

### **Research Article**

# Analysis of consumer's preferences in purchasing fruits and vegetables across selected marketing organizations in Bangalore rural and urban districts

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**SUMMARY:** The efficiency of marketing for fruits and vegetables in India has been of significant concern in the recent years. Poor efficiency in the marketing channels and inadequate marketing infrastructure are believed to be the cause of high and fluctuating consumer prices. This paper analyses the consumer preference across selected marketing organizations for purchasing of fruits and vegetables. Karnataka enjoys a prominent position on the horticultural map of India. The following four marketing organizations were considered for the study, Co-operative marketing systems (HOPCOMS), retailers marketing systems (Subiksha and My Greens) and direct marketing systems (Rythu Bazaar). The study was conducted in Bangalore urban and rural districts of Karnataka with the sample size of 40. Consumer fruit and vegetable purchasing habits are affected by various demographic, socioeconomic and socio-culturalfactors along with the product, price, distribution channel, and advertisement. Diversified and alternative supply chains offer so many advantages to consumers in fruit and vegetable markets. Consumers prefer different outlets for purchase of fruits and vegetables because of their personal differences that are formed by the effects of demographic, socio-economic and socio-cultural factors.

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## BACKGROUND AND OBJECTIVES

Fruits and vegetables have gained an important position in human diet. The recommended intake of fruits / day / person is about 92 g / day and availability of fruits is about 46 g / day / person. The recommended vegetables / day / person is about 300 g / day / person and the availability is about 130 g / day / person. The estimated annual production of fruits and vegetables is 124.24 million tons, but 30 per cent of fruits and vegetables are being wasted, without use which accounts to a loss of nearly 2500 crores. It is mainly due to lack of technical know-how *viz.*, improper transportation, storage and marketing facilities (Anonymous, 2006).

The fruits and vegetables are perishable

commodities and hence, require special kind of marketing. They need to be harvested at right time and made available to the consumers immediately to prevent spoilage losses. In other words, marketing of horticultural produce is a time bound activity and also marketing of fruits and vegetables is subjected to price fluctuations. Apart from this, it is very important to supply fruits and vegetables to consumers regularly at a reasonable price. There has been always a debate on providing remunerative price to farmers and at the same time an affordable price to consumers. This focuses on the issue of marketing with a thrust to reduce the price strategies between the primary producers and the ultimate consumers.

Rapid economic growth and increasing

urbanization led to increase in number of supermarkets. At the same time, common use of technological innovations and applications along with the effects of globalization has an impact on consumers' behaviors and their life styles. According to the emerging different needs of consumer, new and modern outlets such as hypermarkets and supermarkets are introduced in the marketing systems. Also preference to purchase fruits and vegetables depends on several factors, such as health benefits, nutritional values and contributions for the overall economy. For this reason, new initiatives are on the agenda for production and distribution of fresh fruit and vegetable in the domestic market.

Developments in the consumer market are closely followed by developments in production and distribution sectors. It is important to gather data from consumer markets in order to make a point of marketing policies and strategies, and to use resources effectively. The socio-economic and technological developments not only reveal new consumer preferences and demand patterns, but also increase the alternatives for where and how will the consumers purchase. Alternative outlets for agricultural products along with increased consciousness of consumers have been studied and the factors affecting consumer preferences have been introduced by this study.

### RESOURCES AND METHODS

The present study was conducted in randomly selected villages of Bangalore rural and urban districts of Karnataka state. In order to make the comparison among the few organizations and in the event of absence of many organizations working in the same district out of that, preference of major selected marketing organizations at the Bangalore urban and rural districts were controlled to conduct the study. Based on the quantum of horticultural produce handled, the present study was confined to three systems of marketing organizations viz., Co-operative marketing systems (HOPCOMS), retailers marketing systems (Subiksha and My Greens) and direct marketing systems (Rythu Bazaar). The respondents involved in this study were member consumers of the selected marketing organizations. 10 member farmers from each organization were chosen randomly to make a total sample size of 40.

Preference of the selected marketing organization refers to the choice of the respondents in selecting one out of many marketing organizations for purchasing of fruits and vegetables by consumers. Fourteen dimensions were identified and included under major activities of the selected marketing organizations based on facilities available in the organizations and taken as the preference choice. The respondents were asked their preference on 4 point continuum on all the organizations as a) Most satisfactory

b) Moderately satisfactory c) Less satisfactory and d) Least satisfactory. A score of 4, 3, 2 and 1 were given, respectively for the preference of the selected marketing organizations. The maximum possible score was 160 and the minimum possible score was 40.

Besides this, overall preferences of the consumer for the selected marketing organizations were given ranks. The total possible score was 160 and the minimum possible score was 40. Based on the total scores, ranks were given as first, second, third and fourth. The fourteen dimensions were grouped in to strengths and weakness of the selected marketing organizations based on the average scores. Correlation test was applied to know the association between the preferences of respondents in selected marketing organizations.

