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Economic analysis of marketing of grape in Nashik district of Maharashtra state

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Abstract

Grapes are best grown in all types of climates and soils where the Production of other deciduous fruits is restricted. It can be grown well in cold and dry climates in valleys in high elevations. The present study was on economic analysis of marketing of grape in Nashik district of Maharashtra State. A sample size of 60 farmers was selected using proportionate multistage sampling method. The data were elicited for the agriculture year 2018-19 through personal interview method. The total area under grape cultivation in world was 7449 (000 ha), production was 77.8 (mt) and productivity was 10.9 (in ton/ha) in 2018-19. Area under destined for the production of wine grapes, table grapes or dried grapes, in production. 57% of wine grape, 36% of table grape and 7% of dried grape and wine production 292 mhl, table grape-27.3mt, dried grape-1.3mt respectively. Unlike in India, 70% of the world grape production is used for wine making. The country has exported 246133.79 (In MT) of fresh grapes worth 233525.08 lakh during the year 2018-19. per quintal consumer's price was Rs. 12971.78 in channel-II and Rs. 3320.54 in channel-I. The lowest consumer's price was observed in channel-I. The total marketing cost in that observed highest cost was 35.86 percent in channel-I followed by total marketing cost was 35.17 percent in channel-II. The higher market margin was Rs. 5303.67 (68.83%) in Channel-II and lowest market margin was Rs. 479.65 (64.14%) in channel-I. while the higher price spread was Rs. 7705.35 in the channel-II and lowest price spread was Rs. 747.81 in channel-I. It is concluded that, the channel-I price spread is lower Rs. 747.81 as compare to channel-II. Therefore it best channel of marketing as compare to channel-II.

Keywords: Marketing channel, marketing cost, margin and price spread etc.

Introduction

Grapes (*Vitis vinifera*) of family Vitaceae is one of the most popular fruits in the world and is grown in temperate as well as sub-tropical climates. Grapes are best grown in all types of climates and soils where the Production of other deciduous fruits is restricted. It can be grown well in cold and dry climates in valleys in high elevations. A soil having low water holding capacity sandy loam is the best for its growth. Fruits are the chief source of vitamins and minerals. Grapevine cultivation is started in 1960 with the variety of Fakadi and Bhokari as alternative fruit crops. After 1980, it has been practiced as a traditional commercial fruit crop in a large extent of area. Presently, in Nashik district the new various types of varieties are cultivated such as Thompson seedless, Sonaka, and Tas-a-Ganesh, Sharad seedless, Flame seedless, and Manik chaman, Purple seedless and other variety. The analysis of variety wise area under grapevine cultivation at tahsil level reveals that area under Thompson Seedless variety is more followed by Sonaka and TAS-A Ganesh are gaining more importance. Marketing is plays an important role in agricultural development. Identifying the most efficient marketing channel is, thus, critical to optimize the marketing costs/margins and to ensure remunerative prices to the producers.

In the international scenario, total area under grape cultivation in world was 7449 (000 ha), production was 77.8 (mt) and productivity was 10.9 (in ton/ha) in 2018-19. (Sources: OIV, Food & Agricultural Organization and Ministry of Agril. & Farmer Welfare Govt. of India).

In India, total area under grapes cultivation was 151 (IN 000, Ha) and annual production 4001.5 (million ton) with productivity is 26.5 IN MT/Ha) during the year 2018-19. Maharashtra rank first in terms of production accounting for more than 81.22% of total production and highest productivity in the country.

Hence, the study aimed to analyze the economics of marketing grape in Nashik District of Maharashtra with specific objectives viz. i) to study the Marketing channel of grapes in Nashik district ii) to study the marketing cost, margin and price spread of grapes in Nashik District.

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Material and Methods

Multistage sampling design was adopted in selection of district, tehsils, villages and grapes growers. Nashik district was purposively selected on the basis of availability of area under Grapes. Two tehsils of Nashik district was selected for the present study. Dindori and Niphad are highest area under grapes cultivation as compared to other Tehsils. Hence these tehsils were selected for the study. From selected tehsils 6 villages were selected on the basis of highest area under Grapes cultivation. From each village 10 grape growing farmers were selected randomly. Hence totals 60 farmers were selected for the study.

The primary data was being collected from grape growers by the help of pre-tested interview schedule and pertaining for the year 2018-2019. Data were based the consequent costs including marketing such as market channels, cost of marketing, margin and price spread etc. The data were collected by the survey method with the help of specially designed pre-tested questionnaire for grape growers and market agencies in the year 2018-9. The data so obtained for the year 2018-19 were analyzed with a tabular method of analysis. Simple statistical tools such as arithmetical average and percentages were worked out for the purpose of interpretation of results.

