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COST OF PRODUCTION OF BUFFALO AND COW MILK AND ITS UTILIZATION IN AND AROUND MUZAFFARGARH CITY

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The cost of production of buffalo and cow milk and its utilization in and around Muzaffargarh city was determined. The average daily milk yield per buffalo and cow was 5.73 and 2.99 litres, respectively. The average consumption of green fodder, wheat straw and concentrates by an average buffalo and cow was 36.78 and 20.68; 5.82 and 3.34; 1.41 and 0.80 kg, respectively. The cost per litre of buffalo and cow milk was estimated at Rs. 4.01 and 4.27, respectively. Annual net profit in the same order was Rs. 2346.95 and 1109.60. The average age at first calving, average productive life, lactation period, dry period and quantity of milk fed daily to buffalo and cow calves, respectively was 1728 and 1291 days; $12\frac{1}{2}$ and 11 years; 412 and 321 days; 199 and 142 days; 703 and 495 ml.Per capita per day consumption of milk by the low, medium and high income groups was 273, 343 and 493 ml, respectively

INTRODUCTION

In Pakistan livestock are owned in small herds by about five million farm families and one million landless households. Livestock play an important role in the lives of about 30-35 million people or about 40 % of population in the country. In the past, the farmer was keeping animals for bullock power and meeting his own needs of milk and dairy products and unwanted animals were sold for slaughtering. However, during the last decade there occurred a change in traditional approach and as a consequence livestock production acquired importance as an economic entity. The activities of this subsector provide 10-25 % of income to small farmers and livestock producers depending on the accessibility to the market. Livestock and dairy farms provide the main asset base to raise and stabilize income of poor due to its more even distribution than landholdings and such other assets (Anonymous, 1988-89).

Keeping in view the importance of milk as a human food and its economic bearing on the producer, this study was planned to asses the cost of production of buffalo and cow milk and to determine the pattern of its utilization in and around Muzaffargarh city. It also provided general information such as average age at first calving, average productive life, lactation period, dry period, period of feeding milk to calf and average quantity of milk fed daily to calf.

MATERIALS AND METHODS

The universe of this study consisted of Muzaffargarh city and villages around it within a radius of 30 km. Twenty villages (ten on the road side and ten in the interior) were randomly picked up for the collection of data. Five respondents from each of the 20 villages were interviewed. Similarly, five respondents from each of the ten arbitrary sections of Muzafargarh city were interviewed according to the questionnaire. To evaluate the cost of milk production, the farmers were grouped into six categories according to their land holdings:

Category A: Landless
Category B: Marginal (0-2 hectares)
Category C: Small (2-4 hectares)

Category D: Medium (4-6 hectares)
Category E: Large (more than 6 hectares)
Category F: Professional ' Gowalas' / household buffalo and cow keepers in the city.

To determine the pattern of utilization of milk by the residents of this area, 150 respondents, different from those interviewed for cost of production, were interviewed at random. These respondents were categorized on the basis of their monthly income:

a) Low income group (average monthly income upto Rs.1000/-).
b) Medium income group (average monthly income upto Rs. 4000/-).
c) High income group (average monthly income more than Rs. 4000/-).

The data were collected through personal interviews. These data were then tabulated and analysed to draw suitable conclusions.

RESULTS AND DISCUSSION

Milk production: Average daily milk yield per buffalo and cow kept by various categoreis was 5.73 and 2.99 litres respectively in the area surveyed. These results are in partial agreement with those of Zafar (1985).

Feed consumption: The average consumption of green fodder, wheat straw and concentrates by an average buffalo and cow was 36.78 and 20.68; 5.82 and 3.34; 1.41 and 0.80 kg, respectively.

Cost of production: The cost per litre of buffalo and cow milk was estimated at Rs. 4.01 and 4.27, respectively. Net profit per buffalo and cow per year was observed to be Rs. 2346.95 and 1109.60 respectivly. It was found that costs per kg of milk were correlated with total lactation yield, lactation period and length of dry period. The production cost per kg of milk produced was less for high yielding animals. The input-output ratio was better for buffalo milk production (1.37) than for cow milk (1.31). The results of the present study are in agreement with the findings of Kumar and Raut (1971), Singh et al.(1981) and Zafar (1985).On average the maximum (47.88 %) expenditure on buffalo was incurred on feeding alone followed by expenditure on labour (29. 50 %), while in case of cow, feeding cost accounted for 44.89 % and labour cost was 28.06 %. The expenditure incurred on various items particularly on feeding and labour is in accordance with the findings of Reddy and Mathur (1980). It was observed that maintenance of buffaloes for milk production is more profitable and is liked more by owners of various categories in and around Muzaffargarh city.

The average age at first calving in buffalo and cow, average productive life, lactation period, dry period, period of feeding milk to calf & quantity of milk fed daily to buffalo and cow calves, was 1728 and 1291 days; $12\frac{1}{2}$ and 11 years; 412 and 321 days; 199 and 142 days; 703 and 495 ml, respectively. The results of the present study conform to those of Tariq (1987) and Bhatti (1988). Per capita daily consumption of milk by low, medium and high income groups was 273, 343 and 493 ml, respectively.

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