

Cost of milk production on the different farmers of weaker section group in Akola block of Agra district in U.P.

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Abstract

The study was conducted in Akola block of Agra district during the 2008-2009. The study covered 120 cases (40 small, 40 marginal and 40 landless labourers). The results indicated that the net maintenance cost per animal came more on small farms as compared to marginal farms and landless labourers. The study further revealed that the cost of milk production per litre was higher in case of landless labourers due to use of more purchased inputs as compared to small and marginal farmers. The cost of milk production per litre decreases with increase in herd size on all categories of farms.

Key words: Small, marginal farmers and landless labourers, milk production, maintenance cost

Introduction

Agriculture in general and livestock production in particular, is unique because of its diversity and location-specific requirements. A large number of poor households from resource poor area with difficult agro-climatic conditions in India derive their livelihood through livestock production. Animal husbandry is the most important economic activity in rural areas next to agriculture. These activities provide employment and income to the vast majority of the rural population. India's status in dairying is characterized by the fact that this country owns one of the largest livestock population in the world and now emerged as the largest global producer of milk with a record production level of 127 million mt (Economic Survey, 2011-2012). Though contribution of agriculture and allied sectors to the national gross domestic products (GDP) has declined during the last few decades. Livestock sector has been among of few high growth sectors in rural India. The milk production per lactations has increased. The per capita availability of milk of milk was 290 grams during the year 2011-2012, which may be due to the success of operation Flood programme. It amounted to 16.41 per cent share of India in the global milk production and having large number of Mich animals (Anonymsous 2006-2007). The present study was conducted with the following objectives-

- (i) To estimate the production of milk under different farm size as well as in different herd size groups in case of families under study.

- (ii) To examine the cost and returns in milk production in case of different herd size groups on the farms under study.

Methodology

The present study covered Akola block of Agra district and 10 villages. The total number of cases under study was 120(40 small, 40 marginal and 40 landless labourers). The small farmers, marginal farmers and landless labourers were classified into three herd size groups viz I herd size-(having one milch animal), II herd size-(having two milch animals),and III herd size-(three and more milch animals). The number of cases falling in I, II and III herd size groups was 14, 10, and 16 respectively in small farm size group. The number of cases falling in I, II and III herd size groups was 18, 12 and 10 respectively in marginal farm size group while in case of landless labourers the number of cases in I,II and III herd size groups came to 16,14 and 10 respectively. The data were related to year 2008-2009.

Results and Discussion

The Table 1 reveals that the overall average gross maintenance cost per animal in case of small farmers came to Rs.24041.40 per animal, (fixed cost being Rs.7472.45 and variable cost being Rs.16568.95).The overall average net maintenance cost came to Rs.22865.64 per animal. In case of I, II, and IIIrd herd size groups, net maintenance cost came to Rs.23103.71, Rs.23397.32 and Rs.22751.51 respectively. Thus, the net maintenance cost per animal was lowest on IIIrd herd size groups. The table further reveals that the per animal overall average gross maintenance cost came to Rs.22900.30 in case of Marginal farmers (being Rs.7286.15 as fixed and Rs.15614.15 as

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variable cost). The herd size group-wise analysis indicates that the net maintenance cost came to Rs. 22440.11 on I herd size group, Rs. 22545.21 on II herd size group and Rs. 21749.08 in III herd size group families. Thus the net maintenance cost per animal was maximum on II herd size group farms and minimum in case of IIIrd herd size of group families. The overall average net maintenance cost came to Rs. 22154.44 per animal. The per animal overall average gross maintenance cost came to Rs. 22532.50 in case of Landless labourers (being Rs.7216.82 as fixed and Rs.15315.68 as variable cost). The herd size group-wise analysis indicates that the net maintenance cost came to Rs.21768.44 on I herd size group, Rs. 21947.47 on II herd size group and Rs.21578.78 in III

herd size group families. Thus the net maintenance cost per animal was maximum on II herd size group and minimum in case of IIIrd herd size of group families. The overall average net maintenance cost came to Rs.21917.80 per animal.

