



# Dairy Entrepreneurship in *Kandi* Region of Punjab: Prospects and Constraints


Rakesh Rathore 

School of Business Studies, Punjab Agricultural University, Ludhiana, Punjab (141 004), India



Open Access

Corresponding  [rathore@pau.edu](mailto:rathore@pau.edu)

 0000-0002-0024-1176

## ABSTRACT

The present study was carried out in Kandi region of Punjab, India during September, 2021 aimed to study entrepreneurial behavior and constraints faced by farmers in dairy. The entrepreneurs are key persons who promote economic growth and technological changes. The development of entrepreneurship is directly related to the socio-economic development of the society. Entrepreneurship in dairy helps farmers to increase their income or to get additional income from this important allied sector of agriculture. Total 120 farmers' respondents were selected from four villages. The primary data were collected through pre-tested structure interview schedule. Multistage sampling was used to select respondents. The study revealed that like being own boss is important entrepreneurial behavior of overall farmers. Lack of business skills and innovativeness are important entrepreneurial behavior of marginal, small and semi-medium and large farmers respectively. Lack of business skills had highest mean score 3.77 with t-value 9.58 and  $p$ -value  $< .0001$  which was found to be significant at 1% level of significance. Non-availability of certified veterinarian followed by lack of education and training was the important constraints faced by farmers in dairy. Innovativeness was important entrepreneurial behavior of semi-medium and large dairy farmers. There are lots of scopes for dairy entrepreneurship in *Kandi* region of Punjab. Proper training and education are required to the farmers mainly for marginal and small farmers for dairy entrepreneurship.

**KEYWORDS:** Constraints, dairy entrepreneurship, farmers, Kandi region, Punjab

**Citation (VANCOUVER):** Rathore, Dairy Entrepreneurship in *Kandi* Region of Punjab: Prospects and Constraints. *International Journal of Bio-resource and Stress Management*, 2023; 14(3), 450-456. [HTTPS://DOI.ORG/10.23910/1.2023.3361a](https://doi.org/10.23910/1.2023.3361a).

**Copyright:** © 2023 Rathore. This is an open access article that permits unrestricted use, distribution and reproduction in any medium after the author(s) and source are credited.

**Data Availability Statement:** Legal restrictions are imposed on the public sharing of raw data. However, authors have full right to transfer or share the data in raw form upon request subject to either meeting the conditions of the original consents and the original research study. Further, access of data needs to meet whether the user complies with the ethical and legal obligations as data controllers to allow for secondary use of the data outside of the original study.

**Conflict of interests:** The authors have declared that no conflict of interest exists.



## 1. INTRODUCTION

Livestock production is one of the promising sectors of entrepreneurship development in India (Bandopadhyay, 2007). Milk production in the country has increased from 146.3 mt in 2014–15 to 198.4 mt in 2019–20. Dairy has an important secondary source of income for millions of rural people especially for marginal and women farmers (Anonymous, 2020). According to department of animal husbandry Punjab government the total number of cows and Buffalos population was highest in Hoshiarpur district, followed by highest number of population of cow and Buffalo in Pathankot and Rupnagar district respectively..

