



ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2023; 12(2): 2209-2212
© 2023 TPI

www.thepharmajournal.com

Received: 11-12-2022

Accepted: 14-01-2023

Sujit Meshram

Department of Veterinary and Animal Husbandry Extension Education, Nagpur Veterinary College, MAFSU, Nagpur, Maharashtra, India

Dr. Sariput Landge

Assistant Professor, Department of Veterinary and Animal Husbandry Extension Education, Nagpur Veterinary College, MAFSU, Nagpur, Maharashtra, India

Dr. Vaishali Banthiya

Assistant Professor and Head, Department of Veterinary and Animal Husbandry Extension Education, Nagpur Veterinary College, MAFSU, Nagpur, Maharashtra, India

Dr. Jeevan Chahande

Associate Professor, Department of Livestock Production and Management, Nagpur Veterinary College, MAFSU, Nagpur, Maharashtra, India

Dr. Atul Dhok

Assistant Professor, Department of Animal Nutrition, Nagpur Veterinary College, MAFSU, Nagpur, Maharashtra, India

Dinesh Patil

Assistant Professor, Department of Animal Genetics and Breeding, Nagpur Veterinary College, MAFSU, Nagpur, Maharashtra, India

Corresponding Author:

Dr. Sariput Landge

Assistant Professor, Department of Veterinary and Animal Husbandry Extension Education, Nagpur Veterinary College, MAFSU, Nagpur, Maharashtra, India

Constraints analysis of livestock markets in eastern Vidarbha region of Maharashtra

Sujit Meshram, Dr. Sariput Landge, Dr. Vaishali Banthiya, Dr. Jeevan Chahande, Dr. Atul Dhok and Dinesh Patil

Abstract

The study entitled “Constraints analysis of Livestock Markets in Eastern Vidarbha Region of Maharashtra” was carried out in the purposively selected Nagpur, Wardha, Gadchiroli, Bhandara, Gondia, and Chandrapur districts of Maharashtra. Four livestock markets from each district were selected to make the final sample size of 24 livestock markets. Respondents from these livestock markets were selected from three categories viz. livestock owner (5 from each livestock market), middlemen / broker (5 from each market), and LDOs (Livestock Development Officers). Thus, a total of 264 respondents (120 livestock owners, 120 middlemen, and 24 LDOs) were selected as respondents. Among the constraints about lack of basic amenities, the major ones were lack of information regarding pricing patterns, followed by the high cost of transportation and high labor cost. Regarding the lack of infrastructural facilities, the major constraints were high entry and exit fees and inadequate availability of quality feed and fodder. As regards constraints about lack of sanitary facilities the major ones predisposed to infectious diseases, lack of hygiene and sanitation followed by the lack of drainage system and lack garbage disposal system. Regarding lack of operational/ marketing facility, the major constraints were a ring of middlemen and no standard practice of price fixation. No standard criteria of price fixation in the market, lack of faith by owners, and lack of training programmes on livestock marketing were the major constraints for livestock brokers. The major constraints faced by the Livestock Development Officer were, non-availability of official post as a veterinarian in the market and the lack of basic infrastructure facilities.

Keywords: Livestock markets, constraints analysis, marketing facility

Introduction

The livestock sector is an integral part of India's agriculture and it is also an important part of the overall economy in terms of employment, income, and earnings of foreign exchange for the country. (Handage 2017) ^[1]. The growth of the dairy industry with milk production has increased by three folds in the last few decades and it has been a commendable achievement and is well recognized. India possesses 303.76 million bovines, 74.26 million sheep, 148.88 million goats, 9.06 million pigs, and 851.81 million poultry. (Livestock Census, 2020): Livestock includes cows, buffalos, sheep, goats, camels, horses, asses, mules, and poultry and their products. Maharashtra is one of the states in India blessed with different livestock species which provide food and also supply other useful services. It had a 33 million total livestock population out of which 13.9 million cattle 5.6 million buffalos, 2.7 million sheep, and 10.60 million goats (GoI, 2020). Maharashtra state ranks seventh in total milk production in India. The total share of milk production is 6.06 percent. (DAHDF, GoI) ^[2] In Maharashtra, there are various livestock fairs/livestock exchange markets under MSAMB. Livestock marketing is confined to the weekly local markets and annual festival fairs. These livestock markets provide an important platform for the animal transaction not only to the farmers and traders of the state but also to the neighboring states like Chhattisgarh, Madhya Pradesh, Andhra Pradesh, etc. Smooth and effective transactions are made possible by the existence of a regulated market for the animal trade. The regulated markets are seen as responsible entities in carrying out all tasks related to the sale of outputs, keeping in mind the general interest of the farming community as well as the final customers. Keeping all this in view the present study was undertaken to assess the various constraints in livestock marketing in the selected 24 livestock markets of eastern Vidarbha region of Maharashtra.

