



MARKETING PRACTICES, PRICE SPREAD, AND MARKETING EFFICIENCY OF GOAT MARKETING IN SATARA DISTRICT OF MAHARASHTRA

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Abstract: In goat marketing many market intermediaries are involved to perform their functions effectively. With respect to cost and margins at different level, price spread in different channels level estimated. This research delves into the multifaceted realm of goat marketing, exploring the intricacies of marketing practices, price spread dynamics, and overall efficiency within this sector. The aim of the research was to investigate the marketing Practices, price Spread, and marketing efficiency of goat marketing related to goat farming in Satara district of Maharashtra. Based on the number of goats, the study gathered 90 goat farmers who were divided into three groups: small, medium, and large. According to the study, majorly there are four marketing channels Channel I: Producer-Consumer, Channel II: Producer-Merchant-Consumer, Channel III: Producer-Butcher-Consumer, Channel IV: Producer-Merchant-Butcher-Consumer. The overall retention rate for own farming stands at 13.37 per cent. Interestingly, Channel-IV remains the dominant sales channel, accounting for 31.35 per cent of the total goat sales, followed by 22.86 per cent through Channel-II, 21.55 per cent through Channel-III, and 10.84 per cent through Channel-I.

Keywords: Marketing, Channel, Satara, Goat farming

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INTRODUCTION

Accurate statistical values are required to determine the future outlook of the goat population and their productivity. They are also required before any improvement policies which can be planned on a realistic basis and implemented with confidence. The world total number of goats was 1 Billion. (FAO STAT, 2019). There are immense variations among the different part of the country.

China has the largest production of goats. The goat population in India is 148.88 million. Farmers keep goat as a supplementary activity to increase their income among the many agricultural enterprises. The goat farming is very significant to India's rural economy. It benefits the nation's farming community as well as the working class by providing income and jobs. Goat farming typically plays an important part in generating employment and a reliable source of income for rural residents who want to complement their main source of income.

The typical milk production per lactation ranges from 20 to 40 liters for domestic goats and 60 liters for crossbred goats. India produced 221.06 million tons of milk overall in 2021-22, of which 5.4 million tones came from goats. About 7 per cent (0.94 million MT) of the nation's current meat production comes from goats. The crucial items are goat meat, skin and milk.

Products can be exported to generate significant foreign exchange for the nation. Goats are referred to as the "poor man's cow" (or "mini-cow") because they make a significant economic contribution to the underprivileged. They give their kids milk that is nourishing and simple to digest, and they give labourers, the underprivileged, and/or small farmers a reliable, consistent source of supplemental cash. Given their small stature, goats are simple for women and kids to handle. Goat feeding, milking, and care don't call for a lot of tools or laborious work. Investment expenditures, food expenses, and upkeep expenses are all rather modest. One native cow can be raised for the same price as four goats. Goats can be raised very well in places with little fodder and resources. Goat farming provides employment and income in rural areas mostly.

METHODOLOGY

Satara district ranks tenth in goat population in Maharashtra state. It is one of the largest goat farming districts in Maharashtra. Two tehsils viz. Man (29,180), Phaltan (28,477) and were selected on the basis of highest population of goats. 45 respondents (15 small, 15 medium and 15 large) were selected from each tehsil, comprising of total 90 respondents (30 small, 30 medium

and 30 large). Three categories were determined for the herd size: small (up to 10 goats), medium (11-20 goats), and large (> 20 goats). Topics related to the goat farming; data was collected from different size groups by using the well-structured questionnaire.

The data for marketing cost were analyzed to give item wise absolute as well as in percentage to the total marketing cost separately for sellers and buyers. For the remaining aspects, simple statistical tools such as arithmetic mean, percentage used. Simple tabular analysis was employed.

Total Marketing Cost

$$C = C_f + C_{m1} + C_{m2} \dots \dots \dots C_{mn}$$

Where, C = Total Marketing cost, C_f = Cost paid by the producer from the time the produce leaves the farm till he sells it, C_i = Cost incurred by ith middleman in the process of buying and selling the product.

