Factors contributing to organic food consumption: A case of Balangoda area

W.M.S.H. Jayasinghe[*], S.T. Hansika, P. Wattage

Department of Agribusiness Management, Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka, P.O. Box 02, Belihuloya, Sri Lanka
*hashanjalijayasinghe@gmail.com

1. Introduction

Nowadays food consumption patterns are rapidly changing towards organic food products for various reasons. Agricultural products are grown without chemical synthetic pesticides, bioengineered genes, or any artificial fertilizers are called organic products. In Sri Lanka, there are many organic products available such as rice, fruits, vegetables, tea, spices, coffee, cashew, and coconut-based products and those organic products are exported to foreign countries as well. The price of organic products is varying according to consumer preferences and satisfaction while compared with conventional foods that are remarkably higher than the actual price in all parts of the production sites of organic foods. Organic food products are expensive among both organic and non-organic produce consumers. (Narmilan & Sugirtharan, 2015) According to studies, organic food provides many advantages and nutritional value for humans such as nutritional and health benefits, safer than other chemical residue products, etc. (Gopalakrishnan, 2019 Jun- May,pp.242-245).

Several previous studies have examined issues related to the characteristics and consumer behaviours of organic food in the world. The broader objective of this study is to identify the factors that contribute to the consumption of organic foods in the Balangoda area. This study was important to identify consumer knowledge level, influence on organic food consumption, and whether they are environmentally conscious while consuming organic foods. And also increase awareness than current awareness.

2. Materials and Methods

Balangoda is located in the Rathnapura district of the Sabaragamuwa province. The questionnaire started with a brief introduction. That described the aims of the survey, Random Sampling Method was used to identify the factors that are most engaged when buying organic food products. The questionnaire had three sections. The first section of the questionnaire was designed to obtain information about the socio-economic background of respondents such as age, gender, employment, income, education, marital status, and family size. The second section was designed to get information about the consumer knowledge about organic foods. The final section was designed to obtain an idea about consumer preferences for organic food items. The sampling frame for this study was male and female consumers in the Balangoda area with various ages ranging above 21 years old. Through Researcher administered questionnaire, respondents are directly asked questions regarding factors that are mostly considered when buying organic foods. A sample of 220 consumers was interviewed in the market and retail shops in the Balangoda area and the statistical package SPSS was used to analyze the data.

Regression analysis was used as the analysis method of this survey to estimate demand function.

The Demand Function.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Dependent Variable

Y = Average quantity of monthly consumption of organic foods.

Independent Variables

X_1 = Size of household

X_2 = Consumer Knowledge

3. Results and Discussion

3.1 Socio-economic factors of consumers

Within the scope of this study, variables that are thought to impact consumer behaviors such as Age, Gender, Main income source, Education, Average monthly household income, Marital status, and Size of household are taken into consideration. Among the participants 122 were female and 98 were male. And the majority of the participants have obtained their higher education, 24 respondents have completed the primary education and 88 have completed advanced level education, and also 81 have obtained a diploma or a degree. Among 220 respondents 27 have a degree and above. Regarding the income level, the average income level was Rs.55,000.00 and the maximum was Rs. 200,000.00. And the average age of respondents was 36 years. Most participants (60.5%) are married. More participants are employed in the private sector (35%) than any other. Moreover, 88 (40%) of respondents have attained a higher level of education and 108 respondents hold a diploma, degree, or above. This may be considered as a sign that consumers of organic food have higher education levels. Gender is also considered among the factors affecting organic food consumption. Questionnaire results indicate that 55.5% of respondents are women, while 44.5% were men. More women participated in this study than women. Factors leading to women being more informed than men about organic foods.
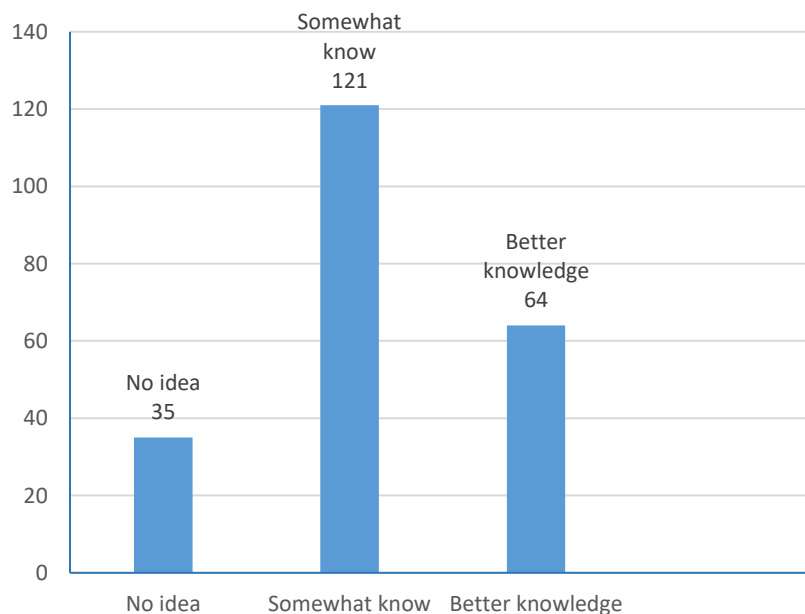

