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## ECONOMIC STUDY OF PROFITABILITY OF RAISIN PRODUCERS IN SANGLI DISTRICT

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### **ABSTRACT:**

Indian economy is partly dependent upon agriculture. Commercial crops like grapes, pomegranates, cashews, bananas, apples, orange, almond etc. are supported to Indian economy. Raisin or Kishmish or Manuka are made from grapes. Sangli raisin market is famous in India due to higher raisin production. In the present paper, an attempt has been made to study the net return and profitability of raisin production in Sangli district. Primary data have collected through structured questionnaire. There are 2320 grape producers in Sangli district out of them 50 per cent of table, 48.3 per cent is raisin and 1.7 per cent wine grape producer. A sample size of 560 raisin producer have used and the respondents were randomly selected. For the comparison, net return and profitability analysis approach is used. Net returns from small firm, medium firms and large firms are Rs336521, Rs 458189 and Rs 660885 respectively. The profitability of raisin production in study area is 66.64 per cent. The highest profitability is seen in case of large firm i.e. 95.25 per cent, followed by medium firms (64.40 per cent) and small firms (43.18 per cent). Major constraints faced by processing firm were marketing and price fluctuation. This study suggests that government should take necessary action to guard the investors of grape processing industry. The main aim of the present paper is to study of net return and profitability in the Sangli District.

**Key Words:** Raisin, Cost of production, Net profit and Profitability etc.

### **INTRODUCTION:**

Raisin is one of the most important dried products obtained by drying of grapes (Sawhney et al, 2009). Raisin is the second most important product of the grapevine, wine being the first (Shanmugavelue, 1989). Raisin is of a great economic importance for many countries (Pangave, 2002). It is widely produced in different parts of the world. India is an important raisin producer of in the

world. At present, India stands 4<sup>th</sup> larger producer of raisin in the world. Sangli is the major quality grape growing area in Maharashtra (India). Sangli district accounts for more than 60 per cent of the production of raisin in India (Gade&Gaikwad, 2014). Grape growers of Sangli district are expertise in quality raisins making. Raisin can provide remunerative returns to the growers. The dried fruits have always been an important contributor source to the agricultural economy. The cost of raisin grape production 48 per cent less than that table grape production but benefit is higher than that of table grape (Gaikwad, 2005). It is clear that raisin production is more beneficial for farmer than the table grape. Raisin enterprise is expected revenue, simply multiply the expected price by the expected yield. To determine the profitability of the operation, prepare either a whole farm budget or an enterprise budget for raisins. The success of any enterprise in industry can be judged on the basis of economic benefits accrued by the entrepreneur from the enterprise (Bhalsing, 2009). The raisin industry in Sangli district will bring large benefits to the people by way of employment and income. The processed raisin is definitely an encouraging return to the farmers.

In this paper an attempt is made to study the Net return and Profitability of raisin industry in Sangli district.

### **STUDY REGION:**

The Sangli district is situated in western part of Maharashtra State. This district consist ten tahsils covering 731 villages. The total area extend is of 8572 sq. km. extending from 16° 45' to 17° 33' north latitudes and 73° 42' to 75° 40' east longitudes. It is bounded by Solapur and Satara districts in the North, Bijapur district in the east, Kolhapur and Belgaum district in the south and the Ratnagiri district to the West {Fig1.1}. The climate of the district is generally dry. In general the rainfall was decreases from west to east from 4000 to 500 mm. From central part to eastward the region faces severe drought conditions. The average annual rainfall of the district is 618.66 mm, the temperature ranges from 14.80° C to 38.4.

### **OBJECTIVES:**

The present study has been undertaken with the following specific objectives.

- 1) To analyze the production cost of raisin in Sangli district.
- 2) To analyze the Profitability of raisin production in Sangli district.

**DATABASE AND METHODOLOGY:**

The study was conducted in Sangli district of Maharashtra. The Present study was based on primary data sources. The primary data have been collected through sample survey and personal interviews.

Sangli district were selected purposively, there are 2320 grape producers with 30,002.69 hectares grape area in the Sangli district, out of them nearly 48.27 per cent (i.e.1120) of are raisin producer. At the random 560 raisin, producers (50 per cent) were selected from leading tahsils of the district. From the processor, details of information such as investment pattern, labour use, processing cost and production techniques were collected. The data pertain to the agriculture year 2013-14.