Marketing Margin

$$MT = \sum (S_i - P_i) / Q_i$$

Where, MT = Total marketing margin, S_i = Sale value of a product paid by ith firm, P_i = Purchase value of a product paid by ith firm, Q_i = Quantity of product handled by its firm

Price Spread

$$P_s = C_p - P_f$$

Where, P_s = Price Spread, C_p = Consumer's price (₹), P_f = Price received by farmer (₹)

Marketing Efficiency

Marketing efficiency was calculated by using the modified method as suggested by Acharya and Agarwal (2001).

$$MME = RP / (MC + MM)$$

Where, MME = Modified measure of marketing efficiency, RP = Price paid by consumer or retailer sale price, MC = Total marketing cost, MM = Net marketing margin

RESULTS AND DISCUSSION

The data pertaining to the production, storage, and surplus sale of goats, categorized by various distribution channels and distinct demographics, has been computed and is illustrated.

Table 1 Shows marketing Channel I: Producer-Consumer, Channel II: Producer-Merchant-Consumer, Channel III: Producer-Butcher-Consumer, Channel IV: Producer-Merchant-Butcher-Consumer. In the context of small sized goat units, approximately 18.80 per cent of goats are retained For the purpose of own farming. The predominant channel for selling goats in this category is Channel-IV, with 29.05 per cent of goats being sold through this channel, followed by Channel-III, which accounts for 21.36 per cent of the sales. Furthermore, 10.25 per cent of goats are sold through Channel-I, 20.51 per cent through Channel-II respectively. For medium-sized goat units, the retention rate for own farming stands at 13.79 per cent. Channel-IV is the primary choice for selling goats in this category, with 31.11 per cent of goats being sold through this channel, followed by 23.12 through Channel-II, 19.33% through Channel-I, 10.51 per cent, through Channel-III 21.44 per cent . In large-sized goat units, the retention rate for own farming is 11.59 per cent Notably, the channel of choice for selling goats in this category is Channel-IV, which captures a substantial 32.14 per cent of the sales, with Channel-II following at 23.38 per cent. Additional percentages of sales include 21.44 through Channel-III, 11.20 per cent through Channel-I. The overall retention rate for own farming stands at 13.37 per cent. Interestingly, Channel-IV remains the dominant sales channel, accounting for 31.35 per cent of the total goat sales, followed by 22.86 per cent through Channel-II, 21.55 per cent through Channel-III, and 10.84 per cent through Channel-I. This information emphasizes the consistent preference for Channel-IV as the favored choice for selling goats across various size categories. Additionally, the data underscores the total marketed surplus, which is 81.19 per cent for small sized units, 86.02 per cent for medium-sized units, 88.40 per cent for large-sized units, and 86.62 per cent for the overall category of goat units, indicating the proportion of goats that are sold in each category.

Table 2 depicts cost incurred by producer in marketing of goat. The findings indicated that the cost per goat was significantly higher in Channel-IV, amounting to Rs.24.06, in contrast to the lower costs observed in other channels: Rs.19.37 for Channel-I, Rs.18.8 for Channel-II, ₹22.06 for Channel-III. Moreover, when examining the breakdown of expenses within Channel-I, it was found that a substantial portion of the expenditure, 73.10 per cent, was allocated to labour charges, followed by other charges at 19.73 per cent. The distribution of expenditure in other channels is not provided in the given information, necessitating reference to the original data source for

comprehensive insights into those channels. In Channel-II, the bulk of the expenses, totaling 80.85 per cent, were dedicated to labor charges, with the remaining 19.14 per cent apportioned to various other costs, and so forth. In Channel-III, a significant 73.10 per cent also of the expenses were allocated to labor charges, leaving 26.29 per cent for other expenditures.

Table 3 depicts cost incurred by merchant in marketing of goat. The findings showed that in Channel-II, the merchant incurred a cost of Rs.236.55 per goat, with transportation expenses accounting for 50.50 per cent, and labor charges for 38.04 per cent of the total cost. In Channel-IV, the village merchant spent Rs.266.28 per goat, with labor costs making up 35.38 per cent, and transportation costs 50.97 per cent of the total.