Ahuja et al. (2016) found that majority (63.75%) of farmers that had medium level of entrepreneurial behavior. Standardization milk has been found most profitable among all types of milk pouches (Gautam et al., 2018). Lyngkhoi et al. (2022) concluded that, the present result forecasts that milk production will increase in the coming years. Manpower are required to accomplish various activities such as milking, feeding, visual identification of estrus detection etc. (Sarangi et al., 2016, Heema et al., 2022). Adoption of scientific dairy technologies such as breeding, feeding, health and hygiene, and marketing was quite low to medium. Yadav and Naagar (2021) and Sharma et al. (2021) concluded higher level of adoption was observed in feeding practices (54.14%) while lower level of adoption was observed in milking (24.05%). Shafi and Chauhan (2021) concludes that majority (67.50%) of the dairy farmers’ sons had a very high extent of essential knowledge to be successful dairy farmers. Singh and Rampal (2016) concluded that majority of trained dairy farmers possessed above average knowledge and the untrained dairy farmers possessed below average. Kumar et al. (2016) concluded that majority of the dairy farmers belonged to medium level entrepreneurial behavior group followed by high level and low level. High cost of concentrates and non-availability of veterinary services were the important problems (Kumar and Kondeti, 2014). Singh et al. (2022) studied education, land holding, material possession, occupation, annual income and sources of information were significantly affecting the entrepreneurial behavior of skilled youth. Manivannan and Tripathi (2007) revealed respondents with high level of self-confidence were quicker in making and implementing the right decisions at the right time. Food safety is positively linked with profit (Dixit et al., 2022). Diya and Sethi (2019) concluded that economic constraint was perceived as major constraint for women in entrepreneurship. Mani, (2011) found that relationship among entrepreneurship and personality traits namely decision making and risk taking ability (Pouria et al., 2021) economic motivation, managerial ability, problem recognition was significant.

Koutouzidou (2022) verified that dairy cattle farms of entrepreneurial mindset have the potential to rise to the future economic, environmental and social challenges that will affect the survival of the sector. Lack of communications, infrastructure, marketing facilities, lack of timely market information is important constraints in farming (Kahan, 2012). Entrepreneurship comprises of innovation, risks and solution that leads to growth and development of business (Saghaian, 2022). There is a negative and significant association between barriers to starting a business and the rate of firm exit (OReilly, 2022). Participation in training programme, technical guidance and consultancy (Rathore and Mathur, 2018) are the major and direct sources of exploiting business opportunities in farming (Yaseen, 2018). Anna et al. (2022) found entrepreneurial behavior showed positive and significant correlation with their Piggery farming experiences. This study aimed to study entrepreneurial behavior and constraints faced by farmers in dairy were the main objectives of the study.

## 2. MATERIALS AND METHODS

The present study was conducted in Kandi region of Punjab, India during September, 2021. Multistage sampling was used for selection of respondents. The information from the respondent was collected by personal interview methods and their responses were considered for the purpose of present study. Data regarding entrepreneurial behavior of dairy farmers and constraint of dairy farmers in dairy were collected through pre-designed and pre-tested questionnaire. Respondents were asked to provide response on five-point Likert scale ranging from 1–5 where 1 represents “strongly agree” and 5 represents “strongly disagree”. Mean score, Percent and t-test used for analyzing the data. Total 120 farmers’ respondents were selected. The detail of sample and respondents presented in the table 1 below.

Table 1: Detail of sample size

District	Tehsil	Villages	No. of respondents
Nawashahr	Balachaur	(1) Thopia	30
		(2) Takarla	30
		(3) Kalar	30
		(4) Thanwala	30
		Total	120

$$(\text{Mean Score}) = (\sum W_i F_n) / n \dots\dots\dots(1)$$

Where, i=1–5,  $W_i$ =weight attached,  $F_n$ =associated frequency, n=number of respondents.

$$(t\text{-test}) t = ((\bar{x} - \mu) \sqrt{n}) / S \dots\dots\dots(2)$$

Where,  $\bar{x}$ =mean of sample, n=number of respondents, S=sample standard deviation,  $\mu$ =population mean.

### 3. RESULTS AND DISCUSSION

Age of the respondents presented in the table 2 majority of farmers' age was up to 30 years (37.50%) followed by 31–40 years (27.50%) age group. Education level of the farmers also revealed in the table 2, majority of the farmers had education up matric level (39.16%) similar results reported (Sharma and Tengli, 2017) by followed by educated up to middle level (16.66%)

Table 2: Demographic profile of the farmers (n=120)

