

CONSUMER ACCEPTABILITY AND WILLINGNESS TO PAY FOR ORGANIC VEGETABLES IN UYO LGA, AKWA IBOM STATE, NIGERIA

Udoh, E. J. and Kamse O. D.

Department of Agricultural Economics, University of Uyo, Uyo, Akwa Ibom State, Nigeria

ABSTRACT

The study examined consumer acceptability and willingness to pay for organic vegetables in Uyo Local Government Area. The objectives of this study included to find out the socio-economic characteristics of consumers in the study area; to find out the perception about organically produced vegetable in the study area; to determine the willingness to pay for organically produced vegetable in the study area; to find out the level of acceptability of organic vegetables in the study area; to find out the consumer's awareness of organic vegetables in the study area; and to determine factors related to willingness to pay for organically produced vegetable in the study area. Descriptive method was adopted in the study. Data was collected from 250 respondents selected from residents of Uyo LGA, via administration of structured questionnaire, using multi-stage sampling procedure. Data was analysed using simple percentage, descriptive statistics and Pearson's correlation analysis. The findings revealed that there is positive and significant relationship between socio-economic characteristics of consumers and consumer's willingness to pay for organically produced vegetables; and there is a positive and significant relationship between socio-economic characteristics of consumers and consumer's perception about organically produced vegetable. It was concluded that the positive consumer acceptability and willingness to pay for organic vegetables in Uyo indicates a potential market opportunity for organic farmers and retailers in the region. It was recommended that consumer concerns should be addressed on the rationale that by addressing consumer concerns and promoting the benefits of organic agriculture, farmers can capture a larger share of this growing market and meet the increasing demand for organic food products. This would then transform into higher productivity and profitability.

Keywords: Organic fertilizer, Consumer Acceptability, Willingness to Pay (WTP)

INTRODUCTION

Population growth in Africa is occurring more rapidly than other regions of the world (Norse and Tschiley, 2003), Nigeria being the most populous country meant the agricultural products and food demand in general is also increasing. The increase in per capita incomes, higher urbanization and the growing numbers of women in the workforce stimulate greater demand for high-value commodities, processed products and ready-prepared foods (Udoh, et al, 2013). Since agribusiness sector is an important catalyst for the development of efficient value chains, a contributor to improved product quality and safety and a provider of services that allow food to flow from production to consumption (Gao *et al.*, 2019) then, as the rural inhabitants who are connected to infrastructure adopt more urbanized lifestyles, food consumption is becoming both more varied and more similar around the world (Halpin and Brueckner, 2004; Udoh, et al, 2013). The role of organic agriculture in providing food and income is now gaining wider recognition (Lotter, et al, 2003; Zong, 2002; Vandermeer *et al.*, 1998). The market of organic products is growing as the number of people willing to eat organic food and pay premium price is increasing. The future of organic agriculture will, to a large extent, also depend on consumer demand and their motive for paying extra price for organically grown food. Thus, a consumer-oriented approach to understanding the market for organic products is important for pursuing better management of organic farming. However, this is a complex process, which is determined by factors such as quality production, certification, infrastructure and market environment and policies (Anobah 2008). It is

also important to understand consumer decision-making regarding organically produced foods and seek strategies about how consumption can be promoted.

Organic agriculture has expanded in Nigeria due to, among other things, interest shown by consumers in food safety issues involving real or perceived quality risks. Healthier, safer, and more environmentally friendly food products are becoming more important to consumers. Extensive use of pesticides and chemical fertilizers in food production has made it almost impossible to avoid daily exposure to low levels of agrochemical residues. There are possible adverse effects on human health from continuous long term, low-level, or chronic agrochemical exposure. This is especially true for vegetables, which are largely consumed fresh. Consumption of organic products is considered by advocates as the best remedy to prevent numerous health hazards associated with consumption of conventionally (inorganically) produced food products. The global market has experienced high growth in organic products (Yusefi, 2004; Woodward, 1996; Vanzetti and Wynen, 2002). Organic production systems are based on specific, and precise, standards of production that aim at achieving agro-ecosystems that are socially, ecologically, and economically sustainable (Lotter, 2003). This is achieved by avoiding the use of synthetic pesticides, herbicides, chemical fertilizers, growth hormones, antibiotics, or gene manipulation; instead, a range of techniques are used that help sustains ecosystems and reduce pollution.

