

PARTICIPATION OF FARM WOMEN IN DIFFERENT DAIRY PRACTICES

S. B. Patel, H. U. Vyas and J. J. Patal

1 Ph.D. Scholar, College of Agriculture, NAU, Campus, Bharuch- 392 012

2 Associate professor & Head, Dept. of Agril. Extension & Communication, NAU, Bharuch- 392 012

3 Ph.D. Scholar, College of Sardarkrushinagar Dantiwada Agricultural University – 385 506

Email: patelshivangi1005@gmail.com

ABSTRACT

The present study was conducted to know the extent participation of farm women in dairy occupation in Bharuch district of Gujarat state with sample of 120 respondents. Women are the back bone of rural economy. The prosperity and growth of nation depends on the status and development of its women as they not only constitute nearly half of the population but also positively influence the growth of remaining half of the population. Farm women were participated in many activities like; selection of milch animals, taking loan for purchase animal, purchase and sale of milch animals, feeding of milch animals, breeding of milch animals, health care of animals and utilization of milk and preparing milk products. Farm women and their participation in dairy occupation were certainly affected their efficiency in work and in the development of dairy enterprise. Majority of farm women participated in feeding the milch animals, utilization of milk and preparing milk products and breeding of milch animals.

Keywords: extent of participation, farm women, dairy practices, milch animals, occupation

INTRODUCTION

Women are the back bone of the rural economy. The prosperity and growth of a nation depends on the status and development of livestock sector (Shafi *et al.*, 2021a & 2021b). In India, generally women have lower per capital resource access than that of men. Gender inequalities prevail in access to the key resources of education and employment. The indicators that capture women's access to the other resources, including financial, health, and media resources, and women's access to spaces outside their homes, also highlight significant constraints on women's access to all types of resources. In spite of the fact that women's participation in livestock management related activities is more critical as compared to men, their contribution and involvement is neither well documented nor considered as paid work. Farm women play important role in dairy practices. They form the integrated part of dairying. In most parts of the country it is women who care, feed and milk the animals. Women generally are responsible for the feeding, grazing, fodder collection, milking, processing, dung management, while men who manage the finances generally sale of milk and milk products. The Indian social system is largely a male dominant society. As per tradition, women are to depend on man in every aspect of life. Dairy occupation has helped rural women emerge from a patriarchal society by breaking down traditional thought and allowing them to play an active

role in poverty reduction. Through, dairy occupation women become self dependent, confident and improve their quality of life.

OBJECTIVE

To study the participation of farm women in different dairy practices

METHODOLOGY

The current investigation was conducted in Bharuch districts. Bharuch district has nine talukas *viz.* Bharuch, Ankleshwar, Amod, Jambusar, Jhagadia, Hansot, Netrang, Vagra and Valia. Out of which two talukas *viz.*, Jambusar and Jhagadia were selected purposively on the basis of maximum number of dairy co-operative societies. Total 120 respondents were selected for the present study. From each village, 10 farm women were selected. Participation of farm women in different dairy practices was determined on the basis of actually performing different dairy practices by them. Specific statements were formed and include feeding milch animals, breeding milch animals, health care and utilization of milk and preparing milk products.

The respondents were personally interviewed. They were asked to state whether she was participating regularly,

oftenly, sometimes, occasionally or never in performing those practices. The score was given according to the nature of her participation in above practices. “Zero” score was assigned for no participation of farm women. “One” score for occasionally participation, “two” score for sometimes participation, “three” score for sometimes participation, “four” score for oftenly participation and “five” score for regularly participation, occupation they were grouped on the basis of their participation index.

RESULTS AND DISCUSSION

Participation of farm women in different dairy practices

(1) General aspects of dairy occupation

The data with respect to participation of farm women in general aspects of dairy occupation are presented in Table 1.

