

Participation of farm women in dairy occupation

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ABSTRACT

The 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, brining 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 navel cord, feeding colostrum, cleaning byre and watering at proper time. Their participation was maximum in case of milking the animals, sale of milk through diary co operatives and preparation of milk products like curd, butter, butter milk and ghee. Their participation was low in case of giving natural services, grazing and obtaining loan for purchase of animals, feed and fodder and in construction of byre.

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INTRODUCTION

Live stock sector is a prominent sector among agriculture and allied activities in India. India is the world's single largest milk producing country with a share of about 14 % 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 state.

Women are considered to be pioneers in all sorts of development. Women contribute nearly equally along with men in the economic development of our country. The crucial roles of women in agriculture and allied occupation have however, been under estimated and under valued. The Indian social system is predominantly a male dominant society. Tradition dictates that women are not capable of doing any thing independently, but have to dependent on man in every aspect of life. Keeping this in view a study was conducted to know the participation of farm women in dairy occupation with the specific objectives to study the participation of farm women in dairy occupation and to know the level of participation of farm women in dairy occupation.

METHODOLOGY

The study was conducted in the 8 randomly selected villages of Anand taluka of Gujarat state fifteen respondents were randomly selected from each village. In all 120

dairy farm women were selected for this study. Participation of farm women in dairy occupation was decided on the basis of actually performing different animal husbandry and dairy practices by them. The different areas of these practices were identified with the help of experts from the discipline of animal husbandry and dairy science. Statements under different areas *i.e.* general aspects, feeding, breeding, management and about milk and milk products were included in the schedule. The respondent farm woman was 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 those practices. "Zero" score was assigned for no participation of farm women, "One" for occasional participation "Two" for sometimes participation, "Three" for often participation and "Four" was assigned for regular participation in each aspect.

In all, 37 statements were prepared under the sub areas *viz.* general-7, feeding-6, breeding-7, management-9 and milk and milk products-8. On the basis of total participation score of an individual, farm women participation index was worked out. In order to know the level of participation of farm women in dairy occupation they were grouped on the basis of their participation index.

RESULTS AND DISCUSSION

Farm women largely participate in the

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work of live stock management and dairy practices besides their day to day house hold activities. In order to know the nature and extent of participation of farm women in dairy occupation, different statements regarding the work were included in the study.

Participation of farm women in general aspect of dairy occupation:

It can be observed from the data presented in Table 1 that about three fourth (73.33 %) and more than half (51.67 %) of the farm women participate in deciding the type of milch animal and selection of breed either regularly, oftenly, sometimes or occasionally, whereas 26.67 % and 48.33 % of them did not participate in deciding the type of animal and selection of breed for milk.

The data further indicate that most of the farm women (ranging from 60.00 to 83.33 %) did not participate in obtaining loan for purchase of animals, purchase of feeds/fodder and in construction of byre, whereas 65.84 % and 61.66 % of the farm women participate either regularly, oftenly, sometimes or occasionally in purchasing of milch animals and culling of uneconomic animals, respectively.

Above discussion leads to conclude that majority of the farm women participate in deciding type of animals, selection of breed, purchasing of improved breed and

culling of uneconomic animals, whereas most of them did not participate in obtaining loan for purchase of animals, purchase of feed and fodder and in construction of byre. This finding is in contrast with the findings reported by Shirolkar (1993).

Participation of the farm women in feeding of milch animals:

The data 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 %), feeding animals (62.50 %) and bringing fodder (56.67 %). However, proportion of the farm women participating regularly in cutting fodder and grazing animal was low (38.34 %) and (10.00 %), respectively. More than one third (36.67 %) of them regularly participated in purchasing feeds.

The proportion of the farm women performing these feeding practices for sometimes ranged from 10.00 % to 18.33 %. A very small proportion of the farm women did not participate in feeding the milch animals (2.5 %) and preparing feed mixture (3.33 %).

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

Table 1: Participation of the farm women in general aspects of dairy occupation						(n=120)	
Sr. No.	Particulars	Regularly	Oftenly	Some times	Occasionally	Never	Mean score
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. Taking loan							
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
C. 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

Note : Figures in parantheses are percentage

Table 2: Participation of farm women in feeding of milch animals						(n=120)	
Sr. No.	Particulars	Regularly	Oftenly	Sometimes	Occasionally	Never	Mean score
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

done by female members and they were available at home for maximum time might be the probable reason for this type of result.

