Organic Tea Products: A Study on Perceptions of Urban Consumers in Golaghat District Of Assam

Diganta, Kr. Mudoi

Assistant Professor, Department of Economics, D K D College, Dergaon

Rising trend of urban population and consumer's concern for nutrition, health, quality of foods and environment in recent times has resulted a change in consumption of organic foods especially Organic Tea. In this connection, several studies have been conducted about the consumer's awareness and nature of consumption of organic foods and concluded that it is significantly higher in developed countries than developing ones. Most of the studies were limited to developed countries. Very few research studies have been conducted in detail with regard to various factors that influence consumer's perception with respect to organic tea products in Assam in general and specially in Golaghat district. The rise in per capita purchasing power, accompanied by the increase in awareness regarding the social, environmental and health benefits of organic products, has not only increased the demand for such products but also incentivized the development of the organic value chain, as evidenced by continuous developments in industries such as e-commerce, supply chain, storage and processing. The present study aims at analyzing factors affecting consumer awareness levels and buying perception regarding Organic Tea with the help of an Exploratory study using a structured survey of 147 respondents in Golaghat district through pre-tested Questionnaires using purposive sampling. This paper attempts to examine the demand for organic tea as people residing in urban area are more conscious about their health and lifestyle. Majority of the people are employed in public and private institutions. The Consumers in the study area have a good purchasing power to pay premium prices for organic teas for a healthy lifestyle.

Keywords: Urbanization, Environment, Organic Tea, Health, Lifestyle, Premium

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I. INTRODUCTION

Organic farming is practiced with varying levels of success in 178 countries¹. However, the North American and European Union regions (as single markets) generate the bulk of the global sales. The global sales increased to US\$89.7 billion in 2016 from US\$7.9 billion in 2000. According to Snehaghai and Naleeni Ramawat, "Consumption of Tea has always been a social and more of a habitual concept for most of the Indian consumers. Increasing health awareness and widespread diseases will lead to a consumption of Organic Tea and Green Tea with more natural flavors"². It is the most popular consumed drink in India. As par Market overview; Production and trade; Retail facts; Consumer behavior 2016, "Turkey is the largest tea-consuming country in the world, with a per capita tea consumption of approximately 6.96 pounds per year. In contrast, India has an annual consumption of 0.72 pounds per person"³. In cities and towns people are more aware about the health benefits of different type's organic tea products. So the demand for such product increases in these areas.

¹ The World of Organic Agriculture Statistics and Emerging Trend 2018, FiBL and IFOAM – Organics International FiBL & IFOAM Website https://shop.fibl.org/CHen/mwdownloads download/link/accessed on July 02.2018

 $^{^{2}}$ A study of consumer perception and preferences towards organic tea in Delhi-ncr International Journal of Research in applied, natural and social sciences (impact: ijranss) Issn(p): 2347-4580;issn(e): 2321-8851 vol. 4, issue 7, July 2016, 101-110

³ Retrieved from *https://www.statista.com* > Consumer Goods & FMCG > Non-alcoholic Beverages Statistic compares the per capita *consumption of tea* worldwide as of 2016.

II. NEED FOR THE STUDY

At present the study on consumer's perception about organic tea is very significant because it is very essential to understand the various factors that influence the perceptions of consumers with regard to organic tea products. Rising trend of urbanization and consumer's concern for nutrition, health, quality of foods and environment in recent times has resulted a change in consumption of organic foods especially Organic Tea⁴. In this connection, several studies have been conducted about the consumer's awareness and nature of consumption of organic foods and concluded that, "It is significantly higher in developed countries than developing ones. Most of the studies were limited to developed countries like America, and some south East Asian countries like Malaysia, Indonesia etc"⁵. Very few research studies have been conducted in detail with regard to various factors that influence consumer's perception with respect to organic tea products in Assam in general and specially in Golaghat district. So, a gap is found and it is necessary to undertake this study.

III. REVIEW OF LITERATURE

A brief review of literature related to the study is given below.

Banerjee (2005) viewed organic tea sector as a very small part of the tea industry but the number of organic tea producers and the volume of organic tea traded in the world market have recorded a high growth over the last few years. According to him this increasing trend has been found due to several factors like awareness among the tea producers about the problem of soil erosion, consumer's awareness on pesticides etc⁶.

Liu, Shangwen, Zhangyu, Amin and Zhichang (2004), in their study conducted in Biijing reported that the income per person was calculated 10.7 times more (2600 Yuan) during 2003 than the income of five years back (242 Yuan) by cultivating organic tea⁷.