**TOOLS OF ANALYSIS:**

The cost and returns in the selected processing units were estimated. The costs involved were grouped into fixed and variable costs. The gross return of a unit was estimated by adding the revenue from the sale of the raisin profit was derived by deducting total costs from total returns. It is necessary to explain two conceptual details. One is the Net return. It will calculate as under,

$$\text{Net return} = \text{Gross receipts} - \text{Total cost.}$$

The other is profitability of the enterprise. Since total cost represents total investment in the enterprise by the firm, Profitability will represent by the firm, Profitability will represent the return on this investment.

The Profitability is mathematically expressed as following statistical equation.

$$\text{Profitability} = \frac{\text{Net returns}}{\text{Total Cost}} \times 100$$

**CONCEPT OF PROFITABILITY:**

Profitability is the ability to earn profit from all the activities of an enterprise. Profitability is the most important factor to be considered in directing a business venture. The word 'profitability' is composed of two words, namely; profit and ability. Sometimes, the terms 'Profit' and 'Profitability' are used interchangeably. But in real sense, there is a difference between the two. Profit is an absolute term, whereas, the profitability is a relative concept. However, they are closely related and mutually interdependent, having distinct roles in business. Profit refers to the total income earned by the enterprise during the specified period of time, while profitability refers to the operating efficiency of the enterprise. It is the ability of the enterprise to make profit on sales. It is the ability of enterprise to get sufficient return on the capital and employees used in

the business operation. According to Harward & Upton (1961), “profitability is the ‘the ability of given investment to earn a return from its use. It shows how efficiently the management can make profit by using all the resources available in the market. Profitability is judged on the basis of net returns earned by the firm. Net returns are difference between total receipts and total cost of production including cost of marketing. Total receipts comprise income from the sale of total production. Cost of production as a broader connotation would include cost of establishment; cost of production would throw light on the profitability of the enterprise.

The measurement of profitability for a concern is as important as the earning of profits. Profitability is a measure of evaluating the overall efficiency of the business. Profitability of a firm can be evaluated by comparing the amount of capital employed i.e. the input with income earned i.e. the output. This is popularly known as return on investment or return on capital employed. It is regarded as the overall profitability ratio and has two components; net return and Profitability.

#### **PRODUCTION COST OF RAISIN:**

Production cost of raisin in this context means the cost incurred for production of raisin grapes, establishment cost, processing cost and marketing cost. According to (Gaikwad, 2007) the total cost of processing consists of the fixed cost and variable cost. The total cost covered with cost of land, shed assets other than land, machinery, labour and transportation cost of material, cost of assets and labour, cost of chemicals, water and electricity charges, salaries of staff are covered in the total of processing cost. However, cost of cleaning, packaging, cold storage, managerial works are included in total of marketing cost.

#### **FIXED COST OF RAISIN:**

The Fixed cost of raisin production includes value of land, shade, drying yard, processing unit, machinery and pre-operative expenses. The Fixed cost derived by proportionally the sound of its economic life. The economic life of rack shad is considered 30 years (3.5 per cent per annum). The rate of recovery of the material used for raisin production varies according to the nature of material. The capital recovery cost is the amount of money required each year to recover the difference between the purchase prices and salvage value (Laura 1998).

Table No 1 shows fixed cost of raisin production in Sangli district. The analysis reveals that total an average production cost is Rs812475 for the

establishment of infrastructure. The maximum cost incurred is on drying yard (53.84 per cent) followed by land (27.38 per cent), Grading Machine (9.84 per cent), Rackshade house (5.09 per cent), Shade net (1.22 per cent), Create (0.61 per cent), processing unit (0.50 per cent) and Water storage tank (0.40 per cent). Aggregate appointed cost per year is about Rs. 32113.

**Table No 1: Fixed Cost of Raisin Production**

Sr. No	Major Heads Amount	Cost in Rs	Fixed cost in %	Interest rate per year in %	Recovery cost per year in Rs
1	Fixed capital				
1.1	Land 20000 sq. ft. plot	222500	27.38	3.5	7787.5
	Shade house 100 sq. ft.	41375	5.09	3.5	1448
	Drying yard 250 ft.	437500	53.84	3.5	15312
	Total	703875	86.63		24548
1.2	Machinery and equipment				
	Grading Machine	80000	9.84	3.5	2800
	Shade net	9950	1.22	20	1990
	Processing unit	4100	0.50	20	820
	Water storage tank	3250	0.40	10	325
	Create	5000	0.61	20	1000
	Miscellaneous assets	6300	0.77	10	630
	Total	108600	13.36		7565
Total		812475	100	--	32113

*Source: Based on fieldwork*

#### VARIABLE COST OF RAISIN PRODUCTION:

**Table No 2: Variable cost of raisin production**

Head Expenditure	Cost per tones (Rs)	Average cost per hectare in Rs	Cost in %
Processing	7885	68126	57.19
Cleaning	1750	15120	12.69
Grading	1750	15120	12.69
Transportation cost of raw material	2400	20736	17.41
Total	13785	119102	100.00

