

Study on Marketed Surplus, Disposal pattern, Marketing Channel of Milk Households in Varanasi District of Uttar Pradesh

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Abstract

The present study entitled “Study on Marketed surplus, consumption, disposal pattern and marketing channel of milk households in Varanasi district of Uttar Pradesh”. Varanasi district of Uttar Pradesh was purposively selected for the study. The Vidhyapeeth block was purposively selected and the two villages Kandwa & Chitapur and two mandies were randomly selected namely Sheergate milk mandi, and Lanka milk mandi. From each of the selected village, ten milk producer and from each mandi, ten milk producers were selected using simple random sampling method. It was observed three marketing channels (Producer-Consumer, Producer–Private Dairy companies–Retailer-Consumers and Producer-Milkman-Consumer) in the study area. In Channel-I was found to be more popular dealing major share of the total quantity sold and about (66.49 percent) volume of cow and (83.06 percent) volume of buffalo was sold through this channel, whereas only (4.86 percent) of produce keep it by producers for their requirement. Milk producer sold maximum amount of their produce to consumers' than milkman. This channel is mainly adopted by milk producer in study area. In channel-I middlemen is not involve. Therefore no commission has been paid to them. In marketing channel -III milkman plays the role of middlemen who collects produce from milk producers' and sells it door to door or to the final consumers.

INTRODUCTION

Milk, a white liquid produced by the mammary glands of mammals, serves as the primary source of nutrition for young mammals before they can digest other types of food. Early-lactation milk contains colostrums, which carries the mother's antibodies to its young, reducing the risk of various diseases. Milk and its products are rich in essential nutrients, including protein, calcium, phosphorus, vitamin B2, and vitamin B12. These products are particularly beneficial for adults, children, and people of all ages. Milk provides calcium for strong bones, proteins crucial for brain development and tissue growth, vitamin A for normal vision, and vitamin D for

calcium absorption. Health experts recommend consuming two glasses of milk daily. Research indicates that a child who drinks a glass of milk meets 35 percent of their protein requirements, 52 percent of their calcium requirement, and 98 percent of their vitamin B12 requirement (Yayar, 2012).

Total milk production in the country is 230.58 million tones and the per-capita availability of milk is 459 grams per day. That's a significant increase of 3.83 percent compared to the estimates from the previous year. Over the past decade (from 2014-15 to 2022-23), India's milk production has grown at an impressive CAGR of 5.85%. Back in 2014-15, the country produced 146.31 million tonnes of milk, and now it has surged to over 230 million tonnes. India contributes nearly 24.64 percent of the global milk production. The average yield per animal per day for exotic/crossbred is 8.55 Kg/day/Animal and for indigenous/non-descript are 3.44 Kg/day/Animal. Top 5 Milk producing States are: Uttar Pradesh (15.72 percent), Rajasthan (14.44 percent), Madhya Pradesh (8.73 percent), Gujarat (7.49 percent), Andhra Pradesh (6.70 percent).

Marketed surplus of milk and factors affecting it, marketing cost, margin and price spread were studied. The marketing of milk in Jammu region revealed that producer's share in the consumer rupee was 93.14 percent, 88.78 percent and 86.17 percent in the first (Producer Consumer), second (Producer -Vendor -Consumer) and third (Producer -Vendor -Processor) marketing channels, respectively, **(Singh and Dwivedi (2014))**. Revealed that production, marketable surplus and marketed surplus of milk per household were 7.16 lit., 5.56 lit. and 2.81 lit., respectively. Marketed surplus of milk (39.01 percent) was lower than marketable surplus of milk (77.65 percent), **(Meena, et al. (2015))**. Studied the overall marketed surplus was around 84 percent, and herd size, price of milk, operational land holding and family size were significant factors influencing the marketed surplus of milk. Approximately 65 percent of milk was disposed of through four traditional marketing channels identified in the study region, **(Mohapatra and Sendhil (2023))**.

