

## Participation of Farm Women in Dairy Activities in Gorakhpur District of Uttar Pradesh

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### ABSTRACT

The field study was performed in 2020 and included two blocks of Gorakhpur district, namely Jungle Kaudiya and Pali. A simple random sampling technique was used in the selection of dairy farm women using the information on the aspect under study were recorded by using personal interview technique for sample size of 150 rural women which are engaged in dairy activity. This study was based on field level primary data collected from the dairy farmers. It was observed that 58 per cent dairy farm women belonged to middle age group, 52 per cent obtained primary education, 58 per cent living in joint family, 72 per cent married, 61 per cent possessing marginal land holding, 68 per cent were dependent upon agriculture, 64 per cent farm women income up to ₹50,000.00 from dairy and 81 per cent having small heard size. The data revealed that the participation of majority of women was high in activities such as cleaning of cattle shed, soaking of concentrates, watering, milking, processing of milk into milk products, feeding of animals and disposal of cow dung. The farm women participation was least in dairy related record maintenance, getting loans or credits from the banks, taking animals for grazing. Thus, it is concluded that there is need to educate them about improved animal husbandry practices for increasing livestock production also suggested that women's participation in dairy farming can reduce poverty in rural areas.

**Key words:** Dairy activities, farm women, livestock management, participation, socio-personal.

### INTRODUCTION

Rural women play a significant role in dairy farming in India. They have full potential for achieving sustainable development and improvement of quality of life through their proactive participation in farming activities. The success of a country depends on the status and improvement of its women, not only because they represent nearly half of the population, but they also positively influence the progress of the entire population (Upadhyay & Desai, 2011). Livestock production serves as the main source of employment, income and food for over seventy percent of Indian population and women play the role of the hidden working force behind the

establishment of livestock sector (Kaur, *et.al.* 2019). Livestock farm women engaged in wide range of dairy activities such as animal grazing, collecting, cleaning animal sheds, processing of milk and livestock products that enables poor and landless families particularly farm women to earn income using common properties (Kaur, 2015). Farm women are actively involved in various aspects of dairy farming activities like livestock management, feeding and breeding livestock, health care *etc.* (Akila and Senthilvel, 2013). The majority (85%) of persons engaged in dairy production is women (Kacker, 2006). Involvement of Indian women in national progress at all levels is undisputable reality although the degree of involvement varies from time to time and region to region

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(Kathiriya, 2013). However, women's involvement in dairying generally declines as the activity becomes more important for household income. Despite the fact that women in India do most of the work in animal husbandry yet their contribution has largely been ignored and inadequately acknowledged. They always remain invisible workers. The present study was undertaken to determine the participation level of rural women in dairy activities and to identify the impact of rural women's participation in dairy farming activities in two blocks of the Gorakhpur district in Uttar Pradesh.

**METHODOLOGY**

The study was conducted in two blocks of Gorakhpur district, namely Jungle Kaudiya and Pali. A sample of seventy-five families was selected randomly from each block. Thus, the total sample comprised of 150 families. One female member shouldering the responsibilities in dairy management from each family represented the study sample. The data were collected personally with the help of structured interview schedule. Data collected were statistically analysed with the help of frequency and percentages. A percentage of women participation index was calculated to determine the participation rate of women in each dairy farming activity. This was based on the following formula:

$$\text{Percentage of Women Participation Index} = (\text{Actual participation of women} / \text{Full participation of women}) \times 100.$$

