

PARTICIPATION OF FARM WOMEN IN DAIRY OCCUPATION

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ABSTRACT

The present study was conducted to know the extent of participation of farm women in dairy occupation. A structured interview schedule was administered to 120 farm women in Anand taluka of Anand district of Gujarat state during Oct. 2004. Farm women largely participated in selection of milch animal breed, purchase of animals, selling of un-economic animals, bringing fodder, feeding animals, preparing concentrate mixture at home and in artificial insemination. Majority of the farm women regularly participated in feeding cooked grains, giving warm water, cleaning calf and cutting naval cord, feeding colostrums, cleaning byre and watering at proper time. Their participation was highest in case of milking the animals, sale of milk through dairy co operatives and preparation of milk product like curd, butter, butter milk and ghee. Their participation was low in case of giving natural services, grazing animals and obtaining loan for purchase of animals, feed and fodder and in construction of byre.

INTRODUCTION

Livestock sector is a prime sector among agriculture and allied activities in India. India is the world's single largest milk producing country with a share of about 14 per cent world milk production. In dairy development map of India, Gujarat occupies a place of pride. This is mainly due to the impressive strides which have taken in organizing a chain of co operative dairies in many parts of the state.

Women's are considered to be pioneers in all arena of development. Women contribute nearly equal to men in the economic development of our country. The crucial roles of women in agriculture and allied occupation have however, been underestimated and undervalued. The Indian social system is largely a male dominant society. As per tradition, women are to depend on man in every aspects of life. Though, agriculture as a whole and dairy in specific, the farm

women play a vital responsibility. Keeping this in view a study was designed to understand that, after almost a half decade of development, what role a farm women is to play in a key co-occupation of agriculture -dairying. It was primarily planned to know the participation of farm women in dairy occupation with the following specific objectives:

1. To study the participation of farm women in dairy occupation
2. To know the level of participation of farm women in dairy occupation.

METHODOLOGY

For this study, eight villages of Anand taluka of Gujarat state were selected randomly. From each village, 15 dairy farm women were randomly selected forming a total of 120 respondents. Participation of farm women in dairy occupation was determined on the basis of actually performing different animal

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husbandry and dairy practices by them. The different areas of dairy business were identified with the help of experts of this area. Specific statements were formed and included under different areas such as purchase and sale of dairy animals, feeding, breeding, management, financial activities, and about milking & preparing milk products in the interview schedule.

The respondents were personally interviewed. They were asked to state whether she was participating regularly, often, 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 rare participation, "two" score for occasional participation,

occupation they were grouped on the basis of their participation index.

RESULTS AND DISCUSSION

Farm women largely participate in the work of live stock management and dairy practices besides their day to day household activities. In order to know the extent of participation of farm women in dairy occupation; the study was confined to specific key areas.

Participation of farm women in purchase and sale of dairy animals

The selection of milch animal and decision for purchase or sale is a key management decision in dairy occupation. An attempt was made to learn the extent of participation of farm women in this area. The data in this regard are presented in table 1.

Table 1: Participation of the farm women in purchase and sale of dairy animals.

Sr. No.	Particulars	Extent of Participation					Mean score
		Regular	Recurrent	Ocassio- nal	Rare	Never	
A Selection of milch animals							
1	Type of milch animals	28 (23.33)	12 (10.00)	22 (18.33)	26 (21.67)	32 (26.67)	1.81
2	Selecting of breed	22 (18.34)	10 (8.33)	18 (15.00)	12 (10.00)	58 (48.33)	1.38
B Purchase and sale of animals							
1	Purchase of improved /cross breed animals	30 (25.00)	8 (6.67)	19 (15.83)	22 (18.34)	41 (34.16)	1.70
2	Culling of uneconomic animals	16 (13.34)	7 (5.83)	23 (19.16)	28 (23.33)	46 (38.34)	1.32

"three" score for recurrent participation and "four" score was assigned for regular participation in each of the activities.

In all, the interview schedule consist 37 statements. On the basis of total participation score of an individual respondent, participation index was worked out. In order to know the level of participation of farm women in dairy

It is obvious from the data presented in Table-1 that about one fourth (23.33 per cent) and almost one fifth (18.34 per cent) of the farm women regularly participate in the activity of selection of the type of milch animal and selection of breed; whereas 26.67 per cent and 48.33 per cent of them did not participate in such activities at all.