*Source: Based on fieldwork*

The variable cost of raisin production occurs at four stages i.e. processing, cleaning, grading and raw material transportation. There is a close connection between the amount of variable costs and volume of production when the variable cost increase also the production cost increased. Table No 2 illustrates the average variable costs. It is Rs13785 per tone and Rs 119102 average cost per acre. The percentage of processing cost accounted is highest of 57.19 per cent per tones and per hectare. Followed by Transportation of raw material (17.41 per cent), cleaning and grading both are 12.69 per cent variable costs are incurred. The highest proportion processing cost is found due to the higher rate of raw materials and labour cost.

Table No 3 reveals average per kilogram and average cost per hectare for raisin marketing. The total marketing cost is Rs 7.87 per kg and average cost per hectare of marketing of raisin is Rs 68082.95 in Sangli district.

### MARKETING COST OF RAISIN PRODUCTION:

**Table No 3: Marketing cost of raisin**

Items of marketing cost	Small	Medium	Large	Average Cost per kg	Average cost per hectare	Cost in %
Packing material	2.33	2.00	1.73	2.02	17462.9	25.64
Labour cost of Packing	0.26	0.26	0.26	0.26	2247.7	3.30
Transport	0.53	0.46	0.46	0.48	4149.6	6.09
Cold storage	2.40	2.40	3.60	2.80	24206	35.55
Commission agent	2.16	2.16	2.16	2.16	18673.2	27.49
Hamali	0.15	0.15	0.15	0.15	1296.75	1.90
Total cost	7.83	7.43	8.36	7.87	68036.15	100

*Source: Based on Fieldwork*

It indicates that cold storage account for the highest proportion of marketing cost with a share of about 35.55 per cent. It is followed by commission agent (27 per cent), packing material (25, 64 per cent), transport (6.09 per cent), labour cost of packing (3.30 per cent) and hamali (1.90 per cent) are respectively.

### NET RETURN AND PROFITABILITY OF RAISIN PRODUCTION IN SANGLI DISTRICT:

The measurement of profitability for a concern is as important as the earning of profits. Profitability statement of raisin in Sangli district, taking into consideration total production cost, Gross receipts and Net returns of Small, Medium and Large farmer (Raisin producer) of Sangli district, and have estimated the profitability of raisin production.

**Table No 4: Net Return and Profitability of Raisin production per hectare**

Items	Small	Medium	Large	Overall
Cost of production grapes	505780	466216	448031	473344
Cost of Processing	127510	117244	112552	119102
Capital recovery cost	78222	63701	60947	67623
Cost of Marketing	67690	64232	72186	68036
Total cost of production	779202	711393	693786	728105
Gross receipts	1115723	1169582	1354671	1213325
Net Returns	336521	458189	660885	485220
Profitability (%)	43.18	64.40	95.25	66.64

*Source: Field survey*

*Note: Figures in parentheses are percentages to total cost.*

Table-5 depicts the relationship between size of the firm and net return, profitability of raisin production. As size of the firm increases, net returns in absolute terms as well as in terms of profitability increase giving direct relationship between size of the firm and profitability. The production cost of raisin grapes of small firms is Rs505780, medium firms Rs 466216 and large firms 448031. Besides this the net returns from small firm, medium firms and large firms are Rs336521, Rs 458189 and Rs660885 respectively. The table shows the average profitability of raisin in study area is 66.64 per cent. The highest profitability is seen in case of large firm i.e. 95.25 per cent, followed by medium firms (64.40 per cent) and small firms (43.18 per cent).

### **CONCLUSION:**

Sangli district is forefront in the production of grapes as well as the processing on grapes. The total production cost of raisin is 728105 per hectare for one year. Out of the total production cost, processing cost share 18.43 per cent i.e. Rs 119102 and total marketing cost was Rs68036 per hectare. The net returns from small firm, medium firms and large firms are Rs. 336521, Rs. 458189 and Rs.660885 respectively. The average profitability of raisin in study area is 66.64 per cent. The highest profitability is observed in case of large firm i.e. 95.25 per cent, followed by medium firms (64.40per cent) and small firms (43.18 per cent).The economy of Sangli district is directly and indirectly connected with grape cultivation and processing. In Sangli, the grape processing industry has remarkable potential for rising national wealth and thereby achieving social and economic benefits. Hence in order to boost the income and employment generation in the district, government has to put in focus on the development of this industry.

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