

## The Study of Change in Consumer Behavior towards Agricultural Marketing

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### Abstract -

Present study was confined to one of the districts of Maharashtra known for its agricultural progressiveness, dynamic agricultural marketing and consumer with reasonable awareness and proportionate sensitivity for agricultural marketing in particular. In the present study 150 respondents from low, medium and high income category of consumers for agricultural marketing were interviewed. The association of consumer behavior with selected features was found.

### Introduction –

Consumer attitude refers to the enduring evaluation of an object of consumption, issue, person or an act. Attitudes guide one's thoughts, influence feelings and affect behaviors. Change in the behavioral pattern of consumers over the years has been due to several factors, and can best be described by consumer acculturation. Consumers use attitudes as a frame of reference to judge new information/objects. Ultimately, consumer attitudes which are learned and stored in memory play a crucial role in purchase decision making.

It is in this context a study picturing consumer behavior towards Agricultural Marketing system bringing about well thought and workable implications would really be a need of the time.

Benedict and Steenkamp (1997) in his book mentioned that food has a central position in the life of consumers. It is the source of nutrition and hedonic experiences; it serves a social and cultural function, and accounts for a major share of consumer expenditure.

Gordon and Soriano (2005) in their paper described a model of attitude-behavior relations, the behavioral perspective model (BPM), which suggests how situational influences on consumer choice may be categorized, and employ Mehrabian and Russell's approach to environmental psychology to test that model in the contexts of attitude formation and attitude - behavior consistency. The results indicate that attitude responses to consumer environments vary as predicted by the model. Moreover, the model presents a framework for managerial action

through the understanding of how structural components of consumer situations (namely, utilitarian and informational reinforcement and behavior setting scope) are related to the generation of affective responses (pleasure, arousal and dominance) and approach-avoidance responses.

Yiridoe et al (2005) in their paper provides a comprehensive evaluation of empirical studies comparing organic products and conventionally grown alternatives. It was found that demand changes according to the price; income elasticity of demand for organic foods is generally small. Finally, it is important for policy analysts and researchers to note that organic fresh fruits and vegetables currently dominate the organic consumer's food basket. Furthermore, it is not clear whether frequent buyers consider particular organic products (e.g., organic meat) as normal goods, or if consumers consider such products as luxury goods.

Purnoma et al (2010) conducted a study on “Why is understanding customer attitude toward 4Ps marketing mix important? The case of the livestock input industry in Indonesia”. The findings of this study revealed that, first, the three market segments were perceived differently and second, there was no significant difference among various demographic variables. This finding showed the importance of market segmentation to determine the appropriate strategy. Eventually, this research provided guidance for agribusiness managers to investigate deeply the customers understanding, preferences and perception.

Kontogeorgos (2012) states that the starting point in the paper's argument is that Agricultural Cooperatives have been slow to develop brands while consumers have been displaying a positive attitude towards these products. His work further suggests a solution to overcome the difficulties and drawbacks associated with the notion "cooperative product" and to compare its similarities with a collective brand, which has been previously proposed as a brand development strategy for the Agricultural Cooperatives.

### **Change in consumer behavior towards agricultural marketing**

The present study emphasis was laid on assessing change occurred in the behavior of consumer in course of time as was anticipated. For this purpose separate scale incorporating therein dimensions of change based on “Buyer’s Black Box Model” finalized and statements therein under indicative of agreement or otherwise for change. Responses from the respondents were sought twice – before and after in three point response continuum (Agree, No response, Disagree) with score assigned as 3, 2 and 1 respectively. From before and after score, difference

score was worked out. Magnitude of score reflected the change occurred. Then all the respondents from the all three categories namely high income, medium income and low income were divided into three groups namely – i) high/significant change in consumer behavior, ii) medium/moderate change in consumer behavior and iii) low / insignificant change in consumer behavior with score range of above 61, score between 31 to 60 and score less than 30 respectively. Categorization of change in consumer behavior however, was based on rationality and logic of convenience and suitability. Distribution of respondents according to their change in consumer behavior score has been presented in table below –

Sr No	Category of change in consumer behavior score	Number of Respondents					
		High Income		Medium Income		Low Income	
		Number (N = 50)	Percent	Number (N = 50)	Percent	Number (N = 50)	Percent
1	High / Significant Change (Above 61 score)	3	6.00	2	4.00	3	6.00
2	Medium / Moderate Change (score Between 31 to 60)	37	74.00	37	74.00	29	58.00
3	Low/Insignificant Change (score less than 30)	10	20.00	11	22.00	18	36.00
	<b>Total</b>	<b>50</b>	<b>100.00</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>100</b>

The number of respondents from high, medium and low income groups who recorded their high / significant change in consumer behavior towards agricultural marketing was estimated to 3, 2 and 3 respectively indicating thereby that transformation in the behavior of consumer did take place significantly.

