

## **PARTICIPATION OF TRIBAL FARM WOMEN IN BREEDING, FEEDING AND MANAGEMENT PRACTICES OF MILCH ANIMALS OF TAPI DISTRICT OF SOUTH GUJARAT, INDIA**

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### **ABSTRACT**

Women play an important role in this sector. In India, women contribute 71 per cent of the total participation in livestock sector. Though agriculture as a whole and dairy in specific, the farm women play a vital responsibility. So, the present study was carried out specific objective to know the participation of farm women in feeding, breeding and management practices. The study was undertaken in Tapi district of Gujarat state in the year 2011. All the ten adopted villages of the Krishi Vigyan Kendra, Vyara were selected purposively for the study. From each village, 20 respondents were selected making total sample size 200. The structural interview schedule was prepared. The statistical measures namely frequency, percentage, mean were used. It could be concluded that the respondents were taking regular participation in activity of selection of type of the milch animals, taking participation in activity of Purchase of improved / cross breed animals on regular basis, taken participation in activities like bringing fodder, have daily participation in giving warm water to bath at calving, taking contribution in feeding colostrums to the calf, adopting veterinary aids like vaccination, have revealed their contribution in activities like watering at proper time to animals, have revealed their stack in activities of purchase of feed / fodder, selling of milk through cooperative society, cleaning milk vessels, have contribution in making milk products like curd.

**KEY WORDS:** Breeding, Feeding, Management, Milch animal

### **INTRODUCTION**

At present livestock is the fastest growing sector in agriculture and allied sectors, which contributing 5.21 per cent of total GDP and 15.00 per cent income from total income. Women play an important role in this sector. In India, women contribute 71 per cent of the total participation in livestock sector. That is estimated that about 75 million women engaged in livestock sector throughout the India. Gujarat occupies a place of pride in dairy development map of India, because of the impressive strides which have taken in organizing a chain of co-operative dairies in many parts of the states. Indian social system is largely a male dominant society as per the tradition women are to depend on man in every aspect of life. Though agriculture as a whole and dairy in specific, the farm women play a vital responsibility. Keeping all these views in mind the research study, "Participation of farm women in breeding, feeding and management practices of milch animal" was undertaken with objective to know the participation of farm women in feeding, breeding and management practices in Tapi district of south gujarat.

### **MATERIALS AND METHODS**

For the study all the five talukas of Tapi district were selected purposively. From each taluka, two villages were selected randomly. From each village, 20 respondents were selected making total sample size 200. The structural interview schedule was prepared. They were asked to state whether she was participated regularly, often, sometimes, occasionally or never in performing those practices. The score was given according to the nature of her participation in above practices. "One" score was assigned for no participation of farm women. "Two" score for rare participation, "Three" score for occasional participation, "Four" score for recurrent participation and "Five" score was assigned for regular participation in each of the activities.

In all, the interview schedule consist 21 statements. The data was tabulated, analyzed and interpreted in the link of the objective. The statistical measures namely frequency, percentage, mean were used.

## RESULT AND DISCUSSION

The results of the study had indicated many facets of farm women's participation as below:

Buffalo breeding is a synonym for low production costs and high levels of productivity (Rocha Loures, 2001). Dairy industry is of crucial importance to India which is the world's largest milk producing country, accounting for more than 13% of world's total milk production (Karmakar and Banerjee, 2006).

From the data presented in Table 1.1, it is apparent that 71.50 per cent of the farm women were taking regular participation in activity of selection of type of the milch animals, while 68 per cent of the respondents were taking regular participation in activity of selecting breed of the dairy animals. These can be considered as large extent and huge involvement of farm women participation on regular basis. It is clear from the data that about 5.50 per cent farm women never participated in activity of selection of type of the milch animals and 6.50 per cent had never participated in activity of selecting breed of the dairy animals.

Financial interactions are the core part of any enterprise. A diary occupation is no more exception. In the above survey it was observed that 75.50 per cent of respondents were taking participation in activity of Purchase of improved / cross breed animals on regular basis (Mean score 4.45) and in the same way about half number ( 54 per cent) have shown regular involvement in activity of culling of uneconomic animals. The never participating approach was observed among farm women ranging from 5 to 18 per cent in such activities.

The data in Table 1.2 indicated that huge numbers of farm women were observed to have taken participation in activities like bringing fodder (96.00 per cent), feeding Animals (94.00 per cent), preparing feed mixtures (88.00 per cent), cutting fodder (63.00 per cent), purchase of feeds (55.50 per cent) and) and grazing animals (47.00 per cent). Interestingly 43.00 per cent of farm women have indicated about their negligible participation in taking the animal in forest for grazing.

