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## **Research Article**

## DETERMINANTS OF CONSUMER BEHAVIOR TOWARDS ORGANIC VEGETABLES

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#### ARTICLE INFO

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ABSTRACT

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#### Key Words:

organic farming, organic vegetables, determinants, attitude

Consumers, now a days are more aware towards the necessity of organic vegetables in take rather than highly chemical vegetables which will cause health hazards to human being and its cultivation has a negative impact to environment. The purpose of study was to analyze the determinants of consumer purchase behavior towards organic vegetables. The study was conducted in the central zone of Kerala. A sample of 60 consumers using vegetables was selected and primary data were collected by using structured questionnaire. Results of the study revealed that price, chemical and pesticide free, eco-friendly aspect, health concern and availability are the most important factors influencing their purchase behavior. Study also proved that education and age are key determinant for consumer preference towards organic vegetables.

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### INTRODUCTION

The term consumer behaviour can be defined as the behaviour that consumers display in searching for purchasing, using, evaluating and disposing of product and services that they expect will satisfy their needs. As vegetables constitute a major portion of food consumption of people, changes has undergone in the nature, type and quality of vegetables consumed by them. Now a day's vegetables are used not only to add their food habit but to provide nutrient and prevent nutritious related diseases and improves physical and mental well being of consumers. In the context of changing behaviour of consumers towards vegetables, study on determinants of consumer behaviour towards organic vegetables which is very important.

Consumer decision making is dynamic in nature. It involves pre purchase, purchase and post purchase decisions and also after use satisfaction. Positive attitudes from frequent use lead to recurring purchase. Similarly both economic factors influence the decision process. In the conventional economics it was believed that price is the most important factor. Empirical evidences identify price as only one of the determinants. Empirical studies further indicate that there are there are many non economic factors with significant influence over purchase decisions. The study aimed to identify the determinants of consumer behavior towards organic vegetables

### **METHODOLOGY**

The study was confined to three districts viz, Thrissur, Palakkad and Ernakulum representing central Kerala. The districts were selected based on the prominence of vegetable cultivation on the expert opinion. Twenty consumers from each selected districts were selected through simple random sampling. Thus the total sample of consumers confined to 60.Primary data were collected through pre-tested structured interview schedule Statistical tools like chi-square, index and ordered probit model were applied to find out the determinants of consumer behavior towards organic vegetables.

## ANALYSIS AND DISCUSSIONS

In this session, an attempt has been made to identify the determinants of consumer behaviour towards organic vegetables. Various factors have been identified, which can or may influence the buying behaviour of consumers towards organic vegetables. They are mainly demographic factors, economic factors and quality related factors environmental factors, personal factors availability factors etc.

#### Socio-Economic profile of consumers

Socio economic status is the measure of economic and social prospects of the individuals. It indicates the social position of an individual with respect education, income and occupation. In order to examine the socio-economic characteristics of the respondents, seven indicators, viz., sex, age, education,

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occupation, family type and monthly family income are considered and they are given in Table 1.

Sl. No.	Demographic factors	No:of Respondents	Percentage
1	Age (in years)		
	Less than 30	4	6.67
	30-40	10	16.67
	40-50	13	21.67
	50-60	18	30
	Above 60	15	25
2	Education		
	SSLC	14	23.3
	Plus two	25	41.67
	Graduation	19	31.67
	Post graduation	2	3.3
3	Occupation		
	Agriculture	10	16.67
	Private	28	46.67
	Government	18	30
	Student	4	6.67
4	Income (in Rs.)		
	Less than 20000	10	16.67
	20000-30000	43	71.67
	30000-40000	6	10)
	above 40000	1	1.67
	Total respondents	60	100

# Relationship of demographic factors of consumer and consumer attitude

The study assessed the attitude of consumers towards organic vegetables based on the data collected on 5 point scale for selected variables. The composite index score obtained was 68.63 which showed the favorable attitude. To examine whether the demographic factors determine the attitude of consumers, a chi-square test was applied and results were given here.

Relationship of demographic factors of consumer and consumer attitude

Demographic factors	Degree of freedom	Chi-square test statistic
Age	4	2.356 <sup>NS</sup>
Educaton	3	0.210 <sup>NS</sup>
Occupation	3	$0.807^{NS}$
Income	3	4.688 <sup>NS</sup>

There is no demographic factors are determinants of buying attitude of consumers towards organic vegetables. So the demographic factors are not considered as the determinants of consumer attitude towards organic vegetables.

# Influence of demographic factors on consumer satisfaction towards organic vegetables

The overall satisfaction index of consumer obtained was 67.78 which reveals that they are satisfied with the organic vegetables. For the calculation of index certain variables were selected and based on that a composite index was formulated. To identify the influence of demographic variables on consumer satisfaction chi-square test was applied and result is given below .

