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Sanjay Kumar Sharma
Ph.D. Scholar, Department of Animal Production, Rajasthan College of Agriculture, MPUAT, Udaipur, Rajasthan, India

Lokesh Gupta
Professor, Department of Animal Production, Rajasthan College of Agriculture, MPUAT, Udaipur, Rajasthan, India

Manoj Kumar
Ph.D. Scholar, Department of Animal Production, Rajasthan College of Agriculture, MPUAT, Udaipur, Rajasthan, India

J L Choudhary
ICAR- Emeritus Professor, Department of Animal Production, Rajasthan College of Agriculture, MPUAT, Udaipur, Rajasthan, India

Siddhartha Mishra
Professor and Head, Department of Animal Production, Rajasthan College of Agriculture, MPUAT, Udaipur, Rajasthan, India

Corresponding Author:
Sanjay Kumar Sharma
Ph.D. Scholar, Department of Animal Production, Rajasthan College of Agriculture, MPUAT, Udaipur, Rajasthan, India

Personal and operational profile of cow shelters (Ghaushalas) in southern Rajasthan

Sanjay Kumar Sharma, Lokesh Gupta, Manoj Kumar, JL Choudhary and Siddhartha Mishra

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Abstract
The study was conducted to analyze the socio-economic characteristics, management practices and resource utilization patterns of cow shelters (Gaushalas) in Southern Rajasthan, covering eight districts and 150 Gaushalas (48 rural and 102 urban) during 2020-21. A pre-tested interview schedule was used to collect data from managers or supervisors of Gaushalas through personal interviews and direct observations. The findings revealed that the majority of Gaushalas (89.58% rural and 93.14% urban) were established between 1986 and 2020, with no new establishments after 2020. A notable disparity in educational status was observed, with 40.20% of urban managers being graduates, compared to 22.92% illiterate managers in rural areas. Most Gaushalas housed a medium number of cattle (184-1110) and reported moderate milk production levels (27-125 L/day). Similarly, a large proportion maintained medium-sized groups of lactating animals and operated with small labor forces (<10 workers). Despite 100% feed adequacy, only 6.25% rural and 4.90% urban Gaushalas engaged in value addition of dung and urine. Landholding patterns indicated limited space in urban areas (93.14% had <110 bighas). Water resources were primarily dependent on tube wells (58.33% rural and 69.61% urban). Extension contact was largely limited to Veterinary Hospitals and Animal Husbandry Departments, with no interaction with KVKs or Livestock Research Stations. The study highlights significant gaps in education, resource utilization, and extension linkage, indicating potential areas for capacity-building and policy intervention. Strengthening institutional support, encouraging value-added resource use, and improving technical skills can enhance the sustainability and productivity of Gaushalas in the region.

Keywords: Gaushala, cow shelters, manager profile, animal husbandry, southern Rajasthan

Introduction
Cow shelters or Gaushalas serve as critical institutions for managing abandoned, stray and unproductive cattle in India. Rooted in religious and cultural traditions, Gaushalas play a key role in animal welfare, particularly for non-lactating, aged or diseased cattle that are no longer economically productive. These shelters are supported by charitable trusts, religious organizations, public donations, and sometimes government schemes. Despite their socio-religious importance, Gaushalas often face challenges in terms of scientific management, resource utilization and technical awareness.

Understanding the personal profile of individuals managing these shelters such as their educational background, herd size, access to resources and institutional connectivity is essential for identifying gaps and potential areas for improvement in animal husbandry practices. Managers socio-economic characteristics directly influence decision-making, adoption of technologies, and overall shelter productivity. Southern Rajasthan, with its mixed agro-climatic zones and significant cattle population, provides a relevant case for studying the managerial profiles of Gaushalas. This study, therefore, aims to analyze the demographic and operational characteristics of Gaushala managers across rural and urban regions of the state, serving as a basis for future policy formulation and targeted interventions.

