

# Gender Disparity in Dairy Farming Activities: Empirical Evidence from Karnataka

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#### **ABSTRACT**

Women are an integral part of the village economy, and their role is important in the framework of rural development. In India, agriculture and allied activities is female dominated. The percentage of female employment in agriculture to the total female employment is higher than the percentage of male employment in agriculture to the total male employment. Dairying in India is a female dominated enterprise. It is established beyond doubt that women always participate in dairy and animal husbandry activities in addition to their daily household chores. The crucial role of women in agriculture, allied occupations, and household activities is however grossly underestimated and undervalued. In this background, the present study aims to analyse the gender disparities in various operational activities of dairying. For the study 300 women dairy farmers were selected and interviewed using interview schedule. The results clearly indicate that the participation of women in most of the dairying activities are significantly higher than of men in the study area. On the other hand majority of men participate in only occasional dairy activities. This gender disparity brings urgent need to sensitize the women dairy farmers and enable them to equal participation in dairying.

Keywords: Gender disparity, women, dairying, milk, rural development, Karnataka.

### 1. INTRODUCTION

Women are an integral part of the village economy, and their role is important in the framework of rural development. In India, agriculture and allied activities is female dominated. The percentage of female employment in agriculture to the total female employment is higher than the percentage of male employment in agriculture to the total male employment. The Census 2011 data on cultivators and agricultural labourers reflects that 67.5 per cent of the total female workers depend on agriculture, either as cultivators or agricultural labourers, while 49.8 per cent of the total male workers do the same. The crucial role of women in agriculture, allied occupations, and household activities is however grossly underestimated and undervalued.

Dairying plays a prominent role in strengthening India's rural economy, and is recognized as an instrument to bring about socio-economic transformation (Ramakrishnappa, 2015). India is ranked first in milk production with 210 million tonnes in 2020-21 contributing 23 per cent of global milk production (Government of India, 2021). The vast potential of dairying in employment generation and poverty alleviation is well-recognized. In dairying, women are involved in managing, organizing, and coordinating activities like calf rearing, fodder collection, feeding, watering, cattle shed cleaning, washing the animal, grazing the animal, taking the animal for breeding and treatment, milking, product making, storing, and marketing of milk and milk products. Women are traditionally responsible for the milking of animals, processing of milk, and collecting dairy products (FAO, 2010). Some 85 per cent of the approximately seven million dairy farmers in India, are women (Shefner-Rogers et al., 1998).

The participation and involvement of farm women in dairy activities in the three agro- climatic zones of Haryana found that almost 95 per cent of the work of dairy cattle is done by women (Sardana et al., 1988). Another study by Kumari in Bihar observed that 80 per cent of all the important dairying operations in milk production was performed by women (Kumari et al., 1988). Participation of women in dairying ranks third after domestic labour in case of landless labourers, whereas it ranked second after domestic work for marginal and small farmers categories (Singh and Rani, 1983). Upreti and Neelam studied the income and empowerment of women through dairy cooperatives across members and non-members in Uttarakhand state. The findings revealed that members of the Women Dairy Cooperative Societies earned more annual income from dairying than non-members (Rani, 2018).



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Women empowerment is the process of building a woman's capacity to be self-reliant and to develop her sense of inner strength. Dairying in India is a female dominated enterprise. It is established beyond doubt that women always participate in dairy and animal husbandry activities in addition to their daily household chores. Women spend more time than men in dairy production activities (Jadav et al., 2014). They play an important role in dairy production, hence, the establishment of a large number of women dairy cooperatives has helped women increase their participation in dairy production and marketing (Shweta and Ashok Singh, 2018). Dairy farming provides regular income to farmers throughout the year and is of significance in generating employment for women (Manish and Tanaka, 2007).

### 2. OBJECTIVE AND METHODOLOGY

The main objectives of the study is to analyse the gender disparity in involvement of various operational activities of dairying. The study was carried out in drought prone region of Kolar district of Karnataka, India, for in-depth analysis. Kolar is the second highest milk producing district in Karnataka state and it has been grouped as one of the most backward districts of the state in the High-Power Committee for Redressal of Regional Imbalances (HPCRRI) under the chairmanship of Prof D. M. Nanjundappa. The HPCRRI which examined the regional imbalances in the state of Karnataka had categorised the districts and taluks based on cumulative development index. According to the 2011 census, the total population of the Kolar district was 15.36 lakh of which 70 per cent live in rural areas. Agriculture and animal husbandry activities are the main occupations of the people of this region. For about a decade, drought has adversely affected the agricultural activities, and dairying has remained the main source of income for lakhs of families in the district. A total of 300 women respondents were selected from 10 dairy cooperative societies as sample for the study. Data were collected by using well-structured and pretested interview schedule.

#### 3. GENDER DISPARITY IN PERFORMING VARIOUS DAIRY ACTIVITIES

As mentioned in the introduction that the dairying in India is a female dominated activity. It is established beyond doubt that women always participated in dairy and animal husbandry activities, in addition to their daily household chores. Many of the important tasks in dairying activities are performed by women, besides fulfilling their routine responsibilities as home makers. Dairying is considered one of the key assets of the rural population and offers significant opportunities for improving the household income. Women located in rural areas play a crucial and significant role in dairy development by their direct involvement in dairying activities. But their contribution in the livestock sector has not been given the place they deserve. They always remain invisible and are inadequately acknowledged.