Marketing channels of grapes

The channels of distribution indicate the route through which commodity moves from initial producer to end consumer.

- Channel I – Producer- Consumer
- Channel II- Producer – Retailer - Consumer
- Channel III – Producer – Commission Agent/wholesaler- Retailer- Consumer
- Channel IV- Producer – Exporter – Commission agent – Wholesaler – Retailer – Consumer

Results and Discussion

Major Marketing channel identified in the study area

The marketing channels are indicating how the produces passes through different agencies from producer and till its reach to the consumer. In the studied area there are two major marketing channels are use in which and are shown in table 1. In that the higher production sold in channel- I (12747 q.) followed by channel-II (5729 q.) The percent production sold in channel-I and channel-II was 68.99 percent, 31.01 percent respectively.

Production and Marketing Surplus of Grape through Different Channel

Production and marketed surplus of grape sold through different channels were calculated and are presented in table 2. The Production of grape was 207.07 quintals in the area of 1 hectare and consumption for home was 2.69 quintals. The results revealed that quantity of grape as 141.02 qtl, 63.36 quintals were marketed through channel-I, and channel-II respectively. Thus total marketed surplus of grape was 204.38 qtl i.e. 98.70 percent.

Marketing cost incurred by different intermediates

Intermediates are the agencies, which link between the sellers and buyer in the market. To improve the marketing, it is necessary to minimize the number of intermediaries. The various intermediates are involved in the grape marketing such as commission agent, wholesaler, and retailer etc. The marketing cost incurred by different intermediates which are

calculated and show in the Table-3 to Table-7.

A) Cost of Marketing Incurred by Producer

Item wise per quintal cost of marketing of grape incurred by producer in different channels was calculated and presented in table 3. The cost incurred by the producer was the highest with Rs. 172.73 per quintal in channel-I followed by 146.63 per quintal in channel-II. It was observed that, the proportionate expenditure on individual item showed that packing charges were Rs. 76.72 (44.42%) followed by transport charge was Rs. 34.7 (20.1%), loading charges were Rs. 19.07 (11.04%), unloading charge was Rs. 17.23 (9.97%), commission charge was Rs. 16.64 (9.63%), market fee was Rs. 5.02(2.91%) and losses Rs. 3.35 (1.93%) in channel-I. Similarly, proportional expenditure on individual item such as the transport charge was Rs.81.34 (55.47%), followed by loading charges were Rs. 24.4 (16.64%), unloading charges were Rs. 24.4 (16.64%), commission charge was Rs.8.1 (5.53%), Losses Rs. 5.09 (3.47%), and Weighing charge Rs. 3.3 (2.25%) in channel-II.

B) Cost of marketing incurred by Exporter

Item wise per quintal cost of marketing of grape incurred by Exporter in the channel-II was calculated and presented in table 4. The cost incurred by the Exporter was the total cost Rs. 2144.67 per quintal in channel-II. It was observed that, the proportionate expenditure on individual item showed that transport charge was Rs. 1249.9 (58.27%), followed by commission charge was Rs. 755 (35.21%), unloading charge was Rs. 69.99(3.27%), loading charges were Rs. 66.98 (3.12%), and packing charges were Rs. 2.69 (0.13%)

C) Cost of marketing incurred by commission agent

Marketing cost incurred by commission agent is given in Table-5. It was observed from Table-4.16 that, the total cost of marketing is Rs. 32.52 in channel-I and Rs. 25.13 in Channel-II. Out of total cost incurred by the commission agent, higher expenditure on transport charge was Rs. 16.01 (49.23%) followed by labour charges were Rs. 12.8 (39.36%) and losses was Rs. 3.71 (11.41%) in the channel-I. Similarly, the higher expenditure on transport charge was Rs. 12.53 (49.86%) followed by labour charges were Rs. 10.44 (41.55%) and losses was Rs. 2.16 (8.59%) in the channel-II.

D) Cost of Marketing incurred by Wholesaler

Per quintal cost of marketing of grape incurred by wholesaler channel-II was calculated and presented in table 6. The result revealed that of total cost was Rs. 139.6 in channel-II. In which share of transport charge was high as Rs. 108 (77.37%), followed by storage charge was Rs. 12 (8.59%), labour charge was Rs 10 (7.17%), miscellaneous charges were Rs. 6 (4.29%) and losses were Rs. 3.6 (2.58%) in channel-II.