Particular	Frequency	(Percent)
Age of the farmers		
up to 30 years	45	37.50
31–40 years	33	27.50
41–50 years	22	18.33
More than 50 years	20	16.66
Education level of farmers		
Illiterate	12	10.00
Primary	23	19.16
Middle	20	16.66
Matric	47	39.16
Higher Sec	10	8.33
Graduate	9	7.50
Annual income of the farmers (₹)		
up to 50,000	32	26.66
51–60,000	24	20.00
61–70,000	30	25.00
71–1,00000	20	16.66
Above 1,00000	14	11.66
Land size in (ha)		
Marginal less than 1	35	29.16
Small more than 1–2	32	26.66
Semi medium more than 2–4	24	20.00
Medium more than 4–10	19	15.83
Above 10	10	8.33

(Source: Primary data)

Annual income of the farmers revealed in the table 2 majority of the farmers income was up to ₹ 50,000 (26.66%) followed by ₹ 61–70,000 (20.00%). Only 11.66% farmers' income was more than ₹ 1,00000. Majority of the farmers were marginal (29.16%) followed by small farmers land size was more than one to two (26.66%) followed by semi

medium (20.00%) followed by medium (15.83%) and least farmers were large (8.33%) (Figure 1).

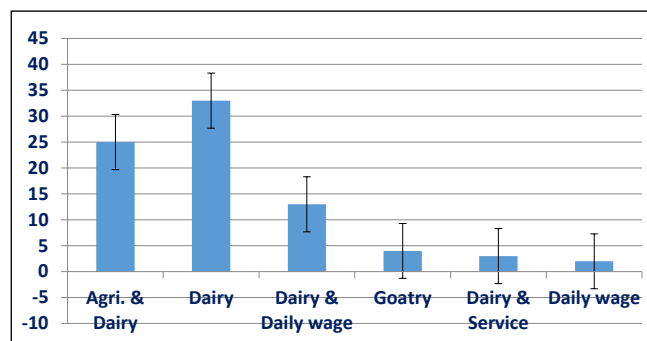


Figure 1: Source of income from different enterprises

The number of dairy animal own by farmers and total milk marketed by farmers presented in the table 3 majority of the farmers own one to two number (43.75%) of animals followed by 11–20 number (32.45%) of animals. Majority of farmers' market 1–20 l milk (35.00%) followed by 21–50 l milk (25%) market day<sup>-1</sup>. Least (6.25%) farmers market more than 150 L milk.

Table 3: Dairy animal own and total milk marketed day<sup>-1</sup> by farmers (n=120)

Particular	Frequency	Percent
Number of dairy animals		
1–10	35	43.75
11–20	26	32.50
21–30	9	11.25
Above 30	10	12.50
Milk marketed by farmers		
1–20 l	28	35
21–50 l	20	25
51–100 l	15	18.75
101–150 l	12	15
Above 150 l	5	6.25

Source: Primary data

Total daily milk production in the study area presented in the table 4 milk production in village Takarla was highest around 4000–5000 kg day<sup>-1</sup> followed by village Thopia around 3000–4000 kg day<sup>-1</sup> followed by village Kalar around 2000–3000 kg day<sup>-1</sup> and village Thanwala around 2000–2500 kg day<sup>-1</sup>

Mean score and standard deviation of each variable presented in the table 5. The mean have been compared with mid value (test value 3). In context of important entrepreneurial behavior of farmers lack of business skills had highest mean score 3.77 with t-value 9.58 and p-value

Table 4 : Total daily milk production in selected villages

Sl. No.	Village	Milk production in (approx. kg day <sup>-1</sup> )
1.	Thopia	3000–4000
2.	Takarla	4000–5000
3.	Kalar	2000–3000
4.	Thanwala	2000–2500

Table 5: Entrepreneurial behavior of dairy farmers

Variable	Mean	Standard deviation	t-value	p-value
Like being own boss	3.13	1.29	4.38	<.0001
Innovativeness	2.96	1.25	3.29	<.0001
Self confidence	2.52	1.42	.157	.876
Willingness to take risk	3.31	1.32	5.47	<.0001
Very competitive	2.71	1.19	1.59	.115
Ability to learn from failure	2.32	1.29	-1.21	.229
Never quit attitudes	3.15	1.43	4.05	<.0001
Lack of business skills	3.77	1.19	9.58	<.0001

*p*=0.01%

<.0001 which was found to be significant at 1% level of significance. Willingness to take risk had second important entrepreneurial behavior of farmers with t-value 5.47 and *p*-value <.0001 which was found to be significant at 1% level of significance.

