



Research Article

MARKETING CHANNELS, MARKETING COST, MARKET MARGIN AND PRICE SPREAD IN SMALL MILLETS IN DANG AND VALSAD DISTRICT OF SOUTH GUJARAT

PATEL D.A.^{1*}, THUMAR V.M.¹ AND SINGH N.M.²

¹Department of Agricultural Economics, N. M. College of Agriculture, Navsari Agricultural University, Navsari, 396445, Gujarat, India

²Planning Officer, Directorate of Research, Navsari Agricultural University, Navsari, 396445, Gujarat, India

*Corresponding Author: Email - deep129@gmail.com

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Abstract: The study entitled the Economic analysis and marketing of small millets in South Gujarat. From South Gujarat region two districts were selected viz, Dang and Valsad. There are three talukas from Dang district and two talukas from Valsad district were selected purposively and from each taluka, 5 villages were selected by probability sampling method. From each village, 6 farmers were selected by simple random sampling method. Total sample size was 150 small millets growing farmers. There were three marketing channels reported in study area, Channel-I: Producer - Consumer, Channel-II: Producer - Retailer - Consumer and Channel-III: Producer - Local trader - Retailer - Consumer. In Dang district, the farmer received the price of Rs. 2200.00 per quintal which was 97.34 per cent share in consumer's rupee in Channel-I. In Valsad district, the farmer received the price of Rs. 2500.00 per quintal which was 97.46 per cent share in the consumer's rupee in Channel-I. In Dang district the net price received by the producer was Rs. 2250.00 per quintal which was 86.28 per cent of the consumer's rupee in Channel-II. In Valsad district, net price received by the producer was Rs. 2530.00 per quintal which was 89.15 per cent out of the consumer's rupee in Channel-II. In Dang district, the net price received by the producer was Rs. 2125.00 per quintal which was 76.00 per cent of the consumer's rupee in Channel-III. In Valsad district, the net price received by the producer was Rs. 2400.00 per quintal which was 77.46 per cent of the consumer's rupee in Channel-III.

Keywords: Marketing Channels, Marketing margin, Marketing cost, Price spread, Small millets

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Introduction

Small millets, group of six crops comprising of finger millet (*Pennisetum coracana*), kodo millet (*Paspalum setaceum*), little millet (*Panicums umatrenc*), foxtail millet (*Setaria italic*), barnyard millet (*Echinochloa utilis*) and proso millet (*Penicummiliaceum*) are considered as nutri-cereals and the source of food, feed and fodder. In India, Small millets recipes are hundreds in number and even stuffs of common food such as dhosa, idly and laddu are made out of small millets. In Gujarat, Papad made from finger millet.

In Goa, it is very popular as satva, poles (dhosa), bhakri, ambil (a sour porridge) are very common preparations and Nachani Ladus are common in some families. In Maharashtra, a type of flat bread is prepared using finger millet and kodo millet flour known as Bhakhri. In Karnataka, finger millet is generally consumed in the form of ragimudde (balls) and it is also used to make roti, idli, dosa and conjee.

Objective of Study

Find out the marketing channels from the study area. Calculate the marketing cost, market margin and price spread in study area.

Materials and Methods

South Gujarat region have seven districts out of which two districts namely Valsad and Dang selected based on cultivation of small millets. Talukas was selected purposively from each selected district having area under highest small millet cultivation. From the selected districts, 3 talukas from Dang district and 2 talukas from Valsad district were selected.

A sample of 25 villages comprises of 15 villages from Dang district and 10 villages from Valsad district were selected by proportionate random sampling. As numbers of villages were approximately equal in each selected taluka of the two districts, 5

villages from each taluka as sample villages. For the selection of farmers, from each selected villages 6 respondents were selected having area under small millets cultivation by simple random sampling (SRS) method. Thus, total sample size was of 150 small millets growers. To study marketing cost, margins and marketing channels of the number of market functionaries viz., 5 hat bazar trader and 10 retailers were selected according to the major channel found in marketing of small millets by the respondents in Dang and Valsad markets.

Price-spread

Price spread = $P_c - P_f$

Where, P_c = Price of the produce paid by the consumer

P_f = Price of the produce received by the farmer

Marketing Margin

Absolute margin of i^{th} middlemen (A_{mi}) = $PR_i - (P_{pi} + C_{mi})$

Percentage margin of i^{th} middlemen = $[PR_i - (P_{pi} + C_{mi}) / PR_i] \times 100$

Where,

PR_i = Sale price of the i^{th} middlemen

P_{pi} = Purchase price of the i^{th} middlemen; and

C_{mi} = Marketing cost incurred by i^{th} middlemen.