Influence of demographic factors on consumer satisfaction towards organic vegetables

Demographic factors	Degree of freedom	Chi-square test statistic
Age	4	4.340 <sup>NS</sup>
Educaton	3	12.134**
Occupation	3	6.995 <sup>NS</sup>
Income	3	5.788 <sup>NS</sup>

From table it could be noticed that among the demographic characteristics level of education had an impact on the level of satisfaction level of consumers towards organic vegetables. Age, Occupation and income were not considered as determining factors for the level of satisfactory consumers.

#### Influence of demographic factors on consumer preference towards organic vegetables

Here Table 2 depicts whether the consumers prefer organic vegetables for their consumption or not.

Table 4 Number of respondents who prefer organic vegetables

Prefer	Thrissur	Palakkad	Ernakulum	Total
V	12	14	11	37
Yes	(60)	(70)	(55)	(61.67)
No	8	6	9	23
INO	(40)	(30)	(45)	(38.33)
Total	20	20	20	60
Total	(100)	(100)	(100)	(100)

Source: Primary data

Note: Figures in Parenthesis represents percentage to total The table shows that majority of the respondents (61.67 percent) were preferred organic vegetables. Ordered probit model which is an econometric tool that is uses to find out the independent variables which are influencing or determining the dependent variables.

Ordered probit estimates for determinants of consumer preference of Organic vegetables

Variables	Estimate	S.E.	Wald	df	Sig.
Age	-0.1384	0.048827	8.03467	1	0.004589
Educational			4.621448	3	0.20171
qualification			4.021446	5	0.20171
Below high school	4.155516	2.535507	2.686089	1	0.101228
Up to 12 <sup>th</sup> standard	3.408167	2.102279	2.628215	1	0.10498
Graduation	4.608502	2.198633	4.393535	1	0.036075
Occupation			2.702088	3	0.439873
Agriculturist	-21.0947	28417.51	5.51E-07	1	0.999408
Private employee	-20.1181	28417.51	5.01E-07	1	0.999435
Government	-22.4203	28417.51	6.22E-07	1	0.999371
employee	-22.4203	20417.31	0.221-07	1	0.777571
Income	-0.01576	0.054976	0.082149	1	0.774406
Constant	25.32288	28417.51	7.94E-07	1	0.999289
<ul> <li>-2 Log likelihood</li> </ul>	60.50748				
Cox & Snell R	0.275944				
Square	0.273944				
Chi-square	19.37321*				
Sig.	0.012986				

It is revealed that demographic factors shows an overall significance statistic in the ordered probit estimate which means the variables under demographic factors are determining the preference of consumers towards organic vegetables. Among the demographic factors age and educational qualification are the two determinants for the consumer preference towards organic vegetables. Age is negatively related with the preference level of consumers. In the case of education it is positively related. From this we can infer that highly educated respondents were preferred to purchase organic vegetables. Income and occupation were not considered as the determinant for preference towards organic vegetables.

In order to identify factors which influences the attitude of consumers towards organic vegetables, index method was employed.

Table 3 Factors influencing the purchase of organic
vegetables (Economical factors)

SI.No	Items	Thr	issur Palakkad		kkad	Ernal	kulum	ulum Total		
51.190	items	Score	Index	Score	Index	Score	Index	Score	Index	
1.	Price	40	100	40	100	40	100	120	100	VI
2.	Economic status	0	0	3	7.5	9	22.5	12	10	NI
3.	Value for money	30	75	13	32.5	13	32.5	56	46.67	Ι
	Composite	70	58.33	56	46.67	62	51.67	188	52.22	I

 Table 4 Factors influencing the purchase of organic vegetables (Quality factors)

SLNo	Items	Thr	issur	Pala	kkad	Ernal	Ernakulum To			
51.100	items	Score	Index	Score	Index	Score	Index	Score	Index	
1.	High nutrient value	26	65	16	40	14	35	56	46.67	Ι
2.	More calories	17	42.5	17	42.5	32	80	66	55	Ι
3.	Chemical & pesticide free	40	100	40	100	40	100	120	100	VI
4.	Hygienic	25	62.5	15	37.5	24	60	64	53.33	Ι
5.	Taste	13	32.5	18	45	22	55	53	44.17	Ι
6.	Freshness	19	47.5	23	57.5	20	50	62	51.67	Ι
	Composite index	140	58.33	129	53.75	152	63.33	421	58.47	(I)

 Table 5 Factors influencing the purchase of organic vegetables (Environmental factors)

