

## STUDIES ON INVOLVEMENT OF RURAL WOMEN IN PREPARATION OF MILK AND MILK PRODUCTS IN TIRORA TAHSIL OF GONDIA DISTRICT (M.S.)

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### ABSTRACT

The present investigation was carried around Tirora tahsil of Gondia district during the year 2020-2021, to study the involvement of rural women in preparation of milk and milk products, sell price of milk products, constraints faced by the rural women and ways to overcome that constraints, by randomly selecting 200 rural women. From Tirora tahsil, four villages were selected i.e. Chirekhani, Kawalewada, Karti and Marartola randomly and from each village 50 rural women were again selected, constituting 200 rural women were classified on different aspects i.e. socio-economic condition, herd size, milk product prepared by rural women etc. Majority of rural women independently involved in preparation of milk products viz., curd and buttermilk (80%) followed by butter (60%), paneer (40%), ghee (20%) and khoa (15%) in Tirora tahsil. It was noticed that majority rural women (77.50 per cent) were involved in sell of milk and milk product and 66.50 per cent were involved in processing of milk and milk products. 44.00 per cent rural women had small herd size, followed by 38.00 per cent medium herd size, while 18.00 per cent of them had large herd size of milch animal.

The constraints faced by rural women in preparation of milk and milk products were classified mainly in three groups like socio-personal constraints, technical constraints and marketing constraints. From this group of constraints, it was revealed that the rural women with respect to socio-personal constraints group were lack of interest with 26 per cent intensity and lack of education with 35 per cent intensity. Lack of scientific knowledge was found to be prominent with 76 per cent and lack of technical guidance with 24 per cent for non-adoption of scientific technologies in preparation of milk and milk products. Amongst the marketing problems 64.50 per cent rural women encountered less price of milk followed by unavailability of cold storage (52%), cost of preparation of milk and milk product is high (47%) and lack of transportation facilities (45%), respectively.

(Key words: milk and milk product preparation, rural women)

### INTRODUCTION

Milk has been recognized as a complete food by nutritionists all over the world. It has all ingredients and nutrients necessary for the growth and healthy human. Modern science as well as ancient Indian texts and scripts are full of reference enlogzing the virtues of milk as a complete food. Indians scripts have been described milk as the elixis of life or Amrita.

India has showed impressive growth in the milk production, achieving an annual production of 187.7 MT in the year 2018-19. While, in Maharashtra annual milk production is 11.3 MT. Uttar Pradesh being the top state in milk production with 30.5 MT (Anonymous, 2019). India is among the world's largest and fastest growing market for milk and milk products (Anonymous, 2012).

India is an agricultural based country and livestock sector is integral component. Women play crucial and

significant role in livestock rearing, all spheres of economic life contribute richly towards national income. The major share of the credit for India's position as largest milk producing country in the world and the significant increase in the capita<sup>-1</sup> availability of milk in the country has to go to the largely illiterate rural women dairy farmers (Patel, 1998).

Milk and milk products constitute important nutritional components serve as the source of first class protein especially for children's and vegetarians. It supplies most essential elements like calcium and phosphorus along with numerous other essential major and minor substances (Karthikeyan and Pandiyan, 2013).

Some of the rural people involved in preparation of locally popular milk product such as Ujanibasundi is the heat desiccated indigenous dairy product prepared by the addition of 10% sugar level and it is more concentrated than Basundi. It was observed to be sweet with pronounced caramelized flavour. The products has a more thick body

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than the normally present in the basundi. Which is main characteristics of the products. Ujani village is situated on the Solapur Latur highway just near the famous religious place, Tuljapur. This product is very much popular in Ujani and around villages as well as over the Latur district (Maharashtra state) and border areas of Maharashtra and Karnataka (Gawande *et al.*, 2020).

Entrepreneurship is the only solution to the growing employment among rural women and youth. It helps to generate employment for number of people within their own social system. This is more beneficial for women in rural areas as it enable them to add to the family income while taking care of their home and dairy centered talk. Rural women posses abundant resources to be taken up an enterprise. She has the benefit of easy availability of farm and livestock base raw material and other resource. Hence, she can effectively undertake both production and processing. But during this phase various constraints such as personal, social, economic, marketing etc. faced by rural women (Sidhu and Kaur, 2006).

Keeping these in view, the present paper focused on "Involvement of rural women in preparation of milk and milk products in Tiroratahsil of Gondia district (M.S.)"

## MATERIALS AND METHODS

The study was carried around Tirora tahsil of Gondia district during the year 2020-2021. Four villages *viz.*, Chirekhani, Kawalewada, Karti and Marartola were randomly selected. A list of rural women who posses milking animals from each selected village was prepared. From each selected village 50 rural women were selected randomly. The data from 200 rural women were collected by contacting them personally with thehelp of structured interviewed schedule.

