Gujarat Journal of Extension Education Vol. 36 : Issue 2 : December 23 *https://doi.org/10.56572/gjoee.2023.36.2.0028*

KNOWLEDGE OF SONS OF DAIRY FARMERS REGARDING ANIMAL HUSBANDRY PRACTICES

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ABSTRACT

The study was conducted on randomly selected 220 sons of dairy farmers of Dholka and Dhandhuka taluka of Ahmed*abad district. 5 villages were selected from each taluka. Sons of dairy farmers selected for the study to know their knowledge about dairy farming. Pre-structured Gujarati version interview scheduled was prepared and used for the data collection. Ex post facto research design was used for statistical analysis. More than four fifth (82.27 per cent) of the farmers' sons had very high level knowledge about dairy farming. The knowledge of farmers' sons about dairy farming was positively related with herd size, extension contact, father's education and attitude toward animal husbandry whereas negatively related with age of son, education of son, family occupation and farm literature media exposure.*

Keywords *: sons of dairy farmer, animal husbandry practice, knowledge*

INTRODUCTION

India ranked first in the world for cattle population (306.7 million in a year 2022) and producing highest milk production (209.96 million tonnes in 2020-21) with per capita availability of milk 406 gm/person/day during 2019-20 which is more than the ICMR recommendation *i.e.* 300 gm/person/day (NDDB, 2022; Statista, 2022). India one of the youngest countries in the world, with 27.3 percent of its population aged 15–29 years, *i.e.*, youth (MoSPI, 2022). India youth unemployment rate for 2020 was 24.90 %, 2.16 % increase from 2019 and unemployment rate for 2021 was 28.26 %, 3.36 % increase from 2020 so animal husbandry can be very good option to get the employment. The dairy market in India reached a value of INR 13,174 billion in 2021. Livestock population and livestock plays very important role in Indian economy, provision of nutrition to human being, provision of fertilizer to farmers etc. Knowledge about dairy farming is very important but it became more useful when the animal owner had scientific knowledge about animal husbandry practices to increase the productivity of livestock and keep the livestock healthy.

OBJECTIVES

(1) To study the profile and level of knowledge of the sons of dairy farmer about animal husbandry practices

(2) To find out the relationship between knowledge and the profile of sons of the dairy farmers

METHODOLOGY

The study was conducted on the sons of dairy farmers from Dholka and Dhandhuka Taluka of Ahmedabad district. Five villages from each Talukas were selected. A random 220 sons of dairy farmers practicing animal husbandry were selected for the study to know their knowledge about dairy farming. To measure their knowledge, total thirty-four objective type questions were prepared. The data was collected by personal contact. Ex-post-facto research design was used (Kerlinger, 1986). Frequency, percentage and Karl Pearson's co-efficient of correlation were used for interpreting the data.

RESULTS AND DISCUSSION

Age

The data mentioned in Table 1 revealed that majority (75.00 per cent) of the respondents belonged to young age group followed by 25.00 per cent of the respondents belonged to middle age group, respectively. For obvious reason majority of the respondents belonged to young age group (Up to 35 Years) as the respondents were the sons of the dairy farmers.

Education

The data depicted in table 1. Shows that more than three fifth (64.55 per cent) of the sons of dairy farmers had secondary and higher secondary level of education followed by 27.27 per cent and 8.18 per cent had primary and graduation & above level of education, respectively which is in accordance with Patel *et al.*, 2020 and Ninama *et al*., 2022. Reason for this result was most of the respondents were involved in practicing dairy farming and agriculture. Whereas, in case of father's education, 68.64 per cent of the respondents had primary level of education followed by

19.55 per cent and 11.82 per cent of the respondents were illiterate and secondary and higher secondary level of education, respectively.

Table 1. Distribution of sons of dairy farmers according to personal characteristics (n = 220)

Sr. No.	Characteristics	Categories	Frequency	Per cent
1	Age	Young age (Up to 35 Years)	165	75.00
		Middle age (36 to 50 Years)	55	25.00
		Old age (Above 50 Years)	00	00.00
2	Education	Illiterate	00	00.00
		Primary (Up to 8th Standard)	60	27.27
		Secondary and Higher Secondary (9th to12th Standard)	142	64.55
		Graduate and above	18	8.18
3	Father's Education	Illiterate	43	19.55
		Primary (Up to 8th Standard)	151	68.64
		Secondary and Higher Secondary (9th to12th Standard)	26	11.82
		Graduate and above	00	00.00

