Marketing Strategies of Fruit and Vegetable Processing Units in Kerala

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ABSTRACT

Marketing occupies a very significant role in the business and is the nerve centre of all human activities. Production of goods has no meaning unless they are exchanged for money or money's worth. Thus for the further production, goods should be moved from the producer's to ultimate consumers. It is through marketing that both the producer and the consumer are correlated. Direct to customers, through agents and through branches are some of the distribution channels used by the processing units. Competition from substitutes is the main problem faced by the sample units. Sales promotion creates demand and increase sales. Various market promotion steps are taken by the sample units to increase the sales turnover, betterment of quality, discount allowed, gifts and offers etc. are some market promotion strategies adopted by majority of the sample units.

Keywords: Large scale units, cottage, home scale units, distribution channels.

INTRODUCTION

India is one of the world's largest producers as well as consumer of food products, with the sector playing an important role in contributing to the development of the economy. Food and food products are the largest consumption category in India, with a market size of USD 181 billion. Domestically, the spending on food and food products amounts to nearly 21% of the gross domestic product of the country and constitutes the largest portion of the Indian consumer spending more than a 31% share of wallet.

Going forward, the Indian domestic food market is expected to grow by nearly 40% of the current market size by 2015, to touch USD 258 billion by 2015. The Indian food industry is poised for huge growth, increasing its contribution in world food trade every year. In India, the food sector has emerged as a high-profit sector on the back of the scope it offers for value addition, particularly with the food processing industry getting recognised as a high-priority area. Accounting for about 32 per cent of the country's total food market, the food processing industry is one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth. The total food production in India is likely to double in the next 10 years with the country's domestic food market estimated to reach US\$ 258 billion by 2015.

All economic activities are based on marketing, because the use of men, money, materials and machinery are rewarded through marketing. The production practices are influenced through the

marketing activity. "Marketing includes the searching activities of prospective sellers and buyers as they attempt to find the products and services they want and that are wanted by others and also includes the facilitating activities, such as financing, storing and transporting" Fruits and vegetable crops assume a unique role in India's economy by improving the income of the rural households. Cultivation of fruits and vegetable crops is labour intensive and hence, generate lot of employment opportunities for the rural population. Fruits and vegetables are rich source of vitamins, minerals, proteins, carbohydrates etc. and hence, referred as protective foods and contribute to the nutritional security of the people. Thus, cultivation of fruits and vegetables plays a vital role in the prosperity of a nation and is directly linked with the health and happiness of the people. Marketing of fruits and vegetables is complex because of perishability, seasonality and bulkiness.

STATEMENT OF THE PROBLEM

Indian farmers depend heavily on middlemen in fruits and vegetable marketing. Fruits and vegetables are not only used for domestic consumption and processing into various products (pickles, preserves, sauces, jam, jelly, squashes, etc.) but also substantial quantities are exported in fresh and processed form, bringing much-needed foreign exchange for the country. These crops also provide ample scope for achieving bio-diversity and diversification to maintain ecological balance and to create sustainable agriculture and can make significant impact on the national economy in the years to come. The spectrum of prices from producer to consumer, which is an outcome of demand and supply of transactions between various intermediaries at different levels in the marketing system, is also unique for fruits and vegetables. Moreover, the marketing arrangements at different stages also play an important role in price levels at various stages viz. from farm gate to the ultimate user. These features make the marketing system of fruits and vegetables to differ from other agricultural commodities, particularly in providing time, form and space utilities. Low efficiency in the marketing channels and inadequate marketing infrastructure are believed to be the cause for fluctuating prices.

OBJECTIVES OF THE STUDY

- 1. To examine the area of sale and distribution channel used by the fruit and vegetable processing units.
- 2. To examine the market promotion technique adopted by the processing units.
- 3. To study the marketing problems of the processing units.

HYPOTHESIS

There is no significant difference in the marketing problems of the fruit and vegetable processing units based on sector of fruit and vegetable processing units.

METHODOLOGY

This study is based on primary and secondary data. The primary data were collected through personal interviews using a well structured interview schedule. Secondary data were gathered from books, annual reports magazines and various journals. Based on the geographical environment, Kerala was divided into three regions, viz., Southern region, Central region and

Northern region. The fruit and vegetable units operating in the state of Kerala is functioning under four divisions viz., large scale, small scale, cottage and home scale sectors. One district from each region having all the four types of fruit and vegetable processing units were selected on random base. Accordingly, Alappuzha from Southern region, Ernakulam from Central region, and Kozhikode from Northern region are selected as the sample study districts. Stratified Random sampling technique was used to carry out the study. 15,49 and 29 units were selected from Alappuzha, Ernakulam and Kozhikode districts respectively. 9 units from large scale, 23 from small scale, 33 from cottage and 28 fromhome scale were selected for the study.

