

Analysis on economics of raisin preparation by different methods in Bijapur district

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ABSTRACT

Agricultural marketing plays an important role not only in stimulating production and consumption, but also in accelerating the pace of economic development. Raisin production has been the most labour intensive activity. There is ample scope for processing of grapes in the form of raisins in Bijapur district, because of better opportunities in form the availability of quality raw material and access to new technology; credit and marketing support system have enabled to boost up the production and also usage of product, in view of good market for Thompson seedless and also for easy processing qualities, the variety will be promising one for the zone. In the study it was found that raisin production by sulphur fumigation was more economical compared to oil dipping method.

INTRODUCTION

India is predominantly agrarian economy since the time immemorial. Agriculture occupies the central place in rural life. However, Agriculture continues to be mainstay of our economy even today. The contribution of agriculture towards national income was about 14.20 per cent in 2010-11 and about 61 per cent of population depends on it. Therefore, it is rightly said that agriculture is the backbone of Indian economy. Agriculture continues to be the mainstay of our economy as it occupies the central place in rural life.

Horticulture is an important segment of agriculture

sector which contributes about one-fifth share in the economy of agriculture and allied sectors. It is the fastest growing sector within agriculture; thanks to the economic prosperity that has provoked marked changes in the life styles and the consumption habits of the people. There has been a perceptible change in the consumption pattern characterized by declining share of food grains and the increasing share of non-food grain items in the consumption baskets particularly fruits and vegetables. Rapidly growing demand for horticulture commodities and products especially burgeoning market for processed fruits and vegetables as well as booming floriculture market is an evidence of the phenomenon that is expected to

accelerate horticulture growth in the country.

Grape is one of the important fruit crop grown in India. Grapes (*Vitis vinifera*) belong to the Vitaceae family. Grape is the third most widely cultivated fruit after citrus and banana. Globally grapes production was 67,909 thousand tonnes during 2010 as per FAO data and grapes production contributes to about 16 per cent of the total fruit production. European Union takes the lead position in grapes production with Italy occupying the top position with 11.48 per cent followed by China with 10.73 per cent and USA with 9.93 per cent. India produces about 2.77 per cent (1,878 thousand tonnes) of the total world production during 2008. Maharashtra (75.33 %) is largest producer of grapes in the country. Maharashtra and Karnataka together contributes about 89.65 per cent of India's grapes production. Grapes are widely consumed as fresh fruit in India. It is also used for producing raisins, wine, juice, juice concentrate, squash, beverages, jams and marmalades. Cultivation of grapes is known as viticulture. Grapes are highly digestible and have a number of therapeutic properties. Grapes are non-climacteric fruit that grow on the perennial and deciduous woody vines.

There is ample scope for processing of grapes in the form of raisins in Bijapur district, because of better opportunities in form the availability of quality raw material and access to new technology; credit and marketing support system have enabled to boost up the production and also usage of product, in view of good market for Thompson seedless and also for easy processing qualities, the variety will be promising one for the zone.

MATERIAL AND METHODS

Bijapur district is situated in the interior of the Deccan peninsular and lies between north latitude 15° 20' and 17° 28'. It is surrounded by Raichur, Dharwad and Belgaum districts, respectively.

Total geographical area of Bijapur district is 10.53 lakh hectares comprising of 1,977 hectares of forest, 8.39 lakh hectares of net area under cultivation and remaining area is not available for cultivation. Net area irrigated in the district accounts for 27 per cent of net area under cultivation.

The analysis of data was further done using the following tools:

Tabular analysis :

Tabular analysis was adopted for analyzing the

general economic characteristics of the sample raisin processors, labour utilization, costs and returns and profits on per tonne basis. Export of raisins both in terms of quantity and value and opinion of processors, traders and retailers about constraints; the data were compared and analyzed by worked out by averages, percentages, etc., to obtain meaningful results.

OBSERVATIONS AND ANALYSIS

In Table 1 it is revealed that the variable cost in production of raisin accounted to Rs. 6,27,827.3. The variable cost was less in oil dipping method compare to sulphur fumigation method (Rs. 6,35,605.8) because the number of labour used and chemicals cost were less. The cost involved in establishment of raisin making unit was varies, the fixed cost, which involved depreciation on building, of racks and other overhead expenses and interest on long term loan was also varying with the method of production.

The cost such as packing material was of Rs.12,000 and it was same for both the methods of raisin production and as the raisin produced (10,000 kg) in both methods by processing 40 tonnes of fresh grapes was same and the cold storage rent also same for both the methods of raisin produced for storage of raisin in the warehouse. The cost incurred on chemicals was more of Rs. 21,360 in oil dipping method compared to sulphur fumigation method of Rs. 14,865 because of quantity of chemicals used in the oil dipping method is quite more. The labour cost in oil dipping method of raisin production was less Rs. 30,030 compared to Rs. 43,794.64 in sulphur fumigation method of raisin production because in oil dipping method the number of days require to produce raisin was only 12 days period as compare to 20-25 days in case of sulphur fumigation method.

As the variable cost in sulphur fumigation method was more, the total cost of production of raisin was also more as compare to oil dipping method. The sales revenue was less in oil dipping method for 10 tonnes of raisin (Rs. 8,85,000) as the total raisin produced by processing 40 tonnes of fresh grapes and sold at the rate of Rs. 88.5 per kg in oil dipping method.