METHODOLOGY:

Varanasi district of Uttar Pradesh was purposively selected for the study. There are eight Blocks in Varanasi district namely Arziline, Harahua, Sevapuri, Chiraigaon, Cholaipur, Baragaon, Pindra, Kashi "Vidhyapeeth, The Vidhyapeeth block was purposively selected for the study considering the presence of large number of milk Producers. In the selected block (Kashividhyapeeth), the two villages Kandwa and Chitaipur were randomly selected. In Varanasi district, a large number of milk mandies and local milk markets are available. To conduct the study, total two mandies were randomly selected namely Sheergate

milk mandi, and Lanka milk mandi. From each of the selected village, ten milk producer and from each mandi, ten milk producer were selected using simple random sampling method.

RESULTS AND DISCUSSION

Analysis of marketable surplus of milk through different channels:

In the study area there are three marketing channels observed. The below table shows the marketable and marketed surplus of milk of channel I (Producer -Consumer) in the study area:-

Table 1: Marketable surplus and marketed surplus of milk through channels-I.

Particulars	Total production (Liters)	Total requirement (Liters)	Marketable surplus (Liters)	Marketed Surplus (Liters)	% of as production
Cows	165155	18423	146732	146732	86.64
Buffaloes	312550	12440	300110	300110	96.01

A perusal table 1: revealed that total milk production of cows through channel-I was 165155 liters and the total requirement was 18423 liters so the marketable and marketed surplus was 86.64 percent. Same as the total production of buffaloes 312550 liters and requirement was 12440 liters and the marketable surplus of Buffaloes through channel-I was 96.01 percent.

The marketable and marketed surplus of milk of channel II (Producer –Private Dairy companies–Retailer- Consumers) in the study area:-

Table 2: Marketable surplus and marketed surplus of milk through channels-II

Particulars	Total production (Liters)	Total requirement (Liters)	Marketable surplus (Liters)	Marketed Surplus (Liters)	% of as production
Cows	47620	6820	40800	40800	85.67
Buffaloes	32200	4850	27350	27350	84.93

A perusal table 2: revealed that total milk production of cows through channel-II was 47620 liters and the total requirement was 6820 liters so the marketable and marketed surplus was 85.67 percent. Same as the total production of buffalo 32200 liters and requirement was 4850 liters and the marketable marketed surplus of Buffaloes through channel-II was 84.93 percent.

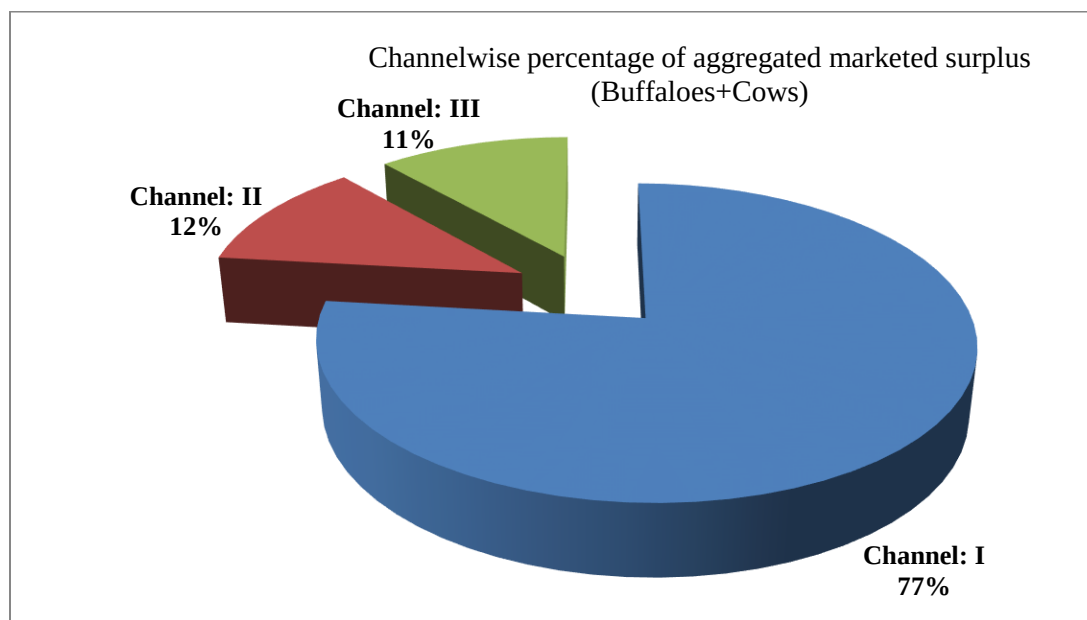
Table 3: Marketable surplus and marketed surplus of milk through channels-III