E) Cost of Marketing Incurred by Retailer

Marketing cost incurred by retailer is given in Table-7. It was observed from Table-4.16 that, the total cost of marketing is Rs. 92.28 in channel-II and Rs. 62.91 in Channel-I. Out of total cost incurred by the retailer, higher expenditure on transport charge was Rs. 25.06 (27.15%) followed by labour charges were Rs. 20.88 (22.62%), storage charge was Rs. 16.70 (18.09%), commission charge was Rs. 10.44 (11.32%), shop tax was Rs.8.35 (9.06%), electric charge was Rs. 5.43 (5.88%), market fee was Rs. 3.75 (4.07%) and losses was Rs. 1.67 (1.81%) in the channel-II. Similarly, the higher

expenditure on transport charge was Rs. 19.20 (30.52%) followed by labour charges were Rs. 9.98 (15.86%), shop tax was Rs. 7.68 (12.20%), commission charge was Rs. 7.33 (11.65%), storage charge was Rs. 6.40 (10.17%), electric charge was Rs. 5.93 (9.43%), market fee was Rs. 3.84 (6.11%) and losses was Rs. 2.55 (4.06%) in the channel-I.

Price spread in grape marketing

Price spread refers to the difference between the price paid by the consumer and price received by the producer. This includes marketing cost and margins of the intermediaries. The marketing cost and margin of each agency in different channels were calculated and the details are presented in table-8.

It is revealed from Table-8 In channel-I, commission agent and retailer were the two intermediaries while in channel-II, Exporter, commission agent, wholesaler and retailer were the four intermediates. In that per quintal received by the grape grower was Rs. 2745.49 in channel-I and Rs. 5566.43 in

channel-II. The higher price was received in the Channel-II. The net price received by producer was the highest (77.48 percent) in channel I (Producer-commission agent-retailer-Consumer) and the lowest (39.46 percent) in channel-II (Producer-Exporter-Commission agent-Wholesaler-Retailer-Consumer). Per quintal consumer's price was Rs. 12971.78 in channel-II and Rs. 3320.54 in channel-I. The lowest consumer's price was observed in channel-I. The total marketing cost in that observed highest cost was 35.86 percent in channel-I followed by total marketing cost was 35.17 percent in channel-II. The higher market margin was Rs. 5303.67 (68.83%) in Channel-II and lowest market margin was Rs. 479.65 (64.14%) in channel-I. while the higher price spread was Rs. 7705.35 in the channel-II and lowest price spread was Rs. 747.81 in channel-I. It is concluded that, the channel-I price spread is lower Rs. 747.81 as compare to channel-II. Therefore it best channel of marketing as compare to channel-II.

Table 1: Major marketing channel identified in the study area

Sr. No.	Channels	Total produce sold (q)	Percentage
1	Channel –I (Producer-Commission agent-Retailer-Consumer)	12747	68.99
2	Channel – II (Producer-Exporter-commission agent-Wholesaler-Retailer-Consumer)	5729	31.01
	Total	18476	100

Table 2: Production and marketed surplus of grapes through different channel (Quantity in quintal)

Sr. No.	Particulars	Grapes	Percent
1	Farm size (ha)	1	
2	Production	207.07	100
3	Consumption for home	2.69	1.30
4	Marketed surplus in channel-I (q) (Producer-Commission agent for local market-Retailer-Consumer)	141.02	68.10
5	Marketed surplus in channel-II (q) (Producer-Exporter-Commission agent-Wholesaler-retailer-Consumer)	63.36	30.59
6	Quantity sold in the market (q)	204.38	98.70
7	Total marketed surplus	204.38	98.70

Table 3: Marketing cost of grapes incurred by producer (Rs. /qtl)

Sr. No.	Producer	Channel-I	Channel-II
1	Packing	76.72 (44.42)	-
2	Loading	19.07 (11.04)	24.4 (16.64)
3	Transport charge	34.7 (20.1)	81.34 (55.47)
4	Unloading charge	17.23 (9.97)	24.4 (16.64)
5	Weighing charge	-	3.3 (2.25)
6	Commission charge	16.64 (9.63)	8.1 (5.53)
7	Market fee	5.02 (2.91)	-
8	Losses	3.35 (1.93)	5.09 (3.47)
	Sub total	172.73 (100)	146.63 (100)

Note: (Figures in the parentheses indicate percentage to total)

Table 4: Marketing cost of grapes incurred by Exporter (Rs. /qtl)

Sr. No.	Exporter	Channel-II
1	Packing	2.69 (0.13)
2	Loading	66.98 (3.12)
3	Transport charge	1249.9 (58.27)
4	Unloading charge	69.99 (3.27)
5	Commission charge	755 (35.21)
	Sub total	2144.67 (100)

Note: (Figures in the parentheses indicate percentage to total)

Table 5: Marketing cost of grapes incurred by Commission agent (Rs. /qtl)