Cost of marketing

$C = CF + C_{m1} + C_{m2} + C_{m3} + \dots + C_{mn}$

Where,

C = Total cost of marketing

CF = Cost borne by the producer farmer in marketing of small millets

C_{mi} = Cost incurred by the i^{th} middle man in the process of marketing

Results and Discussion

Marketing channel in Dang and Valsad districts

The channel of marketing of agricultural produce from producer to consumer varies from commodity to commodity and area to area. The Different channels identified in the study area for small millets were:

Channel-I: Producer – Consumer

Channel-II: Producer – Retailer – Consumer

Channel-III: Producer - local traders – Retailer – Consumer

Marketing costs, margins and price spread of small millets in Channel-I

Dang district

The [Table-1] revealed that the farmer received the price of Rs. 2200.00 per quintal which was 97.36 per cent share in consumer's rupee. Total cost incurred by producer on transportation, loading and unloading, weighing and miscellaneous charges etc., was Rs. 60.00 per quintal which was 2.64 per cent share in consumer's rupee. Farmer sold their produce to consumer at Rs. 2260.00.

Table-1 Marketing costs, margins and price spread of small millets in Channal-I in Dang district of South Gujarat

SN	Particulars	Rs./qtl.	Per cent share in consumer's rupee
1.	Net price received by the producer	2200.00	97.36
2.	Cost incurred by producer		
i.	Transportation	15.00	0.66
ii.	Loading & unloading	15.00	0.66
iii.	Weighing	10.00	0.44
iv.	Miscellaneous charges	20.00	0.88
	Total cost	60.00	2.64
	Producer's selling price to Consumer	2260.00	100.00
3.	Price spread	60.00	2.64

Valsad district

The [Table-2] revealed that the producers get the price Rs. 2500.00 per quintal which was 97.46 per cent share in the consumer's rupee. The total cost of production, loading, unloading, weighing and miscellaneous charges was Rs. 65.00 per quintal incurred by the producer which was 2.54 per cent share in consumer's rupee. Producer sold the produce in Rs. 2565.00 to the consumer.

Table-2 Marketing cost, margin and price spread of small millets in Channel- I in Valsad district of South Gujarat

SN	Particulars	Rs./qtl.	Per cent share in consumer's rupee
1.	Net price received by the producer	2500.00	97.46
2.	Cost incurred by producer		
i.	Transportation	20.00	0.77
ii.	Loading & unloading	15.00	0.58
iii.	Weighing	10.00	0.38
iv.	Miscellaneous charges	20.00	0.77
	Total cost	65.00	2.54
	Producer's selling price to consumer	2565.00	100.00
3.	Price spread	65.00	2.54

Marketing costs, margins and price spread of small millets in Channel-II

Dang district: The [Table-3] revealed that the net price received by the producer was Rs. 2250.00 per quintal which was 86.28 per cent share in the consumer's rupee. The total marketing cost incurred by producer was Rs. 69.00 which was 2.64 per cent share in the consumer's rupee.

The producer sold the produce to the retailer at Rs. 2319.00 which was 88.91 per cent share in the consumer's rupee. The retailer sold the produce to the consumer at Rs. 2608 per quintal. The total marketing cost incurred by the retailer was Rs. 60.00 per quintal which was 2.30 per cent share in the consumer's rupee. The margin obtained by the retailer was Rs. 229.00 per quintal which was 8.78 per cent share in the consumer's rupee. The price spread was Rs. 358.00 per quintal which was 13.72 per cent of the consumer's rupee.

Valsad district: Marketing costs, margins and price spread of small millets in Channel-III in Valsad district of South Gujarat was notified in [Table-4]. The [Table-4] revealed that the net price received by the producer was Rs. 2530.00 per

quintal which was 89.15 per cent share in the consumer's rupee. The total marketing cost incurred by the producer was Rs. 52.00 which was 1.83 per cent share in the consumer's rupee. The producer sold the produce to the retailer at Rs. 2582.00 per quintal which was 90.97 per cent share in the consumer's rupee. The retailer sold their produce to the consumer at Rs. 2838.00 per quintal. The total cost of marketing incurred by the retailer was Rs. 46.00 per quintal which was 1.62 per cent share in the consumer's rupee. The total marketing margin obtained by the retailer was Rs. 210.00 per quintal which was 7.29 per cent share in the consumer's rupee. The price spread was Rs. 308.00 per quintal which was 10.85 per cent of the consumer's rupee.