Lin and Chen, (2004) found that 66 percent organic tea producers export their tea directly to Japan, USA, Germany etc. through posts. They also found that organic tea price range from 20 US dollar to 260 US dollar per kg^8 .

Dabbert, Haring and Zanoli (2004) identified that the marketing of organic products needs to take consumers' motives into account for buying organic products. According to them, the consumer's choices of organic products reflect their general values, ethical standards, levels of personal satisfaction and well-being⁹.

Hazra, (2006), analyzed the reasons for increase in the number of organic producers and volume of organic tea in the world market and found awareness of environmental problems by the tea farmers, increased consumer's awareness of pesticide residues and belief that organic teas are generally of better quality due to avoidance of artificial additives¹⁰.

⁴ *Retrieved from https://www.researchgate.net/.../312161242_a_study_of_consumer_perceptio...* Full-text paper (pdf): *a study of consumer perception and preferences towards organic tea in DelhiNcr.*

⁵ Balaji V and Injodey I. J (2017) Organic Food markets: A study on Perceptions of Indian Consumers. Indian Journal of Marketing. January 2017, pp 26-40

⁶ Banerjee, B (2005) Organic Tea cultivation and Marketing, pp. v

⁷ Liu. X., Shangwen, F., Zhangyu, Amin, S., and Zhichang, W. (2004) The development of organic tea in Chinese mainland. *Proc. Intl, conf. on O-CHA (tea) Culture and Sci.*, 4-6, 2004 Shizuoka, Japan, pp. 732-735.

⁸ Lin, M. L and Chen, T.C. (2004) Tea cultivation in Taiwan. Proc. Intl. Conf. on O-CHA (tea) culture and sci.,

Nov. 4-6, 2004 Shizuoka, Japan, pp. 820=823

⁹ Dabbert, S. and Haring, A. M. and Zanoli, R. (2004) Organic Farming Policies and prospects. Zed Books Ltd., London, UK. Pp. 169

¹⁰ Hazara, G. N. (2006). Organic Tea cultivation and Marketing, "*Production of organic tea in different countries*" Chapter 3 pp-37

Kuhar and Juvancic (2008) in their study identified a few factors like availability of organic foods in retail outlets, consumers' income, health and environmental aspects, and visual appeal of products that most significantly influenced the purchase of organic products¹¹.

OBJECTIVES OF THE STUDY

- 1) To understand the demographic profile of urban consumers in case of organic tea products.
- 2) To find and analyze the factors influencing urban consumer's perception towards organic tea products.

IV. RESEARCH METHODOLOGY

Research design: The research design for the study is exploratory. The major emphasis under such research design is usually on discovery of ideas and insights¹².

Aim: The main aim of the study is to explain the factors that influencing the perceptions of consumer towards Organic tea.

Primary Data: The primary data required for the study has been collected with the help of convenience sampling and structured questionnaire. Under structured questionnaire the question for the study is definite, concrete and pre determined¹³. The primary data has been collected during the period of 2018 (From January 2018 to March 2018).

Study Area: The study is conducted in the region of Golaghat districts headquarter of Assam. It is one of the most wealthy and developed area with many literary intellects and plays a significant role in the tea industry of Assam¹⁴.

Secondary Data: Secondary data has been collected from various journals, reports, and magazines.

Size of Sample: For the present study, 200 respondents have been selected by using convenience sampling and accordingly questionnaires have been distributed among them. But all the completed questionnaires are not obtained, 53 questionnaires are incomplete which results a response rate of 73.5% (147). All the questionnaires are distributed personally. The respondent who does not understand English their questionnaires are given in Assamese language.

Data collected from the respondents have been tested with adequate statistical techniques like percentage, factor analysis, 5-point Likert scale etc. Demographic profile of the respondents has been examined using percentage analysis. Principal component analysis is used to draw out the factors of consumer's perception towards organic tea products. It is a procedure to convert a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables¹⁵. To conduct factor analysis, 5 point Likert scale with scores ranging from 5 to 1 (5– strongly agree, 4- agree, 3- Do not know, 2- Disagree, 1- Strongly Disagree) has been used in this study.

V. LIMITATIONS OF THE STUDY

The study covers only the consumers of organic tea in Golaghat district of Assam. So, the results of the study may not be generalized. Though this study is confined to only one district, the consumers generally possess similar features and therefore the findings of the study would enable broad suggestions for future rectification. It would generate ideas about how to spread the awareness on organic tea into more interior areas where people are unaware about beneficial aspects of the consumption of organic tea. The study is likely to have following limitations:

1. The data collected from the sample respondents are not homogeneous in size. So, generalization of the findings may not be possible in every situation.