The Table 2 indicates that the overall average cost of milk production per litre was Rs. 12.14 in case of small farmers. The herd size -wise analysis indicates that the cost of milk production per litre was Rs. 12.73 on I herd size farms, Rs. 12.48 on II herd size farms and Rs. 11.94 on III herd size families. It shows that cost of milk production was lowest in case III herd size families It was due to higher milk production per animal in case of III herd size families as well as lower net maintenance cost on the farm. The table

Table 1: Total maintenance cost per animals in different categories of Small, Marginal farmers and Landless labourers under different herd size groups.

(In Rs.)

Herd size Group	Fixed cost	Home produce	Variable cost Purchased inputs	Total variable cost	Gross maintenance cost	Dung Value	Net maintenance cost
Small farmers							
I	8401.26 (80%)	12751.16 (20%)	3187.79 (100%)	15938.95	24340.21	1236.50	23103.71
II	7648.22 (80%)	13528.28 (20%)	3382.07 (100%)	16910.35	24558.57	1161.25	23397.32
III	7141.67 (75%)	12570.81 (25%)	4190.28 (100%)	16761.09	23902.76	1151.25	22751.51
Overall	7472.45 (78.33%)	12978.96 (21.67%)	3590.49 (100%)	16568.95	24041.40	1175.76	22865.64
Marginal farmers							
I	8085.31	10615.55 (70%)	4549.53 (3%)	15165.08 (100%)	23250.39	810.28	22440.11
II	7580.89	10257.23 (65%)	5523.13 (35%)	15780.36 (100%)	23301.25	756.04	22545.21
III	6614.93	8709.88 (55%)	7126.27 (45%)	15836.15 (100%)	22451.08	702.00	21749.08
Overall	7286.15	9888.44 (63.33%)	5725.71 (36.67%)	15614.15	22900.30	745.86	22154.44
Landless labourers							
I	8193.18	7396.12 (52%)	6827.20 (48%)	14223.32	22416.50	648.06	21768.44
II	7201.87	3837.60 (25%)	11512.82 (75%)	15350.42	22552.29	604.82	22947.47
III	6652.87	3105.82 (20%)	12423.27 (80%)	15529.09	22181.96	603.18	21578.78
Overall	7216.82	4950.59 (32.33%)	10365.09 (67.67%)	15315.68	22532.50	614.70	21917.80

(Figures in parenthesis indicate percentage)

Table 2: Cost of milk production per litre in different herd size groups of small and Marginal farmers and Landless labourers under different herd size groups

Herdsize group	Milk production per animal per year (in litre)	Net maintenance per animal per year (Rs)	Per litre cost of of milk production (Rs)
Small farmers			
I	1815.00	23103.71	12.73
II	1875.00	23397.32	12.48
III	1905.00	22751.51	11.94
Overall	1883.37	22865.64	12.14
Marginal farmers			
I	1765.00	22440.11	12.71
II	1820.00	22545.21	12.39
III	1830.00	21749.08	11.88
Overall	1810.94	22154.44	12.23
Landless labourers			
I	1685.00	21768.44	12.91
II	1720.00	21947.47	12.76
III	1750.00	21578.78	12.33
Overall	1725.58	21917.80	12.70

further shows that cost of milk production per litre overall average came to Rs. 12.23 in case of marginal farmers. The herd size wise analysis indicates that the cost of milk production per litre came to Rs. 12.71, Rs. 12.39 and Rs. 11.88 I, II, and III herd size, respectively. It indicates that the cost of milk production per litre was more on I herd size families and minimum in case of III herd size families. It may be due to higher production of milk per animal in case of III herd size families as well as lower net maintenance cost on the farm. The table further shows that cost of milk production per litre overall average came to Rs. 12.70

in case of landless labourers. The herd size wise analysis shows that the cost of milk production per litre came to Rs. 12.91, Rs. 12.76 and Rs. 12.33 on I, II, and III herd size, respectively.

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