Table 4 depicts the cost incurred by butcher in channel III and channel IV. In Channel III, the total marketing cost per goat is Rs.280.13. This cost is distributed as follows: 42.83 per cent for labor charge, 46.84 per cent for transportation charge, and 4.79 per cent for fodder. From a young goat, 14.5 kg of chevon is obtained, resulting in a total cost of Rs.13.31 per kg of goat meat in this channel. In Channel IV, the total cost for the butcher, including marketing expenses, amounts to Rs.329.4 per goat. The cost breakdown includes 51.10 per cent for labor charge and 36.49 per cent for transportation charge. The cost incurred by the butcher in Channel IV is Rs.22.71 per kg of goat meat. These costs are influenced by factors such as the time required for acquiring, processing, and selling the goat meat, leading to higher expenses in both channels.

Table 5 depicts price spread in different channels in goat marketing. Trends emerge from the analysis: Firstly, Channel-I proves to be the most lucrative for producers, as it offers the highest return on investment. Producers in this channel receive a substantial portion of the consumer's spending, resulting in the highest net price received among all channels. Secondly, Channel-II also stands out as a favorable option for producers. While not reaching the same level as Channel-I, it provides a better return than Channels II, III, and IV, with a relatively higher net price received. In Channel-I, the consumer's purchase price was Rs.5800. The price spread in Channel-I was Rs.19.37 per purchased goat. In Channel-II, the producer sold goats to merchant at Rs.5400. The price spread in Channel-II was Rs.958.8 per purchased goat. In Channel-III, the producer sold goats to butcher at Rs.5890. The price spread in Channel-III was Rs.672.06 per purchased goat. In Channel-IV, the producer sold goats to merchant at Rs.5680. The price spread in Channel-IV was Rs.1744.06 per

purchased goat. Conversely, Channel-IV presents a less favorable scenario for producers. Here, elevated marketing costs and margins reduce the net price received by goat farmers is less in this channel, impacting their profitability. Lastly, Channels III reveal that net prices received by producers are better than channel I and II and number of goats sold in channel III are good as compared to channel IV. The findings of a 2001 study conducted by Dixit and Shukla, underscoring the vital role of marketing channels in influencing the income of producers within the livestock and meat industry. This information highlights the importance of channel selection for producers and emphasizes the need to consider quality and cost factors when making such decisions. Same results were obtained by Gund (2021).

Table 6 depicts marketing efficiency. It was worked out by using the modified method as suggested by Acharya and Agarwal it is observed that marketing efficiency was maximum for channel-I i.e., 299.30, while it was minimum for the channel-IV i.e. 3.93

Table 1 Production, retention and marketed surplus of young goat (No/goat unit)

<i>Particulars</i>	<i>Flock size</i>			<i>Overall</i>
	<i>Small</i>	<i>Medium</i>	<i>Large</i>	
Young Kids	11.7 (100)	23.78 (100)	41.06 (100)	25.51 (100)
Retention	2.2 (18.80)	3.28 (13.79)	4.76 (11.59)	3.41 (13.37)
Channel I	1.2 (10.25)	2.5 (10.53)	4.6 (11.22)	2.76 (10.86)
Channel II	2.4 (20.54)	5.5 (23.12)	9.6 (23.38)	5.83 (22.85)
Channel III	2.5 (21.36)	5.1 (21.44)	8.9 (21.67)	5.5 (21.57)
Channel IV	3.4 (29.05)	7.4 (31.12)	13.2 (32.14)	8 (31.35)
Total Marketed Surplus	9.5 (81.20)	20.5 (86.21)	36.3 (88.41)	22.1 (86.63)

(Figures in parentheses indicate percentage to total)

Table 2: Cost incurred by producer in marketing of goat (Rs)

<i>Particulars</i>	<i>Channel I</i>	<i>Channel II</i>	<i>Channel III</i>	<i>Channel IV</i>
	(P-C)	(P-M-C)	(P-B-C)	(P-M-B-C)
Labour charge	14.16	15.2	16.26	17.16
	(73.10)	(80.85)	(73.70)	(71.32)
weighing charge	2.55	0	0	0
	(13.16)	(0)	(0)	(0)
Other	2.66	3.6	5.8	6.9
	(13.73)	(19.14)	(26.29)	(28.67)
Cost incurred by producer	19.37	18.8	22.06	24.06
	(100)	(100)	(100)	(100)

(Figures in parentheses indicate percentage to total)

