## A Study on cost and return in milk production on the farms under study

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#### **Abstract**

The Present study was conducted in two blocks viz Khandauli and Bah in Agra District, covered 05 Villages in each block, the Number of cases member and non member was 240 (120 cases members and 120 Non members). The cost of milk production per litre came the Rs. 9.26 and Rs. 9.87 in case of members and non-members respectively. The gross returns from milk production per family was 80894.44 in case of members and Rs. 66454.04 in case of non-members while the gross returns from milk per animal came to Rs. 35019.2 and Rs. 30635.94 in case members and non members, respectively. It can be conducted that the return are more in case of members as compared to non member an account better feeding by the members.

Key words: Non members, milk production, gross returns

#### Introduction

The importance of dairying is reckoned beyond the milk production. It has provided employment and a regular income to millions of small and marginal farmers and agricultural labourers. The significant role played by co-operatives in stimulating dairying has also proved to be an important source of progress. Thus, the need of dairy development is evident from the point of view of both the individual farmer and the nation. For the farmer, the establishment of a successful dairy enterprise would mean a higher gainful employment with regular flow of income and remunerative prices from the sale of milk. For the nation, dairy development would mean additional employment and income opportunities in the rural areas. The dairying has become an important subsidiary source of income for over 70 million of rural families and has assumed an important role in generating self employment opportunities. While our vast population needs for per capita consumption of milk of around 337g/day which is only in the middle rank of nation. our milk production presently (2017-18) exceeds 176.35 million tonnes (The Hindu).

# **Research Methodology**

The present study confined to Agra district of western U.P. A multistage stratified random sampling technique was adopted. One block having highest milk collection through PCDF and one block having lowest milk collection through PCDF were selected

purposively. Five villages from each selected block were selected randomly. At last 120 members of PCDF and 120 non members farmers were selected from selected 10 villages and were stratified in to small 1-2 ha, marginal below 1 ha, and land less. Laborers and data were collected through survey method.

#### **Results and Discussion**

The table 1 indicates that the overall average cost of milk production per liter was Rs. 9.26 in case of members. The category wise analysis shows that the cost of milk production per liter was Rs. 9.46 on small farms. Rs. 9.35 on marginal farms and Rs. 8.98 in case of landless families. It shows that cost of milk production was higher in case of landless families and lower on marginal farms.

The table further shows that cost of milk production per liter overall average came to Rs. 9.87 in non-members. The category wise analysis indicates that the cost of milk production per litre came to Rs.9.98, Rs.9.63 and Rs.10.38 in small, marginal and landless category, respectively. It indicates that the cost of milk production was maximum on small farms and minimum in landless families. From the table, it can also be concluded that cost of milk production per liter in members was lower in comparison to non-members. It was due to more milk production per animal on member's farms as compared to non member's farms on account of better feeding of animals by the members

Table 1: Cost of milk production per liter in different categories of members and non-members

Category	Milk production/ animal/year (liters)	Net maintenance cost/ animal/year(Rs.)	Per liter cost of milk production(Rs.)			
	Members					
Small farm	2673.49	25278.51	9.46			
Marginal farm	2763.35	25887.95	9.35			
Landless laborers	2382.03	21391.38	8.98			
Overall	2589.21	23989.69	9.26			
		Non-members				
Small farm	1853.45	18496.01	9.98			
Marginalfarm	2505.76	24131.41	9.63			
Landless laborers	2197.16	2382.03	10.38			
Overall	2275.84	2323.00	9.87			

in compared by PCDF.

The data presented in table 2 illustrate season wise gross returns from milk per family in different categories of members and non-members.

The table 2 shows that the overall average gross returns from milk came to Rs.80894.44 per family in case of members. It was found to be Rs. 24342.12, in rainy season, Rs. 33612.93 in winter season and Rs. 22939.39 in summer season. The gross returns were highest in winter season and lowest in summer season. The category wise analyses indicate that the returns on marginal farms were highest (Rs.86830.01) and lowest in case of landless families (Rs.75671.66). It was due to more milk produced on marginal farms

of members due to more number of animals per family. In case of non-members the per family overall average gross returns was Rs. 66454.08 being Rs. 20742.07 in rainy season, Rs.27839.89 in winter season and Rs. 17872.12 in summer season. Category wise analysis indicates that the gross returns from milk was Rs.52635.85on small farms, Rs.74210.80 on marginal farms and Rs.63000.98 in landless families. It was observed that the returns were highest on small farms. It was due to higher milk production on small farms. It can be concluded from the table that gross returns from milk per family was highest in all categories of members as compared to non-members. It was due to more milk production and sale of milk at

Table 2: Gross returns from milk per family in different categories of members and non-members families. (in Rs.)