Table 2. Distribution of sons of dairy farmers according to socio economic characters (n = 220)

Sr. No.	Characteristics	Categories	Frequency	Per cent
1	Land Holding	Landless	06	02.73
		Marginal (Up to 1 ha)	75	34.09
		Small (1.1 to 2 ha)	57	25.91
		Medium (2.1 to 4 ha)	82	37.27
		Large (Above 4 ha)	00	00.00
2	Annual Income	Up to ₹ 1 lakh	79	35.91
		Between ₹ 1.01 to ₹ 2 Lakh	100	45.45
		Between ₹ 2.01 to ₹ 3 Lakh	26	11.82
		Above ₹ 3 Lakh	15	06.82
3	Herd Size	Small (Up to 3 animals)	107	48.64
		Medium (4 to 6 animals)	46	20.91
		Large (More than 6 animals)	67	30.45
4	Family Occupation	Animal Husbandry	06	02.73
		Animal Husbandry + Agriculture	211	95.91
		Animal Husbandry + Agriculture + Labour work	01	00.45
		Animal Husbandry + Service	02	00.91
5	Social Participation	No participation	00	00.00
		Membership in one organization	220	100.00
		Membership in more than one organization	00	00.00
		Position holder	00	00.00

Land holding

Less than two fifth (37.27 per cent) of the respondents had 2.1 to 4 hectares of land holding whereas, 34.09 per cent, 25.91 per cent and 2.73 per cent with up to 1 hectare of land holding, 1.1 to 2 hectares of land holding and no land, respectively.

Annual Income

More than two fifth (45.45 per cent) of respondents had annual family income between Rs. 1.01 to Rs. 2 lakhs followed by 35.91 per cent, 11.82 per cent and 6.82 per cent of the respondents had up to Rs. 1 lakh, Rs. 2.01 lakh to 3 lakhs and above Rs. 3 lakh of family annual income, respectively.

Herd size

Less than half (48.64 per cent) of the respondents had small herd size, followed by 30.45 per cent and 20.91 per cent of the respondents had large and medium herd size, respectively.

Family occupation

Great Majority (95.91 per cent) of the respondents were engaged in both animal husbandry and agriculture followed by 2.73 per cent, 0.91 per cent and 0.45 per cent were engaged in only animal husbandry, animal husbandry + service and animal husbandry + agriculture + labour work, respectively. Similar result was found by Patel *et al.*, 2020 who conducted survey in Navsari district of Gujarat state found that 84.44 per cent of the respondents involved in both agriculture with animal husbandry.

Social participation: Cent per cent respondents (100 per cent) had membership in one organization likewise Patel *et al.*, 2020 found that the more than half of the respondents (60 per cent) had only one membership *i.e.* in Milk producer's co-op. society in Navsari district of Gujarat.

Table 3 : Distribution of sons of dairy farmers according to Communicational characters (n = 220)

Sr. No.	Characteristics	Categories	Frequency	Per cent
1.	**Farm Literature Exposure**	Very low (Up to 2.8 score)	00	00.00
		Low (Between 2.81 to 5.6 score)	00	00.00
		Medium (Between 5.61 to 8.4 score)	219	99.55
		High (Between 8.41 to 11.2 score)	01	00.45
		Very high (Above 11.2 score)	00	00.00
2.	**Extension Contact**	Very low (Up to 3.4 score)	00	00.00
		Low (Between 3.41 to 6.8 score)	00	00.00
		Medium (Between 6.81 to 10.2 score)	211	95.91
		High (Between 10.21 to 13.6 score)	09	04.09
		Very high (Above 13.6 score)	00	00.00

Communicational characters

Overwhelming (95.55 per cent) of the respondents had medium level of farm literature exposure followed by 0.45 per cent had high farm literature exposure and 95.51 per cent of the respondents had medium level extension contact followed by 4.09 per cent had high level extension contact reason for that was the respondents were residing in interior rural region where they were facing mobile network issues and poor connectivity like roads, market, co-operative/ private dairy etc.

Self-confidence and Attitude towards AH as an Occupation: Cent per cent (100.00 per cent) of the respondents had very high self-confidence likewise 98.18 per cent of the respondents had very high level of attitude towards animal husbandry as an occupation followed by 1.82 per cent had high level of attitude towards animal husbandry as an occupation reason for that was because most of the respondents had medium land size which enough to manage their herd and respondents practising animal husbandry from many generations. Ninama *et al*., 2022 found favourable attitude towards adopting dairy farming in young women whereas opposite phenomena was found for agriculture in Haryana district (Maurya, *et al.*, 2021).