Constraints faced by farmers in dairy entrepreneurship revealed in the table 6 non-availability of certified veterinarian was the major constraint reported as ranked first, followed by lack of education and training as ranked second finding in line of support of findings of (Jodoun, 2021 and Kaur et al., 2022). Non-availability of improve Artificial Insemination was reported as third constraint finding in line of finding of Singh et al. (2022) and Singh et al. (2015), lack of credit availability was fourth constraint

Table 6 : Constraints faced by farmers

Constraint	Percent score	Rank
Non-availability of certified veterinarian	78.75	I
Lack of education and training	74.60	II
Lack of credit availability	65.00	IV
Non-availability of improve Artificial Insemination	68.75	III
Low price of milk	62.50	V

faced by farmers and low price of milk was ranked fifth important constraints faced by them. Similar results were reported by Singh et al. (2015). Low price of milk, costly feed and fodder, shortage of quality breed animal were major constraints (Rani et al., 2015, Meena et al., 2016). High cost of concentrate feed was the major constraint in economic constraints (Patel et al., 2015). Meena et al. (2015) identified were inadequate awareness about reproductive stages of dairy animals (57.33%). Youth and progressive farmers are more likely to have higher levels of entrepreneurial orientation (Xhoxhi et al., 2021). Marketing facilities for the products are the push factor underlying agri-enterprise (Deepthi et al., 2020)

Entrepreneurial behavior of dairy farmers revealed in the table 7 like being own boss had highest per cent with rank I for marginal, small, semi-medium and large farmers category. Lack of business skill ranked II for marginal and small farmers followed by ability to learn from failure had ranked III. Innovativeness had ranked II in case of semi-medium and large farmers followed by very competitive attitude had ranked III. Self- confidence had IV ranked in case of semi-medium and large farmers. The findings of the study are also in line with the findings of Raina et al. (2016) and Kumar and Goyal (2021) majority (68.40%) of dairy farmers had medium level entrepreneurial behavior. Chaurasiya et al. (2016) and Lawrence and Ganguli (2012) majority of the respondents were belonged to medium category of risk orientation. Majority of the farmers'

Table 7: Entrepreneurial behavior of dairy farmers

Sl. No.	Particular	Marginal and small (%)	Rank	Semi-medium and large (%)	Rank
1.	Like being own boss	65.85	I	77.17	I
2.	Innovativeness	36.59	VII	68.57	II
3.	Self confidence	34.15	VIII	45.71	IV
4.	Willingness to take risk	39.02	VI	48.57	VII
5.	Very competitive	41.46	V	68.50	III
6.	Ability to learn from failure	48.78	III	42.86	VI
7.	Never quit attitudes	46.34	IV	34.29	VIII
8.	Lack of business skills	63.41	II	51.43	IV



respondents had medium category of decision making ability and lowest in case of innovativeness (Ram et al., 2013, Raut and Sankhala, 2014). Majority trained farmers had medium to high and untrained farmers had medium to low level of entrepreneurial behavior (Singh and Kumar, 2020). Porchezhiyan et al. (2015) respondents had medium level of risk orientation (65.8%). Raval and Chandawat (2011) revealed that majority of the respondents had medium knowledge about improved animal husbandry practices in dairy farming. Singh et al. (2016) reported overall entrepreneurial behavior index for small farmers was 53.66. The higher index value was found 72.93 for trained entrepreneur (Channal and Natikar, 2022) (Figure 2).

#### 4. CONCLUSION

Entrepreneurial behavior of dairy farmers in Kandi region of Punjab, India. The finding of study showed that majority of the farmers faced constraints of non-availability of certified veterinarian followed by lack of education training availability, Non-availability of improve AI and low price of the milk. Like being own boss was important entrepreneurial behavior of the overall dairy farmers followed by lack of business skills for marginal and small farmers.