Materials and Methods

The present study was carried out in the purposively selected Nagpur, Wardha, Gadchiroli, Bhandara, Gondia, and Chandrapur districts of Maharashtra. Four livestock markets from each district were selected to make the final sample size of 24 livestock markets. Respondents from these livestock markets were selected from three categories *viz.* livestock owner (5 from each livestock market), middlemen/ broker (5 from each market), and LDOs (Livestock Development Officers). Thus, a total of 264 respondents (120 livestock owners, 120 middlemen, and 24 LDOs) were selected as final respondents. A list of all the livestock markets with their date was taken from Agricultural Produce Marketing Committee (APMC) websites and the regional office at Nagpur and from the available list by following random sampling 4 markets from each district were selected.

A pre-tested semi-structured interview schedule was used for data collection through personal dialogue method coupled with observations and information from study reports for specific objectives. The schedule is prepared on the basis of available literature on livestock marketing, the objectives of the study and by taking guidance from the advisory committee members as well as the experts from the extension discipline. The different constraints faced by the livestock owner were framed in groups *viz.* lack of basic amenities, lack of infrastructural facilities, lack of sanitary facilities, lack of operational/ marketing facilities, and other miscellaneous constraints. All constrained faced by the livestock owner, the livestock broker and livestock development officer were asked to rank them on the basis of their preferences. The data so collected were tabulated and analyzed statistically by Garrett’s ranking method as follows

$$\text{Per cent position} = 100(\text{Rij}-0.50)/\text{Nj}$$

Where,

Rij= Rank given by the *i*th factor by the *j*th individual

Nj= Number of factors ranked by the *j*th individual

Then for each factor the scores of the individual respondents were added together and it was divided by the total number of respondents for whom scores were added. The mean scores were calculated by dividing the total score by the number of respondents.

Result and Discussion

Table 1: Classification of constraints about lack of basic amenities faced by the livestock owners

N=120

Sr. No.	Lack of basic amenities (Rank 1-5)	Mean Score	Rank
1	High cost of transportation	57.48	2
2	High labor cost	46.15	3
3	Lack of information regarding pricing pattern	74.87	1
4	Unavailability of rest room for livestock owner	37.48	4
5	Lack of canteen facility	33.01	5

It is evident from Table No. 1 that lack of information regarding pricing pattern with a mean score of 74.87 is the foremost basic amenities related constraint faced by livestock owners followed by the high cost of transportation, high labor cost, unavailability of the restroom for the livestock owner and lack of canteen facility.

Due to a lack of information regarding pricing patterns, livestock owner-sellers were having little knowledge about market arrivals, prevalent market prices and other market information that ultimately limited their bargaining power and thus it was the main reason which hampered the participation of livestock owners in markets. The findings of the present study are in line with Kumar *et al.* (2009) [3], Okewu and Iheanacho (2015) [4], who also reported lack of information regarding pricing patterns as the major constraint faced by livestock owners.

Table 2: Classification of constraints about lack of infrastructural facility faced by the livestock owners

N=120

Sr. No.	Lack of infrastructural facility (Rank 1-5)	Mean Score	Rank
1	High entry and exit fee	68.58	1
2	Inadequate availability of quality feed and fodder	57.79	2
3	Animal getting stolen during night due to less security at night	33.7	5
4	Lack of transit accommodation	40.68	4
5	Lack of ramp to load and unload the animal	48.45	3

The data from Table No. 2 clearly indicates that high entry and exit fee with a mean score of 68.58 is the foremost infrastructural facility-related constraint faced by livestock owners followed by the inadequate availability of quality feed and fodder, lack of ramp to load and unload the animal, lack of transit accommodation, animal getting stolen during the night due to less security at night.

Due to the high entry and exit fees, livestock owner-sellers were unwilling to participate in the market and they sell or purchase their animals at village level and thus gained very little profit from animal trading. The findings of the present study are in consonance with the reports of Murugan (2016) [5], Selvakumar (2019) [6].

Table 3: Classification of constraints about lack of sanitary facility faced by the livestock owners

N=120

Sr. No.	Lack of sanitary facility (Rank 1-5)	Mean Score	Rank
1	Predispose to infectious diseases lack of hygiene and sanitation	72.16	1
2	Lack of garbage disposal system	49.63	3
3	Lack of drainage system	53.41	2
4	Lack of bath room	37.56	4
5	Lack of toilet	36.21	5

It is quite clearly evident from Table No. 3 that predisposal to infectious diseases lack of hygiene and sanitation with a mean score of 72.16 is the foremost sanitary facility related constraint faced by livestock owners followed by the lack of drainage system, lack of garbage disposal system, lack of bath room and lack of toilet. The findings of the present study are in agreement with the reports of Kumar *et al.* (2009) [3], Okewu and Musa (2015) [4], who reported that predisposal to infectious diseases, lack of hygiene and sanitation were the major constraint faced by livestock owners.