Farmers are shifting production practices to meet the demand for organic products. Organic agriculture products are generally more expensive than their conventional counterparts because organic food supply is limited compared to demand (Bourne and Prescott, 2002). Production costs for organic foods are typically higher because of greater labour inputs and lower production for each crop, making cost per crop higher. Postharvest handling of relatively small quantities of organic foods results in higher costs because of mandatory segregation of organic and conventional produce, especially for processing and transportation. Marketing and the distribution chain for organic products is relatively inefficient and costs are higher because

of relatively small volumes (Brown and Miller, 2020).

Efficiency gains and technological advances alone will not be sufficient to bring production of organic products and their consumption to a sustainable level, as consumer willingness to pay for organic products creates another challenge because the agricultural production process is not complete until farm produce (organic vegetables) reaches the consumer. Given that prices of organic products are generally higher than those of conventional products (Trewavas, 2004; Smith, 2018), studies that focus on consumer willingness to pay for organic vegetables are necessary for sustainable organic vegetable production and consumption and environmental conservation and public health.

Production and marketing strategies of organic products are determined by consumer beliefs, attitudes, and responses to organically grown products and the Willingness to Pay (WTP) a premium price. Because organic products are credence goods, consumers may not know whether a product is produced using organic or conventional methods unless they are told so (Hughner, et al, 2007). Thus, awareness and knowledge about organically produced foods are critical in the consumer purchase decisions. Kilcher (2001) reported that consumers purchase organic products because of a perception that such products are safer, healthier and more environmentally friendly than conventionally produced alternatives. Human health, food safety along with several other product characteristics such as nutritive value, taste, freshness, appearance, and other sensory characteristics influence consumer preferences (Lampkin, 1990, Loureiro and Hine, 2002). The study has come-up to present the real picture of the consumer acceptability as well as their willingness to pay for organically produced vegetable.

Consumers' concern about the quality and safety of conventionally produced food has increased over the years and they are showing great attention towards organic food (Mahale and Soree, 2002). Export is one of the major drivers of growth of organic agricultural products, but with increase in awareness, local consumers are becoming more and more conscious about their health and organic food is gaining widespread acceptability (Ridley *et al.*, 2003). Despite the

favourable conditions, the domestic organic food market is extremely nascent.. The problem is that the likeliness of an individual to consume organic food is dependent on many factors such as awareness level, perception that such products are safer, healthier and more environmentally friendly than conventionally produced alternatives and accessibility etc. Thus this study seeks to find out the effect of these factors on WTP for organic vegetables in Uyo LGA, Akwa Ibom State.

The general objective of this paper is to assess the consumer acceptability and willingness to pay (WTP) for organically produced vegetables. The specific objectives include the followings; To find out the socio-economic characteristics of consumers in the study area; To find out the perception about organically produced vegetable; To find out the level of acceptability of organic vegetables; To find out the consumer's awareness of organic vegetables, and To assess the willingness to pay for organically produced vegetable.

Hypotheses

1. There is no significant relationship between socio-economic characteristics of consumers and consumer's willingness to pay for organically produced vegetable.
2. There is no significant relationship between socio-economic characteristics of consumers and consumer's perception about organically produced vegetable

Nigeria's Organic Agriculture Profile

Compared to some African countries, as an organized practice, Nigeria's organic farming profile is fairly new and less impressive. Nigeria has estimated 61 million ha of arable land, which translates to 66% of its total landmass. Since 2000s Nigeria has cultivated a land area of upward of 33 million ha, leaving between 28-31 million ha of viable arable land resource for agricultural production. A range of "60-70% of Nigerian farmers are traditional rural farmers who by their nature of subsistence agriculture produce uncertified organic using localized and natural resources due to inability to secure synthetic fertilizers" (Oguamanam, 2015, USDA, 2014). However, available data indicate that only 11, 979 ha (i.e. 0.03%) of Nigeria's over

30 million ha of arable agricultural land are cultivated by a trifling 517 producers (USDA, 2014,) under organized organic farming.