Materials and Methods
To assess the knowledge and adoption of animal husbandry management practices among cow shelters (Gaushalas), a field-based descriptive survey was conducted during 2020-21 in eight purposively selected districts of southern Rajasthan. A total of 150 Gaushalas (48 rural and 102 urban) were selected from a population of 187 using proportionate random

sampling. Data were collected through personal interviews using a structured and pre-tested interview schedule specifically designed to capture knowledge and adoption levels across five key areas of animal husbandry: feeding, breeding, housing, milking and health care. The schedule comprised 67 items related to knowledge and 50 items related to adoption, with responses recorded in a dichotomous format (Yes = 1, No = 0). The scores were compiled for each respondent and categorized into low, medium and high levels based on mean and standard deviation. Data were analyzed using descriptive statistics such as frequency, percentage, Mean Percent Score (MPS) and ranking to interpret the level of knowledge and extent of adoption of recommended practices among the surveyed Gaushalas.

Results and Discussion

This section presents the personal and operational profile of respondents managing cow shelters (Gaushalas) in rural and urban settings. The data is interpreted using principles of rural development theory, the Diffusion of Innovations theory and the Sustainable Livelihoods Framework.

Year of Establishment of Cow Shelters

The majority of cow shelters (Gaushalas) 89.58% in rural and 93.14% in urban areas were established between 1986 and 2020, reflecting the historical spread of cow shelters under government schemes or religious-social initiatives during that period. The absence of new Gaushalas after 2020 could be attributed to a shift in policy focus, funding saturation or infrastructural constraints.

Table 1: Year of establishment of cow shelters (Gaushalas)

S. No.	Establishment Year	Rural (n_1=48)		Urban (n_2=102)	
		f	%	f	%
1	Before 1986	5	10.42	7	6.86
2	In between (1986 to 2020)	43	89.58	95	93.14
3	After 2020	0	0.00	0	0.00
Total		48	100	102	100

F= Frequency, %= Percentage, n= Total number of respondents

Education Level of Managers

Education levels significantly impact managerial efficiency, technology adoption and record-keeping. Urban managers were better educated, with 40.20% graduates, compared to 22.92% illiterate managers in rural areas. According to human capital theory, educational attainment enhances decision-making, financial management and capacity to adapt new practices.

Table 2: Education level of manager/supervisor

S. no.	Education Level	Rural (n_1=48)		Urban (n_2=102)	
		f	%	f	%
1	Illiterate	11	22.92	5	4.90
2	Primary	8	16.67	4	3.92
3	Middle	9	18.75	11	10.78
4	Matriculate	5	10.42	11	10.78
5	Higher Secondary	8	16.67	27	26.47
6	Graduate	6	12.50	41	40.20
7	Post graduate	1	2.08	3	2.94
Total		48	100	102	100

F= Frequency, %= Percentage, n= Total number of respondents

Distribution of Cattle in Cow Shelters

Most cow shelters in both rural (66.67%) and urban (57.84%) areas housed a medium number of cattle (184-1110). Small shelters (<184 cattle) were also common (31.25% rural; 32.35% urban), while large Gaushalas (>1110 cattle) were rare, particularly in rural areas (2.08%). The predominance of medium-sized shelters reflects a moderate operational scale that balances resource use and animal welfare.

Table 3: Distribution of cattle (numbers) in the cow shelters (Gaushalas)

S. no.	Cattle (in numbers)	Rural (n_1=48)		Urban (n_2=102)	
		f	%	f	%
1	Small (<184)	15	31.25	33	32.35
2	Medium (184-1110)	32	66.67	59	57.84
3	Large (>1110)	1	2.08	10	9.80
Total		48	100	102	100

F= Frequency, %= Percentage, n= Total number of respondents

Milk Production Levels

Milk production in most shelters was categorized as medium (27-125 litres/day), accounting for 45.83% of rural and 53.92% of urban shelters. Rural Gaushalas also had a higher proportion (50%) in the small production category (<27 litres), indicating potentially lower productivity or focus on non-milking functions such as animal care and religious purposes.