Table 4: Classification of constraints about lack of operational/ marketing facility faced by the livestock owners

N = 120

Sr. No.	Lack of operational / marketing facility (Rank 1-7)	Mean Score	Rank
1	Fraudulent practices followed by the seller	54.19	3
2	No standard practice of price fixation	55.68	2
3	Improper animal grading facilities	41.05	6
4	Ring of middle men	74.65	1
5	High marketing fee / commission	52.37	4
6	Lack of transparency in trading	41.96	5
7	No mechanism or agency to check malpractices in trading of animal	31.25	7

Table No. 4 clearly indicated that ring of middlemen with a mean score of 74.65 is the topmost operational/ marketing facility related constraint faced by livestock owners followed by the no standard practice of price fixation, fraudulent practices followed by the seller, high marketing fee/commission, lack of transparency in trading, improper animal grading facilities, and non-existence of any agency to check malpractices in trading of the animal.

Brokers and middlemen always interfere in the transaction of a bullock with or without the willingness of sellers causing exploitation of livestock owners. The findings of the present study are near similar with Murugan (2016)^[5] Tanpure (2016)^[7], and Selvakumar (2019)^[6] who also reported the presence of middlemen as the major constraint faced by livestock owners.

Table 5: Classification of miscellaneous constraints faced by the livestock owners

N=120

Sr. No.	Miscellaneous constraints (Rank 1-4)	Mean Score	Rank
1	Veterinary and medical facilities were lacking	57.38	2
2	Lack of extension agencies in APMC	58.52	1
3	Lack of insurance facility	34.28	4
4	Lack of training programme on livestock marketing	51.80	3

As evident from the Table No. 5, lack of extension agencies in APMC with a mean score of 58.52 is the topmost miscellaneous constraint reported by livestock owners followed by lack of veterinary and medical facilities, lack of training programme on livestock marketing and lack of insurance facility.

Since the service of a veterinarian was not available the livestock owners faced various problems in identification of animal age, disease free etc. the second important constraint was lack of proper technical guidance with scores value 57.38 in the livestock market this could be the reason which hinders

Table 7: Classification of constraints faced by the Livestock Development Officer

N=24

Sr. No.	Constraints (Rank 1-4)	Mean Score	Rank
1	Lack of basic infrastructure	62.70	2
2	No official post as veterinarian in market	71.87	1
3	Lack of training programme on livestock marketing	39	4
4	Lack of hygiene and sanitation	39	4
5	No standard practice of price fixation	50.41	3

Table 7 clearly indicates that no official post as veterinarian in the market with a mean score of 75.96 is the foremost constraints faced by Livestock Development Officer followed by the Lack of basic infrastructure facility, no standard

the participation of livestock owners in livestock markets. The findings of the present study are conformity with the reports of Selvakumar (2019)^[6] who reported that veterinary and medical facilities were the major constraint faced by livestock owners.

Table 6: Classification of constraints faced by the Livestock Broker

N=120

Sr. No.	Constraints (Rank 1-4)	Mean Score	Rank
1	No standard practice of price fixation	75.96	1
2	Lack of faith by owner	69.03	2
3	Lack of training programme on livestock marketing	57.0	3
4	Lack of awareness about government scheme	50.17	4
5	Lack of knowledge about animal diseases	43.93	5
6	High Transportation cost along with mortality	28.90	6
7	Harassment from local police at checkpoint	26.91	7

It is clearly evident from table 6 that no standard practice of price fixation with a mean score of 75.96 is the foremost constraint faced by livestock brokers followed by the lack of faith by the owner, lack of training program on livestock marketing, lack of awareness about government scheme, lack of knowledge about animal diseases, high transportation cost along with mortality and harassment from local police at a checkpoint.

