



## Research Article

# SOCIO-ECONOMIC STATUS OF DAIRY FARM WOMEN OF RAJKOT DISTRICT OF GUJARAT

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**Abstract:** Animal husbandry practices and agricultural activities are the main areas of the economic activities for dairy farm women. The study was conducted following exploratory research design to ascertain the profile characteristics of dairy farm women in rural areas of Rajkot District. In the rural area's majority (55.00 percent) of the respondents was in the middle age group followed by 19.00 and 17.00 percent of the respondents belonged to the young and old age group respectively. While in case of education majority 40.00 percent of the respondent were educated up to secondary level whereas, 22.50 percent of the respondents were educated up to primary level followed by 21.25 percent respondents were educated up to high secondary level, 7.00 percent respondents were graduate. Hence, efforts should be undertaken by the Government, Veterinary Universities and other extension agencies in providing information on livestock farming practices so that they could bring about change in their living and improve the socio-economic status of livestock farmers.

**Keywords:** Dairy farm women, Socio-economic change, Veterinary Extension, Rural, Rajkot

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## Introduction

Livestock rearing, which was a way of life in the past, is now assuming the form of gainful business occupation. Livestock production and dairy development have been viewed by planners and policy makers as an effective instrument of social and economic change in the rural areas, as they provide employment to the weaker sections and thereby help them in augmenting their income. Out of total livestock in the country, 80 % is owned by small and marginal farmers and landless farm labourers. The livestock, thus, make large contributions to the development of rural economy and help the rural masses to improve their standard of living. It is a common observation that dairy farm women are fully engaged in care and management of dairy animals. It is thus, imperative that dairy development is not feasible unless dairy farm women are trained in scientific dairy farming. Realizing this fact, Rajkot district Co-operative milk producer's union limited, Rajkot, ATMA agencies and NGO started conducting the training programme for rural women with respect to improved animal husbandry practices. Understanding of livestock management practices followed by farmers in a region is necessary to identify the strengths and weaknesses of the rearing systems and to formulate suitable intervention policies.

## Materials and Methods

The research study will be conducted in jurisdiction of Krishi Vigyan Kendra, JAU, Pipalia. Two talukas will be selected randomly for conducting the present investigation. Eight villages will be further selected from two talukas where dairy husbandry practiced. From each village ten farm women will be selected who engaged dairy farming. Accordingly, 80 farm women will be selected purposively from each of the eight villages. An interview schedule will be prepared to collect the required information as per the objective of the study. Data will be collected personal interview method. The collected data will be quantified, categorized and tabulated. Analysis will be carried out by using frequencies and percentage.

## Results and Discussion

### Personal, Socio-economic Characteristics of Dairy farm women:

Age influences the behaviour of an individual by exposing to varied situations. The data presented in [Table-1] indicated that majority (55.00 percent) of the dairy farm women was in the middle age group followed by 19.00 and 17.00 percent of the respondents belonged to the young and old age group respectively. The probable reason might be that this age is considered to be an actively working age and so as the dairy farm women in this group would also have responsibilities of earning for their families, leading to findings that majority were in middle age group. This finding was in accordance with the [8,11]. Education also enables the farmers to keep farm records on production and reproduction, so that they would be able to quantify their performance and lay down targets for improvement. Data in the below Table-1 revealed that majority 40.00 percent of the respondent were educated up to secondary level whereas, 22.50 percent of the respondents were educated up to primary level followed by 21.25 percent respondents were educated up to high secondary level, 7.00 percent respondents were graduate and 6.00 percent respondents were illiterate. The finding is in line with the findings reported by [7,10,12]. However, it is in contradiction to the findings by [3]. The data presented in Table 2.3 revealed that higher percentage (46.25 percent) dairy farm women was found to have medium size land holding, while 33.75 percent dairy farm women were found to have small size of land holding, whereas 10.00 percent dairy farm women had marginal size of land holding, and only 6.00 percent dairy farm women had large size of land holding. This might be due to that dairy farm women had main occupation is rearing the animals, and in order to maintain their animals, they may be cultivating the land. In case of annual income, the data presented in Table 2.3 indicated that 40.00 percent of dairy farm women belonged to high annual income followed by 22.00 percent of dairy farm women had medium annual income. Whereas 14.00 and 9.00 percent dairy farm women belonged to medium and low annual income group respectively.