The work of collection of data on involvement of rural women in preparation of milk products in Tirora tahsil was carried out by developing a proforma questionnaire. To study the different aspects like milk products prepared by rural women, method use for preparation, selling price of milk products, utilization of profit byrural women and the constraints faced by rural women. The data were categorised on the basis of size of herd of milking animals owned by rural women.

1. Small (upto 2 milch animal), 2. Medium (3-4 milch animal)
3. Large (more than 4 milch animal)

The collected data on various variables were subjected statistical analysis to find out mean, frequencies and standard deviation so as to estimate by adopting the procedure suggested by Panse and Sukhatme (1985).

$$SD = \sqrt{\frac{\sum(x_i - \mu)^2}{N}}$$

$\sigma$  = population standard deviation

$N$  = the size of the population

$x_i$  = each value from the population

$\mu$  = the population mean

## RESULTS AND DISCUSSION

### Role of rural women in preparation of milk product

It is inferred from the Table 1 that majority of rural women independently involved in preparation of milk products *viz.*, curd and buttermilk (80%) followed by butter (60%), paneer (40%), ghee (20%) and khoa (15%) in Tirora tahsil. It is further noticed that majority of rural women (73%) involved in preparation of paneer from Kawalewada village and very few percentage of (2.50% to 5%) rural women prepared khoa in selected villages under study. Sangeeta and Desai (2011) also reported that about 95 per cent of the farm women involved in preparation of milk products. These results are more or less similar to the results of present study.

### Role of rural women in processing and marketing of milk and milk product

It is noticed from Table 2 that majority rural women (77.50%) were involved in sell of milk and milk product and 66.50 per cent were involved in processing of milk and milk products. Majority of rural women (92%) from Kawalewada involved in processing of milk and milk products, while from Chirekhani and Karti 60 per cent women involved in these activities. With respect to sell of milk and milk products majority of rural women (84%) from Kawalewada followed by 78 per cent from Marartola, 76 per cent from Karti and 77 per cent from Chirekhani actively involved in sell of milk and milk products.

The reason behind this might be due to most of the rural women unaware about the technologies and scope for processing of milk and milk products and they does not have large herd size, it may be one of the reason that they don't had large amount of milk for processing.

Rathod (2011) also reported that 76.66 per cent respondent were involved in the sale of milk and milk products, while 68.33 per cent farm women performed milk processing activities. Likewise, Kaur (2015) revealed that women rarely participated in milk processing and 64.60 per cent women took up processing on small scale only and 74 per cent women were involved in sale of milk. These results are in conformity with the findings of present investigation.

### Distribution of rural women according to herd size

It is observed from Table 3 that 44.00 per cent rural women had small herd size, followed by 38.00 per cent medium herd size, while 18.00 per cent of them had large herd size of milch animal. This indicates that the rural women had a relatively small herd size of milch animals. It might be possible that overburdening of house work be the reason which makes them difficult to maintain large herd size.

**Table 1. Role of rural women in preparation of milk product**

Sr. no.	Product	Name of villages								Total (n=200)	
		Chirekhani		Kawalewada		Karti		Marartola		Freq.	%
		Freq.	%	Freq.	%	Freq.	%	Freq.	%		
1.	Dahi	35	17.50	60	30.00	33	16.50	32	16.00	160	80
2.	Butter milk	34	17.00	58	29.00	35	17.50	33	16.50	160	80
3.	Butter	26	13.00	39	19.50	27	13.50	28	14.00	120	60
4.	Paneer	19	09.50	26	13.00	20	10.00	15	07.50	80	40
5.	Ghee	09	04.50	14	07.00	08	04.00	09	4.50	40	20
6.	Khoa	08	04.00	10	05.00	07	03.50	05	02.50	30	15

**Table 2. Role of rural women in processing and marketing of milk and milk products**

Sr. no.	Particular	Name of village								Total (n=200)	
		Chirekhani		Kawale-Wada		Karti		Marartola		Freq.	%
		(50)	(50)	(50)	(50)	(50)	(50)				
Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
1.	Processing of milk and milk product	30	60	46	92	30	60	27	54	133	66.50
2.	Sell of milk and milk product	36	72	42	84	38	76	39	78	155	77.50

**Table 3. Distribution of rural women according to herd size**

Sr. No.	Herd size	Frequency	Percentage
1	Small (up to 2 milch animals )	88	44.00
2	Medium (3-4 milch animals)	76	38.00
3	Large (more than 4 milch animals)	36	18.00
	Total	200	100.00
	Mean =3.80	SD=0.52	