¹¹ Kuhar, A., and Juvancic, L. (2008) Determinants of purchasing behavior for organic and integrated fruits and vegetables in Solvenia. *Agricultural Economics Review, 11 (2), 70-83*

¹² Kothari C. R. and Garg G (2018). Research Methodology, Methods and techniques, *New age International Publishers*. Pp. 34

¹³ Kothari C. R. and Garg G (2018). Research Methodology, Methods and techniques, *New age International Publishers*. Pp. 97

¹⁴Retrieved from <u>https://en.wikipedia.org/wiki/Golaghat</u>

¹⁴ Kuhar, A., and Juvancic, L. (2008) Determinants of purchasing behavior for organic and integrated fruits and vegetables in Solvenia. *Agricultural Economics Review*, *11* (2), 70-83

¹⁵ Kothari C. R. and Garg G (2018). Research Methodology, Methods and techniques, *New age International Publishers*. Pp.365

2. The sample size and the methodology used for data analysis and interpretation may impose some limitation in generalization of the result.

3. The selection of respondents is done on own convenience.

VI. RESULTS AND DISCUSSION

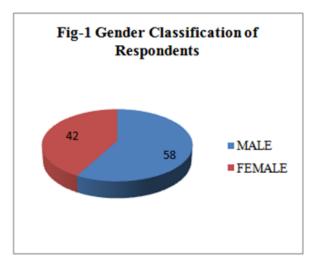
The demographic profile of the respondents has been collected by using four parameters namely gender, age group, monthly household income, and average spend on organic tea products per month. The demographic profile of the respondents is presented in Table 1. It is seen from the table1 that males (58%) constituted majority of the respondents in the sample data when compared to females (42%). Most of the respondents belonged to the age group of less than 30 years of age (50.34%) while respondents above 50 years of age were the least (14.97). It is also observed that majority of the respondents in the sample area had a monthly household income of Rs. 30,000 -Rs. 50,000 (38.10%), while the average spend per month on organic tea products belonged to the category of Rs. -500 - Rs. 1,000 (45.58%).

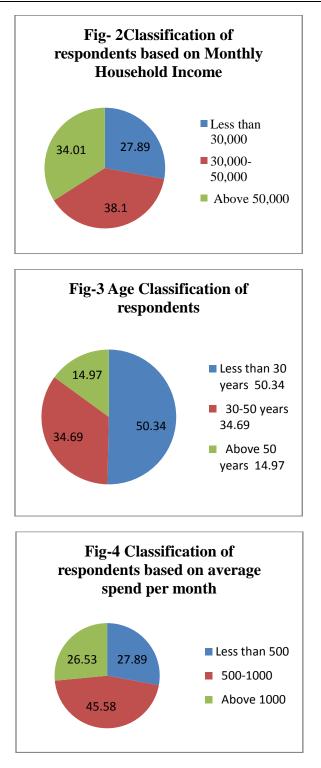
Table1. Demographic profile of the Respondents						
Descripti	ve Statistics	Frequency	Percentage			
	Male	86	58			
Gender	Female	61	42			
	Total	147	100			
	Less than 30 Years	74	50.34			
	30-50 Years	51	34.47			
Age Group	Above 50 Years	22	14.97			
	Total	147	100			
	Less than 30,000	41	27.89			
Monthly Household	Rs. 30,000-Rs. 50,000	56	38.10			
Income	More than 50,000	50	34.01			
	Total	147	100			
	Less than Rs. 500	41	27.89			
Average spend per	Rs. 500- Rs. 1000	67	45.58			
month	More than Rs. 1000	39	26.53			
	Total	147	100			

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Source: Field Survey

The demographic profile of the respondents is also shown graphically. The Figure 1 depicts the graphical representation of the respondents classified on the basis of gender composition. The Figure 2 depicts the graphical representation of the respondents classified on the basis their monthly household income. The Figure 3 depicts the graphical representation of the respondents classified on the basis of their age. The Figure 4 depicts the graphical representation of the respondents based on their average spend per month on organic tea products.





Factor Analysis: The technique of Factor analysis is often used in data reduction to identify the minimum number of common factors that explain most of the variance that is observed in a large number of observed variables¹⁶. Here, Varimax Rotation Technique is also applied in order to simplify the factor structures and to increase the interpretability of the factor solution obtained¹⁷.