Category	Rainy season	Winter season	Summer season	Total		
	Members					
Samll Farm	2367.77(29.47)	33729.93(41.99)	22917.24(28.53)	80317.94(100)		
Marginal Farm	26172.05(30.14)	35112.87(40.43)	25545.09(29.41)	86830.01(100)		
Landless laborers	23419.94(30.95)	31855.98(42.10)	20395.74(26.95)	75671.66(100)		
Overall	24342.12	33612.93	22939.39	80894.44		
(30.09)	(41.55)	(28.36)	(100)			
	Non-Members					
SmallFarm	16287.35(30.94)	22237.54(42.24)	14110.97(26.81)	52635.85(100)		
MarginalFarm	233323.41(31.42)	30980.69(41.74)	19906.7(26.82)	74210.80(100)		
Landlesslaborer	19459.31(30.89)	26489.32(42.05)	17052.35(27.06)	63000.98(100)		
Overall	20742.07(31.21)	27839.89(41.89)	17872.12(26.90)	66454.08(100)		

(Figures in parenthesis indicate percentage)

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Rainy season	Winter season	Summer season	Total		
Members					
10221.51 (28.23)	15707.25 (43.38)	10276.82 (28.38)	36208.58 (100)		
10816.65 (28.89)	15649.61 (41.81)	10963.54 (29.29)	37429.79 (100)		
9923.71 (30.95)	13498.29 (42.10)	8642.26 (26.95)	32064.26 (100)		
10537.69 (30.09)	14551.03 (41.55)	9930.48 (28.36)	35019.2 (100)		
Non-Members					
7433.27(29.65)	10944.45 (43.66)	6687.63 (26.68)	25065.35 (100)		
10208.90 (30.13)	14623.74 (43.16)	9048.52 (26.10)	33881.16(100)		
9135.85(30.89)	12436.32 (42.05)	8005.81 (27.06)	29577.98 (100)		
9558.54(31.20)	12841.4 (41.92)	8236.00 (26.88)	30635.94(100)		
	10221.51 (28.23) 10816.65 (28.89) 9923.71 (30.95) 10537.69 (30.09) 7433.27(29.65) 10208.90 (30.13) 9135.85(30.89)	Mem  10221.51 (28.23) 15707.25 (43.38)  10816.65 (28.89) 15649.61 (41.81)  9923.71 (30.95) 13498.29 (42.10)  10537.69 (30.09) 14551.03 (41.55)  Non-Me  7433.27(29.65) 10944.45 (43.66)  10208.90 (30.13) 14623.74 (43.16)  9135.85(30.89) 12436.32 (42.05)	Members  10221.51 (28.23) 15707.25 (43.38) 10276.82 (28.38)  10816.65 (28.89) 15649.61 (41.81) 10963.54 (29.29)  9923.71 (30.95) 13498.29 (42.10) 8642.26 (26.95)  10537.69 (30.09) 14551.03 (41.55) 9930.48 (28.36)  Non-Members  7433.27(29.65) 10944.45 (43.66) 6687.63 (26.68)  10208.90 (30.13) 14623.74 (43.16) 9048.52 (26.10)  9135.85(30.89) 12436.32 (42.05) 8005.81 (27.06)		

(Figures in parenthesis indicate percentage)

remunerative prices to D.U.S.S. by members.

The table 3 shows that the overall gross returns from milk came to Rs. 35019.2 per animal in case of members ranging from Rs. 9930.48 in summer season to Rs. 14551.03 in winter season. The table further reveals that category wise gross returns from milk came to Rs. 36205.58 on small farm's, Rs. 37429.79 on marginal farms and Rs. 32064.26 in landless families. It indicates that per animal gross returns was highest on small farms and lowest in landless families. It was due to more milk production on small farms in case of members. The table further indicates that the overall average gross returns per animal in case of non- members was Rs.30635.94. it was found to be Rs. 9558.54 in rainy season, Rs.12841.4 in winter season and Rs.8236.00in summer season. The results further reveal that gross returns in different categories of non-members were found to be Rs. 25065.35, Rs.33881.16 and Rs.29577.9n small, marginal and landless category, respectively. It indicates that the returns from milk was lowest on small farms and was highest on marginal farms.

It can be concluded from the table that gross returns per animal was higher in all categories of members as compared to non-members. It was due to the sale of milk at remunerative price by the members.

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