Table 1: Participation of farm women in general aspects of dairy occupation (n=120)

Sr. No.	Particulars of participation	Participation of farm women					Mean score
		Regularly	Oftenly	Some times	Occasion-ally	Never	
A	Selection of milch animals						
1	Types of milch animals	28 (23.33 %)	12 (10.00 %)	21 (17.50 %)	29 (24.17 %)	30 (25.00 %)	1.83
2	Selection of breed	20 (16.67 %)	12 (10.00 %)	18 (15.00 %)	16 (13.33 %)	54 (45.00 %)	1.40
B	Taking loan						
1	Purchase of animals	20 (16.67 %)	07 (5.83 %)	06 (5.00 %)	17 (14.17 %)	70 (58.33 %)	1.08
2	Purchase of feed and fodder	0	03 (2.50 %)	22 (18.33 %)	15 (12.50 %)	80 (66.67 %)	0.57
3	Construction of byre	0	04 (3.33 %)	06 (5.00 %)	15 (12.50 %)	95 (79.17 %)	0.33
C	Purchase and sale of animals						
1	Purchase improved/ cross breed	25 (20.83 %)	13 (10.83 %)	20 (16.67 %)	21 (17.50 %)	41 (34.17 %)	1.67
2	Culling of uneconomic animals	15 (12.50 %)	08 (6.67 %)	24 (20.00 %)	27 (22.50 %)	46 (38.33 %)	1.33

Note: Figures in the parenthesis indicate the percentage

It can be observed from table 1 that about three fourth (75.00 %) and more than half (55.00 %) of the farm women participated in deciding type of milch animal and selecting of breed either regularly, oftenly, sometimes or occasionally, respectively. Whereas, 25.00 per cent and 45.00 per cent of them had not participated in deciding the type of animal and selection of breed for milk.

The data further indicated that most of the farm women (ranging from 58.33 to 79.17 %) had not participate in obtaining loan for purchase of animals, purchase of feed and fodder and construction of byre, whereas 65.83 per cent and 61.67 per cent of the farm women participate either regularly,

oftenly, sometimes or occasionally in purchasing of milch animals and culling of uneconomic animals, respectively.

Above result leads to conclude that majority of the farm women had participated in deciding type of animals, selection of breed, purchasing of improved breed and culling of uneconomic animals, whereas most of them had not participated in obtaining loan for purchase of animals, purchase of feed and fodder and construction of byre.

(2) Feeding of milch animals

The data with respect to participation of farm women in feeding of milch animals are presented in table 2.

Table 2: Participation of farm women in feeding of milch animals

(n=120)

Sr. No.	Particulars of participation	Participation of farm women					Mean score
		Regularly	Oftenly	Some times	Occasionally	Never	
1	Bringing fodder	70 (58.33 %)	20 (16.67 %)	15 (12.50 %)	15 (12.50 %)	0	3.21
2	Cutting fodder	74 (61.67 %)	24 (20.00 %)	12 (10.00 %)	10 (8.33 %)	0	3.35
3	Grazing animals	55 (45.83 %)	26 (21.67 %)	17 (14.17 %)	12 (10.00 %)	10 (8.33 %)	2.87
4	Feeding animals	80 (66.67 %)	10 (8.33 %)	20 (16.67 %)	04 (3.33 %)	06 (5.00 %)	3.28
5	Preparing feed mixtures	76 (63.33 %)	16 (13.33 %)	12 (10.00 %)	11 (9.17 %)	05 (4.17 %)	3.23
6	Purchase of feeds	42 (35.00 %)	10 (8.33 %)	12 (10.00 %)	21 (17.50 %)	35 (29.17 %)	2.03

Note: Figures in the parenthesis indicate the percentage

The data from table 2 indicated that majority (66.67 %) of the farm women regularly participated in feeding animals, preparing feed mixture (63.33 %) and cutting fodder (61.67 %) and bringing fodder (58.33 %). However, the farm women participating regularly in grazing animal and purchase of feed were 45.83 and 35.00 per cent, respectively. A very small proportion of the farm women had not participated in feeding the milch animals (4.17 %) and preparing feed

mixture (4.17 %).

This clearly shows that farm women largely participated in feeding milch animals. It was observed in the study area that the work regarding livestock was mainly done by female members and they were available at home for maximum time might be the probable reason for this type of result.