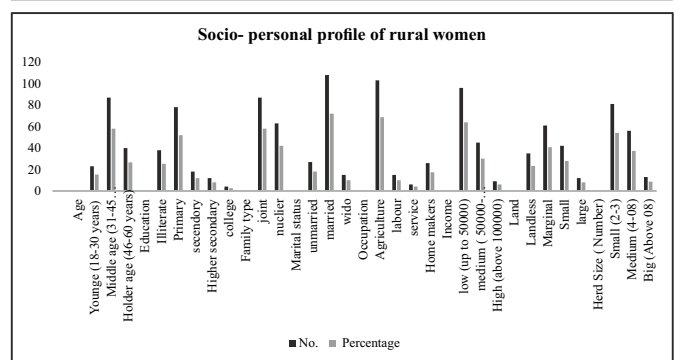
**RESULTS AND DISCUSSION**

The data presented in Table 1 indicated that majority (58.0%) of respondents were from lower middle age group followed by upper middle (26.67%) and younger (15.3 %) age group. This implies that younger and upper middle age group women were less involved in dairy activities. Results on education showed that majority of respondents were having education up to primary (52.0 %) followed by illiterate (25.0%), secondary (12.0 %), higher secondary (8.0 %) and college educated (2.67 %). It means that highly educated women are not involving in dairy farming. It was also observed that mainly of respondents belonged to joint family whereas 58 per cent respondents belonged to nuclear family. This means dairy enterprise mostly run in joint families. Results on marital status showed that majority of respondents were married (72 %) followed by unmarried (18 %) and widow (10 %). While looking at the occupation result showed that majority (68%) respondents were from agriculture as occupation followed by homemakers (17.33%), labour (10.0 %) and service (4.0 %). It is also depicted in Table 1 that the majority of respondents (64%) had low income

followed by medium (30%) and high (6%). The study revealed that 40.67 per cent farm women families had marginal land followed by small farmers (28.0 %). It was also observed that 8 per cent were large farmers and 23.33 per cent were landless. Regarding herd size, 54 per cent families had small live stock holding whereas 37.3 and 8.67 per cent were in medium and big category respectively (Fig. 1). The results are similar with the findings of Bose *et al.*, (2013) and Ram and Meena (2013).

**Table 1: Socio-personal profile of rural women n=150**

Characteristics	No.	Percentage
<b>Age</b>		
Younger (18-30 Years)	23	15.33
Middle Age (31-45 Years)	87	58.00
Upper Middle Age (46-60 Years)	40	26.67
<b>Education</b>		
Illiterate	38	25.33
Primary	78	52.00
Secondary	18	12.00
Higher Secondary	12	8.00
College	4	2.67
<b>Family Type</b>		
Joint	87	58.00
Nuclear	63	42.00
<b>Marital Status</b>		
Unmarried	27	18.00
Married	108	72.00
Widow	15	10.00
<b>Occupation</b>		
Agriculture	103	68.67
Labour	15	10.00
Service	6	4.00
Home Makers	26	17.33
<b>Income (₹)</b>		
Low (Up to 50000)	96	64.00
Medium (50,000-1,00,000)	45	30.00
High (Above 1,00,000)	9	6.00
<b>Land</b>		
Landless	35	23.33
Marginal	61	40.67
Small	42	28.00
Large	12	8.00
<b>Herd Size (Number)</b>		
Small (2-3)	81	54.00
Medium (4-08)	56	37.33
Big (Above 08)	13	8.67



**Fig. 1: Socio-personal profile of rural women**

**Participation of Rural Women in Different Dairy Farming Activities:**

In general, prior to participating in dairy farming, rural women did not know about scientific feeding, breeding, management, and health care practices in livestock. However, they gathered knowledge through their experience, receiving training and increasing awareness. The comparisons of the level of participation in dairy farming activities are shown in Table 2 and in fig.2.

**Dairy Feeding Activities**

The present investigation focused mainly on six major operations carried out by dairy women farmers. The result obtained during present investigation are presented in Table 2 and in fig. 2. The study revealed that most of the work regarding Feeding and watering of animals was the sole responsibility of the women. They were responsible for the tasks like taking the animals for grazing, fodder collection, chaffing and storage of fodder *etc.* Among these activities most of the respondents (91.33 %) were involved in watering the animals, soaking of concentrates (90%), mixing green fodder with roughage (85.33) and feeding the animals (84.67%). Generally, in India rural women accept cooking as their responsibility. This might be the cause for the higher percentage of women involved in food preparation in farming. This finding agrees with Upadhyay & Desai (2011) who reported that 98.34 per cent of farm women participated in preparing food mixtures. Harvesting the fodder crops (72.67), chaffing fodder (54.67 %), carrying the harvested fodder (50.67%) and fodder collection (50%) was found to be second highest. While less involvement was found in storage of feed and fodder (30%) and taking animals for grazing (14.67%) These findings agreed with the results reported by Bose *et al.*, (2013) and Kaur (2015).

**Dairy Management Activities**

Dairy management activities are an essential segment of operating and maintaining dairy farming. Dairy management activities are internal and include disposal of cow dung (90%), cleaning of animal sheds (88%), washing and grooming of animals (78%) and milking of lactating animals (72.67%) maintenance of milk records (48%) were performed by women. However, participation of women in maintaining milk records (48%) was found lower than all other management activities (Table 1 & fig. 2). These findings corroborate with the results of Lahoti, *et al.* (2012), Bose *et al.*, (2013) and Kaur (2015).

