# Role of dairying in farm economy of rural and urban weaker sections milk producers in Bulandshahr district of western U.P.

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#### **Abstract**

Indian agriculture is a symbiosis of crop and animal production. About 70% of its population is dependent on income from agriculture. Dairying in our country is recognized as a subsidiary occupation that provides gainful employment especially to the under privileged weaker section of rural community. Dairying is an alternative to raise the employment and income of the families in the rural area. The present study was made to examine the role of dairying in farm economy of rural and urban milk producers of Bulandshahr district of Western U.P. during the year 2008-09. The data were collected from 70 rural and 70 urban milk producer's families of Bulandshahr (U.P.). The weaker section families (small, marginal farmers and landless labourers) in rural and urban milk producer's families were selected randomly. The results of the study revealed that dairying has played a significant role in contributing to the annual farm family income of the weaker section families of rural milk producers being about 35.58% in small farmers, 55.29% in marginal milk producers and 83.81% in case of landless labourers. While, in case of urban milk producer's families it was 40.42%, 62.03% and 83.14% to the total annual farm family income in small, marginal farmers and landless labourers, respectively. The overall income of dairying in the total annual family income in case of rural was 61.02% while, in urban it was 66.63%. It can be concluded that dairying has positive impact in contributing to the annual family income of rural and urban weaker sections milk producer's families. Thus, dairying can be a better source for weaker section families to raise their income.

Key Words: income, dairying, rural, urban, weaker section, milk, economy

#### Introduction

Agriculture and animal husbandry are the foremost occupations that man has adopted as a source of his livelihood right from beginning of civilization. Importance of these occupations can be realized with the fact that very existence of human beings is dependent on food, which is being provided by the agriculture and animal husbandry. Even today, the development of agriculture and animal husbandry holds the key to the development of Indian economy in general and rural economy in particular. Milk production is an important activity of Indian agriculture playing important role in the Indian economy and socioeconomic development of the country. The fact that dairying could play a more constructive role in

promoting rural welfare and reducing poverty is increasingly being recognized. Milk and milk products are most widely acceptable form of animal protein in India due to dominance of vegetarian population as milk is a wholesome food and capable of being produced in any part of India under varying agroclimatic conditions. Animal husbandry is the most important component of Indian agriculture supporting livelihood of more than two-thirds of the rural population especially marginal, small and landless farmers (Singh et al., 2018).

Dairying in India is an occupation of small farmers and about half of the rural population own milch animals. More than 70 million rural households engaged in milk production, the majority being small

and marginal farmers (Hemme et al., 2015). In India around 70% farmers are marginal (owning less than one hectare), and 77% of them earn even a miserable income of Rs. 6,067 per capita a year (Paroda, 2018).

It is well known fact that bulk of milk production in our country is the hands of millions of marginal and small milk producers scattered all over the country, who normally lack adequate resources and marketing facilities for the small quantities of milk produced by them. They were not in a position to reach the urban market and receive remunerative price of milk. Several schemes were introduced by the government to meet the demand of whole some milk of the urban consumers. Since the demand of milk has increased with increase in the population. Therefore, there is a need for raising milk production specially through small and marginal farmers to raise their income for their economic development. In general, farmers are keeping their animals just to utilize their available resources. They had never taken this as a planned business and not at all in economic way. The present study was planned to examine the role of dairying in farm economy of rural and urban weaker sections milk producers in Bulandshahr district of western Uttar Pradesh. Thus, present study would not only be filled in the information gap but would also be beneficial to milk producers, planners, policy makers, administrators and economist in formulating policies for the economic development of weaker section families in the area under the present study.

The present study was undertaken with the following objectives:

- 1. To know the farm resource structure on the farms.
- 2. To examine the income obtained from different enterprise followed on farm.
- 3. To find out the share of income through milk production in total family income.

#### **Materials and Methods**

The study was confined to Bulandshahr district in western Uttar Pradesh. The Bulandshahr district was purposively selected for the study because the dairy development facilities are well developed for increasing the milk production in the district. Bulandshahr district consists of sixteen development blocks, one blocks namely Bulandshahr, was selected for the present study purposively. Since, this block is near the district headquarter. After Selection of block the list of villages falling in Bulandshahr block was taken from the block headquarter. Then the whole