#### 5. ACKNOWLEDGEMENT

Author is thankful to director, Regional Research Station, PAU, Ballawal Saunkhri and their faculties for their support and guidance during study.

#### 6. REFERENCES

- Ahuja, R., Singh, S.P., Sangwan, S.S., Gautam, 2016. Entrepreneurial behavior of dairy farmers in Haryana. *Haryana Veterinarian* 55(1), 6–11.
- Anonymous, 2020. Development of Dairy Sector in India. Federation of Indian Chambers of Commerce and Industry (FICCI), Govt. of India, 1–43. Available at <https://ficci.in/spdocument/23304/Development-Dairy-Sector.pdf>. Accessed on 04.09.2022.
- Anna, A., Singh, B.P., Chander, M., Sagar, M.P., Suman, R.S., Pawale, S.S., 2022. Entrepreneurial behaviour of Piggery Trainees of Pashu Vigyan Incubators. *Indian Journal of Extension Education* 58(1), 186–188.
- Bandopadhyay, 2007. Emerging choices of Indian agriculture to agripreneurs. In: Proceedings of the Winter School on Advanced Extension Strategy for Entrepreneurship Development and Management. ICAR, New Delhi and Bidhan Chandra Krishi Viswavidyalaya, West Bengal, India, 4–24 December.
- Chaurasiya, K.K., Badodiya, S.K., Somvanshi, S.P.S., Gaur, G.L., 2016. Entrepreneurial behavior of dairy farmers in Gwalior district of Madhya Pradesh. *Indian Journal of Dairy Science* 69(1), 112–115.
- Channal, G., Natikar, K.V., 2022. Differential effects of entrepreneurship development programme on dimensions of entrepreneurship. *Indian Research Journal of Extension Education*, 22 (2), 6–12 <https://seea.org.in/uploads/pdf/2022-70-6-12.pdf>
- Dixit, A.K., Sirohi, S., Ravishankar, K.M., Cariappa, A.G.A., Kumar, S., Bhandari, G., Sharma, A.K., Thakur, A., Bhullar, G.K., Thakur, A., 2022. Understating emerging value chains and business performance: evidence from dairy industry in India. *Journal of Agribusiness in Developing and Emerging Economies*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JADEE-10-2022-0219>
- Diya, S., Sethi, N., 2019. Problem and constraints faced by rural scheduled caste women for entrepreneurship. *International Journal of Bio resource and Stress Management* 10(3), 306–311. DOI: [HTTPS://DOI.ORG/10.23910/IJBSM/2019.10.3.1977](https://doi.org/10.23910/IJBSM/2019.10.3.1977)
- Deepthi, V., Rambabu, P., Gopikrishna, T., 2020. Push and Pull factors underlying agri enterprise development in Andhra Pradesh. *Green Farming* 11(4&5), 458–460.
- Gautam, R., Maurya, R., Singh, R., Sangam R., Verma, S.K., Agrahari, S., Kumar, S., Maurya, P., Verma, A.K., 2018. A case study of milk processing plant of Parag dairy Faizabad. *International Journal of Bio-resource and Stress Management* 9(5), 585–591.
- Heema, R., Sivaranjani, S., Gnanalakshmi, K.S., 2022. An insight in to the automation of the dairy industry: A review. *Asian Journal of Dairy and Food Research* 41(2), 125–131. DOI 10.18805/ajdfr.DR-1856.
- Jadoun, Y., 2021. Gender mainstreaming through livestock entrepreneurship. *Indian Journal of Extension Education* 55(2), 61–69. Retrieved from <https://epubs.icar.org.in/index.php/IJEE/article/view/109201>
- Kahan, D., 2012. Entrepreneurship in farming. Food and Agriculture Organization of the United Nations Rome, pp.1-136 <https://www.fao.org/3/i3231e/i3231e.pdf>
- Koutouzidou, G., Ragkos, A., Theodoridis, A., Arsenos, G., 2022. Entrepreneurship in dairy cattle sector key features of successful administration and management. *Land*. 11, 1736. <https://doi.org/10.3390/land11101736>
- Kumar, N., Kondeti, S., 2014. Impact of micro finance on dairy enterprise women- A case study in Rayalaseema region of Andhra Pradesh. *Economic Affairs* 59(4), 489–496.
- Kumar, T., Kumar, S., Yadav, R.R., Kumar, M., 2016. Entrepreneurial behavior of men and women dairy cooperative members in Milkipur blocks of Faizabad district a gender perspective. *International Journal of*



