



Perceived Constraints in Marketing of Milk during Normality and Due to Lockdown in West Bengal

Rakesh Roy¹

Malda Krishi Vigyan Kendra, Uttar Banga Krishi Vigyan Kendra, Ratua, Malda-732205, West Bengal

ABSTRACT

The study was undertaken with an objective to assess the perceived constraints in marketing of milk during normality and due to lockdown in West Bengal. In all, 120 dairy farmers were randomly selected using two marketing channels such as (i) Producer – Consumer (ii) Producer – Milkman - Consumer having equal proportion from both the channels from two blocks of Malda district. The perceived constraints faced and suggestions in improving the marketing of milk were analyzed through Garrett ranking techniques. The study showed that the major perceived constraints in marketing of milk during normality were less remunerative price for milk followed by high seasonal fluctuation in demand and price of milk. But during the lockdown, the major perceived constraints were no market opportunities to sell their milk followed by problem of transportation and small opening hours of market. The suggestive measures recommended by the milk producer were to stable market and market rate of milk followed by proper marketing channel and higher opportunities in dairy product marketing. Further, creation of basic infrastructure needs to be done to strengthen the marketing of milk in the region.

Key Words: COVID-19, Lockdown, Marketing, Milk, Perceived constraints

INTRODUCTION

According to the 20th Livestock Census (2019) India has total livestock population of 535.78 million showing an increase of 4.6 per cent over livestock census-2012 where West Bengal has highest growth rate of 23.32 per cent. Further, the dairy cattle population was **145.12 million** which has increased by **18 per cent** over the previous census of 2012 (DAHD, 2019). India's per capita milk availability in Indian Fiscal Year 2019-2020 was 406 g/day with fluid milk production coming in at 198.4 MMT and India's per capita milk consumption was 406 g/day (2019-2020) which surpasses the world average of 305 g/day in 2020 (USDA, 2021). In spite of all these potential facts of India dairy sector, it has to be mentioned that Indian dairy sector was still traditional with very less productivity compared to developed countries. There were various perceived constraints by the small-scale dairy farmers

in breeding, feeding, management, livestock healthcare and even marketing of milk and dairy products. Marketing of raw milk or its product with remunerative price was a real challenge for small scale dairy farmers.

Further with the outbreak COVID-19, lockdown was one of the common options suggested by World Health Organisation to curb the pandemic (WHO, 2020). India had declared lockdown all over India from 25th March, 2020 for 21 days to curb the pandemic (Dev, 2020) which was further extended with some sort of relaxation in agriculture sector. Lockdown had badly affected in all the agriculture and allied sectors. Among these sectors, products with most perishability were the worst affected due to lockdown and dairy was one of them. Keeping these in mind, a study was undertaken to assess the perceived constraints in marketing of milk during normality and due to lockdown in West Bengal.

*Corresponding author: rakeshvetext@gmail.com

Table 1. Constraints in marketing of milk during normality.

Sr. No.	Perceived constraint	Producer-Consumer (n=60)	Producer-Milkman-Consumer (n=60)	Total (N=120)	Rank
1	Less remunerative price for milk	70.13	69.65	69.89	I
2	High seasonal fluctuation in demand and price of milk	60.17	59.98	60.08	II
3	Poor institutional support for marketing of milk or dairy products	62.87	62.28	62.58	III
4	Milk selling has cultural and religious influence in the locality	58.73	59.47	59.10	IV
5	High exploitation by middleman	55.33	55.33	55.33	V
6	Non-existence of cooling or processing centre for milk	41.75	41.52	41.63	VI
7	High dependency on local market	45.28	47.62	46.45	VII
8	Poor consumption behaviour of milk locally	39.35	38.85	39.10	VIII
9	Lack of awareness in marketing strategy	31.82	30.22	31.02	IX
10	No initiative by Govt. agencies for marketing of milk	29.57	30.08	29.83	X

MATERIALS AND METHODS

The study was purposively conducted in Malda district due considerable number of cattle population and per capita milk availability in the state. In all, 120 dairy farmers were randomly selected from two blocks of Malda district that were using two marketing channels for marketing their produce such as (i) Producer – Consumer and (ii) Producer – Milkman - Consumer with equal proportion from both the channels. The perceived constraints and suggestions in marketing issues were analyzed through Garrett ranking techniques (Garrett, 1981). The respondents were asked to rank the given factors of perceived constraints and suggestions. The orders of merit, assigned by the respondents were converted into ranks by using the following formula.