(3) Breeding of milch animals

The data with respect to participation of farm women in breeding of milch animals are presented in Table 3.

Table 3 : participation of farm women in breeding of milch animals

(n=120)

Sr. No.	Particulars of participation	Participation of farm women					Mean score
		Regularly	Oftenly	Some times	Occasionally	Never	
A	Methods of breeding						
1	Natural service	06 (5.00 %)	06 (5.00 %)	20 (16.67 %)	18 (15.00 %)	70 (58.33 %)	0.83
2	Artificial insemination	23 (19.17 %)	09 (7.50 %)	33 (27.50 %)	31 (25.83 %)	24 (20.00 %)	1.80
B	Care at the time of calving						
1	Giving warm water bath after calving	59 (49.17 %)	08 (6.67 %)	19 (15.83 %)	21 (17.50 %)	13 (10.83 %)	2.66
2	Feeding cooked grains	60 (50.00 %)	20 (16.67 %)	10 (8.33 %)	10 (8.33 %)	20 (16.67 %)	2.75
3	Giving warm water to drink	70 (58.33 %)	12 (10.00 %)	15 (12.50 %)	17 (14.17 %)	06 (5.00 %)	3.03
C	Care of new born calf						
1	Cleaning of calf, trimming hooves and cutting naval cord	60 (50.00 %)	10 (8.33 %)	20 (16.67 %)	20 (16.67 %)	10 (8.33 %)	2.75
2	Feeding colostrums	63 (52.50 %)	13 (10.83 %)	15 (12.50 %)	24 (20.00 %)	05 (4.17 %)	2.88

Note: Figures in the parenthesis indicate the percentage

It may be seen from table 3 that more than half (58.33 %) of the farm women had not participated while natural service of method of breeding. Majority (80.00 %) had participated either, regularly, oftenly, sometimes or occasionally in the operation of artificial insemination.

The data further indicate that majority (58.33 %) of

the farm women regularly participated in giving warm water to drink, feeding colostrums (52.50 %). feeding cooked grains (50.00 %), cleaning of calf and cutting navel cord (50.00 %) and giving warm water bath at the time of calving (49.17 %).

(4) management of milch animals

The data with respect to participation of farm women in management of milch animals are presented in Table 4.

Table 4: Participation of farm women in management of milch animals (n=120)

Sr. No.	Particulars of participation	Participation of farm women					Mean score
		Regularly	Oftenly	Some times	Occasionally	Never	
1	Watering at proper time	70 (58.33 %)	22 (18.33 %)	14 (11.67 %)	14 (11.67 %)	0	3.23
2	Grooming and blooming	50 (41.67 %)	28 (23.33 %)	13 (10.83 %)	29 (24.17 %)	0	2.83
3	Cleaning byre	80 (66.67 %)	14 (11.67 %)	15 (12.50 %)	07 (5.83 %)	04 (3.33 %)	3.33
4	Preparing cow dung cake	21 (17.50 %)	20 (16.67 %)	25 (20.83 %)	34 (28.33 %)	20 (16.67 %)	1.90
5	Preparing gobar gas mixture	04 (3.33 %)	21 (17.50 %)	02 (1.67 %)	04 (3.33 %)	89 (74.17 %)	0.73
6	Preparing compost	23 (19.17 %)	30 (25.00 %)	19 (15.83 %)	17 (14.17 %)	31 (25.83 %)	1.98

Note: Figures in the parenthesis indicate the percentage

It can be observed from the data in the Table 4 that all the farm women were watering at proper time and grooming and blooming ,while 96.67 per cent,83.33 per cent, 74.17 per cent and 25.83 per cent were cleaning byre, preparing cow dung cake, preparing compost and preparing gobar gas mixture either regularly, oftenly, sometimes or occasionally, respectively. This clearly indicates that management practices

of milch animals were largely performed by the farm women. This finding was supported by the findings of Christian and Chauhan (2019).

