) were significantly correlated, emphasising that farmers with rational, evidence-based mindsets and those sensitive to market signals view social media as a credible and timely source for advisory services and market price updates.

Credibility (r = 0.389**) was also positively associated, indicating that farmers who trust digital advisories, especially those shared in the local language, have favourable perception. These findings likely reflect the Andhra Pradesh context where higher literacy, the dominance of dairy and poultry enterprises, increasing youth involvement and the spread of regional-language content through programs like Digital India and AP FiberNet have collectively fostered positive perception of social media. Meanwhile, traditional socio-economic variables exerted little influence compared to factors linked to digital access, exposure and scientific outlook. These findings are in conformity with the outcome of Saini and Jagadeeswari (2024) [7], Tiwari *et al.*, (2023) [9] and Raja *et al.*, (2023) [5].

Conclusion
The study showed that social media is increasingly recognised as a valuable information source by livestock farmers in Andhra Pradesh with majority exhibiting a medium perception level that signals gradual yet positive acceptance. Although digital expansion has enabled more equitable access to timely livestock advisories, there is still room for further progress, especially in bridging digital skill gaps and improving connectivity. Factors such as education, herd size, material possessions, media ownership, social media exposure, information-seeking behaviour, scientific orientation, market orientation and credibility have a significant positive relationship with favourable perception, highlighting that digital literacy and proactive engagement drive higher acceptance.

The findings suggest that the widespread adoption of digital advisories, regional language content and targeted capacity-building programs can accelerate the digital transformation of livestock extension services, especially for less literate and resource-constrained farmers. Utilising platforms such as WhatsApp, Facebook and YouTube can make information more accessible, boost productivity and improve the resilience of the rural livestock sector, as long as inclusivity and local context are prioritised. Strengthening digital infrastructure and digital skills, coupled with trust-building and locally relevant content, will be crucial for deepening the impact of social media on livestock production and livelihoods in Andhra Pradesh and beyond.

References
1. Data Reportal. Digital 2025: India. Kepios Analysis in partnership with We Are Social and Meltwater; 2025.
2. Department of Animal Husbandry & Dairying (DAHD), Govt. of India. Annual Report on Livestock Production Statistics. 2023.
3. Malik A, Ansari MA. Farmers' use of social media and constraints faced: A study in Uttarakhand, India. Asian J Agric Ext Econ Sociol. 2024;42(8):92-100.
4. Manjusree RV, Maiti S, Garai S, Manjunath KV, Jha SK, Kadian KS. Farmers' perception towards agromet advisory services in Kerala. 2022.
5. Raja B, Rani VS, Padmaveni C, Reddy MM, Kumar BA. Analysis of farmers' perception and usage of social media in agriculture. Int J Bio-resource Stress Manag. 2023;14(12):1646-53.
6. Sethy S, Mukhopadhyay SD. Use of ICTs by farmers: A study in Odisha. Asian J Agric Ext Econ Sociol. 2020;38(5):74-86.
7. Saini H, Jagadeeswari B. Perception of farmers towards M-Kisan initiative. J Sci Res Rep. 2024;30(10):65-69.
8. Thakur D, Chander M. Use of social media for livestock advisory services: The case of WhatsApp in Himachal Pradesh, India. Indian J Anim Sci. 2017;87(8):1034-7.
9. Tiwari RK, Singh S, Lodhi R, Pandey AK. Perception of the farmers towards social media in relation to diffusion of agricultural technologies. Int J Ext Educ. 2023;1(1):1-8