Percent Position of each rank = $100 (R_{ij} - 0.5) / N_j$

R = Rank given for i^{th} factor by j^{th} individual; N= Number of factors ranked by j^{th} individual.

The percentage position of each rank obtained was converted into scores as per the table given by Henry Garrett. The scores of individual respondents were added together for each factor and divided by the total number of the respondents. The mean scores for all the factors were arranged in order of merit and inference drawn.

RESULTS AND DISCUSSION

The two extremes of marketing process in general consist of a producer and a consumer. In between the producer and the consumers there might be various channels through which the product passes to the end users. Various researchers had pointed out that the channels vary from 2 to 7 in marketing of milk, but the study was done on the two most traditional marketing channels of producer to consumer and producer to milkman to consumer and their perceived constraints during normality and during lockdown. Further, probable suggestion for enhancing the marketing opportunities were also assessed.

Perceived Constraints in Marketing of Milk

Table 2. Constraints perceived in marketing of milk due to COVID-19 and lockdown issues.

Sr. No.	Perceived constraint	Producer-Consumer (n=60)	Producer-Milkman-Consumer (n=60)	Total (N=120)	Rank
1	No market for milk	72.38	71.60	71.99	I
2	Problems of transportation	60.05	60.70	60.38	II
3	Small opening hours of market	55.70	53.15	54.43	III
4	Less remunerative price for milk	47.73	49.92	48.83	IV
5	High exploitation by middleman	49.25	47.68	48.47	V
6	Non-existence of cooling or processing centre for milk	32.62	34.55	33.58	VI
7	Inadequate marketing channel	29.27	29.40	29.33	VII

Marketing constraints during normality

The study showed that perceived constraints in marketing of milk during normal year (i.e., no lockdown issues) were less remunerative price for milk had highest mean score (69.89) and ranked 1st followed by high seasonal fluctuation in demand and price of milk (2nd) and poor institutional support for marketing of milk or dairy products (3rd). The study also showed that milk producers had ranked constraints in a similar way whether they sold their produce directly or through milkman to the consumer (Table 1). Further, exploitation by milkman was not among the top ranked constraints instead the dairy farmers perceived milkman as one of the potential players in milk marketing channel. No initiative by the government agencies for marketing of milk was least perceived constraints due to the fact of small scale produce by the dairy farmers and traditional methods of dairy farming practices. Teklay and Haji (2019) had reported similar perceived constraints in marketing of milk in their study. Saran *et al* (2020) reported that poor price of milk, poor sale ability of value-added products and exploitation by the middleman were the three major perceived constraints in Rajasthan. Tewari *et al* (2017) reported that the major constraints related to milk marketing in the study area were lack of storage facilities, high price of milch cattle, high transportation cost and improper grading. Absence

of government marketing cooperatives was among the last ranked constraints perceived by fisherman in Tripura (Das and Kumar, 2020).

Marketing constraints due to lockdown

The study showed that perceived constraints in marketing of milk due to COVID-19 and lockdown issues were no market opportunities to sell their milk had highest mean score (71.99) was ranked 1st followed by problem of transportation (2nd) and small opening hours of market (3rd). Further, the result shows that the dairy farmers using either producer-consumer channels or producer-milkman-consumer faced similar types of constraints for marketing of milk (Table 2). Roy *et al* (2022) reported similar types of constraints in marketing of mangoes due to lockdown in the region. A study on fish harvest and post-harvest losses in Ludhiana shows that fish market trade, supply chain was badly affected like other livestock enterprises due to the pandemic and lockdown (Kumar and Datta, 2020).

Suggestions to improve marketing of milk

The suggestive measures recommended by dairy farmers to improve marketing opportunities were stable market and market rate which had highest mean score (69.04) was ranked 1st followed by proper marketing channel (2nd) and higher opportunities in dairy product marketing (3rd). All the dairy farmers irrespective of use of milk

Table 3. Suggestions to improve marketing of milk.