So far as the process of purchase of animals is concerned, almost one fourth (25.00 per

cent) of the respondents participated regularly in the activity, where as almost one third (34.16 per cent) of them did not participate in such activities at all. Similarly, only 13.34 per cent of the respondents participate regularly in the activities of culling of uneconomic animals; where as 38.34 per cent of them did not participate in such activities at all.

These findings are in contrast with the findings reported by Shirolkar (1993).

Participation of the farm women in feeding of milch animals

The feeding of animals is another most important aspect in dairy management. Hence, it was thought to evaluate the involvement of farm women in the activities of feeding of milch animals. The data

in grazing animal (10.00 per cent). A very marginal proportion of the farm women did not participate in the activities of feeding the milch animals (2.5 per cent) and preparing feed mixture (3.33 per cent).

This clearly shows that farm women largely participated in feeding of milch animals. These, findings are in the line with the findings of Shirolkar (1993), Manjit Kaur and Shaguna Singla (2001) and Parte (2003).

Participation of farm women in breeding of milch animals

In dairy business, the breeding of milch animals is another important activity. It was also analysed the extent of involvement of farm women in these activities. Data in this regard are presented in Table-3.

It is perceived from Table-3 that more than

Table 2: Participation of farm women in the activities of feeding of milch animals.

Sr. No.	Particulars	Extent of Participation					Mean score
		Regular	Recurrent	Ocassio-nal	Rare	Never	
1	Bringing fodder	68 (56.67)	12 (10.00)	20 (16.67)	03 (2.50)	17 (14.16)	2.92
2	Cutting fodder	46 (38.34)	10 (8.33)	22 (18.33)	12 (10.00)	30 (25.00)	2.25
3	Grazing animals	12 (10.00)	8 (6.67)	18 (15.00)	24 (20.00)	58 (48.33)	1.10
4	Feeding animals	75 (62.50)	9 (7.50)	15 (12.50)	18 (15.00)	03 (2.50)	3.12
5	Preparing feed mixtures	76 (63.34)	11 (9.16)	12 (10.00)	17 (14.17)	04 (3.33)	3.15
6	Purchase of feeds	44 (36.67)	8 (6.67)	20 (16.66)	10 (8.33)	38 (31.67)	2.08

regarding participation of the farm women in feeding of milch animals are presented in Table-2.

The data from the Table-2 indicate that majority of the farm women regularly participated in preparation of feed mixture (63.34 per cent), feeding animals (62.50 per cent), bringing fodder (56.67 per cent), cutting fodder (38.34 per cent), and purchasing feeds (36.67 per cent). However, only a few respondents participate regularly

three fifth (63.33 per cent) of the farm women did not participated in the activity of giving natural service to the dairy animals. This finding confirms the finding of Shirolkar (1993). Though the regular involvement in the activity of artificial insemination was observed for 18.34 per cent of them. Joshi (2000) also reported similar findings.

The data further indicated that majority of the farm women regularly participated in giving warm water bath (51.67 per cent),

Table 3: Participation of farm women in breeding of milch animals.

Sr. No.	Particulars	Extent of Participation					Mean score
		Regular	Recurrent	Ocassional	Rare	Never	
A Methods of breeding							
1	Natural service	04 (3.34)	06 (5.00)	16 (13.33)	18 (15.00)	76 (63.33)	0.70
2	Artificial insemination	22 (18.34)	09 (7.50)	24 (20.00)	32 (26.66)	33 (27.50)	1.62
B Care at the time of calving							
1	Giving warm water bath	62 (51.67)	06 (5.00)	12 (10.00)	21 (17.50)	19 (15.83)	2.59
2	Feeding cooked grains	54 (45.00)	06 (5.00)	18 (15.00)	32 (26.67)	10 (8.33)	2.51
3	Giving warm water to drink	72 (60.00)	10 (8.33)	12 (10.00)	20 (16.67)	06 (5.00)	3.01
C Care of new born calf							
1	Cleaning of calf, trimming hooves and cutting navel cord	62 (51.67)	08 (6.66)	22 (18.34)	18 (15.00)	10 (8.33)	2.78
2	Feeding colostrums	64 (53.34)	12 (10.00)	16 (13.33)	22 (18.33)	06 (5.00)	2.88

feeding cooked grains (45.00 per cent), giving warm water to drink (60.00 per cent), cleaning of calf and cutting navel cord (51.67 per cent) and feeding colostrums (53.34 per cent). These findings are in conformity to the results reported by Manjit Kaur and Shaguna Singla (2001). Only a few (ranging from 5.00 to 15.83 per cent) of them did not participate in performing these activities at all.