**Animal Health Care Activities:**

A high percentage of rural women in both villages

took care of sick animals. The received data presented in Table 1 & fig. 2 indicated that 76.67 per cent of rural women were engaged in this activity. This indicates strong feelings for the animals and they give of their time to tend to the sick animals. These results agree with the findings reported by Bose *et al.*, (2013), Kathiriya *et al.* (2013), Lahoti *et al.*, (2012) and Rathod *et al.*, (2011). Their concern with taking care of dairy animals helped them to sustain their farming interests. Following their care of sick animals, the participation index was highest in vaccinations of dairy animals (71.67%). The study reported that women were involved in care of new born (69.33%), care of pregnant animals (65.33), deworming (30 %). The results are in conformity with the findings of Bose *et al.*, (2013) and Tripathi and Bhanja (2000).

**Treatment facilities availed by livestock owner**

It could be observed from Table 1 that majority of the respondents were depended on Private veterinarian services (48%), Govt. vet. Hospital (23.33%), Private veterinarian and home remedy (21.33%) and home remedy (7.33%), respectively. Occurrence of diseases causes heavy economic losses in terms of animal health and production. Control of animal diseases assumes prime importance in the crucial time of shifting of animal agriculture from extensive to intensive and commercial system of management. Figure 2 also showing that veterinary and extension services much needed to dairy women farmers for better improvement of animal health and economic status of farmers.

**Processing and Marketing Activities**

Data presented in Ttable 1 showed that in both blocks, most of the activities related to processing and marketing of milk were performed by rural women. Among these activities their participation rates were found to be highest (100%) in processing of milk into milk products and (77.333 %) in milk sale. The decisions made by women in both blocks regarding the quantity of milk to be used for personal consumption and the amount to be sold. Typically, rural women have the responsibility for accommodating the nutritional needs of the family. This result is in agreement with Bose *et al.*, (2013), Sarma and Payeng (2012), Singh and Srivastava (2012). Figure 2 also showed that a high percentage of women involved in these activities indicated that they were more attentive to the practices that improved their dairy farming.

**Miscellaneous**

Majority of the farm women in study area were ignorant about record maintenance and hence, it was observed that only 5.3 per cent of respondents-maintained records in the form of small book or piece of paper. Similar findings were reported by Yadav *et al.* (2005)

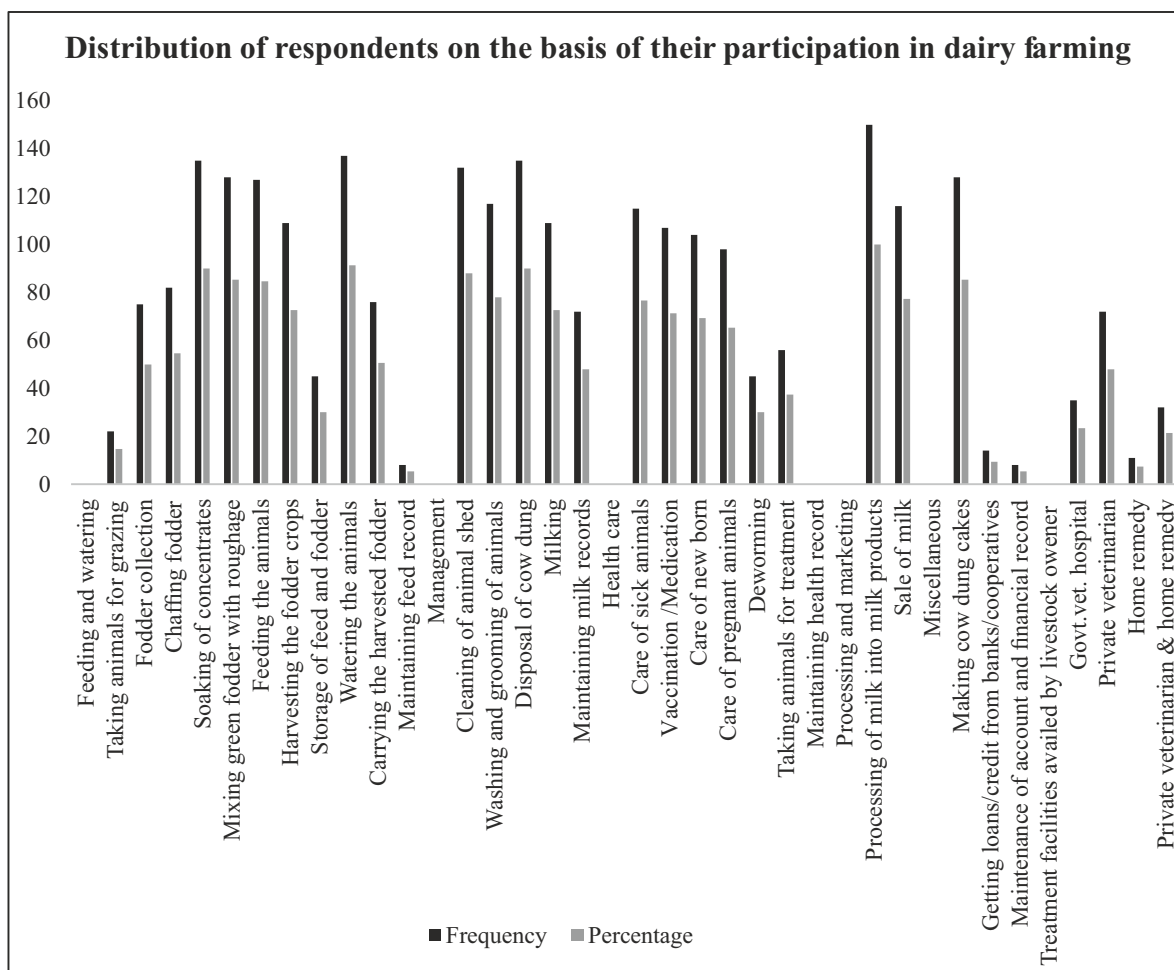
with regards to record maintenance. Farm women perceived the activity of getting loans/credit from banks/cooperatives were solely responsibility of men and hence only 9.33 per cent women were actively involved in this activity. Figure 2 also showed that the majority of women (85.33%) were also found to involved in making cow dung cakes activities due to the reason that cow dung cakes are used as fuel to save expenditure.