Sr. No.	Perceived constraint	Producer-Consumer (n=60)	Producer-Milkman-Consumer (n=60)	Total (N=120)	Rank
1	Stable market and market rate of milk	70.02	68.07	69.04	I
2	Proper marketing channels	58.20	61.63	59.92	II
3	Higher opportunities in dairy product marketing	55.45	52.38	53.92	III
4	Establishment of cooling and milk processing centre	49.02	49.92	49.47	IV
5	Elimination of middlemen	49.63	47.68	48.66	V
6	Higher institutional support for marketing of milk or dairy products	34.68	35.28	34.98	VI
7	Cooperative marketing network or Farmer Producer Company	30.00	32.03	31.02	VII

marketing channels in the study had given similar ranks to improve the marketing opportunities of milk. One of the interesting facts that came out from the study was that the milk producers had not felt for cooperative marketing network or formation of Farmer Producer Company for milk and therefore ranked as last suggestion of improving the marketing opportunities of the region. This might be due to the reason that majority of the dairy farmers were small-scale traditional milk producer and using traditional marketing channels. Njarui *et al* (2010) recommended that consideration should be given to processing of storable products such as ghee and cheese as these are processed and successfully marketed by dairies

CONCLUSION

The existing marketing system of milk in Malda district is traditional and primitive which depend on the sweet seller for the usage of their milk. It has not proved to be adequate and efficient. Farmers were not able to their surplus produce remuneratively and there were widespread distress sales. Further, the sudden lockdown has created a huge problem in selling of milk even no market for their produce due to closure of sweet shops and short opening hours of the market. The milk producers have faced huge loss

due to non-availability of market in the year 2020 and similarly poor market and poor remunerative price of milk in the year 2021. Therefore, for the sake of the small-scale dairy farmers, the policy makers need to improve the marketing channels with stable market and market rate for milk. Further, establishment of basic infrastructure such as cooling and processing centre needs to be done to strengthen the marketing of milk in the region.

ACKNOWLEDGEMENT

The author is highly thankful to the respondents and Dr. Ashim Sarkar for all their cooperation during the data collection.

REFERENCES

- DADH (2019). 20th Livestock Census. <https://static.pib.gov.in/WriteReadData/userfiles/key%20results.pdf> Accessed on Feb 15, 2021.
- Das A and Kumar N R (2020). Constraints faced by the fish consumers and marketing agents in Tripura. *J Krishi Vigyan* (Special Issue): 54-58.
- Dev S M (2020 April 8). Addressing COVID-19 impacts on agriculture, food security, and livelihoods in India. International Food Policy Research Institute (IFPRI) Blog. <https://www.ifpri.org/blog/addressing-covid-19-impacts-agriculture-food-security-and-livelihoods-india> Accessed on October 16, 2021.

Perceived Constraints in Marketing of Milk

- Garrett H E (1981). *Statistics in Psychology and Education*. Published by Vakils, Feffer and Simons Ltd., Mumbai.
- Kumar J and Datta SN (2020). Assessment of fish harvest and post-harvest losses in Ludhiana district of Punjab - A case study. *J Krishi Vigyan* (Special Issue): 6-10
- Njarui D M G, Gatheru M, Wambua J M, Nguluu S N, Mwangi D M and Keya G A (2010). Challenges in milk processing and marketing among dairies in the semi-arid tropical Kenya. *Livestock Res Rural Dev* **22**, Article#35. from <http://www.lrrd.org/lrrd22/2/njar22035.htm> Accessed on March 2, 2022.
- Roy R, Das S, Sarkar V, Das B, Mondal A, Rudra B C, Bhowmik P and Majumder D (2022). Marketing of mango: perceived constraints during normality and due to lockdown in West Bengal. *Indian J Ext Edu* **58**(1): 176-179.
- Saran D, Sharma M and Yogi V (2020). Constraint in production and marketing of milk in rural areas of Bikaner district in Rajasthan. *Int J Curr Microbiol App Sci* (Special Issue)-**11**: 3057-3063.
- Teklay Z and Haji J (2019). Dairy production and marketing constraints in the urban and peri-urban settings of Ethiopia: An implication for poor performance of the dairy sector at small-scale farms. *Asian J Res Anim and Vet Sc* **4**(4): 1-10
- Tiwari H, Bhatt S and Goutam Y (2017). Price spread, efficiency and constraints in marketing of milk: a case study of Varanasi district, Uttar Pradesh. *Trends in Biosciences* **10**(9):1728-1731
- USDA (2021). Dairy and Products Annual – 2021. https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Dairy%20and%20Products%20Annual_New%20Delhi_India_10-15-2021.pdf Accessed on February 15, 2021.
- World Health Organization (WHO) (2020). Coronavirus disease (COVID-19) Pandemic. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019> Accessed on October 16, 2021.

Received on 27/3/2022

Accepted on 24/9/2022