### **OBSERVATIONS AND ANALYSIS**

The results of the present study as well as relevant discussions have been presented under following sub heads:

# Overall preference ranks given by the consumers towards selected marketing organizations:

It is observed from the Table 1 that among the selected four marketing organizations the consumers preferred Subiksha with the highest score of 122 and it stands first, followed by HOPCOMS (103), Rythu Bazaar (99), and My Greens (76) which stands second, third and fourth rank, respectively. By comparing all these organizations, based on the ranks given by the consumers Subiksha stood first. It might be because of being one of the largest retail markets in India. The retail outlets under this chain are mainly organized on the concept of a discount store that meets the monthly household needs of a family. Subiksha not only services its customers through its outlets but also meet their demand through the home delivery concept.

Table 1 : Overall preference ranks given by the consumers towards selected marketing organizations (n = 40)

Sr. No.	Name of an organization	Consumers			
		Total score	Overall rank		
1.	Subiksha	122	1		
2.	HOPCOMS	103	2		
3.	Rytha Bazaar	99	3		
4.	MyGreens	76	4		

# Consumer's preferences towards selected marketing organizations based on different dimensions in marketing of fruits and vegetables:

The Table 2 revealed preference of the respondents in selecting one out of selected marketing organizations for

purchasing of fruits and vegetables by consumers. A closer observation from the Table 2 shows that Subiksha had given highest score for the following dimensions. Weighment of the produce (159), display of price tags (141), other processed products availability (109), range of fruits and vegetable availability (117), services available (100), cold storage facilities (91), packing/packaging of the produce (107), attention given to the consumer (156), availability of produce in the off season (116) and publicity of the marketing institution (81).

The Subiksha was ranked second by the consumers in the following dimensions. Freshness of the produce (142), price offered (138),proximity (105) and timings of the out lets (157).

Subiksha works under the concept of shopping under the single roof. They are providing electronic weighment system; each and every product is tagged with price in Subiksha. It is easy to identify prices by the consumers. Other processed products are also available along with daily house hold requirements. Wide range of fruits and vegetables are available in the half seasons at Subiksha. They give kind attention to the consumers in a pleasant manner. All the products that are available in the Subiksha are graded and packed in good manner. Subiksha is giving facilities like vehicle parking, language keeping etc. to their consumers and also they are advertising through radio, papers and televisions. Because of all these reasons Subiksha got highest scores in the following dimensions.

From the Table 2 HOPCOMS got the highest scores in the following dimensions. Freshness of the produce (157), price offered (153), proximity (113) and timings of the out lets (159). HOPCOMS has ranked second by the consumers in the following dimensions. Weight of the produce (158), display of price tags (91), other processed products availability (77), range of fruits and vegetable availability (98), services available (89), cold storage facilities (57), packing/packaging of the produce (79), attention given to the consumer (151), availability of produce in the off season (90) and publicity of the marketing institution (57).

It is mainly because in HOPCOMS there is no intervention of middle man between farmers and consumers. They are directly selling the fruits and vegetable to the consumers. So that leads to availability of fresh produce to the consumers at a reasonable rate. HOPCOMS is having 400 out lets in Bangalore rural and urban districts and all the out lets will work from early morning to late night.

From the Table 2 it can be concluded that Subiksha in the one of the largest retail marketing organization in India having 550 stores spread across the length and breadth of the country. Apart from fruits and vegetables other house hold materials are also available in Subiksha. They have their own contract farming in and around the Bangalore city.

This leads to low margin and high turnover in Subiksha. They are giving advertisements through mass media channels and recently they started home delivery concept also. Because of all these reasons Subiksha stood first according to consumers rank followed by HOPCOMS, Rytha Bazaar and MyGreens. The RythaBazaar and MyGreens are small fruit and vegetable marketing organizations having 1 to 2 outlets in and around the city. They were not able to satisfy the consumers to that extent.

Table 2: Indicates consumers preferences towards selected marketing organizations based on different dimensions in purchasing of fruits and vegetables

Sr. No	Items	Rythu Bazaar (Score)	Subiksha (Score)	My Greens (Score)	HOPCOMS (Score)
1.	Freshness of the produce	153	142	142	157
2.	Price offered	144	138	134	153
3.	Weightment of the produce	152	159	140	158
4.	Display of price tags	111	141	109	91
5.	Other processed products availability	67	109	79	77
6.	Range of fruits and vegetable availability	88	117	91	98
7.	Proximity	70	105	104	113
8.	Services available	78	100	82	89
9.	Cold storage facilities	60	91	67	57
10.	Packing/packaging of the produce	73	107	87	79
11.	Attention given to the consumer	123	156	147	151
12.	Availability of produce in the off season	85	116	91	90
13.	Publicity of the marketing institution	41	81	51	57
14.	Timings of the out lets	140	157	155	159

## Strengths of the selected marketing organizations as perceived by consumers:

The strengths of the selected marketing organizations are calculated based on the average scores. By using cutoff scores, fourteen dimensions of selected fruit and vegetable marketing organizations are classified in to strengths and weakness. The average score of Rythu bazaar is 99, Subiksha (123), MyGreens(106) and HOPCOMS (109). In Table 3 following seven dimensions were like freshness of the produce, price offered average, correct weighment of the produce, display of price tags, services available, attention given to the consumer and proximity of the outlets. Average consumers were satisfied with these seven dimensions according to their scores across selected fruit and vegetable marketing organizations.