Bartlett's Test of Sphericity ($X^2 = , 350.185, p < 0.05, Table 2$) indicates that it has not generated identity matrix and the Kaiser-Meyer-Olkin (KMO) value of sampling adequacy is 0.701, which is greater than 0.5 and this shows that it is feasible to undertake factor analysis. Principal Component Analysis is used to measure the desired the characteristics of organic tea products from 147 respondents. The overall value of Kaiser-Meyer-Olkin (KMO) is 0.701. (Table 2) Bartlett's Test of Sphericity is statistically significant (p< 0.0005), indicating that the data are factorizable. PCA reveals three components, as has been indicated in the graphical presentation in the figure that has Eigen values greater than one used for extracting the factors. Eigen values represent the total variance explained by each factor. Three factors are retained upon Eigen values of more than one. Varimax Rotation Technique is also used to measure the individual factor loadings, and the result suggests that the Eigen value, for the extracted three factors, is greater than the recommended level of 1. This reveals that out of 13 items include in the factor analysis, three dimensions are extracted and emerged with a cumulative variance of 49.581 percent. Hence, three components solution explain 49.581 percent of the variance. Principal Component Analysis and varimax rotation results in the formation of three factors (Table-3) explains a cumulative variance of 49.581 percent with primary loadings of all the three items whose values are greater than 0.05 to form the best possible factor structure.

'Health Benefits' has become as the most important determinant of the factors affecting consumer preference towards purchase of organic tea products with a total Eigen value of 2.648 and variance of 22.067%. The Eigen value indicates the relative importance of each factor in accounting for this particular set of variables being analyzed. Major variables include in this factor include healthy, safety, rich in nutrients, natural, and free from chemicals.

'Consumer ideology' towards organic tea products has been identified as the second most important determinant of the factors affecting consumer preferences towards purchase of organic tea products with a total Eigen value of 1.736 and of variance 14.470 %. Major variables of this factor include a growing concern for the environment, availability of variety of organic tea products, taste etc.

'Free from chemicals' has become as the third most important determinant of the factors affecting consumer preference towards purchase of organic tea products with a total Eigen value of 1.565 and variance of 13.044 %. Major variables constituting this factor include no additive, non- toxic etc.

The reliability scale for all the three dimensions as a whole are calculated in order to see if the items are genuine or not (Table 4). Looking at the reliability scale, all the three dimensions show coefficients higher than 0.70, meaning that these dimensions comprising of various items show a true measure of consumer perception towards purchase of organic tea products.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.702
Bartlett's Test of Sphericity	Approx. Chi-Square		350.185
	df		66
	Sig.		0

Table 2. KMO and Bartlett's Test of Sampling Adequacy

Table 3. Total Variance Explained

ĺ		Initial Eigen values			Extra	ction Sums of Loadings	1	Rotati	ion Sums of Loadings	1
	Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulati ve %	Total	% of Variance	Cumula tive %
ľ	1	3.278	27.321	27.321	3.278	27.321	27.321	2.648	22.067	22.067
ľ	2	1.450	12.086	39.407	1.450	12.086	39.407	1.736	14.470	36.537
	3	1.221	10.174	49.581	1.221	10.174	49.581	1.565	13.044	49.581

¹⁶ GPH Panel Experts (2007) Research Methods in Economics (MEC 109) pp. 162

¹⁷ GPH Panel Experts (2007) Research Methods in Economics (MEC 109) pp. 172

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4	.991	8.256	57.836
5	.948	7.896	65.733
6	.816	6.803	72.536
7	.733	6.112	78.647
8	.703	5.858	84.505
9	.689	5.739	90.244
10	.514	4.279	94.524
11	.398	3.315	97.838
12	.259	2.162	100.000

Table 4. Reliability Statistics

Chronbach's Alpha	Chronbach's Alpha based on Standardized items	Items
0.703	0.737	12

VII. CONCLUSIONS AND RECOMMENDATIONS

Thus from the above analysis we may conclude that health benefit has become the most important determinant of the factors affecting consumer preference towards purchase of organic tea products. It is essentially very important to study the factors that have an impact on consumer perception towards organic tea products. This study will be helpful for the producers and marketers of organic tea products to understand the importance of various factors on the overall consumer preference towards consumption of organic tea. All the three factors included in the study influenced consumer buying (49.58 % of the cumulative variance explained, Table). Thus we can say that consumers are health conscious by giving high priority to their health and safety. The marketers should adopt a more competitive strategy to raise the sales of Organic Tea because urban consumers have a higher buying potential and also concern for health, safety and environment. A few promotional activities like free tea tasting, sampling of tea bag and organizing health Camps should be organized on a regular basis. Besides, there is also necessary to introduce new offers such as rewards cards, gift coupons to increase customers' satisfaction towards their brand and increase sales. The study has revealed that Producers should target consumers with average monthly household income of Rs. 50,000 or above.

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