

Constraints Faced by Dairy Farmers in Adoption of Improved Dairy Farming Practices

Priya Khurana¹, Arpita Sharma Kandpal², and Sunil Kumar³

¹M.SC student, Dept. of Agricultural Communication, College of Ag, GBPUA&T, Pantnagar. Uttarakhand INDIA

²Assistant Professor, Dept. of Agricultural Communication, College of Ag, GBPUA&T, Pantnagar. Uttarakhand INDIA

³Professor, Dept. of Animal Breeding and Genetics College of Veterinary, GBPUA&T, Uttarakhand, INDIA

*Corresponding Author: sharmaarpita35@gmail.com

How to cite this paper:

Khurana, P., Kandpal, A. S., & Kumar, S. (2023). Constraints Faced by Dairy Farmers in Adoption of Improved Dairy Farming Practices. *International Journal of Livestock Research*, 13 (2), 55-58.

Received : Nov 01, 2022
Accepted : Feb 24, 2023
Published : Feb 28, 2023

Copyright © Khurana et al., 2023

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Dairy farming plays an integral role in the improvement of the livelihoods of rural people mainly for smallholders and dairy farming is equally important for the economic development of the country. In India, low animal productivity results due to climatic, social, and economic factors due to which farmers do not adopt improved dairy farming practices to a good extent. The present study was conducted in the Kumaon division of Uttarakhand state. Udham Singh Nagar district was purposively selected as the locale of study. For the selection of block, Rudrapur and Sitarganj blocks were selected by chit method of Simple Random Sampling. Two villages were selected from each selected block by random sampling. A total of 100 respondents from these villages were selected through Probability Proportionate to Size sampling method. Farmers are not receiving training, low prices of milk and milk products, lack of family support, lack of government schemes for dairy farming, and distant locations of AI centers are some of the constraints faced by dairy farmers. Lack of government schemes for dairy farming, not having superior breeds, and Lack of government schemes for dairy farming are also some of the constraints faced by dairy farmers.

Keywords: Constraints, Dairy Farming, Improved Practices

Introduction

The Indian Agricultural framework is mainly a mixed crop-livestock farming system, agriculture is considered the lifeline of the country as it employs 47.2 percent population along with the food security that is provided to the expanding population of the country (FAO, 2019). As an imminent part of agriculture, the animal husbandry and livestock sector focus on supplementing farm incomes by contributing towards employment, draught animals, and manure (Baindha, *et.al.*, 2017). Animal husbandry and agriculture are considered interdependent and the development of one cannot be completed without the other one. Approximately 75 percent of the World's economically less stable population lives in rural areas, and at least 600 million of these people produce food, generate cash income, manage risks, and build up assets through livestock. India has a large number of livestock resources. (Chinnadurai *et.al.*, 2018)

At present India is still not doing great in the dairy industry especially when it comes to import and export. In India, the dairy industry is facing numerous challenges and has tough competition with foreign countries with better yields and technologies. (Ghosh *et.al*, 2014). In Uttarakhand, dairy is a promising economic activity for smallholders who constitute the majority of farming communities in the region as here every household in rural and semi-urban areas owns livestock, small-scale dairies, and milk collection centers are coming up on their own in the region (Singh, 2003). Major states with higher cattle populations are West Bengal, Uttar Pradesh, Madhya Pradesh, Bihar, etc. whereas Uttarakhand has 0.96 percent cattle and 0.79 percent buffaloes. (Kachhawaha *et.al*, 2021). There has been a remarkable decrease in the indigenous cattle population and buffalo population in the state. Overall, the total population of cattle has decreased. In Uttarakhand, the growth rate for milk production in 2018 was found to be 3.24 percent which is lower than the growth rate in India which is 4.47 percent. Understanding the livestock and dairy farming practices adopted by the farmers is significant to identify the strength and weaknesses of the extension systems and formulating needed intervention policies (Gupta *et.al*, 2008).

In spite of all of these points, dairy farmers were facing many problems due to a lack of information on various aspects. Rajpoot *et al.* (2018) stated that the low price of milk and milk products; lack of technical knowledge, high cost of construction, no vaccination against contagious diseases, and lack of loan facilities were major constraints in adopting improved dairy farming practices. Rathva *et al.*(2020) stated that the high cost of feed, lack of insemination facility time, and high cost of production of milk were the major constraints perceived by dairy farmers for the adoption of recommended practices.

Constraints faced by dairy farmers while adopting Improved dairy feeding practices are widespread of the belief that colostrums feeding is unhygienic and it may be harmful to the health of calves, the high cost involved in purchasing of concentrate mixture, lack of knowledge about the correct amount of concentrate should be added, non-availability of information about balance feeding and scarcity of green fodder round the year.

The present research investigation is an attempt to study the constraints faced by dairy farmers.

Material and Methods

The present study was conducted in the Kumaon division of Uttarakhand state. Udham Singh Nagar district was purposively selected as a locale of study because Udham Singh Nagar has the highest milk production in the Kumaon division (163.52 Thousand MT). Thus, it has maximum contribution in the dairy sector in this division. For the selection of block, Rudrapur and Sitarganj blocks were selected by chit method of simple random sampling. Two villages were selected from the selected each block by random sampling for accessing the objectives ascertain above with a total of 100 respondents. Respondents from each village were selected through the Purposive method. The research design used in the present study was a descriptive research design and data collection was performed through an interview schedule. The data were further coded, tabulated, analyzed, and interpreted using proper statistical tools. Garrett's ranking method was used to complete the ranking of the constraints faced by the respondents. This ranking was used by determining the most significant constraints faced by the dairy farmers from their given response. The ranking was calculated as a factor of percentage position value using the following equation:

$$\text{Percent Position (PP)} = 100(R_{ij} - 0.5)/N_j$$

Where R_{ij} is the value given by the respondents, while N_j is the number of the variables analysed by J respondents. The percent position values were then converted to Garrett values using the Garrett conversion table. The values of R_{ij} were then changed to Garrett values and then the average Garrett score was calculated and the alternative ranking based upon the highest score was given.