The profit obtained was less (Rs. 1,38,247.7) in oil dipping method as compare to (Rs. 2,12,085.2) sulphur fumigation method. The net returns per kg of raisin and net returns on investment was (Rs. 13.82) and (Rs. 1.18) comparably less in oil dipping method of raisin production.

Table 1 : Cost and returns in raisin production by oil dipping method (10 tonne)			
Sr. No.	Particulars	Method of processing	
		Oil dipping method	
		Quantity	Value
Variable cost			
1.	Raw grapes (kg)	40,000	5,60,000
2.	Chemicals		
(a)	Ethyl Oleate lye (lit.)	130	15,600
(b)	Potassium carbonate (kg)	160	5,760
3.	Labour cost (Man days)	273	30,030
4.	Packaging material	600 box	12,000
5.	Interest on working capital @7 %	-	4,437.3
6.	Total variable cost (TVC)	-	6,27,827.3
Fixed cost			
7.	Depreciation	@ 7 % interest	38,365
8.	Interest on fixed capital	@ 11 % interest	80,560
9.	Total fixed cost (TFC)		1,18,925
10.	Total cost of production	10,000 kg	7,46,752.3
11.	Sales revenue		8,85,000
12.	Profit (10-9)		1,38,247.7
13.	Net return per kg of raisins		13.82
14.	Net return on investment		1.18

Table 2 : Cost and returns in raisins production by sulphur fumigation method			
Sr. No.	Particulars	Method of processing	
		Sulphur fumigation method	
		Quantity	Value
Variable cost			
1.	Raw grapes (kg)	40,000	5,60,000
2.	Chemicals		
(a)	Ethyl Oleate lye (lit.)	64	8,000
(b)	Potassium carbonate (kg)	117	4,240
(c)	Sulphur (kg)	75	2,625
3.	Labour cost (Man days)	382	43,794.64
4.	Packaging material	600 box	12,000
5.	Interest on working capital @7 %	-	4,946.17
6.	Total variable cost (TVC)	-	6,35,605.8
Fixed cost			
7.	Depreciation	@ 7 % interest	38,344
8.	Interest on fixed capital	@ 11 % interest	83,965
9.	Total fixed cost (TFC)		1,22,309
10.	Total cost of production	10,000 kg	7,57,914.8
11.	Sales revenue	-	9,70,000
12.	Profit (11-10)	-	2,12,085.2
13.	Net return per kg of raisins	-	21.20
14.	Net return on investment		1.27

In Table 1 clearly indicated that the raisin production by oil dipping method was economical. From the Table it is clear that the raisin production was economical in both the methods, the raisin produced by sulphur fumigation method was fetched more price per kg (Rs. 97) as compared to raisin produced by oil dipping method (Rs. 88.50) per kg because of the quality of raisin produced by sulphur fumigation method and it has got export demand.

In Table 2 it is revealed that the variable cost in production of raisin accounted to Rs. 6,35,605.8 because of cost of raw material accounts major share in the variable cost. As the fixed cost involved in establishment of raisin making unit was accounted to Rs. 1,22,309, which involves depreciation on the buildings, racks, and other overhead expenses of Rs. 38,344 and interest on fixed capital accounted Rs. 83,965. The cost such as labour cost of Rs. 43,794.6, chemicals cost of Rs. 14,865 and packing material cost of Rs. 12,000 accounted for the raisin produced by processing 40 tonnes of fresh grapes which yields 10 tonnes of raisin. The cost incurred on chemicals and labour was more in sulphur fumigation method compare to oil dipping method of raisin production because of usage of additional sulphur for fumigation as well as it requires more number of labour as it takes 20 to 25 days for raisin to be process. The total cost of production of raisin was more in sulphur fumigation method (7,57,914.8) compare to oil dipping method (7,46,752.3) because variable cost was more and fixed cost also varies from oil dipping method because sulphur fumigation method of raisin production requires construction of fumigation chamber which cost additional investment. The sales revenue realized also more in this method Rs.97 per kg as compare to Rs. 88.5 per kg in the case of oil dipping method. The profit obtained was more in this method Rs. 2,12,085.2 compare to oil dipping method Rs. 1,38,247.7 because of the quality and market value of raisin produced from sulphur fumigation method was more. The net returns per kg of raisin and returns on investment was more (Rs. 21.20 and 1.27, respectively) compared to (Rs. 13.82 and 1.18, respectively) oil dipping method of raisin production. In Table 2 it is clearly indicated that the raisin production by sulphur fumigation was more economical compared to oil dipping method. More or less similar results were also obtained by Venkateshwarlu *et al.*, 1998 on banana, Vijay Kumar, 1997 on rose, Govindareddy *et al.*, 1997 and Gommagolmath, 1994 on mangoes and Krishnamurthy, 1985 and Kulkarni, 1984 on grapes.

Conclusion :

The study has found that the price prevailing for raisin produced by sulphur fumigation method was high, but there is also demand for oil dipped raisin. So it is better to go for combined combination of production of both types of raisin looking to the prevailing market conditions. The study also found it very important that, establishing modern type of raisin making unit is more beneficial in the long run, even though the investment at the beginning is higher compared to the old method, which requires frequent repair and the efficiency will be less.

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