This, finding is in the line with the findings of Shirolkar (1993), Kaur and Singla (2001) and Parte (2003).

Participation of farm women in breeding of milch animals:

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

It is seen from Table 3 that more than three fifth (63.33 %) of the farm women did not participate while giving natural service. This finding confirms observations made by Shirolkar (1993). Nearly three fourth (72.50 %) of them participate either, regularly, oftenly, sometimes or occasionally in the operation of artificial insemination. Joshi (2000) also reported type of same finding.

The data (Table 3) further indicate that majority of the farm women regularly participated in giving warm water bath (51.67 %), feeding cooked grains (45.00 %), giving warm water to drink (60.00 %), cleaning of calf and cutting navel cord (51.67 %) and feeding colostrum (53.34 %). These findings are supported by Kaur and

Singla (2001). Very low of them did not participate in performing these activities.

From above findings it can be cleared that majority of the farm women participated in breeding of milch animals except in case of natural services. In Anand taluka, the facility of artificial insemination is available at every milk co-operative society. Hence, they availed that facility. Only few animals conceived with natural services and that role was performed by male might be the possible explanation of this result.

Participation of the farm women in management of milch animals:

The data regarding participation of the farm women in performing management practices of milch animals are presented in Table 4.

It can be observed from the data in Table 4 that majority of the farm women participated in giving veterinary treatment to the animal *i.e.* giving vaccination (85.00 %), treatment of animals from veterinary doctors (90.84 %) and providing home used medicine (81.67 %) either, regularly, oftenly, sometimes or occasionally. This indicates that most of the farm women participated

Sr. No.	Particulars	Regularly	Oftenly	Some times	Occasionally	Never	Mean score
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 colostrum	64 (53.34)	12 (10.00)	16 (13.33)	22 (18.33)	06 (5.00)	2.88

Sr. No.	Particulars	Regularly	Oftenly	Sometimes	Occasionally	Never	Mean score
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.	Treatment of animals from veterinary doctors.	48 (40.00)	18 (15.00)	23 (19.17)	20 (16.67)	11 (9.16)	2.60
3.	Providing home used medicine to animals	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
C. Preparing cowdung cake							
1.	Preparing Gobar gas mixture	04 (3.34)	02 (1.66)	00 (0.00)	00 (0.00)	114 (95.00)	0.18
2.	Preparing compost	30 (25.00)	22 (18.33)	24 (20.00)	12 (10.00)	32 (26.67)	2.05

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 present finding is in contrast to the findings of Shirolkar (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 %), watering animals at proper time (60.00 %) and grooming and brooming (54.16 %). It was striking to note that most of the farm women (95.00 %) 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 %) of them regularly participated in the preparation

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 those reported by Parte (2003).

The data further reveal that majority of the farm women regularly prepared milk products viz. curd (56.67 %), buttermilk (46.67 %) and ghee (51.67 %), whereas low participation was found in case of preparing mava (6.67 %). 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 finding is similar to the report made by Shirolkar (1993) and Kaur and Singla (2001).

In the study, efforts were further made to determine

Table 5: Participation of farm women in milking and preparing milk products

Sr. No.	Particulars	Regularly	Oftently	Sometimes	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. Utilization 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 co-op.society	74 (61.66)	12 (10.00)	17 (14.17)	05 (4.17)	12 (10.00)	3.09
C. 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

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 Shirolkar (1993), Kaur and Singla (2001) and Parte (2003).

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 5.

It is evident from the data reported in Table 5 that about three fourth of the farm women regularly performed functions like milking the animals (70.83 %) and cleaning milk vessels (70.00 %). About two third of the farm women (66.66 %) did not participate in house hold sale of milk. The results are in conformity of the finding of Shirolkar (1993). However, majority (61.66 %) of them participated in the sale of milk through co-operative dairy society. The probable reason could be that every village

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.

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 %. However, the farm women had the largest participation (63.59 %) in the aspect of milk and milk products followed by feeding

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.	General	29.01
2.	Feeding	60.97
3.	Breeding	57.55
4.	Management	57.45
5.	Milk and milk products	63.59
6.	Overall participation	53.71

aspects (60.97 %) and nearly equal participation (57.55 % and 57.45 %) in breeding and management of animal, respectively. The farm women had low participation in general aspects of 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 of Table 7 show that about two third of the farm women (65.00 %) had medium level of participation in dairy occupation. However, 16.67 % farm women had

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

a high participation and less than one fifth (18.33 %) 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 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 navel 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 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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