Results and Discussions

Constraints in the present study refer to the problem faced by dairy farmers in the adoption of improved dairy farming practices. Garrett's ranking method was used to assess constraints. The data regarding constraints faced by dairy farmers have been presented in Table 1.

Table 1: Constraints faced by dairy farmers

Constraints	Percent position (%)	Garrett score	Average	Rank
No training received	4.166	83	74.8	I
Low price of milk and milk products	12.5	73	64.98	II
High cost of feed and fodder	20.83	66	62.51	III
Lack of knowledge and information	29.16	61	58.07	IV
Shortage of green fodder	37.15	57	53.65	V
Poor credit support	45.83	52	52.13	VI
Lack of veterinary facility in villages	54.16	48	50.88	VII
Distant location of AI centres	62.5	44	49.25	VIII
Do not have superior breeds	70.83	39	48.44	IX
Lack of family support	79.16	34	34.45	X
Non-availability of grazing land	87.5	27	32.55	XI
Lack of government schemes for dairy farming	95.83	17	26.67	XII

From the data presented in Table 1, it was found that 'no training received' (ranked I) was the major constraint faced by dairy farmers in the adoption of improved dairy farming practices as they were not avail of the training to follow such practices because of which they could not follow those practices to the desired extent, followed by low prices of milk and milk products (ranked II) as the major constraint to the dairy farmers. High cost of feed and fodder (ranked III) as a major constraint followed by a Lack of knowledge and information about improved dairy farming practices (ranked IV). Lack of schemes in the dairy sector (ranked V) followed by shortage of dry green fodder (ranked VI).

The next important constraint faced by dairy farmers is poor credit support to the dairy farmers (ranked VII). The next constraint faced is the lack of veterinary facilities in villages (ranked VIII) followed by distant locations of Artificial Insemination centres (ranked IX) and lack of family support (ranked X). Non-availability of grazing land is the other constraint (ranked XI) followed by the lack of Government schemes ranked last (ranked XII). The results are in line with the outcomes of Rathva *et al.* (2020), Minhaj *et al.* (2020), and Rajpoot *et al.* (2018).

Conclusion

From the discussion, this can be concluded that dairy farmers were facing many problems. Farmers are not receiving training, low prices of milk and milk products, lack of family support, lack of government schemes for dairy farming, and distant locations of AI centers are some of the constraints faced by dairy farmers. lack of government schemes for dairy farming, do not have superior breeds, and Lack of government schemes for dairy farming are also some of the constraints faced by dairy farmers.

Contribution by Authors

Equal contribution

Conflict of Interests

There is no conflict of interest.

Publisher Disclaimer

IJLR remains neutral concerning jurisdictional claims in published institutional affiliation.

References

1. Baindha, A., Berwal, R. K., Kumar, A., Sankhla, G., and Kumar, V. 2017. Socio personal, communication and psychological profile affecting entrepreneurial behaviour of milk processors. *Int. J. Vet. Sci. Anim. Husb.*, 2(2): 39-43.
2. Chinnadurai, M., Ashoka, K. R. and Anbarasan. 2018. Allied sector as catalyst of economic growth. *Kurushetra*, 66(6): 9-13.
3. Dhaka, B. L., Meena, N. L., Bairwa, R. K. and Nagar B. L. 2017. Constraints analysis in adoption of improved dairy farming practices in Bundi district of Rajasthan. *Chem. Sci. Rev. lett.*, 6(22): 995-999.
4. Ghosh, R. K., Goswami, A. and Mazumdar, A. K. 2014. Adoption behaviour of dairy farmers in cooperative farming systems. *Livest. Res. Rural Dev.*, 16(11): 15-21.
5. Kachhawaha, S., Kalash, P., Jangish, B. L., Rathore, B. S. and Sharma, S. M. 2021. Adoption of scientific dairy practices by cross bred cow rearer in Jodhpur district. *Int. J. Livest. Res.*, 11(10): 26-33.
6. <http://dahd.nic.in/about-us/divisions/cattle-and-dairy-development> Ministry of Fisheries, Animal Husbandry and Dairying, 21/02/22.
7. <http://des.uk.gov.in> Planning Department, Government of Uttarakhand, Statistical Diary 2017-18, 23/12/2021.
8. Rajpoot, J.S., Kirad, K.C., Badaya, A. K. and Chauhan, S.S. 2018. Constraints faced by Dairy Farmers while adopting Animal Management Practices in Dhar District of Madhya Pradesh, *Int. J. Curr. Microbial. App. sci.*, 7(1): 3163-3166.
9. Rathva, A.L., Sorathiya, L.M., Barot, B.C. and Gadhvi, D.N. 2019. Constraints perceived by dairy farmers in Urban Peri areas of South Gujarat. *Vet. Res. Int.*, 8(1): 04-06.