**Table 4. Constraints faced by rural women in Tirora tahsil of Gondia District**

Sr. No.	Particular	Frequency	Percentage
<b>A</b>	<b>Socio-personal constraints</b>		
1	Lack of interest	52	26
2	Lack of education	70	35
<b>B</b>	<b>Technical constraints</b>		
1	Lack of scientific knowledge	152	76
2	Lack of technical guidance	48	24
<b>C</b>	<b>Marketing constraints</b>		
1	Unavailability of cold storage	104	52
2	Lack of transportation facilities	90	45
3	Less price of milk	129	64.5
4	Cost of preparation of milk product is high	94	47

On contrary, Patel (1998) and Gupta (2020) reported that majority of farm women (57.50%) and (65.00%) had medium herd size.

#### Constraints faced by the rural women

Constraints referred to the problem or difficulty encountered by the rural women while preparation of milk and milk products.

In Tirora tahsil the various constraints faced by the rural women while preparation of milk and milk products have been stratified into different groups listed below.

1. Technical constraints
2. Personal constraints
3. Marketing constraints

The constraints encountered by rural women with respect to socio-personal constraints group were lack of interest with 26 per cent intensity and lack of education with 35 per cent intensity. Lack of scientific knowledge was found to be prominent with 76 per cent and lack of technical guidance with 24 per cent for non-adoption of scientific technologies in preparation of milk and milk products.

Jadhav *et al.* (2013) also reported on women empowerment through innovation in dairy farming, they suggested that to improve the socio-economic condition of the rural dairy farm women more number of training should be conducted in area of processing of milk.

Amongst the marketing problems 64.50 per cent rural women encountered less price of milk followed by unavailability of cold storage (52%), high cost of preparation of milk and milk products (47%) and lack of transportation facilities (45%), respectively.

Kathiriya *et al.* (2014) also reported on marketing constraints faced by rural women in three tahsils of Rajkot district of Gujarat state. They revealed that more than 65 per cent rural women encountered less price of milk followed by unavailability of cold storage (50%), high cost of preparation of milk and milk products (46.67%) and lack of

transportation facilities (46%) respectively. These results are in agreement to the findings of present investigation.

## REFERENCES

- Anonymous, 2012. Annual Report 2012 – 2013, National Dairy Development Board.
- Anonymous, 2019. Annual Report 2019, National Dairy Development Board.
- Gawande, S. B., V. G. Atkare and R. M. Zinjarde, 2020. Sensory quality and cost structure of Bottle gourd pulp (*Lagenaria siceraria*) Ujanibasundi. *J. Soils and Crops*. **30** (1): 103-106.
- Gupta, A., A. Saha, R. K. Gupta, S. Chakraborty and D. S. Dhakre, 2020. Socio-economic status of rural women dairy farmers in Surguja district of Chhattisgarh. *Bull. Env. Pharmacol. Life Sci.* **9**(4): 112-116.
- Karthkeyan, N. and C. Pandiyan, 2013. Microbial quality of khoa and khoa based milk sweets from different sources. *Int. Food Res. J.* **20**(3): 1443- 47.
- Kathiriya J., D. Saradava, D. Sanepara and B. Kabaria, 2014. Training needs of dairy farming women and constraints faced by rural women: a case study of Gujarat. *Int. J. Agri. Sci. and Vet. Medicine*. **2**(2): 46-50.
- Kaur, K. 2015. Participation of rural women in dairy activities. *J. Krishi Vigyan*. **4** (1):72-75.
- Jadhav, S. J., V. Durga Rani, Sreeja Mudgal and H.B. Dhamasaniya, 2013. Women empowerment through dairy farming. *Asian J. Dairy and Food Res.* **33**(2): 147- 153.
- Panse, V. G. and P. V. Sukhatme, 1985. Statistical methods for agricultural workers. Ind. Council of Agri. Res., New Delhi.
- Patel, A. 1998. Women and white revolution. *Cooperative Dialogue*. **8** (1): 20-25.
- Sangeeta, U. and C.P. Desai, 2011. Participation of farm women in animal husbandry in Anand District of Gujarat. *J. Community Mobilization and Sust. Devl.* **6**(2): 117-121.
- Sidhu, K. and S. Kaur, 2006. Development of entrepreneurship among rural women. *J. Soc. Sci.* **13**(2): 147-149.
- Rathod, P. K., T. R. Nikam and S. Landge, 2011. Participation of Rural Women in Dairy Farming in Karnataka. *Ind. Res. J. Ext. Ed.* **11**(2): 31- 36.

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