ANALYSIS OF RESULTS

Market for the food products in Kerala is classified into four categories, namely

- 1. Within the district (Local Market)
- 2. Outside the district
- 3. Outside the state
- 4. Export

The per cent of area of sales of sample units based on sectors is given below.

Table 1
Sector wise distribution of sales of sample units

Sector wise distribution of sales of sample units									
Area of sales	Large scale sector	Home scale sector	Small scale sector	Cottage sector	χ^2	Р			
Within the district	9 (100.0)	27 (96.4)	22 (95.7)	31 (93.9)	0.69	0.876			
Outside the district	9 (100.0)	8 (28.6)	20 (87)	19 (57.6)	18**	0.000			
Outside the state	9 (100.0)	1 (3.6)	10 (43.5)	6 (18.2)	35.78**	0.000			
Export	9 (100.0)	5 (17.9)	6 (26.10)	2 (6.10)	12**	0.007			

Source: Primary Data

Note: Figures in brackets indicate percentage

** Significant at 0.01 level

From the table 1, it is clear that 100 per cent of units from large scale sector have sales within district. 93.9 per cent of sample units of cottage sector have local sale. Local sale of sample units from small scale sector and home scale sector are 95.7 and 96.4 per cent. 100 percent of large scale sector have sale outside the district. 87 per cent of units from the small scale sector have done sales outside the district. The sample units from cottage sector which perform sales outside the district are 57.6 per cent. The test shows significant variation at 0.01 level ($x^2 = 18$). All large scale units have done majority of sales, outside the state i.e., 100 per cent. Only 3.6 per cent of units from home scale sector perform sale outside the state. 6 units from cottage sector have done sales outside the state and 43.5 per cent of sample units from the small scale sector have performed sales outside the

state. The sector wise analysis of industry exhibits significant variation at 0.01 level ($x^2 = 35.78$) for the area of sale outside the state. 26.10 per cent of sample units from small scale sector have done export, 100 per cent of sample units from large scale sector have export and 17.9 per cent of units from home scale sector and only 2 units from cottage sectors have done export. The statistics shows significant variation at 0.01 level ($x^2 = 12$).

DISTRIBUTION CHANNEL

Data relating to the sample units that dealt with distribution channel based on sector of the industry is given below.

Table 2
Sector wise distribution channel of sample units

Distribution channel	Large scale sector	Home scale sector	Small scale sector	Cottage sector	χ^2	p
Direct to customers	0 (0.0)	26 (92.9)	9 (39.1)	27 (81.8)	37.9**	0.000
Through agents	8 (88.9)	13 (46.4)	17 (73.9)	23 (69.7)	7.67	0.053
Through branches	2 (22.2)	0 (0.0)	9 (39.1)	2 (6.1.0)	18.88**	0.000

Source: Primary Data

Note: Figures in brackets indicate percentage

** Significant at 0.01 level

From the table 2, it is clear that large scale units do not provide products directly to the customers. In home scale sector, 92.9 per cent of units have direct supply to the customers. 39.1 per cent of the units from small scale sector have direct supply of goods to the customer. From the cottage sector, 81.8 per cent have direct supply to the customers. The F test shows significant variation at 0.01 level ($x^2 = 37.9$). In large scale sector, 88.9 per cent of units have sale through agents. From cottage sector, 69.7 per cent of sample units have to sell products through agents. 46.4 per cent from home scale sector and 73.9 per cent of units from small scale sector sell product through agency. In large scale sector, 22.2 per cent of sample units sell products through branches. Home scale sector have no such distribution channel 39.1 per cent of units of small scale sector have sale through branches. 6.10 per cent of cottage sector have branches to sell their products. The test shows significant variation at 0.01 level ($x^2 = 18.88$).

Marketing problems

Marketing is the most important problem faced by the sample units. The marketing problems affect the existence of manufacturing units, the distribution channel and ultimately the customers. The various marketing problems faced by the sample units are listed one by one. According to the priority, the sample units are asked to give first rank to the problems that they

considered the most important and the second rank to the next important problem and so on. Table 3, shows the important problems of marketing and ranking according to their mean score.