**Table 2: Distribution of respondents on the basis of their participation in dairy farming**

**n=150**

Activities	Frequency	Percentage
<b>Dairy Feeding Activities</b>		
Taking animals for grazing	22	14.67
Fodder collection	75	50.00
Chaffing fodder	82	54.67
Soaking of concentrates	135	90.00
Mixing green fodder with roughage	128	85.33
Feeding the animals	127	84.67
Harvesting the fodder crops	109	72.67
Storage of feed and fodder	45	30.00
Watering the animals	137	91.33
Carrying the harvested fodder	76	50.67
Maintaining feed record	8	5.33

<b>Dairy Management Activities</b>		
Cleaning of animal shed	132	88.00
Washing and grooming of animals	117	78.00
Disposal of cow dung	135	90.00
Milking	109	72.67
Maintaining milk records	72	48.00
<b>Animal Health Care Activities</b>		
Care of sick animals	115	76.67
Vaccination /Medication	107	71.33
Care of new born	104	69.33
Care of pregnant animals	98	65.33
Deworming	45	30.00
Maintaining health record	0	0.00
<b>Treatment facilities availed by livestock owner</b>		
Govt. vet. hospital	35	23.33
Private veterinarian	72	48.00
Home remedy	11	7.33
Private veterinarian & home remedy	32	21.33
<b>Processing and Marketing Activities</b>		
Processing of milk into milk products	150	100.00
Sale of milk	116	77.33
<b>Miscellaneous</b>		
Making cow dung cakes	128	85.33
Getting loans/credit from banks/cooperatives	14	9.33
Maintenance of account and financial record	8	5.33



**Fig. 2: Distribution of respondents on the basis of their participation in dairy farming**

**CONCLUSION**

The findings of the present study showed that rural women contributed to dairy farming activities through their active participation. Most of the work in regard to feeding, management, and health care activities was done by rural women, and in most cases, they managed the dairy farming. Dairy farming led to a marked reduction of poverty and improved livelihood among rural women. Before starting dairy farming they were housewives, but after involvement, dairy farming created income-earning potential for rural women and this contributed to the family income, which led to savings, ultimately improving their lives. Through participation in dairy farming rural women were able to come out from under the patriarchal social system and removed constraints, which have historically limited their autonomy. As a result, women have increased their participation in economic activities. Through participation in dairy farming rural women have been able to increase their consciousness and economic levels, and thereby making a significant contribution to the well-being of the family. Ultimately, they have been able to break the cycle of poverty. Therefore, participation of rural women in dairy farming has been a key factor for poverty reduction in rural areas.

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