Table 4: Distribution of cow shelters based on milk production

S. no.	Milk Production (in Litre)	Rural (n_1=48)		Urban (n_2=102)	
		f	%	f	%
1	Small (<27)	24	50.00	40	39.22
2	Medium (27-125)	22	45.83	55	53.92
3	Large (>125)	2	4.17	7	6.86
Total		48	100	102	100

F= Frequency, %= Percentage, n= Total number of respondents

Distribution of Lactating Animals

The majority of Gaushalas in both rural (81.25%) and urban (88.24%) areas maintained a medium number of lactating animals (4-30), reflecting a consistent reproductive management approach. Very few shelters had either large (>30) or very small (<4) lactating populations, indicating a general homogeneity in herd management practices.

Table 5: Distribution of lactating animals in cow shelters (Gaushalas)

S. No.	Lactating Animal (in No.)	Rural (n_1=48)		Urban (n_2=102)	
		f	%	f	%
1	Small (<4)	6	12.50	5	4.90
2	Medium (4-30)	39	81.25	90	88.24
3	Large (>30)	3	6.25	7	6.86
Total		48	100	102	100

F= Frequency, %= Percentage, n= Total number of respondents

Workforce in Cow Shelters

Most shelters operated with a small workforce (<10 workers), constituting 58.33% in rural and 67.65% in urban areas. Only a few employed more than 32 workers. The labor structure suggests that cow shelters are managed with limited human resources, possibly due to financial constraints or a preference for voluntary service models in traditional Gaushalas.

Table 6: Distribution of workers in cow shelters (Gaushalas)

S. no.	Workers in Gaushala (No.)	Rural (n_1=48)		Urban (n_2=102)	
		f	%	f	%
1	Small (<10)	28	58.33	69	67.65
2	Medium (10-32)	18	37.50	29	28.43
3	Large (>32)	2	4.17	4	3.92
Total		48	100	102	100

F= Frequency, %= Percentage, n= Total number of respondents

Value Addition of Dung and Urine

Value addition of dung and urine was notably absent in most shelters, with 93.75% of rural and 95.10% of urban Gaushalas not engaging in such practices. This point to a significant missed opportunity in organic farming inputs and bioenergy production. Promoting awareness and technologies for dung-based value addition could enhance sustainability and economic viability.

Availability of Feed

All respondents from both rural and urban Gaushalas reported adequate feed availability, indicating strong feed resource planning or support systems. This is a positive sign for animal health and productivity, though the qualitative nature and nutritional value of the feed were not assessed in this study.

Land Availability in Cow Shelters

A majority of Gaushalas, particularly in urban areas (93.14%), had small land holdings (<110 bighas). Rural shelters were slightly more diversified, with 13.95% having large tracts (>262 bighas). Limited land availability may restrict fodder cultivation and infrastructure development, especially in urban settings where land cost is high.

Table 7: Availability of land in the cow shelters (Gaushalas)

S. no.	Land Availability (in Bighas)	Rural (n_1=48)		Urban (n_2=102)	
		f	%	f	%
1	Small (<110)	36	75.00	95	93.14
2	Medium (110-262)	5	10.42	3	2.94
3	Large (>262)	7	13.95	4	3.92
Total		48	100	102	100

F= Frequency, %= Percentage, n= Total number of respondents

Sources of Water

The primary water source was tube wells, serving 58.33% of rural and 69.61% of urban Gaushalas. A combination of tube wells and wells was the second most common source. The absence of canal water indicates a reliance on groundwater, which raises concerns about long-term water sustainability, especially in drought-prone regions.

Extension Contact Categorization

Extension contact was largely limited to Veterinary Hospitals and Animal Husbandry Departments. In rural areas, 58.33% of respondents relied on veterinary hospitals, whereas in urban areas, 57.84% engaged more with Animal Husbandry Departments. No contact was reported with Krishi Vigyan Kendras (KVKs) or Livestock Research Stations (LRS), suggesting a gap in technical outreach and research-extension linkage.