Table 3
Distribution of ranking the marketing problems

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Marketing problems	Mean	Rank
Competition from substitutes	6.0	1
Seasonal market	2.5	4
Lack of order	2.2	5
High commission to agents	3.7	2
Lack of steady demand	3.0	3
Lack of market information	2.1	6

Source: Primary Data

From the table 3, it is clear that the main problem faced by marketing is competition from substitutes followed by high commission to agents. The third rank goes to lack of study of demand followed by seasonal market. Fifth and sixth rank goes to lack of order and lack of market information.

Table 4
Distribution of ranking of marketing problems based on sector

Distribution of fanking of marketing problems based on sector								
Marketing	Large scale sector		Home scale sector		Small scale sector		Cottage sector	
problems	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
Competition from substitutes	6.0	1	6.0	1	6.0	1	6.0	1
Seasonal market	0.8	3	3.2	3	2.3	4	2.5	5
Lack of order	0.3	4	2.6	5	1.4	6	3.0	4
High commission to agents	5.0	2	2.6	4	4.5	2	3.7	2
Lack of steady demand	0.0	5	3.6	2	2.8	3	3.4	3
Lack of market information	0.0	6	2.5	6	2.3	5	2.3	6

Source:Primary Data

From the table 4, it can be seen that in large scale sector, first rank goes to competition from substitute second rank goes to high commission to agents, seasonal market (rank 3) followed by lack of order, fifth rank goes to lack of steady demand and sixth rank goes to lack of market information. Competitions from substitutes occupy first rank in home scale sector, small scale sector, and cottage sector. Lack of steady demand occupies second rank in home scale sector. High commission to agents occupies second rank in small scale sector and cottage sector. Third rank goes to seasonal market in home scale sector, and in small scale sector and cottage sector, it is for lack of steady demand. In cottage sector fourth rank goes to lack of order. In small sector,

it is for seasonal market and for home scale sector high commission to agent. Lack of order in home scale sector occupies fifth rank. In small scale sector lack of market information occupies fifth rank while seasonal market is placed in fifth position in cottage sector. In small scale sector sixth position is for lack of order.

Correlation matrix regarding the marketing problems based on sector is shown below.

Table 5
Correlation matrix of marketing problems based on sector

	Large scale	Home scale	Small scale	Cottage
Marketing problems	sector	sector	sector	sector
Large scale sector	1			
Home scale sector	0.6	1		
Small scale sector	0.71	0.77	1	
Cottage sector	0.77	0.71	0.83*	1

Source: Primary Data
* Significant at 0.05 level

Spearman correlation matrix regarding the ranking of problems relating to marketing based on sector between large scale and home scale shows no significant correlation (r=0.6). Similar result can be seen in large scale with small scale (r=0.71), large scale with cottage sector (r=0.77). This means that the problems of the marketing are not same in large scale with other sectors. Correlation between small scale sector with cottage sector shows significant correlation at 0.05 level (r=0.83).

Table 6
Distribution of sector wise marketing problems

	builducion o	I bector wise	mai keung	problems		
Marketing	Large	Home	Small	Cottage	Kruskal	
problems	scale	scale	scale	sector	Wallis H	p
	sector	sector	sector	sector	vv ams m	
Competition from	6	6	6	6		
substitutes					0	1.000
	0.8	3.2	2.3	2.5		
Seasonal market					17.23**	0.001
	0.3	2.6	1.4	3		
Lack of order					34.77**	0.000
High commission	5	2.6	4.5	3.7		
to agents					10.94*	0.012
Lack of steady	0	3.6	2.8	3.4		
demand					24.87**	0.000
Lack of market	0	2.5	2.3	2.3		
information					23.32**	0.000

Source: Primary Data

** Significant at 0.01 level

^{*} Significant at 0.05 level

Kruskal Wallis test is used to know the relationship exists between the mean score. The average score of competition from substitutes are same for all sectors. The mean score of seasonal market are 0.8, 3.2, 2.3 and 2.5 respectively for the sector of industry. The H test exhibit significant correlation at 0.01 level (H=17.23). Similar results can be observed in lack of order with average score of 0.3, 2.6, 1.4 and 3. The H value is 34.77, significant at 0.01 level. High commission to agent show significant variation at 0.05 level with average score of 5, 2.6, 4.5 and 3.7. The H test exhibit significant variation at 0.05 level (H=10.94). The average score of lack of steady demand are 0, 3.6, 2.8 and 3.4. The test exhibit significant variation at 0.01 level (H = 24.87). The average score of lack of market information show significant variation at 0.01 level (H= 23.32). Earlier a hypothesis has been formulated that there is no significant difference in the marketing problems of the fruit and vegetable processing units based on sector. As per the analysis shown above it is found that out of six marketing problems, five problems differ significantly based on the sector of the units. Hence the hypothesis is rejected.