### Weaknesses of the selected marketing organizations as perceived by consumers:

The weakness of the selected marketing organizations observed by the consumers were like availability of other processed products, availability of different range of fruits and vegetables, cold storage facilities, packing / packaging of the produce, availability of produce in the half season, publicity of the marketing institution and timings of the out lets. The Table 4 shows that average consumers were not satisfied with these dimensions among any of selected fruit and vegetable marketing organizations based on the scores. So, there is need to upgrade these facilities by the

Table 3: Indicates strengths of the selected marketing organizations as perceived by consumers								(n=40)	
Sr. No.	Items	Rythu bazaar		Subiksha		My Greens		HOPCOMS	
		Score	Rank	Score	Rank	Score	Rank	Score	Rank
1.	Freshness of the produce	153	1	142	3	142	3	157	1
2.	Price offered	144	2	134	5	138	4	153	2
3.	Correct weigthment of the produce	140	3	159	1	158	1	152	3
4.	Display of price tags	111	5	141	4	109	5	91	6
5.	Services available	78	6	100	7	82	7	89	7
6.	Attention given to the consumer	123	4	156	2	147	2	151	4
7.	Proximity	70	7	105	6	104	6	113	5

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Table 4: Indicates weaknesses of the selected marketing organizations as perceived by consumers (n=40)									
Sr. No.	Items	Rythu bazaar		Subiksha		My Greens		HOPCOMS	
		Score	Rank	Score	Rank	Score	Rank	Score	Rank
1.	Other processed products availability	67	5	109	3	79	5	77	5
2.	Range of fruits and vegetable availability	88	1	117	2	92	1	98	1
3.	Cold storage facilities	78	3	100	5	82	4	89	3
4.	Packing/packaging of the produce	60	6	91	6	67	6	56	7
5.	Availability of produce in the half season	73	4	107	4	87	3	79	4
6.	Publicity of the marketing institution	85	2	116	1	91	2	90	2
7.	Timings of the out lets	41	7	81	7	51	7	57	6

Table 5: Association between profile consumers and their preferences of selected marketing organizations (n=40)								
Independent variables -	Correlation co-efficient(r)							
independent variables	Rythu Bazaar	Subiksha	My Greens	HOPCOMS				
Age	0.108	0.155	-0.112	0.166				
Education	-0.312*	0.368*	-0.255*	0.362*				
Family size	-0.065	0.260*	0.024	0.241*				
Mass media participation	0.112	0.357*	0.153	0.301				
Cosmopoliteness	0.015	0.287*	-0.328*	0.216*				
Social participation	0.113	0.264*	0.160	0.088				
Possession of house hold materials	-0.011	0.123	-0.140	0.020				
Decision making pattern	-0.176	0.030	0.157	-0.150				
Annual income	-0.235*	0.459**	0.050	0.005				

<sup>\*</sup> and \*\* indicate significance of values at P=0.05 and 0.01, respectively

selected fruit and vegetable marketing organizations.

# Association between profile consumers and their preferences of selected marketing organizations:

From the Table 5 Rythu Bazaar is in negative association between education and annual income, My Greens is having negative association between education cosmopoliteness. It indicates that the consumers having less education, low annual income and less cosmopoliteness usually go to Rythu Bazaar and MyGreens to purchase fruits and vegetables. The Table 5 indicates that Subiksha is having strong association between education, family size, mass media participation, cosmopoliteness, social participation and annual income. This indicates that the consumers who prefer Subiksha for purchase of fruits and vegetable are educated; with large family size and they are having mass media contact, having high cosmopoliteness with high annual income and social participation. HOPOCOMS is having positive significant association between education, family size and cosmopoliteness. It indicates that the consumers that are purchasing fruit and vegetables in HOPCOMS are educated having large family size and are cosmopolite in nature. On the whole the consumers having education, high family income, with mass media contact and cosmopolite nature will preferSubiksha first, then HOPCOMS for purchase of fruits and vegetables.

### **Conclusion:**

Fresh fruits and vegetables are perishable by nature and difficult to store and transport. This situation requires us to evaluate the management of supply and distribution channels carefully. Consumers demand fresh fruit and vegetables with nutritional value under healthy and hygienic conditions. Product quality has an important role in the consumer's purchasing decision. Due to the increase in the level of education and quality of life, the outlets in fresh fruit and vegetables supply chains are gradually gaining importance. Also, demographic

characteristics of people play an important role in determining consumers' preference in purchase of fresh fruit and vegetables.

This study indicates that the consumers prefer fruit and vegetable marketing organizations based on the freshness produce, proximity of the stores, service available in the stores, range of fruits and vegetables availability. The consumers who are well educated with large family size, high annual income and mass media contact will prefer Subiksha and HOPCOMS.

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