

ASSESSMENT OF EXISTING MILK PRODUCTION, CONSUMPTION AND MARKETING PATTERNS FOR MILK PRODUCED BY DAIRY CATTLE IN CHITWAN, NEPAL

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Introduction

- Dairy sub-sector shares more than 60% livestock sector contribution to Gross Domestic Product (CBS 2010) and has been contributing to draw urban capital to rural area (NEPC 2014).
- There are small scale farmers rearing cattle using traditional system to meet the sustenance needs of their family. They lack the awareness of managerial and environmental factors affecting production.
- In addition, the lower milk quality and productivity has set drawbacks in commercialization of this sector (NEPC 2014), (Timsina, K.P. 2010)

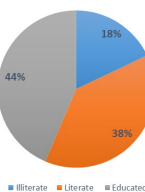
Methodology

- A structured questionnaire-survey was held among 41 households in Phoolbari Village of Chitwan such that each respondent reared at least one dairy cattle at the time of survey.
- Sampling and analysis of milk from each cow was done to determine SNF% and Fat%.
- Other data were obtained from dairy cooperatives where farmers sold their milk.
- Data analysis was performed using IBM SPSS.

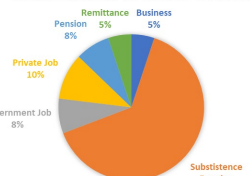
Results and Discussion

- The average daily milk yield per cow was 9.24 ± 0.21 liters with $3.90 \pm 0.09\%$ fat and $7.92 \pm 0.07\%$ SNF, out of which 7.96 ± 0.48 liters of milk was sold per day.
- 17% of respondents used urea molasses mineral blocks (UMMB) for supplemental feeding.
- The estimated weight of cattle on average using Schaeffer's formula was 333.27 ± 8.44 kgs. As, cattle cannot be sold for meat in Nepal, management of unproductive cows has hindered commercialization of cattle rearing, which would otherwise have fetched good sum of money through sales of unproductive cattle.

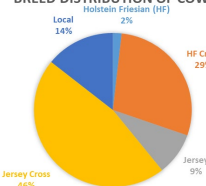
Educational Status



MAJOR SOURCE OF FAMILY INCOME

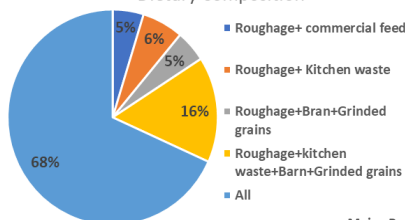


BREED DISTRIBUTION OF COW

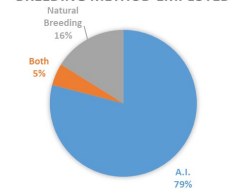


- The average dry period was 61.55 ± 1.76 days.
- The average payment received by the farmer was Rs. 44.20/liter. The average price paid by consumer was Rs. 74.5/liter. Huge difference exists between the farmers price and consumers price possibly because of middlemen's play in the supply chain.
- Farmers receive money on the basis of fat and SNF and consumers pay on the basis of quantity of milk.
- A Dairy farmer was able to make an income of NRs. $107,114.64 \pm 6457.38$ per annum per lactating cattle.
- On average, 98.45 ± 5.11 kg milk protein per lactating cattle per annum was supplied to the community

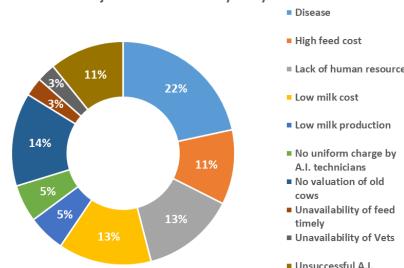
Dietary Composition



BREEDING METHOD EMPLOYED



Major Problem Faced by Dairy Farmers



Schaeffer's formula
 Weight (Lbs.) = $LG^2/300$
 Where,
 L - Length from point of shoulder to point of buttocks (inches)
 G - Chest girth of the animal (inches)

Conclusion

- Dairy husbandry has been established as a major channel for supplying high quality Animal Source Food (ASF) to the community.
- This ASF can be supplied at a cheaper price to the consumers, yet fetching the farmers a greater amount of profit by shortening the supply chain thereby reducing middlemen's foul play.
- Overall production and productivity can be further increased by solving major problems of the farmers that hinder maximum input utilization for maximum production.
- Governmental and nongovernmental intervention must be made to aware the farmers about improved feeding and breeding practices.

References

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