Table: 1 Distribution of respondents according to their characteristics, (N=80)

Sr	Characteristics	Frequency	Percentage
1	Age		
	Young age (Up to 35 years)	19	23.75
	Middle age (36 to 55 years)	44	55.00
	Old age (above 55 years)	17	21.25
2	Education		
	Illiterate	6	7.50
	Primary (1 to 7 <sup>th</sup> std.)	18	22.50
	Secondary (8 to 10 <sup>th</sup> std.)	32	40.00
	Higher Secondary (11 <sup>th</sup> to 12 <sup>th</sup> std.)	17	21.25
	Graduate (above 12 <sup>th</sup> std.)	7	8.75
3	Size of land holding		
	Marginal (up to 1 ha)	10	12.50
	Small (1.01 to 2 ha )	27	33.75
	Medium (2.01 to 4 ha )	37	46.25
	Large (Above 4 ha)	6	7.50
4	Annual income		
	Very low annual income (up to ₹ 100000)	3	3.75
	Low annual income (₹ 100000 to 150000)	9	11.25
	Medium annual income (₹ 150000 to 200000)	14	17.50
	High annual income (₹ 200000 to 250000)	22	27.50
	Very high annual income (above ₹ 2,50,000)	32	40.00
5	Dairying experience		
	Low experience (below 4.72)	9	11.25
	Medium experience (between 4.72 to 12.36)	53	66.25
	High experience (more than 12.36)	18	22.50
6	Extension participation		
	Low Extension participation	17	21.25
	Medium Extension participation	54	67.50
	High Extension participation	9	11.25
8	Herd size		
	Low herd size (Up to 2 animal)	8	10.00
	Medium herd size (3-7 animal)	58	72.50
	High herd size (above 7 animal)	14	17.50
9	Milk production		
	Small producers' group (Less than 200 lit/day)	22	27.50
	Medium producers' group (In between 200 - 400 lit/day)	45	56.25
	Large producers' group (More than 400 lit/day)	13	16.25
10	Training received		
	No training received	65	81.25
	One training received	15	18.75
	More than one training received	00	00

Only 2.00 of dairy farm women had low annual income i.e. up to Rs. 100000. Dairy farm women distribution according to their dairying experience near about two third of dairy farm women (66.25 %) had medium dairy farming experience followed by 18.00 percent respondents had high dairying experience. Only 9.00 percent farm women possessed low dairying experience. Thus, it is inferred that majority of respondents had medium level of experience in dairying. Extension participation helps the farm owners to acquire detailed knowledge about scientific practices in animal husbandry occupation and to solve their problems with the help of extension personnel and experts from various fields. Sharing the experience by interacting with experts may increase confidence, which may result in high rate of adoption of advanced dairy farming technology that leads to higher profitability. It is apparent from the data in [Table-1] that vast majority (67.50 percent) of dairy farm women had medium level of extension participation. The probable reason for this might be various effective transfers of technology approaches applied by extension functionaries of Krishi Vigyan Kendra, Rajkot Dairy, Cooperative Milk Society, State Veterinary department and Veterinary College would have motivated the dairy farm women to participate in various extension activities. Similar findings that majority of the respondents had medium level of extension participation [1,6]. The interest and involvement of an individual in dairy farming increases with increase in number of animal holdings and vice versa. In case of herd size, Table 2.7 data inferred that 72.50 percent dairy farm women had a medium herd size (i.e. 3-7 animal) while 17.50 percent dairy farm women had more than 7 animals. Only 8.00 percent dairy farm women had less than 2 animals. These findings are simulated with the observations of [4,7,12] while it is contradicted the results of [5]. Milk yield production data presented in [Table-1] in which 42.50 percent dairy farm women had medium milk yield

followed by 41.25 percent dairy farm women had low milk yield. While 16.25 percent dairy farm women had high milk yield. Total milk production on commercial dairy farm is an important factor since it is directly concerned with profitability. As the herd size increases the milk production also increases and the profitability of commercial dairy farm may also increase. Milk contributes around 96.00 percent of total profitability of commercial dairy farm. It is clear from the data in [Table-1] that majority (56.25 percent) of dairy farm women were in medium producers' group. Similar findings that majority of the medium dairy farmers were in medium producers' group [10]. Training of any kind makes a person competitive enough to perform his job with more skill and better performance and it enables him to prepare himself to perform duty with better output. The data in [Table-1] show that large majority (81.25 percent) of the respondents did not receive any training pertaining to dairy farming before engaging themselves in commercial dairy farming. Even after their quite a long period in the business they hadn't thought of it. This may adversely affect profitability and sustainability of the farm. Their performance would have further been improved if they had been exposed to training. The findings are in line with the findings of [7]. However, it is contradiction to findings of [2,9].

### Conclusion

A field survey was conducted to acquire the first-hand information on dairy husbandry practices in the Rajkot district of Saurashtra region with the objectives to study personal, social and economic characteristics of dairy farm women. From the above discussion, it can be concluded that majority of dairy farm women were middle age and educated up to secondary level. More than one-half dairy farm women possessed 3-7 animals and belonged to medium milk production category.

One-half of the dairy farm women had medium dairying experience and extension participation.

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**Application of research:** Extension participation can also be strengthening and quantity of milk produced should also be increased to make commercial dairy farms more economically viable and self-sustained.

**Research Category:** Extension Education

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**Data Collection:** Rural areas of Rajkot District

**Ethical approval:** This article does not contain any studies with human participants or animals performed by any of the authors.

Ethical Committee Approval Number: Nil

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