villages were divided into two categories i.e. villages located in the urban vicinity i.e. city boundary (Nagar Mahapalika) and secondly the villages located out of the city boundary (rural area) at different distances in rural area. After doing so, 5 villages from rural and 5 villages from urban areas were selected, randomly. After selection of villages, two separate lists of animal keeper of weaker section community small farmers (1-2 hectare), marginal farmers (> 1 hectare) and landless labourers were prepared for rural and urban areas. Then 70 cases from rural milk producers (14 small, 21 marginal and 35 landless) and 70 cases from urban milk producers (12 small, 16 marginal and 42 landless) were selected for the present study for the comparison of the economy of rural and urban milk producers. The final selection of cases of rural and urban milk producer's families was made purely on random basis from different categories based on proportion to its size. The study was based upon primary data. The primary data were collected with the help of pre-prepared schedules and questionnaires by personal interview method within four five meetings with the respondents. Thus, the survey method was used for the collection of data. The primary data related to the year 2008-09. The data obtained from different categories of rural and urban milk producers were analyzed with the help of tabular analysis for drawing the result. However, ratio and percentage have also been calculated for interpretation of data.

### **Results and Discussion**

Land area per farm:

The table 1 shows the land area per farm in case of rural and urban milk producers families. The table 1 indicates that the land area per farm overall average came to 1.26 hectare in case of rural. In different categories it came to 1.46 and 0.69 hectare

Table 1: Land area per farm in different categories of rural and urban milk producers

1.46
1 46
1.10
0.69
1.26
1.33
0.57
0.89

Table 2: Annual farm business income from milk per family in case of rural and urban milk producers.

(Rs)

Category	Net income from milk	Value of unpaid Family labour	Interest on owned fixed capital	Farm business income
Rural				
Small	32744.73	5319.81	4953.12	43017.66
Marginal	44562.53	5580.06	5003.04	55145.63
Landless	47357.55	5401.19	5074.25	57832.99
Urban				
Overall	43596.48	5438.58	5028.67	54063.73
Small	39268.18	5811.19	6199.16	32430.62
Marginal	51649.23	6595.70	5911.19	34807.92
Landless	44670.43	6401.49	5914.41	29590.90
Overall	45339.49	6344.69	5962.49	57646.67

on small and marginal farms, respectively. The table further reveals that in case of urban, the overall average land area per farm was 0.89 hectare. In different categories it was 1.33 hectare and 0.57 hectare on small and marginal farms, respectively. It can be concluded from the table that the land area per farm was highest in small categories of rural as compared to urban milk producers.

Annual farm business income from milk production:

The annual farm business income from milk production was also estimated. Farm business income is derived by adding the value of unpaid family labour and interest on owned fixed capital with net income as shown in table 2. The results in table 2 reveals that the overall average farm business income from milk came to Rs. 54063.73, while, net income from milk was Rs. 43596.48, value of unpaid family labour came to Rs. 5438.58 and interest on owned fixed capital came to Rs. 5028.67 per family in rural milk producer's families. In different categories it came to Rs. 43017.66, Rs. 55145.63 Rs. and Rs. 57832.99 in small, marginal and landless category, respectively. It shows that the farm business income was more in landless farms and lowest in small families. It was due to keeping of more numbers as well as better quality of animal by landless families. The table further indicates that the overall average farm business income from milk came to Rs. 57646.67 in case of urban milk producers per family. While, net income from milk came to Rs. 45339.49, value of unpaid family labour was Rs. 6344.69 and interest on owned fixed capital was Rs. 5962.49. The category-wise analyses indicate that the farm business income per family was Rs. 51278.53 on small farms, Rs. 64156.12 on marginal farms, and Rs. 56986.33 in landless families. It indicates that the farm business income was highest on marginal farms and lowest on small families of urban milk producers. It can be concluded that the farm business income from milk per family was highest in all categories of urban in comparison to rural. It was due to higher milk production per family and milk sold at higher price by the urban milk producers.

Annual farm business income through crop production per family:

The farm business income (F.B.I.) through crop enterprise was also estimated and shown by table 3. The table 3 indicates that in case of rural milk producers the overall average farm business income through crops per family came to Rs. 22524.91, while, it came to Rs. 19450.44 as net income from crops, Rs. 2350.91 as value of unpaid family labour and Rs. 723.56 as interest on owned fixed capital. In different categories it came to Rs. 63673.53 on small farms and Rs. 32634.01 on marginal farms of rural milk producers. It shows that the F.B.I. was higher on small farms than on marginal farms of rural milk producers. It was due to more land area on small farms. The table further reveals that the overall average farm business income through crops per family in case of urban milk producers was Rs. 16681.75 being Rs. 14283.18 as net income from crop production, Rs. 1867.23 as value of unpaid family labour and Rs. 531.33 as interest on owned fixed capital. The category wise analysis indicates that the F.B.I. through crop production was Rs. 61755.45 on small farms and Rs. 26666.07 on marginal farms of urban milk producers. It clearly shows that the F.B.I.