Participation of the farm women in management of milch animals

Good management in dairy business adds to the profits from two angles; one by reducing the costs and another by increasing the profits. The data regarding participation of the farm women in performing management practices of milch animals are presented in Table 4.

Table 4: Participation of the farm women in management of milch animals

Sr. No.	Particulars	Extent of Participation					Mean score
		Regular	Recurrent	Ocassional	Rare	Never	
A Adopting veterinary aids							
1	Vaccinating animals	41 (34.17)	14 (11.67)	21 (17.5)	26 (21.66)	18 (15.00)	2.28
2	Taking animals to veterinary doctors	48 (40.00)	18 (15.00)	23 (19.17)	20 (16.67)	11 (9.16)	2.60
3	Treating animals with home made medicines	24 (20.00)	16 (13.34)	26 (21.66)	32 (26.66)	22 (18.34)	1.90
B. Care and Management							
1	Watering at proper time	72 (60.00)	20 (16.67)	16 (13.33)	12 (10.00)	00 (0.00)	3.26
2	Grooming and brooming	65 (54.16)	24 (20.00)	14 (11.67)	17 (14.17)	00 (0.00)	3.14
3	Cleaning byre	82 (68.34)	12 (10.00)	14 (11.66)	08 (6.66)	04 (3.34)	3.34
4	Preparing Gobar gas mixture	04 (3.34)	02 (1.66)	00 (0.00)	00 (0.00)	114 (95.00)	0.18
5	Preparing compost	30 (25.00)	22 (18.33)	24 (20.00)	12 (10.00)	32 (26.67)	2.05

It can be observed from the data in the Table-4 that majority of the farm women actively participate in giving veterinary treatment to the dairy animals i.e. giving vaccination (85.00 per cent), treatment of animals from veterinary doctors (90.84 per cent) and providing home used medicine (81.67 per cent) either, regularly, often, sometimes or occasionally. This indicates that most of the farm women participate regularly in giving treatment to diseased animals. The probable reason may be the availability of veterinary facility by AMUL and also availability of veterinary dispensary at taluka levels.

The finding is in contrast with the findings of Shirokar (1993).

It was further, noticed that majority of the farm women regularly participated in performing the management practices of milch animals such as cleaning byre (68.34 per cent), watering animals at proper time (60.00 per cent) and grooming and brooming (54.16 per cent). It was striking to note that most of the farm women (95.00 per cent) did not participate in preparing gobar gas mixture. The possible reason may be that generally, this role performed by the female

servant in the study area. However, one fourth (25.00 per cent) of them regularly participated in the preparation of F.Y.M. or compost manure. This clearly indicates that management practices of milch animals were largely performed by the farm women.

This finding is similar to the findings reported by Shirokar (1993), Manjit Kaur and Shaguna Singla (2001) and Parte (2003).

Participation of farm women in financial activities

The data pertaining to participation of the farm women in financial activities are presented in Table-5.

The data further indicate that most of the farm women (ranging from 60.00 to 83.33 per cent) did not participate in obtaining loan for purchase of animals, purchase of feeds/fodder and in construction of byre.

Participation of the farm women in milking and preparation of milk products

The data pertaining to participation of the farm women in milking and preparation of milk products are presented in Table-6.

It is evident from the data reported in Table-5 that about three fourth of the farm women

Table 5. Participation of the farm women in financial activities

Sr. No.	Particulars	Extent of Participation					Mean score
		Regular	Recurrent	Ocassional	Rare	Never	
A	Taking loan for						
1	Purchase of animals	20 (16.67)	5 (4.16)	8 (6.67)	15 (12.5)	72 (60.00)	1.05
2	Purchase of feed/fodder	0 (0.00)	2 (1.66)	22 (18.34)	18 (15.00)	78 (65.00)	0.56
3	Construction of byres	0 (0.00)	4 (3.34)	6 (5.00)	10 (8.33)	100 (83.33)	0.28
B	Marketing of milk						
1	House hold sale of milk	12 (10.00)	04 (3.33)	14 (11.67)	10 (8.33)	80 (66.67)	0.82
2	Selling of milk through cooperative society	74 (61.66)	12 (10.00)	17 (14.17)	05 (4.17)	12 (10.00)	3.09