Particulars	Total production (Liters)	Total requirement (Liters)	Marketable surplus (Liters)	Marketed Surplus (Liters)	% of as production
Cows	37080	3950	33130	33130	88.52
Buffaloes	39660	5820	33840	33840	85.32

A perusal table 3: revealed that total milk production of cows through channel-II was 37080 liters and the total requirement was 3950 liters so the marketable and marketed surplus was 88.52 percent. Same as the total production of buffalo 39660 liters and requirement was 5820 liters and the marketable marketed surplus of Buffaloes through channel-III was 82.32 percent.

Sale of milk (Cow and Buffaloes) to different marketing channels:

The volume of milk was sold to three different marketing channels. Through channel-I total volume sold by the producers was 446842 liters that was 76.78 percent, as through channel-II it was 68150 liters that was 11.71 percent and through channel-III was 66970 liters that was 11.50 percent of total marketed surplus. It was observed the channel-I was most popular for highest marketable surplus.



Pie chart: 1 Total marketed surplus (Cows and Buffaloes) through different channels

Marketing channels

Marketing channels are routes through which milk move from producer to consumers'. The length of the channel varies depending on the form of consumers' demand. There were mainly three marketing channels observed in marketing of milk in the study area:

Channel I- Producer –Consumer

Channel II- Producer –Private Dairy companies– Retailer- Consumers

Channel III- Producer –village vendors/local collectors- Consumers

Marketing channels for milk were identified in the study area was made through producer-consumer (channel-I), Producer –Private Dairy companies Retailer Consumers (channel-II), Producer –village vendors/local collectors- Consumers (channel-III).

Channel-I was found to be more popular dealing major share of the total quantity sold and about (66.49 percent) volume of cow and (83.06 percent) volume of buffalo was sold through this channel, whereas only (4.86 percent) of produce keep it by producers for their requirement. In **Channel-II** about (18.48 percent) volume of cows, (7.56 percent) volume of buffaloes was sold through this channel, where as only (1.83 percent) of produce keep it by producers for their requirement. In **Channel-III** about (15.01 percent) volume of cows, (9.36 percent) volume of buffaloes was sold through this channel, where as only (1.54 percent) of produce keep it by producers for their requirement.

Total volume(buffaloes +Cows) was sold (93.53 percent) through channel-I, (85.37 percent) through channel-II and (87.26 percent) through channel-III and (6.46 per cent) through channel-I, (14.62 percent) through channel-II and (12.73 percent) through channel-III produce keep it by producers for their requirement channel-I (Producer- Consumer), channel-II (Producer –Private Dairy companies– Retailer- Consumers) and channel-III (Producer –village vendors/local collectors- Consumers) respectively. Total(34.79 percent) volume of cow and (56.96 percent) volume of buffaloes was sold through both channels, whereas only (8.24 percent) of produce keep it by producer for their requirement.

CONCLUSION

The study concluded that there are three marketing channels (Producer-Consumer, Producer–Private Dairy companies–Retailer-Consumers and Producer-Milkman-Consumer) in the study area. In Channel-I was found to be more popular dealing major share of the total quantity sold and about (66.49 percent) volume of cow and (83.06 percent) volume of buffalo was sold through this channel, whereas only (4.86 percent) of produce keep it by producers for their requirement. Milk producer sold maximum amount of their produce to consumers' than milkman. This channel is mainly adopted by milk producer in study area. In channel-I middlemen is not involve. Therefore no commission has been paid to them. Maximum selling of milk is take place through this channel. In marketing channel -III milkman plays the role of middlemen who collects produce from milk producers' and sells it door to door or to the final consumers.

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