



ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2023; SP-12(7): 2684-2686
© 2023 TPI
www.thepharmajournal.com
Received: 11-04-2023
Accepted: 21-06-2023

Dr. Komal Chandraker
Veterinary Assistant Surgeon,
Gariyaband, Chhattisgarh, India

Dr. Alok Kumar Pandey
University Professor, Birsa
Agriculture University, Ranchi,
Jharkhand, India

Study on adoption of improved dairy management practices by livestock entrepreneurs

Dr. Komal Chandraker and Dr. Alok Kumar Pandey

Abstract

The dairy industry plays a crucial role in providing a sustainable source of nutrition and livelihood for millions of people worldwide. With the increasing demand for dairy products and the need for efficient resource utilization, adopting improved dairy management practices becomes imperative for livestock entrepreneurs. The study took place in Jharkhand and Chhattisgarh, with three agroclimatic regions in each state. Sixty large commercial dairy farmers from different districts participated in the study. The analysis focused on adoption of improved dairy management practices by livestock entrepreneur. The results showed that adoption index in breeding, feeding, management, disease control and marketing by dairy entrepreneur is higher than that of conventional farmers.

Keywords: Entrepreneur, adoption index, dairy management

Introduction

In the fast-evolving landscape of modern agriculture, livestock entrepreneurs find themselves at the forefront of an ever-expanding global demand for animal products. As the world's population continues to grow, so does the need for sustainable and efficient livestock production to meet the escalating demands for food, fiber, and other essential resources. In this context, the adoption of improved livestock management practices by livestock entrepreneurs has become an indispensable pillar for achieving not only economic prosperity but also environmental stewardship and animal welfare.

Gone are the days when livestock production merely relied on traditional, time-worn methods. Today, the livestock industry faces unprecedented challenges, including resource constraints, climate change, and shifting consumer expectations. To remain competitive and responsible stewards of the environment, livestock entrepreneurs must embrace innovative practices that promote optimal productivity while minimizing the ecological footprint.

The adoption of improved livestock management practices is a multi-faceted endeavor that encompasses a wide range of strategies, technologies, and philosophies. It involves a comprehensive approach that addresses animal well-being, nutrition, disease prevention, waste management, environmental sustainability, and data-driven decision-making. By actively incorporating these practices into their operations, livestock entrepreneurs can revolutionize their businesses and contribute to a more sustainable and resilient future for the entire livestock industry.

This introduction serves as a gateway into the transformative realm of modern livestock management practices, illuminating the significance and urgency of adopting a proactive and progressive mindset. As we delve into the key components of improved livestock management, it becomes apparent that its benefits extend far beyond the boundaries of individual enterprises. The collective impact of embracing these practices reaches out to global food security, rural development, biodiversity conservation, and the delicate balance of our planet's ecosystems.

Material and Methods

The research was carried out in the states of Jharkhand and Chhattisgarh, India, specifically chosen due to their similar agro climatic conditions. Within each state, certain districts were randomly picked for the study: Ranchi, Deoghar, and Saraikela Kharsawan in Jharkhand, and Bastar, Mahasamund, and Surguja in Chhattisgarh.

A comprehensive list of commercial dairy farmers was compiled from various departments and organizations. The selection criteria for dairy animals included respondents who owned 10

Corresponding Author:
Dr. Komal Chandraker
Veterinary Assistant Surgeon,
Gariyaband, Chhattisgarh, India

or more dairy animals. Subsequently, these farmers were categorized into two groups: Entrepreneurs and Conventional large livestock farmers. Entrepreneurs were identified by their adoption of innovations, involvement in commercialization, and recognition through awards or accolades for their contributions to the field. The analysis focused on 31 conventional dairy farmers and 29 entrepreneurs

In this study, it refers to the degree of adoption of any items of recommended package of livestock practices by a livestock owner either in past or at present. The extent of adoption of dairy management practices (breeding, feeding, management, disease control and marketing) was measured with the help of scale developed by Sharma and Sohal (1987). Each question

had three possibilities which were “Adopted”, “Adopted but discontinued” and “Not Adopted”, score was given in form of 2, 1 and 0 respectively. The extent of adoption for entrepreneur and conventional farmers was calculated on the basis of total score secured by the dairy livestock owner. Based on total scores, the dairy livestock owners were classified into three categories i.e., low, medium and high. The adoption index was calculated by using formula.

$$\text{Adoption index} = \frac{\text{Total obtained score}}{\text{Total obtainable score}} \times 100$$

Results and Discussion

Table 1: Distribution of the dairy owners according to their level of adoption in different improved Dairy management practices.

Practices	Adoption Categories	Entrepreneurs (n=29)		Conventional farmers (n=31)		Adoption index	
		No	%	No	%	Entrepreneur	Conventional farmers
Breeding	Low (up to 3)	0	0	9	29.03	86.63	57.25
	Medium (4-6)	8	27.58	18	58.06		
	High (7& above)	21	72.41	4	12.90		
Feeding	Low(up to 3)	12	6.89	16	51.61	78.44	45.56
	Medium(4-6)	10	34.48	12	38.70		
	High (7&above)	17	58.6	3	9.6		
Management	Low(up to 3)	1	3.44	12	38.70	87.06	51.20
	Medium (4-6)	4	13.79	17	54.83		
	High (7&above)	24	82.75	2	6.45		
Disease control	Low(up to 3)	0	0.00	18	58.06	87.5	39.11
	Medium(4-6)	7	24.13	12	38.70		
	High (7&above)	22	75.86	1	3.22		
Marketing	Low(up to 3)	3	10.34	21	67.7	81.46	41.12
	Medium(4-6)	7	24.13	9	29.03		
	High (7&above)	19	65.5	1	3.22		
Total	Low (up to 13)	0	0.00	3	9.67	84.22	46.85
	Medium(14-27)	4	13.79	28	90.32		
	High(28-40)	25	86.20	0.00	0.00		