- Bio-resource and Stress Management 7(4), 756–760.
- Kumar, V., Goyal, T., 2021. Entrepreneurial behavior of dairy farmers in Udaipur district of Rajasthan. *The Pharma Innovation* 10(10), 28–32.
- Kaur, J., Jadoun, Y.S., Singh, J., Kansal, J.S., 2022. Constraints perceived by dairy farmers in adoption of animal welfare management practices. *Journal of Community Mobilization and Sustainable Development* 17(1), 221–226
- Lawrence, C., Ganguli, D., 2012. Entrepreneurial behavior of dairy farmers in Tamil Nadu. *Indian Research Journal of Extension Education* 12(1), 66–70.
- Lyngkhai, D.R., Singh, S.B., Singh, R., Tyngkan, H., 2022. Trend analysis of milk production in India. *Asian Journal of Dairy and Food Research* 41(2), 183–187. DOI 10.18805/ajdrf.DR-1789.
- Mani, C., 2011. Forces behind entrepreneurship of women- an economic study. *International Journal of Bio resource and Stress Management* 2(3) 345–348. <https://www.pphouse.org/ijbsm-article-details.php?article=146>
- Manivannanan, C., Tripathi, H., 2007. Management efficiency of dairy entrepreneurs. *Indian Research Journal of Extension Education* 7(2&3), 44–51.
- Meena, B.S., Verma, H.C., Meena, Singh, A., Meena, D.K., 2015. Field level study on productive and reproductive parameters of dairy animals in Uttar Pradesh, India. *Indian Journal of Animal Research* 49(1), 118–122.
- Meena, B.S., Verma, H.C., Singh, A., 2016. Farmers' knowledge on productive and reproductive performances of buffalo under smallholder farming system. *Buffalo Bulletin* 35(1), 101–108.
- O'Reilly, C., 2022. Barriers to entry entrepreneurship and income inequality within the USA. *Journal of Entrepreneurship and Public Policy* 11(4), 332–356. <https://doi.org/10.1108/JEPP-06-2022-0069>
- Patel, K., Chaudhary, G.M., Ghasura, R.S., Aswar, B.K., 2015. Constraints faced by dairy farm women in improved animal husbandry practices of Banaskantha district of North Gujarat. *Indian Journal of Hill Farming* 28(2), 130–132.
- Porchezhiyan, S., Sudharshan, A., Umamageswari, M., 2016. Entrepreneurial behavioral index of dairy farmers in the Northern districts of Tamil Nadu. *Indian Journal of Economic Development* 4(1), 2320–9828.
- Pouria, A., Ghadermarzi, H., Karimi, H., Norouzi, A., 2021. The process of adopting entrepreneurial behavior evidence from agriculture students in Iran. *Innovations in Education and Teaching International* 58(3), 340–350, DOI: 10.1080/14703297.2020.1734476
- Raina, V., Bhushan, B., Parshant, B., Khajuria, S., 2016. Entrepreneurial behavior of dairy farmers. *Journal of Animal Research* 6(5), 947–953.
- Ram, D., Singh, M.K., Chaudhary, K.P., Jayarani, L., 2013. Entrepreneurship behavior of women entrepreneurs in Imphal of Manipur. *Indian Research Journal Extension Education* 13(2), 31–35.
- Rani, R., Gill, A., Bajaj, G., 2015. Constraints perceived by dairy farmers in availing and repayment of dairy loans in Punjab. *Economic Affairs* 60(2), 323–330.
- Raut, A., Sankhala, G., 2014. Entrepreneurship among commercial dairy farmers in Maharashtra. *Indian Journal of Dairy Science* 67(6), 1–6.
- Raval, R.J., Chandawat, M.S., 2011. Extent of knowledge of improved animal husbandry practices and socio-economical characteristics of dairy farmers of district Kheda Gujarat. *International Journal of Farm Science* 1(2), 129–137.
- Rathore, R., Mathur, A., 2018. Entrepreneurship development in medicinal and aromatic plants prospects and challenges. *International Journal of Economic Plants* 5(1), 032–035. Doi: [HTTPS://DOI.ORG/10.23910/IJEP/2018.5.1.0219](https://doi.org/10.23910/IJEP/2018.5.1.0219)
- Saghaian, S., Mohammadi, H., Mohammadi, M., 2022. Factors affecting success of entrepreneurship in agribusinesses evidence from the city of Mashhad, Iran. *Sustainability* 2022, 14, 7700. <https://doi.org/10.3390/su14137700>
- Sarangi, S., Umadikar, J., Kar, S., 2016. Automation of agriculture support systems using Wisekar case study of a crop-disease advisory service. *Computers and Electronics in Agriculture* 122, 200–210.
- Shafi, M., Chauhan, N.B., 2021. Factors affecting basic essential knowledge of dairy farmers' sons to be successful dairy farmers. *Indian Research Journal of Extension Education* 21(2&3), 94–97.
- Sharma, S., Singh, S., Singh, A., Rashmi, 2021. Adoption behavior of rural youth towards dairy farming practices. *Indian Research Journal of Extension Education* 21(4), 80–84.
- Singh, P., Bhatti, J.S., Hundal, J.S., Kansal, S.K., 2015. Constraints faced by farmers in adoption of dairy as entrepreneurship. *Haryana Veterinarian* 54(1), 67–69.
- Singh, P., Kumar, R., 2020. An investigation of entrepreneurial behavior of dairy farmers in Malwa region of Punjab. *Indian Journal of Economics and Development* 16(2s), 274–280.
- Singh, P., Rampal, V.K., 2016. Extent of knowledge of trained and untrained dairy farmers of Malwa region of Punjab. *International Journal of Bio-resource and Stress Management* 7(6), 1383–1386.
- Singh, S., Gupta, B.K., Mishra, B.P., Shukla, G.,