Table 8: Categorization of cow shelters (Gaushalas) according to extension contact

S. no.	Extension contact	Rural (n_1=48)		Urban (n_2=102)	
		f	%	f	%
1	KVK	0	0.00	0	0.00
2	LRS	0	0.00	0	0.00
3	A.H. Department	20	41.67	59	57.84
4	Vet. Hospital	28	58.33	43	42.16
Total		48	100	102	100

F= Frequency, %= Percentage, n= Total number of respondents

Conclusion

The study reveals that most Gaushalas in both rural (89.58%) and urban (93.14%) areas were established between 1986 and 2020. Urban Gaushalas showed better managerial education, with 40.20% graduates, compared to a high illiteracy rate (22.92%) in rural areas. Medium-sized shelters (184-1110 cattle) dominated, and most shelters reported medium milk production (27-125 litres/day) and lactating animals (4-30). Feed availability was adequate across all shelters, but land availability remained small in most cases, especially in urban areas (93.14%). Despite the potential, value addition of dung/urine was rare—only 6.25% rural and 4.90% urban shelters practiced it. Tube-wells were the main water source, and extension contact was limited to veterinary hospitals and A.H. Departments, with no linkages to KVKs or LRS.The findings highlight the need for improved education, enhanced resource utilization and better integration with research and extension systems to strengthen the operational and economic sustainability of Gaushalas.

References

1. Bashir A, Sharma R. Extension services and animal husbandry practices among tribal livestock keepers in J&K. Indian Journal of Social Research. 2011;52(2):109-114.
2. Chandra S, Rathore PS, Tiwari S. Land availability and staffing in Indian Gaushalas: A comparative study. Livestock Research Reports. 2023;14(2):102-109.
3. Dhayal BL, Mali RS. Knowledge of breeding practices among milk producers in Rajasthan. Journal of Dairy and Veterinary Sciences. 2015;8(3):121-127.
4. Gour A. Livestock ownership and literacy among tribal farmers in India. Tribal Research Bulletin. 2015;8(1):33-39.
5. Khode RL, Aulakh GS, Lohakare A. Impact of socio-personal characteristics on dairy farming adoption among farmers. Indian Research Journal of Extension Education. 2013;13(3):21-25.
6. Kumar S, Singh H, Meena MS. Status of cow shelters in Haryana and challenges faced in their management. International Journal of Livestock and Rural Development. 2019;11(3):73-80.
7. Mandi R, Subhash R. Assessment of infrastructure and resource utilization in Gaushalas of Karnataka. Indian Journal of Livestock Research. 2019;39(4):91-98.
8. Manjunath L, Patil SS, Reddy R. Socio-economic analysis of dairy farmers in Yadgir district of Karnataka. Journal of Rural Studies. 2020;22(1):54-60.
9. Mohanty P, Tripathy SK. Medicinal uses of cow urine in traditional systems of medicine. Journal of Ethnoveterinary Medicine. 2014;3(2):77-83.
10. Patel M, Sabapara GP. Knowledge of feeding and breeding practices among tribal dairy farmers in Gujarat. Journal of Animal Husbandry Extension. 2023;19(1):12-19.
11. Prashad B, Meena RL, Gaur S. Educational profile of dairy farmers in semi-arid Rajasthan. International Journal of Agricultural Extension. 2019;17(4):88-93.
12. Randhawa NS. Cow urine as bio-enhancer and biopesticide: A review. Indian Journal of Organic Farming. 2010;8(1):44-49.
13. Saunders M. Traditional Indian beliefs and animal treatment methods. Cultural Veterinary Studies. 1982;5(4):198-204.
14. Selvak Kumar P, Natarajan A. Effectiveness of AI services and breeding awareness in Tamil Nadu. South Indian Journal of Extension Education. 2013;17(1):41-47.
15. Sharma A. A comprehensive study on the status and functioning of cow shelters in India. Indian Journal of Animal Welfare. 2020;18(2):120-127.
16. Sharma N, Singh M. Extension contact and knowledge level of dairy farmers in Kheda district. Gujarat Journal of Extension Education. 2012;23(2):88-92.
17. Singh R, Yadav K, Kumar A. Education status and adoption of improved dairy farming practices in Northern India. Journal of Dairy Science and Technology. 2021;10(1):45-52.
18. Thakur RP, Yadav RS. Gender disparity in livestock farming: A study from rural India. Indian Journal of Gender Studies. 2001;6(2):113-119.