Table 3: Cost incurred by merchant in marketing of goat

Particulars	Merchant Channel II	
	Rs/goat	Per cent
Labour charge	90	38.04
Transport charge	120.18	50.80
Market fee	5	2.11
Fodder	12.3	5.19
Water	5.07	2.14
Other	4	1.69
Cost incurred by merchant	236.55	100
Particulars	Merchant Channel IV	
	Rs/goat	Per cent
Labour charge	94.22	35.38
Transport charge	135.74	50.97
Market fee	5	1.87
Fodder	18.2	6.83
Water	6	2.25
Other	7.12	2.67
Cost incurred by merchant	266.28	100

Table 4: Cost incurred by butcher in marketing of goat

		Butcher Channel III	
Particulars	Rs/goat	Rs/kg	Per cent
Labour charge	120	8.27	42.83
Transport charge	131.22	9.04	46.84
Weighing charge	4.12	0.28	1.47
Packaging charge	6.28	0.43	2.24
Water	5.07	0.34	1.80
Fodder	13.44	0.92	4.79
Total cost	280.13	19.31	100
		Butcher Channel IV	
Particulars	Rs/goat	Rs/kg	Per cent
Labour charge	168.34	11.60	51.10
Transport charge	120.22	8.29	36.49
Weighing charge	4.18	0.28	1.26
Packaging charge	12.3	0.84	3.73
Water	6.16	0.42	1.87
Fodder	18.2	1.25	5.52
Total cost	329.4	22.71	100

Table 5: Price spread in different channels of goat marketing (Rs)

	Channel			
Particulars	I (P-C)	II (P-M-C)	III (P-B-C)	IV (P-M-B-C)
Price received by Producer	5720.15	5520.75	5320.22	5100.65
	(98.68)	(87.07)	(81.34)	(74.24)
Cost incurred by Producer	19.37	18.8	22.06	24.06
	(0.33)	(0.29)	(0.33)	(0.35)
Price paid by Merchant	0	5400	0	5680
	(0.0)	(85.17)	(0.0)	(82.67)
Cost incurred by Merchant	0	236.55	0	266.28
	(0.0)	(3.73)	(0.0)	(3.87)
Margin of Merchant	0	703.45	0	923.72
	(0.0)	(11.09)	(0.0)	(13.44)
Price paid by Butcher	0	0	5890	6340
	(0.0)	(0.0)	(90.06)	(92.28)
Cost incurred by Butcher	0	0	280.13	329.4
	(0.0)	(0.0)	(4.28)	(4.79)
Margin of Butcher	0	0	369.87	200.6
	(0.0)	(0.0)	(5.65)	(2.91)
Price paid by Consumer	5800	6340	6540	6870
	(100)	(100)	(100)	(100)

Marketing cost	19.37	255.35	302.19	619.74
	(0.33)	(4.02)	(4.62)	(9.02)
Marketing Margin	0	703.45	369.87	1124.32
	(0.0)	(11.09)	(5.65)	(16.36)
Price spread	19.37	958.8	672.06	1744.06
	(0.33)	(15.12)	(10.27)	(24.38)

(Figures in parentheses indicate percentage to total)

Table 6: Marketing efficiency

Marketing Channels	PRP	PPC	Particulars MC	MM	MC+MM	MME
I (P-C)	5720.15	5800	19.37	0	19.37	299.30
II (P-M-C)	5520.75	6340	255.35	703.45	958.8	6.61
III (P-B-C)	5320.22	6540	302.19	369.87	672.06	9.73
IV (P-M-B-C)	5100.65	6870	619.74	1124.32	1744.06	3.93

CONCLUSIONS

A higher retention share for own rearing was observed in small flocks (18.80 per cent) compared to medium and large sized flocks (13.79 and 11.59 per cent), The predominant channel for selling goats at an overall level is Channel-IV, with 31.35 per cent of goats being sold through this channel, 86.63 per cent for the overall category of goat units, indicating the total marketed surplus

Price spreads in different marketing channels. Price spread observed highest in channel IV (24.38 per cent) and lowest in channel I (0.33 per cent). The share of the producer in the consumer's rupee. It was conclude that producer's share in consumer's rupee was higher in channel-I followed channel-II, channel-III and Channel IV

It is observed that marketing efficiency was maximum for channel-I i.e., 299.30, while it was minimum for the channel-IV i.e. 3.93

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