Table 3: Annual farm business income through crop production per family in case of rural and urb	an milk producers.
	(Rs.)

Category	Net income from crop production	Value of unpaid family labour	Interest on owned fixed capital	Farm business income	
Rural					
Small	55023.88	6602.76	2046.89	63673.53	
Marginal	8152.21	3434.54	1047.26	32634.01	
Overall	19450.44	2350.91	723.56	22524.91	
Urban					
Small	52909.07	6878.17	1968.21	61755.45	
Marginal	22807.13	3010.52	848.42	26666.07	
Overall	14283.18	1867.23	531.33	16681.75	

through crop production was maximum on small farms and minimum on marginal farms of urban milk producers. It was due to more land area on small farms. It can be concluded that the farm business income per family was higher on rural milk producers in comparison to urban milk producers. It was due to more land area in case of rural milk producers. Another researcher (Kashish et.al. 2017) in his study found that the dairy farming contributes significantly to the income of farmers particularly the small holder dairy farmers.

Annual source wise income per family:

The family income per year from different sources has also been examined and is shown in table 4. The table 4 indicates that in case of rural milk producers, the overall average family income per year from different sources came to Rs. 88603.62 per

family which is contributed by 61.02 percent through milk, 25.42 percent through crops, 2.70 percent through service, 3.99 percent through wages, 2.98 percent through cart loading and 3.90 percent through other sources. It shows that the milk production is the major source of income on landless rural milk producers families. The table further reveals that in case of urban milk producers, the overall average income per year per family from different sources came to Rs. 86517.01 which is contributed by 66.63 percent through milk, 19.28 percent through crops, 2.88 percent through service, 3.82 percent through wages, 3.34 percent cart loading and 4.05 percent other sources. It shows that the milk production is the major source of income in landless families and marginal farms as found in case of rural milk producers also. It can be concluded from the table that the family income per year was more in

Table 4: Annual income from different sources in different categories of rural and urban milk producers family. (Value in Rs. per family)

Category	y Milk	Crop	Service	Wages	Cart loading	Other sources	Total income
Rural							
Small	43017.66(35.58)	63673.53(57.67)	3643.38(3.01)	2971.43(2.46)	2872.63(2.38)	4718.33(3.90)	120896.96(100)
Marginal	55145.63(55.29)	32634.01(32.72)	2460.58(2.47)	3408.86(3.42)	2698.89(2.71)	3391.28(3.40)	99739.25(100)
Landless	57832.99(83.81)	-	1846.93(2.68)	3834.61(5.56)	2508.46(3.64)	2981.92(4.32)	69004.91(100)
Overall	54063.72(61.02)	22524.90(25.42)	2390.32(2.70)	3534.25(3.99)	2638.42(2.98)	3452.01(3.90)	88603.62(100)
Urban							
Small	51278.53(40.42)	61755.45(48.67)	3808.56(3.00)	2636.08(2.08)	2988.66(2.36)	4407.21(3.47)	126874.49(100)
Marginal	64156.12(62.03)	26666.07(25.78)	2638.95(2.55)	3281.69(3.17)	3076.07(2.97)	3616.84(3.50)	103435.74(100)
Landless	56986.33(83.14)	-	2056.76(3.00)	3503.83(5.12)	2785.23(4.06)	3208.90(4.68)	68541.05(100)
Overall	57646.67(66.63)	16681.75(19.28)	2490.14(2.88)	3304.30(3.82)	2886.58(3.34)	3507.57(4.05)	86517.01(100)

(Figures in parenthesis indicate percentage)

case of rural milk producers as compared to urban milk producers. It was mainly due to more income through crop production in case of rural milk producers. The contribution of dairying is about 61 percent in the family income of rural milk producers and 66 percent in case of urban milk producers. Thus, it clearly shows that the importance of dairying is increasing the income of milk producers to bring them above the poverty line of weaker sections families in both the categories. For the rural and urban milk producer's families The present findings can be supported by another researcher Nargunde (2013) who reported that 60-65% of the income of marginal and small scale farmers now comes from dairying. Dairying in rural areas surpassed crop production in terms of profit in marginal, small and medium sized holdings. For small scale farmers with irrigated land, dairying and crop production together were more profitable then crop farming alone. Kumar and Kumar (2017), also found that share of income through milk production in weaker section families of members was being about 27.07% in small farmers, 31.36% in marginal farmers and 72.29% in case of landless labourers while, in case of non-members it was 18.90%, 31.88% and 66.70% to the total annual farm family income in small, marginal farmers and landless labourers, respectively.

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