Sl.No	Items	Thri	ssur	Pala	kkad	Ernal	ikulum Total			
	items	Score	Index	Score	Index	Score	Index	Score	Index	
1.	Eco-friendly vegetables	32	80	30	75	31	77.5	93	77.50	VI
2.	Environmental concern	20	50	13	32.5	15	37.5	48	40	Ι
	<b>Composite index</b>	52	65	43	53.75	46	57.5	141	58.75	Ι

 Table 6 Factors influencing the purchase of organic vegetables (Personal factors)

SI.No	Items	Thrissur		Pala	Palakkad		Ernakulum		Total	
51.100	items	Score	Index	Score	Index	Score	Index	Score	Index	
1.	Awareness on organic vegetables	32	80	26	65	24	60	82	68.33	Ι
2.	Influence of family	24	60	21	52.5	22	55	67	55.83	Ι
3.	Health concern	32	80	28	70	33	82.5	93	77.50	VI
	Composite index	88	73.33	75	62.50	79	65.83	242	67.22	I

 Table 7 Factors influencing the purchase of organic vegetables (Availability factors)

Sl.No	Items	Thrissur		Pala	kkad	Ernal	kulum	Total		
51.NO	Items	Score	Index	Score	Index	Score	Index	Score	Index	
1.	Availability of vegetables	40	100	38	95	35	87.5	113	94.17	VI
2.	Availability of information	29	72.5	12	30	14	35	55	45.83	Ι
3.	Regular supply	20	50	19	47.5	17	42.5	24	20	NI
4.	Distance to the market	38	95	31	77.5	33	82.5	102	85	Ι
	Composite index	127	79.38	100	62.50	99	61.88	294	61.25	1

The above tables reveals that among the economic factors price is the most important determinant followed by value for money. Health aspect is very important factor which create an interest in consumers to buy organic vegetables. In the present era, almost all people are capable of buying vegetables but pure and quality vegetables are not available or their availability is becoming rare.

Chemical and pesticide free, factor is considered as the most important determinant among the quality factors. Other factors like nutrient value, more calories, hygienic, taste and freshness are important determinant for consumers choice towards organic vegetables. Personal factors like awareness on organic vegetables, influence of family and health concern are also important for the consumers. Availability of vegetables and convenience to markets are also important. The vegetables are purchased daily by consumers. So the availability is an important factor. Economic status and regular supply is not an important determinant for consumers.

 
 Table 4.8 Composite index of determinants of consumer attitude towards organic vegetables (Factorwise)

Composite	Thrissur		Palakkad		Ernakulum		Total (n=60)		T
index of factors	Score	Index	Score	Index	Score	Index	Score	Index	Importance
Economic	70	58.33	56	46.67	62	51.67	188	52.2	(I)
Quality factors	140	58.33	129	53.75	152	63.33	421	58.47	(I)
Environmental factors	52	65	43	53.75	46	57.5	141	58.75	(I)
Personal factors	88	73.33	75	62.50	79	65.83	242	67.22	(I)
Availability factors	107	65	81	52	82	55.56	270	60	(I)

The composite index of various factors showed that all the listed factors are act as the important factors determining consumer attitude towards organic vegetables shows that personal factors and availability factors is more important. Economical factors are least scored factor in determining consumer attitude to purchase organic vegetables.

## FINDINGS, CONCLUSIONS AND SUGGESTIONS

There are various factors which influence consumer behavior towards organic vegetables like economical factor, quality factors, environmental, personal and availability factors. However the influence level of different variables under each factor is different. The most important factors that determine consumer attitude are price, chemical and pesticide free, eco friendly vegetables, health aspect, and availability of vegetables and distance to the market. Attitude is not determined by any of the demographic factors but the satisfaction of organic vegetables determined by education of the individuals. Further age and education also found as an important determinant for consumer preference towards organic vegetables. Consumers are very much favorable towards organic vegetables therefore efforts must be taken tocreate awareness among consumers and affordable pricing strategy also should adopt by the farmers and traders soas to make it affordable to the consumers.

## References

- Ahmad, s.2010.Organic Food: A Study on Demographic Characteristics and Factors Influencing Purchase Intentions among Consumersin Klang Valley, Malaysia. Int.j.businessmanag. Vol.5.(3)
- Boccaletti, S. &Nardella, M. 2000, Consumer's willing to pay for pesticide-free fruit and vegetable in Italy. *International Food and Agribusiness Management Review*, (3), pp. 297-310.
- Botonaki, A., Polymeros, K., Tsakiridou, E. &Mattas, K. 2006. The role of food quality certification on consumers' food choices adequate marketing strategy for the effective promotionof certified food products. *British Food* j. 108 (2), pp. 77-90.
- Canavari, M., Nocella, G. &Scarpa, R. 2005. Stated willingness-to pay for organic fruit and
- pesticide ban-an evaluation using both web-based and face-to face interviewing. *Journal of*

Food Products Marketing, 11(3), pp. 107-134.