- Raghubanshi, S., Kalia, A., Kumar, A., 2022. Entrepreneurial behavior of skilled youths of Banda district of Bundelkhand region Uttar Pradesh. *Indian Journal of Extension Education* 58(1), 189–191.
- Singh, J., Nafees, A., Slathia, P.S., 2016. Entrepreneurial behavior of dairy farmers of Jammu region. *Indian Journal of Extension Education* 22(1&2), 83–86.
- Singh, P., Singh, G.P., Mishra, A., Jhariya, P., Kumari, S., 2022. A study on present income earned and constraints faced in dairy enterprises in Pratapgarh district of Uttar Pradesh. *The Pharma Innovation*, 11(4), 636–641.
- Sharma, O.P., Tengli, M.B., 2017. Profile study under entrepreneurial behavior of young farmers of Navsari District. *International Journal of Social Science* 6(4), 223–226. DOI: 10.5958/2321-5771.2017.00025.4
- Yadav, C.M., Naagar, K.C., 2021. Dairy farming technologies adopted by the farmers in Bhilwara district of Rajasthan. *Indian Research Journal of Extension Education* 21(1), 7–11.
- Yaseen, A., Somogyi, S., Bryceson, K., 2018. Entrepreneurial behaviour formation among farmers evidence from the Pakistani dairy industry. *Journal of Agribusiness in Developing and Emerging Economies* 8(1), 124–143. <https://doi.org/10.1108/JADEE-01-2017-0002>
- Xhoxhi, O., Dentoni, D., Imami, D., Skreli, E., Sokoli, O., 2022. Does farmers' trust towards buyers drive their entrepreneurial orientation. *Journal of Agribusiness in Developing and Emerging Economies* 12(1), 142–159. <https://doi.org/10.1108/JADEE-03-2020-0045>