Table 4 : Distribution of sons of dairy farmers according to psychological characters (n = 220)

Sr. No.	Characteristics	Categories	Frequency	Per cent
1	**Self Confidence**	Very low (Up to 3.8 score)	07	02.92
		Low (Between 3.81 to 7.6 score)	105	43.75
		Medium (Between 7.61 to 11.4 score)	67	27.92
		High (Between 11.41 to 15.2 score)	53	22.08
		Very high (Above 15.2 score)	08	03.33
2	**Attitude Towards AH as an Occupation**	Very low (Up to 11.8 score)	00	00.00
		Low (Between 11.81 to 23.6 score)	00	00.00
		Medium (Between 23.61 to 35.4 score)	00	00.00
		High (Between 35.41 to 47.2 score)	04	01.82
		Very high (Above 47.2 score)	216	98.18

Knowledge score of sons of dairy farmers calculated by adding score of all the thirty-four questions of knowledge about dairy farming. Thereafter, based on total score received by the respondents, they were classified into different group which is mentioned in Table no. 5.

Table 5: Overall knowledge about dairy farming of dairy farmers' sons (n=220)

Sr. No.	Category	Frequency	Per cent
1	**Very low** (Score up to 6.8)	00	00.00
2	**Low** (Score between 6.81 to 13.6 score)	00	00.00
3	**Medium** (Score between 13.61 to 20.4)	04	1.82
4	**High** (Score between 20.41 to 27.2)	35	15.91
5	**Very high** (Score above 27.2)	181	82.27

Data presented in Table 5 that four fifth (82.27 per cent) of the sons of dairy farmers had very high level of knowledge about dairy farming followed by 15.91 per cent and 1.82 per cent had high and medium level of knowledge about dairy farming, respectively while none of sons of dairy farmers had low and very low level of knowledge about dairy farming. Majority (82.27 per cent) of the sons of dairy farmers had very high level of knowledge of dairy farming reason for that may be due sons of dairy farmers residing with their family and used to get knowledge from their parents and grandparents, observing their elders doing dairy farming related activity and use of internet to get the information related to dairy farming. All these situations and circumstances might have played role in getting very high level of knowledge about dairy farming. This finding is very well supported by Mahammad and Chauhan (2021).

Relation between knowledge of sons and their profile

The data presented in Table 6 indicate that knowledge of sons of dairy farmers had highly significant ($p < 0.01$) positive correlation with father's education and attitude toward animal husbandry and positively correlated related with herd size of dairy farm and extension contact whereas correlation of knowledge of sons of dairy farmer with age of son, education of son, family occupation, farm literature media exposure was negative and land holding by dairy farmer, annual family income and self-confidence were had significant ($p < 0.01$) negative correlation. The result also showed that knowledge about dairy farming was not related with social participation. This result showed that fathers education and attitude towards animal husbandry plays very important role in knowledge of sons about dairy farming as the father had higher education than the knowledge of son about dairy farming was also higher and as the herd size and extension contact were more the level of knowledge in sons was on higher side because of increased in more exposure to the animal and extension personals.

Present data for correlation between knowledge and herd size, extension contact and attitude towards animal husbandry practices were found in accordance with Mahammad and Chauhan, 2021 likewise Ninama *et al.*, 2022 also supported the present result for herd size, farm literature media exposure, extension contact and attitude towards animal husbandry practices

Table 6: Relation between knowledge of the farmers' sons and their profile (n=220)

Sr. No.	Independent variables	Correlation coefficient
A	**Personal variables**	
X_1	**Age**	-0.120
X_2	**Education**	-0.031
X_3	**Father's education**	0.176**
B	**Economic variables**	
X_4	**Land holding**	-0.255**
X_5	**Annual family income**	-0.297**
X_6	**Family occupation**	-0.030
X_7	**Herd size**	0.043
C	**Communicational variables**	
X_8	**Farm literature media exposure**	-0.120
X_9	**Extension contact**	0.053
D	**Psychological variables**	
X_{10}	**Self confidence**	-0.203**
X_{11}	**Attitude toward animal husbandry**	0.263**

* Significant at 0.05 level ** Significant at 0.01 level

CONCLUSION

From above study it can be concluded that younger generation do not want leave animal husbandry as their self-confidence for animal husbandry was high which can be seen by their knowledge and attitude towards animal husbandry practices.

CONFLICT OF INTEREST

No conflict of interest among researchers.

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Received : October 2023 : Accepted : December 2023