Sr. No.	Commission agent	Channel-I	Channel-II
1	Labour charge	12.8 (39.36)	10.44 (41.55)
2	Transport charge	16.01 (49.23)	12.53 (49.86)
3	Losses	3.71 (11.41)	2.16 (8.59)
	Sub total	32.52 (100)	25.13 (100)

Note: (Figures in the parentheses indicate percentage to total)

Table 6: Marketing cost of grapes incurred by Wholesaler (Rs. /qtl)

Sr. No.	Wholesaler	Channel-II
1	Labour charges	10 (7.17)
2	Transport charge	108 (77.37)
3	Storage charge	12 (8.59)
4	Miscellaneous charges	6 (4.29)
5	Losses	3.6 (2.58)
	Sub total	139.6

Note: (Figures in the parentheses indicate percentage to total)

Table 7: Marketing cost of grapes incurred by Retailer (Rs. /qtl)

Sr. No.	Retailer	Channel-I	Channel-II
1	Labour charge	9.98 (15.86)	20.88 (22.62)
2	Transport charge	19.20 30.52)	25.06 (27.15)
3	Shop tax	7.68 (12.20)	8.35 (9.06)
4	Commission charge	7.33 (11.65)	10.44 (11.32)
5	Electric charge	5.93 (9.43)	5.43 (5.88)
6	Storage charge	6.40 (10.17)	16.70 (18.09)
7	Market fee	3.84 (6.11)	3.75 (4.07)
8	Losses	2.55 (4.06)	1.67 (1.81)
	Sub total	62.91 (100)	92.28 (100)

Note: (Figures in the parentheses indicate percentage to total)

Table 8: Per quintal marketing cost, margin and price spread in grape marketing

Sr. No.	Particulars	Channel-I	Channel-II
1	Producer		
	Price received	2745.49 (82.68)	5266.43 (40.59)
	Cost incurred	172.73 (5.2)	146.63 (1.13)
	Net price received	2572.76 (77.48)	5119.8 (39.46)
2	Exporter		
	Price received	-	8524.52 (65.71)
	Cost incurred	-	2144.67 (16.53)
	Margin	-	1113.42 (8.58)
3	Commission agent		
	Price received	2912.34 (87.71)	9358.12 (72.14)
	Cost incurred	32.52 (0.97)	25.13 (0.19)
	Margin	134.36 (4.04)	808.47 (6.23)
4	Wholesaler		
	Price received	-	10714.34 (82.59)
	Cost incurred	-	139.6 (1.07)
	Margin	-	1216.62 (9.37)
5	Retailer		
	Price received	3320.54 (100)	12971.78 (100)
	Cost incurred	62.91 (1.89)	92.28 (0.71)
	Margin	345.29 (10.39)	2165.16 (16.69)
6	Consumer's price	3320.54 (100)	12971.78 (100)
7	Marketing cost	268.16 (35.86)	2401.68 (31.17)
8	Market margin	479.65 (64.14)	5303.67 (68.83)
9	Price spread	747.81 (100)	7705.35 (100)

Note: (Figures in the parentheses indicate percentage to total)

Conclusion

The percent production sold in channel-I and channel-II was 68.99 percent, 31.01 percent respectively.

The Production of grape was 207.07 quintals in the area of 1 hectare and consumption for home was 2.69 quintals. The results revealed that quantity of grape as 141.02 qtl, 63.36 quintals were marketed through channel-I, and channel-II respectively. Thus total marketed surplus of grape was 204.38 qtl i.e. 98.70 percent.

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References

- Ahire SC. An Analysis of Market Channel of Pomegranate Fruit in Dhule District (M.S.) International Journal of Science and Research. 2017;6(2):1112-1116.
- Ahire AM, Bhonde SR. Marketing Channels and Price Spread of Grapes A Study of District Nashik, Maharashtra, A National Journal of Agriculture and Rural Development. 2008;40(4):27-30.
- Jagatap, M.D. Price spread in marketing of grapes in Pune district of Maharashtra, International Research Journal of Agricultural Economic and Statistics. 2014;5(2):176-178.
- Kalimangasi N, Majula R, Kalimangasi NN. The Economic Analysis of the Smallholders Grape Production and Marketing in Dodoma Municipal: A case study of Hombolo Ward international Journal of Scientific and Research Publications. 2014;4(10):1-8
- Kumari P, Kumar S, Ratnam S. Price spread and marketing of banana in Vaishali district (Bihar) International Journal of Chemical Studies. 2018;6(3):1966-1969.
- Patil R. Economic analysis of marketing channel of grapes in Maharashtra, International Research Journal of Agricultural Economic and statistics. 2017;8(1):21-25.