Calf rearing is the vital act at any livestock farm. Age from birth to 1 year is the critical lifespan where calf is exposed to many life threatening conditions. Because at that age immunity may not have developed up to full extent. Mortality reduction is the indicator of well-organized and scientific farm management. Breeding the animals is a work requiring skill as well as some knowledge about genetic make up of the animals. The data in Table 1.3 indicated that artificial service option and natural service option was adopted by 78.00 per cent and 23.50 per cent respectively. About 88.50 per cent and 77.50 per cent women participated in the survey were observed to have daily participation in giving warm water to bath at calving and feeding cooked grains to dam respectively. 91.5 per cent women are taking contribution in feeding colostrums to the calf. Negligible on an average ranging from 3.00 per cent to 6.00 per cent were no taking participation in activities like care at the time of calving and newborn.

The data portrayed in Table 1.4 indicated that 44 to 70.50 per cent women have played the role in adopting veterinary aids like vaccination as well as treatment to the animals. About 97.50 per cent and 71.50 per cent women have revealed their contribution in activities like watering at proper time to animals and preparing compost from dung respectively. Very few participants ranging from have declined to have participated in watering and grooming. About 49.50 per cent were not participating in the treating animals with homemade medicines.

The data in Table 1.5 indicated that majority of the participants (59.50 per cent) have revealed their stack in activities of purchase of feed / fodder and 93.50 per cent of the respondents were

Sr. No.	Particulars	Extent of Participation					Mean Score
		Regular	Recurrent	Occasional	Rare	Never	
<b>1</b>	<b>Participation of the farm women in purchase and sale of dairy animals</b>						
<b>A</b>	<b>Selection of milch animals</b>						
1	Type of milch animals	143 (71.50)	25 (12.50)	14 (7.00)	7 (3.50)	11 (5.50)	4.41
2	Selecting of breed	136 (68.00)	30 (15.00)	14 (7.00)	7 (3.50)	13 (6.50)	4.35
<b>B</b>	<b>Purchase and sale of animals</b>						
1	Purchase of improved / cross breed animals	151 (75.5)	18 (9.00)	10 (5.00)	11 (5.50)	10 (5.00)	4.45
2	Culling of uneconomic animals	108 (54.00)	23 (11.5)	22 (11.00)	11 (5.50)	36 (18.00)	3.78
<b>2</b>	<b>Participation of the farm women in the activities of feeding of milch animals</b>						
1	Bringing fodder	192 (96.00)	4 (2.00)	2 (1.00)	1 (0.50)	1 (0.50)	4.93
2	Cutting fodder	126 (63.00)	2 (1.00)	3 (1.50)	31 (15.50)	38 (19.00)	3.76
3	Grazing animals	94 (47.00)	4 (2.00)	3 (1.50)	11 (5.50)	88 (44.00)	3.03
4	Feeding animals	188 (94.00)	5 (2.50)	2 (1.00)	1 (0.50)	4 (2.00)	4.86
5	Preparing feed mixtures	176 (88.00)	16 (8.00)	5 (2.50)	0 (0.00)	3 (1.50)	4.81
6	Purchase of feeds	111 (55.50)	31 (15.50)	12 (6.00)	3 (1.50)	43 (21.50)	3.82
<b>3</b>	<b>Participation of farm women in breeding of milch animals</b>						
<b>A</b>	<b>Method of breeding</b>						
1	Natural service	47 (23.50)	22 (11.00)	10 (5.00)	25 (12.50)	96 (48.00)	2.50
2	Artificial insemination	156 (78.00)	20 (10.00)	7 (3.50)	7 (3.50)	10 (5.00)	4.53
<b>B</b>	<b>Care at the time of calving</b>						
1	Giving warm water bath	177 (88.50)	8 (4.00)	10 (5.00)	1 (0.50)	4 (2.00)	4.77
2	Feeding cooked grains	155 (77.50)	13 (6.50)	14 (7.00)	6 (3.00)	12 (6.00)	4.47
3	Giving warm water to drink	156 (78.00)	15 (7.50)	12 (6.00)	6 (3.00)	11 (5.50)	4.50
<b>C</b>	<b>Care of new born calf</b>						
1	Cleaning of calf, dehorning, cutting navel cord and hoof trimming	115 (57.50)	31 (15.50)	32 (16.00)	3 (1.50)	19 (9.50)	4.10
2	Feeding colostrums	183 (91.50)	6 (3.00)	3 (1.50)	2 (1.00)	6 (3.00)	4.79