(5) Health care of animals

The data with respect to participation of farm women in health care of animals are presented in Table 5

Table 5: Participation of farm women in health care of animals (n=120)

Sr. No.	Particulars of participation	Participation of farm women					Mean score
		Regularly	Oftenly	Some Times	Occasionally	Never	
1	Care of sick animals	79 (65.83 %)	10 (8.33 %)	14 (11.67 %)	17 (14.17 %)	0	3.26
2	Vaccination	10 (8.33 %)	31 (25.83 %)	40 (33.33 %)	29 (24.17 %)	10 (8.33 %)	2.02
3	Care of new born	100 (83.33 %)	05 (4.17 %)	05 (4.17 %)	10 (8.33 %)	0	3.63
4	Deworming	15 (12.50 %)	05 (4.17 %)	75 (62.50 %)	05 (4.17 %)	20 (16.67 %)	1.92
5	Taking animal for treatment	20 (16.67 %)	19 (15.83 %)	21 (17.50 %)	60 (50.00 %)	0	1.99
6	Maintaining health record	05 (4.17 %)	05 (4.17 %)	05 (4.17 %)	10 (8.33 %)	95 (79.17 %)	0.46

Note: Figures in the parenthesis indicate the percentage

It is evident from the data reported in table 4.17 Vahora *et al.* (2016). that about four fifth (83.33 %) of the farm women regularly performed activities like care of new born followed by 65.83 and 16.67 per cent had participated in care of sick animals and taking animal for treatment, respectively. Nearly four fifth (79.17 %) of them were not maintaining health record. This findings was similar with findings of Kaur (2015) and

(6) Milking, utilization of milk and preparing milk products

The data with respect to participation of farm women in milking and preparing milk products presented in Table 6.

Table 6: Participation of farm women in milking, utilization of milk and preparing milk products (n=120)

Sr. No.	Particulars of participation	Participation of farm women					Mean score
		Regularly	Oftently	Some times	Occasionally	Never	
A Milking							
1	Milking the animals	82 (68.33 %)	15 (12.50 %)	12 (10.00 %)	06 (5.00 %)	05 (4.17 %)	3.36
2	Cleaning milk vessels	81 (67.50 %)	10 (8.33 %)	11 (9.17 %)	12 (10.00 %)	06 (5.00 %)	3.23
B Utilization of milk							
1	House hold sale of milk	10 (8.33 %)	6 (5.00 %)	12 (10.00 %)	11 (9.17 %)	81 (67.50 %)	0.78
2	Sale of milk through co. op. dairy society	76 (63.33 %)	11 (9.17 %)	16 (13.33 %)	05 (4.17 %)	12 (10.00 %)	3.12
C Preparation of milk products							
1	Curd	67 (55.83 %)	20 (16.67 %)	20 (16.67 %)	06 (5.00 %)	07 (5.83 %)	3.12
2	Butter milk	57 (47.50 %)	10 (8.33 %)	18 (15.00 %)	14 (11.67 %)	21 (17.50 %)	2.57
3	Ghee	57 (47.50 %)	14 (11.67 %)	22 (18.33 %)	12 (10.00 %)	15 (12.50 %)	2.72
4	Mava	17 (14.17 %)	13 (10.83 %)	15 (12.50 %)	14 (11.67 %)	61 (50.83 %)	1.26

Note: Figures in the parenthesis indicate the percentage

It is evident from the data reported in table 6 that nearly two third i.e. 68.33 per cent and 67.50 per cent of the farm women regularly performed functions like milking the animals and cleaning milk vessels. About two third (67.50%) of the farm women had not participated in house hold sale milk. The probable reason could be that every village has milk cooperative society and this role has been performed early in the morning as well as evening by farm women.

The data further, revealed that a majority (55.83%) of the farm women regularly preparing curd, buttermilk (47.50 %), ghee (47.50 %) and mava (14.17 %). This clearly indicated that the functions like milking the animals, cleaning milk vessels, selling milk through co-operative societies and preparation of milk products were mainly performed by women only.