Table-3 Marketing costs, margins and price spread of small millets in Channel-II in Dang district of South Gujarat

SN	Particulars	Rs./qtl.	Per cent share in consumer's rupee
1.	Net price received by the producer	2250.00	86.28
2.	Cost incurred by producer		
i.	Transportation	15.00	0.57
ii.	Loading & unloading	20.00	0.76
iii.	Weighing	12.00	0.46
iv.	Miscellaneous charges	22.00	0.84
	Total cost	69.00	2.64
3.	Producer's selling price to Retailer	2319.00	88.91
4.	Cost incurred by retailer		
i.	Transportation	15.00	0.57
ii.	Loading & unloading	20.00	0.76
iii.	Weighing	10.00	0.38
iv.	Miscellaneous charges	15.00	0.57
	Total cost	60.00	2.30
5.	Retailer margins	229.00	8.78
6.	Retailer sale price	2608.00	100.00
7.	Price spread	358.00	13.72

Table-4 Marketing costs, margins and price spread of small millets in Channel-II in Valsad district of South Gujarat

SN	Particulars	Rs./qtl.	Per cent share in consumer's rupee
1.	Net price received by the producer	2530.00	89.15
2.	Cost incurred by producer		
i.	Transportation	12.00	0.42
ii.	Loading & unloading	10.00	0.35
iii.	Weighing	10.00	0.35
iv.	Miscellaneous charges	20.00	0.70
	Total cost	52.00	1.83
3.	Producer's selling price to Retailer	2582.00	90.97
4.	Cost incurred by retailer		
i.	Transportation	12.00	0.42
ii.	Loading & unloading	10.00	0.35
iii.	Weighing	9.00	0.31
iv.	Miscellaneous charges	15.00	0.52
	Total cost	46.00	1.62
5.	Retailer margins	210.00	7.39
6.	Retailer sale price	2838.00	100.00
7.	Price spread	308.00	10.85

Marketing cost, margins and price spread of small millets in Channel- III in Dang and Valsad districts of South Gujarat:

Dang District

Marketing costs, margins and price spread of small millets in Channel-III in Dang district is given below in [Table-5]. The [Table-5] revealed that the net price received by the producer was Rs. 2125.00 per quintal which was 76.00 per cent share in the consumer's rupee. The total marketing cost incurred by the producer was Rs. 50.00 per quintal which was 1.78 per cent share in the consumer's rupee. The producer sold their produce at Rs. 2175.00 to the local traders which accounts 77.78 per cent share in the consumer's rupee. The total marketing cost incurred by the local traders was Rs. 46.00 per quintal which was 1.64 per cent share in the consumer's rupee.

The local traders sold their produce to the retailer at Rs. 2471.00 per quintal which was 88.37 per cent share in the consumer's rupee. The traders obtained Rs. 250.00 margin which was 8.94 per cent of the consumer's rupee. The total marketing cost of retailer was Rs. 55.00 which was 1.96 per cent of the consumer's rupee. The total margin obtained by the retailer was Rs. 270.00 per quintal which was 9.65 per cent share in the consumer's rupee. The retailer sold their produce to the ultimate consumer at Rs. 2796.00 per quintal. The price spread was Rs. 671.00 per quintal which was 24.00 per cent share in the consumer's rupee.

Table-5 Marketing costs, margin and price spread of small millets in Channel-III in Dang district

SN	Particular	Rs./qtl.	Per cent share in consumer's rupee
1.	Net price received by the producer	2125.00	76.00
2.	Cost incurred by producer		
i.	Transportation	10.00	0.35
ii.	Loading & unloading	10.00	0.35
iii.	Weighing	10.00	0.35
iv.	Miscellaneous charges	20.00	0.70
	Total cost	50.00	1.78
3.	Producer's selling price to Wholesaler	2175.00	77.78
4.	Cost incurred by local traders		
i.	Transportation	10.00	0.35
ii.	Loading & unloading	11.00	0.39
iii.	Weighing	10.00	0.35
iv.	Miscellaneous charges	15.00	0.53
	Total cost	46.00	1.64
5.	Local traders' margin	250.00	8.94
6.	Local traders selling price to retailer	2471.00	88.37
7.	Cost incurred by retailer		
i.	Transportation	15.00	0.53
ii.	Loading & unloading	10.00	0.35
iii.	Weighing	10.00	0.35
iv.	Miscellaneous charges	20.00	0.70
	Total cost	55.00	1.96
8.	Retailer margins	270.00	9.65
9.	Retailer sale price	2796.00	100.00
10.	Price spread	671.00	24.00