Respondents from high income group are comparatively more vigilant observing changes occurring in the society in general and members of society designating themselves as consumers in particular. As compared to that of their counterparts from medium and low income groups, respondents from high income groups probably are more educated, with sound financial position, well conversant with technological advancement and establishing more social contacts. Besides food quality characteristics, the high importance given by the consumer from high income group

in diet and health issues, price, Governmental actions, cultural factors, distribution channels and dominance of supermarket chains. Thus influencing their social, cultural, political, demographic and technological features remaining cause for the effect and are more prone to changes in their behavior for the transformation in the behavior of consumers, this probably makes us to believe this and therefore are the results. These findings exhibit similarity with that of findings obtained by Booth and Shepherd(1988), Murray et.al (1996), Davies et al (2000) and Tsourgiannis(2008).

#### **Association between change in consumer behavior score and their selected features:**

In consonance with one of the objectives it was necessary to verify as to whether there exist association between change in the behavior of consumer score and selected features. Features selected were from the different features as under –

1. Personal Feature – Age and Education.
2. Social Features – Social Participation.
3. Economic Feature – Income.
4. Psychological Feature – Attitude towards agricultural Marketing.

These features are in view of their importance and significant contribution in bringing about the change. Data therefore were subjected to test of Chi Square ('t' test). Values obtained were compared with Table values at 0.05 p. Null hypothesis was rejected where  $\alpha \leq 0.05$  & it was accepted when  $\alpha > 0.05$ . Results emerged are as below –

#### **Association between Change in consumer behavior and Age –**

The Hypothesis does hold good at 5% level of significance as chi square critical is greater than the calculated value. Thus null hypothesis is failed to reject and can be interpreted that there is no significant association between age and the change in consumer behavior towards agricultural marketing was found.

#### **Association between Change in consumer behavior and Education–**

The Hypothesis does hold good at 5% level of significance as chi square critical is greater than the calculated value. Thus null hypothesis is failed to reject and can be interpreted that there is no significant association between education and the change in consumer behavior towards agricultural marketing was found.

#### **Association between Change in Consumer Behavior and Social Participation –**

The Hypothesis does hold good at 5% level of significance as chi square critical is greater than the calculated value. Thus null hypothesis is failed to reject and can be interpreted that there

is no significant association between social participation and the change in consumer behavior towards agricultural marketing was found.

#### **Association between Change in consumer behavior and Income–**

The Hypothesis does hold good at 5% level of significance as chi square critical is greater than the calculated value. Thus null hypothesis is failed to reject and can be interpreted that there is no significant association between income and the change in consumer behavior towards agricultural marketing was found.

#### **Association between Change in consumer behavior and Attitude towards Agricultural Marketing–**

The Hypothesis does not hold good at 5% level of significance as chi square critical is smaller than the calculated value. Thus null hypothesis is rejected and can be interpreted that there is significant association between attitude towards agricultural marketing and the change in consumer behavior towards agricultural marketing was found.

Based on the above discussion it can be interpreted that, attitudes play a critical and significant role in influencing the consumer behavior. Attitude is usually associated with the notion of liking or disliking someone or something. The attitude formation is facilitated by various factors like direct personal experience, influence of peers, friends and relatives and exposure to mass media. The changing attitude can eventually change consumer behavior. Attitudes are more fundamental than others and more resistant to change.

Thus it can be concluded that in Agricultural marketing the features like age, education, income, social participation will not be directly responsible for the change in consumer behavior but the attitude of the consumer towards the agricultural marketing will directly be responsible for the change.

Kumar and Joseph<sup>5</sup> (2012) referred Consumer attitude as the enduring evaluation of an object of consumption, issue, person or an act. Attitudes guide one's thoughts, influence feelings and affect behaviors. Change in the behavioral pattern of consumers over the years has been due to several factors, and can best be described by consumer acculturation. They also stated that Consumers use attitudes as a frame of reference to judge new information/objects. Ultimately, consumer attitudes which are learned and stored in memory play a crucial role in purchase decision making.

The findings obtained by Dempsey and Mitchell<sup>6</sup> (2010) provide evidence that implicit attitudes can have a significant influence on behavior, despite conflicting product information, and increased levels of motivation and opportunity.