The present study was conducted in drought prone region of Kolar district in Karnataka, India. The study has observed various operations of dairy farming, which are practiced by dairy farmers in the study area. The findings of the study with respect to various activities of dairying are depicted in Table 1. Activities like cleaning cattle shed and dung disposal, bringing fodder from the field, procuring and feeding, bathing of animals and giving water to animals, milking and milk marketing, preparation of milk products, care of calves/calf, and others are the considered daily dairy activities. The encashment and credit follow-up, harvesting and storage of fodder, purchase of feed, veterinary services, maintenance of cattle shed and others are occasional dairy activities.

It is evident from Table 1 that women's contribution to dairying is higher than that of men. In the present study, the role of women was assessed for their involvement in different activities of dairying. The study revealed that more than 80 per cent of the women were involved in most of the dairy activities. The study also revealed that the share of women participation was very less compared with men in areas of purchase of feed and fodder (21.6%) and purchase of feed (25.9%).

Table 1: Share of Work performed by Women in various Dairy Activities (%) N=300

Sl.	Dairy Activity	Women	Men	Children
No.				
1	Collection and bringing fodder from the field	66.8	30.1	3.1
2	Feeding of fodder and watering of dairy animals	86.0	12.4	1.6
3	Preparation of concentrate and feeding	88.1	11.6	0.3
4	Taking dairy animals for grazing/field/ pond	80.6	12.0	7.4
5	Milking	81.4	18.6	0
6	Taking milk to dairy societies	21.6	30.4	48.0
	(sale of milk)			
7	Payment from sale of milk	29.2	67.0	3.8
8	Preparation of milk products for own use	98.0	2.0	0
9	Washing the dairy animals	75.1	24.3	0.6
10	Cleaning of cattle shed and dung disposal	93.8	6.2	0



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11	Care of calves / calf	91.5	7.4	1.1
12	Purchase of feed	25.9	74.1	0
13	Storage of dry fodder	41.2	53.1	5.7
14	Veterinary services/healthcare	39.0	61.0	0
15	Maintenance of cattle shed	51.3	48.7	0
16	Miscellaneous	80.1	12.3	7.6

Source: Primary survey

The involvement of women in the preparation of milk products such as curd, ghee, and buttermilk for own use is highest at 98 per cent, followed by cleaning of cattle shed and dung disposal (93.8 per cent), care of calves /calf (91.5 per cent), preparation of concentrate (boosa/hindi/kichen waste/millet waste), and feeding (88.1 per cent), feeding of fodder and watering the dairy animals (86 per cent), milking (81.4 per cent), and taking dairy animals for grazing (80.6 per cent). Further, the participation of women in dairying operations with regard to washing the dairy animals (75.1 per cent) and collection and bringing fodder from the field (66.8 per cent) is also highest / higher than men.

The results clearly indicate that the participation of women in most of the dairying activities is significantly higher than of men in the study area. Women participation in taking milk to dairy societies (21.6 per cent), purchase of feed (25.9 per cent), visit to DCS for payment from sale of milk (29.2 per cent), and collection, purchase and storage of dry fodder (41.2 per cent) was found to be least in dairying. The preparation of milk products like ghee, curd and buttermilk for own use is mostly carried out by women. Women also actively participate in the repair and maintenance of cattle shed with locally available materials or resources.

Major activities in which men participate actively are visit to DCS and to collect payment once in a month. The local DCSs pay the farmers monthly for the milk they deliver to the co-operative throughout the month. Further, the study revealed that 61 per cent of the men were engaged in veterinary services and healthcare of dairy animals. Veterinary services such as taking animals for treatment when sick, calling doctor for animal vaccination, and other associated services. The study also revealed that a significant number of children supply milk to their local DCS. The children performed activities like taking milk to dairy societies (48 per cent), taking dairy animals for grazing (7.4 per cent), help their parents in storage of dry fodder (5.7 per cent), bringing fodder (3.1 per cent), etc.

Women participate at different levels in almost all the activities of dairying right from collecting fodder, grazing the animals, preparation of feed, providing feed and water for animal, cleaning the sheds, taking care of calves / calf, and washing the dairy animals. But some activities like purchase of concentrated feed, collection of payments, and veterinary services are mostly done by men.

#### **CONCLUSION**

The forgoing analysis clearly indicate that the participation of women in most of the dairying activities is significantly higher than of men. Dairy activities such as milking, cleaning cattle shed and dung disposal, feeding and procurement, grazing, care of calves/calf, giving water to animals, and other operations are predominantly performed by women, than men and children in the study area. Children are largely used to supply the milk to the dairy cooperatives. Occasional activities such as encashment and credit follow-up, purchase of feed and fodder, and veterinary services are mainly carried out by men in all categories of households. The participation of women in most of the dairying activities are significantly higher than of men in the study area. On the other hand majority of men participate in only occasional dairy activities. This gender disparity brings urgent need to sensitize the women dairy farmers and enable them to equal participation in dairying.

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