Table 7: Participation index of the farm women in different aspects of dairy practices (n=120)

Sr. No.	Particular about the aspects	Participation index
1	General	29.26
2	Feeding	74.83
3	Breeding	59.61
4	Management	58.26
5	Health care	55.28
6	Milk products	62.94
7	Overall participation	56.70

It can be observed from the data presented in table 7 that the farm women had an overall participation to extent of 56.70 per cent. However, the farm women had the largest participation (74.83 %) in the aspects of feeding followed by

milk and milk products (62.94 %) and 59.61 per cent, 58.26 per cent and 55.28 per cent had participation in breeding, management and healthcare, respectively.

In order to know the level of participation of farm women in dairy occupation, they were grouped on basis of their participation index. The data are presented in table 8.

Table 8: Distribution of farm women according to their level of participation in dairy occupation

(n=120)

Sr. No.	Participation	Frequency	Percentage
1	Low	21	17.50
2	Medium	82	68.33
3	High	17	14.17

The data from table 8 shows that about two third (68.33 %) of the farm women had medium level of participation in dairy occupation. However, 17.50 percent of farm women had low participation and 14.17 per cent of farm women had high participation in dairy occupation. This indicates that farm women had medium level of participation in dairy occupation. The probable reason might be that most of the dairy related activities performed by farm women but financial activities performed by men. Another reason is women have less confident to take stand of any situation or problems and most of the decision take by her husband due to male dominant society. This finding was supported by the findings of Kaur *et al.* (2019).

CONCLUSION

Three fourth and more than half of the farm women participated in deciding type of milch animal and selecting of breed either regularly, oftenly, sometimes or occasionally, respectively. Majority of them have participated either, regularly, oftenly, sometimes or occasionally in artificial insemination. Majority of the farm women regularly participated in giving warm water to drink, feeding colostrums, feeding cooked grain, cleaning of calf and cutting navel cord and giving warm water bath. All the farm women were watering at proper time and grooming and blooming. Three fifth of the farm women regularly performed activities like care of new born. Two third of the farm women regularly performed functions like milking the animals. Majority of the farm women regularly preparing curd, buttermilk, ghee and mava and medium level of overall participation in dairy

occupation.

The study facilitates in knowing the characteristics of the farm women which may serve as a guideline for planners and extension agencies in planning and implementing programme related to dairy occupation.

Subject matter specialist and agricultural extension officer should visit to farm women’s and guide them to solve the technical problem related to dairy occupation.

CONFLICT OF INTEREST

No conflict of interest among researchers.

REFERENCES

Christian, B. M. and Chauhan, N. B. (2019). Participation of farm woman in decision-making process with respect to animal husbandry practices. *Gujarat Journal of Extension Education*, 30 (2), 137-144.

Kaur, K. (2015). Participation of rural women in dairy activities. *Journal of Krishi vigyan*, 4(1) 72-75.

Kaur, S., Singh, J., Verma, H. K., Dash, S. K. and Kansal, S. K. (2019). Participation Appraisal of Women Farmers in Dairy Husbandry Practices in Indo-Pak Border Area of Punjab (India). *Int. J. Curr. Microbiol. App. Sci*, 8 (5), 2298-2305.

Shafi, Mahammad R. Sk., Chauhan, N. B. and Vinaya Kumar H. M. (2021a) Responsible factors to encourage dairy farmers’ sons to avail training on animal husbandry. *Guj. J. Ext. Edu.* 32(1):202-205.

Shafi, Mahammad R. SK., Chauhan, N. B. and Vinaya Kumar H. M. (2021b) Predictable characteristics of young dairy farmers in shaping their animal husbandry workability. *Guj. J. Ext. Edu.* 32(2):209-211.

Vahora, S. G., Thorat, G.N. and Ramjiyani, D. B. (2016). Involvement of tribal dairy women in health care management practices of animal husbandry. *Gujarat Journal of Extension Education*, 27 (1), 70-73.

Vinaya Kumar, H. M., Yashodhara.B., Preethi and Govinda Gowda, V. (2015). Impact of Community Based Tank Management Project on Socio-Economic Status and Crop Productivity of Beneficiary Farmers in Tumkur District of Karnataka State. *Trends in Biosciences*. 8(9): 2289-2295.