The fact that there is no standard practice of price fixation in the market was a major constraint faced by livestock brokers, resulting in a wide range of variation in sale prices of the same breed in the same market. The second important constraint was a lack of faith by the owner. It was evident that the livestock owners were afraid of being cheated in the weekly markets because majority of the players in the livestock markets were traders and butchers who use their unique ways to hide information from livestock owners. The findings of the present study are in conformity with the reports of Puneet kumar (2010)^[8] reported that no standard criteria of price fixation in the market is major constrains faced by the middlemen from Bareilly market. Savanur *et al.* (2018)^[9] also reported that the high cost of animal transportation raises the remunerative price and creates a significant constraint for both sellers and buyers in eastern dry zone of Karnataka. Sellers from other states face harassment from local police at checkpoints and are frequently asked for bribes to issue animal passes was reported by Das *et al.*, (2016)^[10]. Long-distance transportation of animals between markets causes stress and injuries due to overloading and unfair management practices such as inadequate padding support, improper handling, and pointed objects in the vehicle was reported by Alam *et al.*, (2018)^[11].

practice of price fixation, lack of training program on livestock marketing and lack of hygiene and sanitation. The findings of the present study are in line with Singh *et al.* (2014)^[12] who observed that all cattle markets in Uttar

Pradesh lack veterinary services such as vaccination, on-site treatment, and the issuing of health certificates. During the rainy season, the cattle fair is at risk of spreading infections due to a lack of hygiene and sanitation due to water logging Das *et al.*, (2016) ^[10]. There was also no livestock extension agency present in the market, which could otherwise serve as a good platform for extension agencies as reported by Kumar *et al.* (2009) ^[3].

Conclusion

From the study, it can be concluded that the livestock marketing system in the eastern Vidarbha region lacks a basic amenities, infrastructural facilities, sanitary facilities, and operational/ marketing facilities due to which livestock owners, middlemen/brokers, and Livestock development officers are facing problems while performing the marketing operations. To overcome these constraints, providing infrastructure facilities for the dedicated livestock markets could bring more remunerative returns for the farmers against the sale of their livestock. Further, market intelligence and for casting with the use of modern ICT tools can improve the livestock marketing scenario for the benefit of all stakeholders and prevent the exploitation of the farmers.

References

1. Handage Sushant, Manjunath L, Chandre Gowda CT, Naveen Kumar GS, Amith NG, Shruthi JS. Livestock Marketing Practices in Hassan District of Karnataka. The Indian Journal of Veterinary Sciences and Biotechnology (IJVSBT). 2017;13(1):42-45.
2. DAHDF, GoI Annual report Basic Animal Husbandry and Fishery Statistics. Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmer's Welfare, Government of India, Krishi Bhawan, New Delhi; c2020.
3. Shalander Kumar, Kareemulla K, Rama Rao CA. Goat Marketing System in Rajasthan. Indian Journal of Agricultural Marketing. 2009;23(3):150-167.
4. Okewu J, Iheanacho AC. Profitability of Goat Marketing in Benue State, Nigeria: A Study of Selected Local Government Areas. An International Academic Journal for Global Research. 2015;10(2):54-74.
5. Murugan M, Vasanthakumarand S, Edwin S. Constraints Analysis of Livestock Markets in Southern Districts of Tamil Nadu. Indian Veterinary Journal. 2016;93(9):14-16.
6. Selvakumar KN, Kathiravan G. Survey of Cattle Markets in Tamil Nadu: An Assessment of Functionaries' Constraints. International Journal of Agriculture Science and Research (IJASR). 2019;9(6):143-150.
7. Tanpure MU, Dahatonde KN, Ingale YM. Price Structure and Constraints in Marketing of Crossbred Bullocks in Chandrapur District of Vidarbha Region of Maharashtra. Advances in Life Sciences. 2016;5(6):2385-2388. Print: ISSN 2278-3849.
8. Kumar Puneet Livestock's Markets in Bareilly District an Analytical Study of Infrastructure and Constraints. M.V.Sc. Thesis, Division of Extension Education, IVRI, Izzatnagar, Bareilly.
9. Savanur Mahesh, Satyanarayan KV, Shilpa Shree J. Study on Growth and Composition of Cattle Markets in Eastern Dry Zone of Karnataka. The Indian Journal of Veterinary Sciences and Biotechnology. 2017;13(2):54-57.
10. Das G, Jain DK, Pandit A. Prioritization of constraints faced by different marketing functionaries in the organized cattle fairs of Rajasthan. Asian Journal of Dairy and Food Research. 2016;35(1):33-36.
11. Alam M, Hasanuzzaman MM, Hassan M, Rakib TM, Hossain ME, Rashid MH, *et al.* Assessment of transport stress on cattle travelling a long distance (≈ 648 km), from Jessore (Indian border) to Chittagong, Bangladesh. Veterinary Record Open. 2018;5:e000248. doi:10.1136/vetreco-2017-000248
12. Singh R, Nath T, Singh PK, Kumar K. Livestock Markets and Buyers Perspectives on Voluntary versus Mandatory Disclosure of Information: Evidence from Cattle Markets in Uttar Pradesh. Indian Journal of Agricultural Economics, Indian Society of Agricultural Economics. 2014;69(3):1-9.