Figure 1. Consumer Knowledge about existing organic products in the market

a. Consumer Knowledge about existing organic products in the market

According to findings, 185 respondents have considerable knowledge about the existing organic products in the market.

3.3. Multiple regression results and Demand Function

A multiple linear regression model was applied to estimate factors affecting organic food consumption. (Table 1) Regression results showed that the two variables considered, size of household and consumer knowledge was significant at a probability level of 0.05.

According to the coefficient table, the Size of household have a positive β value and consumer knowledge have a negative β value. It means when the size of the household increased by 1-unit average quantity of monthly consumption of organic foods goes up at 508.262 % because those have positive values. When consumer knowledge increased, the average quantity of monthly consumption of organic foods goes down at 937.318% because those have negative values. Then demand function can be estimated as,

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where,

Average quantity of monthly consumption of organic foods = 2514.483 + 508.268 + (-973.318) + ε

According to the Model summary (Table 2) $R^2 = 0.018$, taken as a set, the predictors (X_1 & X_2) account for 1.8% of the variable in the Average Quantity of monthly consumption of organic foods.

Table 01. Multiple Regression results

Model	β	St. Error	t	Significant
Constant	2514.483	2071.587	1.214	0.226
Size of house hold	508.268	239.543	2.122	0.035**
Consumer knowledge	-973.318	476.690	-2.042	0.042**

** - Significant at 0.05 (95% Confidence Interval)

a). Dependent Variable is the Average quantity of monthly consumption of organic foods.

Table 02. Model summary table

R^2	Adj R^2	Sig. F
0.045	0.018	0.134

According to the majority of the public, high prices of organic foods are due to the production cost and the less amount of production drives the high price. So, the majority of consumers could only purchase a few organic foods because of the high price and lack of market supply.

4. Conclusions

This survey helps to increase consumer awareness and knowledge about organic food consumption than the current awareness and also it helps to increase organic food consumption and increase farmers' income. As a result, the organic food consumption market can grow furthermore. According to the finding in the Balangoda area, there is a considerable demand for organic food products, but there is not enough supply to the market. Also, highly educated people are more concerned about organic products and they tend to purchase organic vegetables. Increasing awareness or education about these organic products can increase organic vegetable consumption in the Balangoda area.

5. References

Aydogdu, M., & Kaya, F. (2020). Factors Affecting Consumers' Consumption of Organic Foods: A case study in GPA-Sanliurfa in Turkey. Retrieved from just.modares.ac.lk.

Gopalakrishnan, D. (2019). Advantages and Nutritional value of Organic Food on Human Health. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, *3*(4), 242-245. Retrieved from https://www.ijtsrd.com/papers/ijtsrd23661.pdf

Narmilan, A., & Sugirtharan, A. (2015). Demand for Organic food products in the Urban areas of the Batticoloa District, Sri Lanka. *Research Journal of Agriculture and Forestry Sciences, 3*(11), 21-26.

Olhan, E., & Ataseven, Y. (2019). Factors affecting organic food consumption: A case study of Ankara. *Journal of Environmental Protection and Ecology, 20*(1), 196-205.

Trento, L., Goecks, L. Souza, M. & Dauer, M., (2018). Factors that influence the consumption of organic foods. 7th International Workshop - Advances in Cleaner Production, 1-8.