MARKET PROMOTION

The word 'promotion' originates from the Latin word Promovire meaning to move forward or to push forward². The aim of production is sales. Sales promotion creates demand and increase sales. It is an important instrument in marketing to lubricate the marketing effect. Nowadays sales promotion is an essential tool to boost sales. Promotion is the final element in the marketing mix.

Various market promotion steps are taken by the sample units to increase the sales turnover, betterment of quality, discount allowed, gifts and offers etc are some market promotion strategies adopted by majority of the sample units. The market promotion techniques adopted by the sample units based on their sector of operation is presented in table 7.

Table 7
Sector wise distribution of market promotion techniques

Sector wise distribution of market promotion teeminques						
Market promotion techniques	Large scale sector	Home scale sector	Small scale sector	Cottage sector	χ^2	P
Frequent advertising	9 (100.0)	16 (57.1)	2 (8.7)	10 (30.3)	27.66**	0.000
Betterment of quality	7 (77.8)	22 (78.6)	16 (69.6)	28 (84.8)	1.88	0.598
Discount allowed	2 (22.2)	2 (7.1)	1 (4.3)	2 (6.1.0)	3.23	0.357
Gifts and offers	2 (22.2)	0 (0.0)	0 (0.0)	1 (3.0)	12.11**	0.007
Credit period extended	9 (100.0)	19 (67.9)	12 (52.2)	26 (78.8)	8.74*	0.033

Source: Primary Data

Note: Figures in brackets indicate percentage

**Significant at 0.01 level
* Significant at 0.05 level

From the table 7, it can be inferred that 100 per cent of large scale sector opted the main market promotion technique i.e., frequent advertising. 57.1 per cent of home scale sector have made frequent advertising. Only 8.7 per cent of small scale units have advertising and 30.3 per cent from cottage sector make frequent advertising. The x² test shows significant variation at 0.01 level (x 2 =27.66). It is also found that 77.8 per cent of large scale sector have the market promotion technique, betterment of quality. 78.6 per cent of home scale sector. 69.6 per cent of units from small scale sector and 84.8 per cent from cottage sector have betterment of quality as their market promotion technique. Discount allowed by large scale sector, as market promotion technique is negligible i.e., 22.2 per cent of sample units. Only two units from home scale sector have to follow this as market promotion. One unit from small scale and two units from cottage sector have discount allowed as market promotion. The test shows no significant variation. Two units from large scale sector choose gifts and offers as promotion technique. No units from home scale sector and small scale sector have to offer any gifts and offers to the customers. Only 3.0 per cent of units from cottage sector offer gifts and offers to the customers. The test shows significant variation at 0.01 level ($x^2 = 12.11$). 100 per cent of large scale sector have offered credit period extended as the market promotion technique. 19 units from home scale sector, 52.2 per cent from small scale and 78.8 per cent from cottage sector have credit period extended as their promotion technique. The x^2 test shows significant variation at 0.05 levels ($x^2=8.74$).

CONCLUSION AND RECOMMENDATIONS

Marketing is of paramount importance in fruit and vegetable manufacturing units. It is because the funds invested for production is recouped through marketing. Food products in Kerala have mainly four markets i.e., local market, outside the district, outside the state and export. The main distribution channels used by the sample units are direct to customers, through agents, and through branches. The main problem related with the marketing is competition from substitutes, so in order to overcome this various marketing techniques were introduce. No compromise should be made on the quality of the products. Government should be strict and bring changes in the food laws. Food inspectors should be appointed in adequate numbers and should given proper training to update skills and knowledge. There should be a research and development wing in every large scale units to get ideas about the changing trends of the preservation, processing, packaging and changing consumer behavior. Presently majority of the fruit and vegetable processing units operating in the state does not have a brand name of their products. Therefore it is suggested that every fruit and vegetable processing units should make use of a brand name so that customers can easily identify the products. Though the sample units of Kerala depend upon other states for raw materials, quality and price may be varying. Co-operative societies may be started at the panchayat and district level for buying and selling of the fruits and vegetables that are grown in our state. Vegetable and fruit promotion council and department of agriculture should provide various schemes and subsidies to the farmers for encouraging fruit and vegetable cultivation.

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