Gordon and Soriano<sup>7</sup> (2005) in their paper described a model of attitude-behavior relations, the behavioral perspective model (BPM), which suggests how situational influences on consumer choice may be categorized, and employ Mehrabian and Russell's approach to environmental psychology to test that model in the contexts of attitude formation and attitude - behavior consistency. The results indicate that attitude responses to consumer environments vary as predicted by the model. Moreover, the model presents a framework for managerial action through the understanding of how structural components of consumer situations (namely, utilitarian and informational reinforcement and behavior setting scope) are related to the generation of affective responses (pleasure, arousal and dominance) and approach-avoidance responses.

#### **Statistical difference between change in consumer behavior score representing different categories under study –**

Having established the association between the change in consumer behavior score and their selected characteristics, it was thought necessary to find out as to whether there exist differences statistically between the change score with the difference in their categories they represent. Initially it was proposed to use student's "t test" for this purpose, however, since the number of respondents in some of the categories was more than 30, data had to be subjected to "f test" (ANOVA) instead of "t test". Outcome of the analysis is presented in table below –

<b>Sr No</b>	<b>Category of Respondents</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Variance</b>
1	High Income	50	39.7	14.41	207.89
2	Medium Income	50	40.62	15.15	229.7556
3	Low Income	50	38.36	16.03	257.2704
	<b>Total</b>	<b>150</b>	<b>39.56</b>	<b>15.24</b>	<b>232.4997</b>

#### **ANOVA**

	<b>Sum of squares</b>	<b>Degrees of freedom</b>	<b>Mean square</b>	<b>F Value</b>	<b>P value</b>

<b>Between</b>	129.16	2	64.580	0.279	0.757
<b>Within</b>	34012.44	147	231.377		
<b>Total</b>	34141.60	149			

It was hypothesized that respondents representing different categories defer on their score for change in consumer behavior. Results are however contradictory with the hypothesis formulated in this regard which remains disproved.

On the basis of computed “F” value, it can be said that results emerged are non-significant indicating thereby nonexistence of difference in the change in consumer behavior score obtained both between and within the groups. This could probably be because the change in consumer behavior is due to various factors and the consumers are prone to change their behavior with the slightest change in any of the environmental stimuli.

A significant study in measuring consumer sentiments towards marketing practices was carried out by Gaski and Etzel (1986). Other researchers were Wee and Chan (1989) found that the pricing strategies and advertising appeals must also be adapted to suit the consumer’s needs and taste. The influence of demographic variables on attitudes towards marketing was found that the less educated, the lower income group and those with no jobs are less privileged jobs were most hostile towards marketing.

Booth and Shepherd (1988) argued that cultural and economical factors, consumer’s personality, attitudes, values and emotions, affect consumers’ decision making process regarding food selection.

Food quality characteristics, the high importance given by consumers in diet and health issues, price, governmental actions, cultural factors, distribution channels and the dominance of the supermarket chains also affect consumers buying behaviour within E.U countries (Murray et al.1996; Davies et al. 2000; Tsourgiannis 2008).

Furthermore, religious prohibitions, cultural beliefs and counterculture attitudes have a significant influence on Greek consumers purchasing decisions towards food products together with the social characteristics of the consumers, included the size of the family and the role of the head of the family (Michalopoulos and Demoussis 2001; Sdrali and Apostolopoulos 2002; Lazaridis 2003).

Schwartz (2006) considered that there is potential for expanding production and marketing of sweetpotatoes in southern Illinois because they are readily grown organically or

with minimal pesticide applications and are a highly nutritious alternative staple food. Two experiments measured: (1) attitudes and consumption behavior about sweetpotatoes of consumers in supermarkets and direct market venues; and (2) effect of planting date and cultivar/clone on yield distribution at two locations over three years. He further reported that Consumers express strong interest in sweetpotatoes, but consume very few. Most purchased sweetpotatoes at supermarkets (53%), followed by direct markets (34%) and rarely restaurants (2%). Diverse demographics and traditions of use caused sharply contrasting attitudes about the utility and value of sweetpotatoes, new methods of educating consumers, e.g., point of purchase materials (recipes), are required to expand market potential.

Vlohovic et al (2011) indicated the necessity of extending the assortment for products deriving from organic agriculture and food industry, then continuity in supply and adequate marketing approach. With informed and educated consumers, it might be possible to raise consumption to another level.

Koutroulou and Tsourgiannis (2011) conducted a study in Greece. Their study indicated that there was a significant association between the adoption of buying behaviour and the factors that influence them to choose local products. The factors affecting Consumer purchasing behavior were topicality of products, taste, production methods, environmental impact, quality, price, health safety, attractiveness of packing, curiosity and prestige.

### **Findings –**

1. Conspicuous change appears to be there in the behavior of consumer with particular reference to agricultural marketing in changing scenario as compared to that of situation in past.
2. It can be concluded that there exist association between change consumer behavior score and the attitude of consumers towards agricultural marketing.

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