In dairy entrepreneur's maximum number of respondents (72.41%) were in high category followed by medium (27.58%) for breeding practices and for conventional farmers maximum number of respondents (58.06%) were in medium category followed by low (29.03%) and high (12.90%). Adoption index was found to be highest in entrepreneur (86.63) as compared to conventional farmers (57.25) for dairy breeding practices. Hazarika and Singh (1983) [2] reported a positive and significant association between social participation and adoption of dairy innovations.

In feeding practices maximum number of dairy entrepreneurs (58.6%) was in high category followed by medium (34.48%) and low (6.89%) and for conventional farmers maximum number of respondents (51.61%) were in low category followed by medium (38.70%) and high (9.6%). Adoption index was found to be highest in entrepreneurs (78.44) as compared to conventional farmers (45.56) for dairy feeding practices. Meena *et al.* (2012) [4] reported that adoption level of tribal farmers regarding feeding of dry fodder (100%), feeding of colostrum to newly born calves (86.25%) was quite high and green fodder (50.00%) in Udaipur district in Rajasthan.

In management practices of dairy entrepreneur, maximum number of respondents (82.75%) were in high category followed by medium (13.79%) and low (3.44%) and for conventional farmers maximum number of respondents (54.83%) were in medium category followed by low (38.70%) and high (6.45%). Adoption index was found to be highest in entrepreneurs (87.06) as compared to conventional farmers

(51.20) for dairy management practices. Meena *et al.* (2012) [4] conducted a study in Bikaner district of Rajasthan and reported that in case of member respondents, 26.25 percent were in the category of high adopter, 42.50 percent medium adopter and 31.25 percent members were in the category of low adopter of improved animal husbandry practices. On the other hand, in case of non-members, majority (56.25%) of the respondents belonged to low adopter category followed by medium and high adopter category with 37.40 percent and 6.25 percent respondents, respectively.

In disease control practices of dairy entrepreneur maximum number of respondents (75.86%) were in high category followed by medium (24.13%) and for conventional farmers maximum number of respondents (58.06%) were in low category followed by medium (38.70%) and high (3.22%). Adoption index was found to be highest in entrepreneurs (87.5) as compared to conventional farmers (39.11) for dairy disease practices.

In marketing practices maximum numbers of dairy entrepreneurs (65.5%) were in high category followed by medium (24.13%) and low (10.34%) and for conventional farmers maximum numbers of respondents (67.7%) were in low category followed by medium (29.03%) and high (3.22%). Adoption index was found to be highest in entrepreneurs (81.46) as compared to conventional farmers (41.12) for dairy marketing practices.

In total adoption in dairy improved management practices for entrepreneurs it was found that maximum number of dairy entrepreneurs (86.20) were in high category followed by

medium (13.79%) and for conventional farmers maximum number of respondents (90.32%) were in medium category followed by low (9.67%). Adoption index was found to be highest in entrepreneurs (84.22) as compared to conventional farmers (46.85) for total adoption in dairy management practices. Adoption index in dairy entrepreneurs were found to be in contradiction with result of Mande *et al* (2009)^[3] who conducted their study in Latur district. Higher adoption index in dairy entrepreneur could be due to high innovativeness, cosmopolitanism, self-confidence and income among farmers. Whereas Akhter *et al.* (2013)^[1] conducted a study in Sikar district of Rajasthan and reported that non-adoption of the animal husbandry practices were observed in health & hygiene (56.30%) followed by the housing management (31.70%), feeding of dairy animals (26.6%), breeding of dairy animals (17.20%) and clean milk production (6.70%).

Conclusion

In conclusion, entrepreneurs show a higher adoption index for dairy management practices compared to conventional farmers. Their business mindset drives them to seek optimal efficiencies, explore technological advancements, and implement innovative strategies in dairy farming. With a focus on profitability, sustainability, and market opportunities, entrepreneurs are more likely to embrace modern dairy management practices, leading to increased productivity, improved product quality, and a competitive advantage in the industry. Their proactive approach to adopting new methods positions them at the forefront of dairy farming, contributing to overall industry growth and development.

References

1. Akhter J, Asiwai BL, Hussain A. Knowledge and adoption of animal husbandry practices among the farmers of Sikar district of Rajasthan. *Indian Journal of Extension Education & Rural Development*. 2013;(21):196-199.
2. Hazarika P. A study of correlates of knowledge and adoption behaviour of the dairy farmers under ICDP Haryana. M.Sc. Thesis, National Dairy Research Institute (Deemed University), Karnal, India; c1983.
3. Mande JV, Thombre BM. Adoption of cattle rearing practices by dairy cattle owners in Latur district of Maharashtra. *Journal of Dairying, Foods & Home Science*. 2009;28(3&4):176-180.
4. Meena DK, Ram H, Meena BS. Adoption of improved animal husbandry practices by the members and non-members of dairy cooperative societies. *Indian Journal of Dairy Science*. 2012;65(4):356-358.