<b>4</b>	<b>Participation of the farm women in management of milch animals</b>						
<b>A</b>	<b>Adopting veterinary aids</b>						
1	Vaccinating animals	141 (70.50)	30 (15.00)	17 (8.50)	3 (1.50)	9 (4.50)	4.46
2	Taking animals to veterinary doctors	43 (22.50)	35 (17.50)	34 (17.00)	25 (12.50)	63 (31.50)	2.85
3	Treating animals with home made medicines	44 (22.00)	22 (11.00)	23 (11.50)	12 (6.00)	99 (49.50)	2.50
<b>B</b>	<b>Care and Management</b>						
1	Watering at proper time	195 (97.50)	0 (0.00)	3 (1.50)	0 (0.00)	2 (1.00)	4.93
2	Grooming and bathing	126 (63.00)	68 (34.00)	3 (1.50)	0 (0.00)	3 (1.50)	4.57
3	Brooming and cleaning the shed	125 (62.50)	1 (0.50)	73 (36.50)	1 (0.50)	0 (0.00)	4.25
4	Preparing Gobar gas mixture	29 (14.50)	18 (9.00)	2 (1.00)	3 (1.50)	148 (74.00)	1.89
5	Preparing compost	143 (71.50)	6 (3.00)	2 (1.00)	0 (0.00)	49 (24.50)	3.97
<b>5</b>	<b>Participation of the farm women in financial activities</b>						
<b>A</b>	<b>Taking loan for</b>						
1	Purchase of animals	70 (35.00)	13 (6.50)	2 (1.00)	7 (3.50)	108 (54.00)	2.65
2	Purchase of feed / fodder	119 (59.50)	12 (6.00)	3 (1.50)	3 (1.50)	63 (31.50)	3.61
3	Construction of byres	16 (8.00)	5 (2.50)	7 (3.50)	3 (1.50)	169 (84.50)	1.48
<b>B</b>	<b>Marketing of milk</b>						
1	House hold sale of milk	81 (40.50)	23 (11.50)	14 (7.00)	5 (2.50)	77 (38.50)	3.13
2	Selling of milk through cooperative society	187 (93.50)	2 (1.00)	4 (2.00)	1 (0.50)	6 (3.00)	4.82
<b>6</b>	<b>Participation of farm women in milking and preparing milk products</b>						
<b>A</b>	<b>Milking</b>						
1	Milking the animal	167 (83.50)	2 (1.00)	8 (4.00)	1 (0.50)	22 (11.00)	4.46
2	Cleaning milk vessels	196 (98.00)	1 (0.50)	1 (0.50)	0 (0.00)	2 (1.00)	4.95
<b>B</b>	<b>Preparation of milk products</b>						
1	Curd	82 (41.00)	12 (6.00)	9 (4.50)	12 (6.00)	85 (42.50)	3.03
2	Butter milk	65 (32.50)	6 (3.00)	8 (4.00)	7 (3.50)	14 (7.00)	2.01
3	Ghee	7 (3.50)	0 (0.00)	2 (1.00)	5 (2.50)	186 (93.00)	1.19
4	Mawa	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	200 (100.00)	1.00

sold milk through cooperative society. Few were observed to have not participation in activities of purchase of feed/ fodder (3 93.50 per cent), while 84.5 per cent of the respondents were not playing role in construction of byre.

The data presented in Table 1.6 indicated that participation of farm women was observed for cleaning milk vessels (98.00 per cent) and Milking the animal (83.50 per cent) respectively. Moderate number of farm women have observed to have contribution in making milk products like curd (41.00 per cent) , butter milk (32.50 per cent), ghee (3.50 per cent) etc., but 0 per cent were observed to have participation in mawa making .Activities of animal husbandry and its development can be made intensive by increasing consumption of milk among tribal masses.

From the above discussion it could be concluded that the respondents were taking regular participation in activity of selection of type of the milch animals, taking participation in activity of Purchase of improved / cross breed animals on regular basis, taken participation in activities like Bringing fodder, have daily participation in giving warm water to bath at calving, taking contribution in feeding colostrums to the calf, adopting veterinary aids like vaccination, have revealed their contribution in activities like watering at proper time to animals, have revealed their stack in activities of purchase of feed / fodder, selling of milk through cooperative society, Cleaning milk vessels, have contribution in making milk products like curd.

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