

## COMPARATIVE ECONOMICS OF BUFFALO AND COW MILK PRODUCTION IN KARNAL DISTRICT OF HARYANA

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### ABSTRACT

**The study conducted in Karnal district of Haryana revealed that milk production by rearing buffalo was more profitable as compared to that of cow. The gross income (Rs. 22249.52) and net income (Rs.3720.28) per buffalo per annum was significantly higher as compared to (Rs. 17498) and (Rs.2028) per cow per annum respectively. Similar pattern was observed in case of family labour income realized from buffalo and cow. The improved breed of the animals and better feeding might be helpful for increasing income and employment opportunities in the study area.**

**Key words:** Cost and returns of milk

Milk production in India is increasing at annual growth rate of 4.5 per cent as compared to 1 per cent in the world as a whole. Total milk production of the country has increased from 21 million tonnes in 1961 to 100 million tonnes in 2007-08. Consequently, the per day per capita milk availability has also increased from 124 grams in 1961 to 285 grams in 2007-08. The livestock sector contributed 4.22 per cent to the country's GDP and 20.71 per cent to agriculture GDP during the year 2005-06 (*Economic Survey 2007-08*). Livestock as an integral component of economic and social life of the rural community. Haryana is the 10th largest milk producing state of the country which produced 5367 thousand tonnes milk during the year 2006-07, which constitutes 5.32 percent of the total milk production of the country (*Economic Survey 2007-08*). Buffalo and cow are the main source of milk production in the country as well as in Haryana State. It is worthwhile to examine as to which one is more profitable in Haryana in farming situation. Keeping this view in mind, the present study was conducted in Karnal district of Haryana. The specific objective of the study was cost and return estimate of buffalo and cow milk production at prevailing production pattern of Haryana.

Multistage random sampling technique was employed for selection of sample for the study.

District Karnal of Haryana state was selected purposively out of the 19 districts of the State as the best breeds of animals are maintained in the district along with high quality of feeding management and also the best technology support available at the National Dairy Research Institute. A total of 40 buffalo and cow milk producer households was selected from two villages of the Nissing block of the district randomly. The data were collected on green fodder, dry fodder and concentrates fed to the animals, labour used for up keep of the animals, milk yield and all the other related parameters during the years 2006-07 with the help of pre- tested and well structured questionnaires. The tabular analysis was employed to work out cost of milk production and return received from sale of milk. The socio economic indicators of different categories of household were also studied.

The cost and return analysis of buffalo and cow milk production presented in Table 1 revealed that variable cost, fixed cost and total cost were 14.60, 24.99 and 16.51 per cent respectively more of buffalo than those of the cow. The total cost of buffalo milk production was Rs.18529.24 per annum per animal whereas it was Rs.15469.56 for cow milk production. Buffaloes were invariable fed with more quantity of green fodder and concentrates, which resulted, to comparatively higher cost of

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**Table 1:** Comparative Costs and Returns of Buffalo and Cow Milk Production

Particulars	(Rs. / annum / animal)		
	Buffalo	Cow	% of Difference
Green fodder	5869.52	5347.64	8.89
Dry fodder	2372.67	1958.73	17.45
Concentrates	2402.95	2022.05	15.85
Human labour charges	3710.83	3048.58	17.85
Miscellaneous expenses	463.50	279.55	39.69
Interest on working capital	592.78	506.26	14.60
Variable cost	14819.47	12656.55	14.60
Fixed cost	3116.99	2306.75	25.99
Total Cost (Variable + Fixed)	18529.24	15469.56	16.51
Gross return	22249.52	17498.19	21.35
Net return	3720.28	2028.63	45.70
Family labour income	7431.11	5077.21	31.68
Benefit – Cost Ratio	1.20	1.13	5.83

maintenance. The higher milk yield realized from buffaloes provided higher net return (Rs.3720.28) as compared to the cows milk production. Similarly the family labour income was also higher (Rs. 7431.11) in case of buffalo. The market price for buffalo milk was more as compared to the cow's milk. The benefit – cost ratio was more in buffalo milk production than the cow milk production. Thus, the cost and return were significantly higher for buffalo milk production as compared to cow milk. The buffalo milk production could be enhanced through increased use of concentrates and green fodder, as there was much potential in quality breeds of the animal. The buffalo milk production was more remunerative being Rs. 22249.52 gross income and Rs.3720.28 as net income per animal per year along with benefit cost ratio was 1.20. In case of cow milk production, gross income was Rs. 17498.19 and net

income Rs. 2028.63 whereas benefit – cost ratio estimated as 1.13. The good quality breeds of dairy animals could be more remunerative by better feeding and could generate better employment opportunities to the farmers in the study area.

### CONCLUSION

The study conducted in Karnal district of Haryana revealed the fact that milk production by rearing buffalo was more profitable as compared to that of cow. The gross income (Rs. 22249.52) and net income (Rs.3720.28) per buffalo per annum was significantly higher as compared to (Rs. 17498) and (Rs.2028) per cow per annum respectively. Similar pattern was observed in case of family labour income realized from buffalo and cow. The improved breed of the animals and better feeding might be helpful for increasing, income and employment opportunities in the study area.

### REFERENCE

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