Table 6: Participation of farm women in milking and preparing milk products

Sr. No.	Particulars	Regularly	Often	Some times	Occasionally	Never	Mean score
A Milking							
1	Milking the animals	85 (70.83)	13 (10.83)	10 (8.33)	08 (6.67)	04 (3.34)	3.39
2	Cleaning milk vessels	84 (70.00)	08 (6.66)	10 (8.33)	11 (9.17)	07 (5.84)	3.25
B Preparation of milk products							
1	Curd	68 (56.67)	19 (15.83)	20 (16.67)	08 (6.67)	05 (4.16)	3.14
2	Butter milk	56 (46.67)	14 (11.66)	23 (19.17)	12 (10.00)	15 (12.5)	2.70
3	Ghee	62 (51.67)	15 (12.5)	18 (15.00)	07 (5.83)	18 (15.00)	2.80
4	Mava	08 (6.67)	06 (5.00)	32 (26.66)	24 (20.00)	50 (41.67)	1.15

regularly performed functions like milking the animals (70.83 per cent) and cleaning milk vessels (70.00 per cent). About two third of the farm women (66.66 per cent) did not participate in house hold sale of milk. Confirming this finding Shirolkar (1993). However, majority (90.00 per cent) of them participated in the sale of milk through co-operative dairy society. The probable reason could be that every village has milk co-operative society and this role has been performed early in the morning as well as in the evening by women.

This finding is in the line with the findings reported by Parte (2003).

The data further, reveal that a majority of the farm women regularly prepared milk products viz. curd (56.67 per cent), buttermilk (46.67 per cent) and ghee (51.67 per cent), whereas low participation was found in case of preparing Mava only (6.67 per cent). This clearly indicate that the functions like milking of animals, cleaning milk vessels, selling of milk through co-operative society and preparation of milk products were mainly performed by women only.

This findings are similar to the findings reported by Shirolkar (1993) and Manjit Kaur and Shaguna Singla (2001).

Participation Index

In the study, efforts were further made to determine whether participation of the farm women differs in different aspects of dairy occupation. For this purpose, participation index of the farm women in different aspects of dairy occupation was worked out. The data in this regard are given in Table-6.

Table 6: Participation index of the farm women in different aspects of animal husbandry and dairy practices.

Sr. No.	Particular about the aspects	Participation index.
1	Purchase and sale of milch animals	29.01
2	Feeding of milch animals	60.97
3	Breeding of milch animals	57.55
4	Management of milch animals	58.59
5	Financial activities	15.45
6	Milking and preparing milk products	68.46
7	Overall participation	53.71

It can be observed from the data presented in Table-6 that the farm women had an overall participation in dairy occupation to the extent of 53.71 per cent. However, the farm women had the largest participation (63.59 per cent) in the aspect of milk and milk products followed by feeding aspects (60.97 per cent) and nearly equal participation

(57.55 per cent and 57.45 per cent) in Breeding and management of animal, respectively. The farm women had low participation in general aspects of dairy occupation.

Level of participation in dairy occupation

In order to know the level of participation of farm women in dairy occupation, they were grouped on the basis of their participation index. The data are presented in Table-7.

The data from Table-7 shows that about two third of the farm women (65.00 per cent) had medium level of participation in dairy

fodder, feeding animal and preparing concentrate mixture at home. Majority of them participated in the operation of artificial insemination, whereas their participation was low in case of natural services. Large proportion of the farm women regularly participated in feeding cooked grains, giving warm water, cleaning of calf and cutting novel cord and feeding colostrum at the time of calving. A great majority of them did not participate in preparing gobar gas mixture. The farm women largely participated in the activities like milking the animals, sale of milk through dairy cooperative and in preparation of milk

Table 7: Distribution of the farm women according to their level of participation in dairy occupation. N = 120

Sr. No.	Participation	Frequency	Percentage
1.	Low (below 48.13)	22	18.33
2.	Medium (between 48.13 to 59.83)	78	65.00
3.	High (above 59.83)	20	16.67
	Total	120	100.00

occupation. However, 16.67 per cent farm women had a high participation and less than one fifth (18.33 per cent) of them had low participation in dairy occupation. This indicates that farm women had medium level of participation in dairy occupation. The probable reason might be that some of the dairy activities are female dominant.

CONCLUSION

On the basis of above discussion it could be concluded that majority of the farm women participated in selection of milch animals, breed, purchasing of animals and culling of uneconomic animals. Most of them did not participate in obtaining loan for purchase of animals, purchase of feeds and fodder and in construction of byres. Majority of the farm women regularly participated in bringing

products like curd, butter, butter milk and ghee. Overall participation of the farm women was higher in case of milk and milk products followed by feeding management and breeding. Their level of participation in dairy occupation was medium.

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