Table-6 Marketing cost, margin and price spread of small millets farmer in Channel-III in Valsad district

SN	Particular	Rs./qtl.	Per cent share in consumer's rupee
1.	Net price received by the producer	2400.00	77.47
2.	Cost incurred by producer		
i.	Transportation	15.00	0.48
ii.	Loading & Unloading	10.00	0.32
iii.	Weighing	15.00	0.48
iv.	Miscellaneous charges	20.00	0.64
	Total cost	60.00	1.93
3.	Producer's selling price to Wholesaler	2460.00	79.40
4.	Cost incurred by local traders		
i.	Transportation	13.00	0.41
ii.	Loading & Unloading	10.00	0.32
iii.	Weighing	11.00	0.35
iv.	Miscellaneous charges	14.00	0.45
	Total cost	48.00	1.54
5.	Local traders margin	250.00	8.06
6.	traders selling price to retailer	2758.00	89.02
7.	Cost incurred by retailer		
i.	Transportation	15.00	0.48
ii.	Loading & Unloading	15.00	0.48
iii.	Weighing	10.00	0.32
iv.	Miscellaneous charges	15.00	0.48
	Total cost	55.00	1.77
8.	Retailer margins	285.00	9.19
9.	Retailer sale price	3098.00	100.00
10.	Price spread	698.00	22.53

Valsad district

Marketing costs, margins and price spread of small millets in Channel-III in Valsad district is given below in [Table-6]. The [Table-6] revealed that the net price received by the producer was Rs. 2400.00 per quintal which was 77.47 per cent share in the consumer's rupee. The total marketing cost incurred by the producer was Rs. 60.00 which was 1.93 per cent share in the consumer's rupee. The producer sold their produce at Rs. 2460.00 per quintal which was 79.40 per cent share in the consumer's rupee. The total marketing cost incurred by the traders was Rs. 48.00 per quintal which was 1.54 per cent share in the consumer's rupee. Traders sold their produce to the retailer at Rs. 2758.00 per quintal which was 89.02 per cent share in the consumer's rupee. The local traders obtained Rs. 250.00 per quintal margin which was 8.06 per cent share in the consumer's rupee. The marketing cost retained by the retailer was Rs. 55.00 per quintal which was 1.77 per cent share in the consumer's rupee. The retailer sold their product to the ultimate consumer at Rs. 3098.00 per quintal and get margin of Rs. 285.00 per quintal which was 9.19 per cent of consumer's rupee. The price spread was Rs. 698.00 per quintal which was 22.53 per cent share in the consumer's rupee.

Conclusion

In Dang district, it was observed that the per cent share of total marketing cost was maximum in Channel-III Rs. 142.00 followed by Channel-II Rs. 129.00 and Channel-I Rs. 60.00 which were 5.06 per cent, 4.93 per cent and 2.65 per cent, respectively. The marketing margin was obtained the maximum in Channel-III Rs. 520.00 followed by Channel-II Rs. 229.00 which was 18.59 per cent and 8.78 per cent, respectively. The price spread was calculated maximum in the Channel-III Rs. 671.00 which was 24.00 per cent followed by the Channel-II Rs.358 which was 13.72 per cent and 2.65 per cent in Channel-I. It was considered that the Channel-I was more efficient compared to Channel-II and Channel-III in Dang district.

In Valsad district, it was observed that the per cent share of total marketing cost was maximum in Channel-III Rs. 163.00 followed by Channel-II Rs.98.00 and Channel-I Rs.65.00 which were 5.24 per cent, 3.45 per cent and 2.54 per cent, respectively. The marketing margin was the maximum in Channel-III Rs. 535.00 followed by Channel-II Rs. 210.00 which was 17.25 per cent and 7.39 per cent, respectively. The price spread was calculated maximum in the Channel-III Rs. 648.25 which was 22.54 per cent followed by the Channel-2 Rs. 308.00 which was 10.85 per cent and 2.54 per cent in Channel-I. It was considered that the Channel-I was more efficient compared to Channel-II and Channel-III.

Application of Research: This research will be helpful of the study of marketing of small millets

Research Category: Agricultural Economics

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Cultivar / Variety / Breed name: Small millets

Conflict of Interest: None declared

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.

Ethical Committee Approval Number: Nil

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