In the past ten years of its emergence, the organic sector of Nigeria's agriculture has been distinctively busy. For the most part, that busyness is evident in the mushrooming of actors and stakeholders of various stripes, including institutional/research interests at various levels of research, education and development, as well as among civil society and other non-classifiable actors. In no order, the impressive list of such factors include the organizing umbrella initiative, the Organic Agriculture Project in Tertiary Institutions in Nigeria (OAPTIN) that focuses on developing capacity and network of Nigerian academics in organic agriculture; the pioneering Dara/Eurobridge Farm, a venture at the forefront of Nigeria first certified organic agro-produce (medicinal herbs, ginger, turmeric, plantain and lemongrass). Others include the Olusegun Obasanjo Centre for Agricultural Research and Development (OOCAR&D), which supports R&D in organic agriculture. The OOCAR&D is credited with the formation of the Nigerian Organic Agriculture Network (NOAN), which is a networking platform for all organic agricultural interest groups in Nigeria (USDA, 2014). There is also the Organic Farmers Association of Nigeria (OFAN) in addition to regional or rural-leaning organic agro organizations and various organic input producing and organic product-specific bodies too numerous to mention.

As expected from this list of organic stakeholders, there is no dearth of activities around organic agriculture in Nigeria, which hosted the 2015 Third African Organic (Agriculture) Conference. However, as indicated above, those activities have yet to translate into a significant organized organic farm holding. Not only has Nigeria embraced agricultural biotechnology and now set to formally introduce and regulate GMOs on the agricultural fields and on dining tables, among others, such a development is happening at a time when Nigeria's agricultural reforms has attracted the attention of Africa and the rest of the world.

Willingness to Pay (WTP)

The concept of consumer's WTP according to Sylvia (2014) refers to the maximum amount a

person would be willing to pay or sacrifice in exchange for a good. It is the premium price to be paid by consumers to purchase a product or to enjoy a service. The aim of a consumer is to maximize utility. Therefore, if the good or service has high utility to the consumer, then the consumer will be willing to pay for such good or service for his satisfaction; and if the good or service has little and does not satisfy the consumer's utility, then he willing not be willing to pay for such good or service (Oduh and Oduh, 2012).

Elicitation of resource valuation is often done with contingent valuation and choice experiments estimating WTP for specific attributes of foods (Jianjun, et al 2005). While contingent valuation, (i.e. hypothetical valuation), is often used to evaluate a product as whole, conjoint choice experiments are able to evaluate bundles of attributes that define a good. In any case it is important to be cautious when making statements about stated preference results in terms of actual behaviour, but generating a WTP value for transitional organic produce is valuable for future environmental protection.

Consumers' WTP for Agriculture Organic Product (AOP)

Several studies have been carried out on consumers' WTP for various food commodities. For example, Adepoju and Oyewole (2014) analysed factors affecting households' WTP for bread with cassava flour inclusion using logistic regression method, they found households' WTP negatively related with the premium price and a positive significant relationship with household income. According to Voon, et al (2011), attitude and subjective norms exerted significant positive effects on WTP while the effect of affordability was not significant. Attitude further impacted subjective norms and affordability, thus indicating that efforts to promote consumption growth should focus on influencing consumer attitudes. The work by Aryal, et al (2009), revealed that all respondents are willing to pay price premium, but the level of acceptability varied considerably. A total of 58% of the consumers are willing to pay 6- 20% price premium, whereas 13% are willing to pay up to 50% premium. The average premium was estimated about 30%. About 39% of the

respondents feel the extra cost for organic products is reasonable, while 27% considered it too high. The survey also suggested that the consumption of organic products is increasing; however, product development and innovations in certification, processing, labeling and packaging are needed to further stimulate demand.

Another study by Anyam *et al.*, (2013), analysed the factors driving WTP, the effect of attributes on WTP and mean WTP for improved bread by using descriptive statistics and conditional logit regression model. The results revealed that price and the non-monetary attributes namely, bromate label, certification, nutritional label, flavour and texture were significant in explaining consumer's choices. Although price was significant, it was negative and that indicated the consumers' utility for improved bread option decreases with price increase. The brand name in the same study was not significant. The study by Mmasa and Mlambiti, (2012) on factors that influences consumption of processed sweet potato products in Tanzania revealed that two factors mostly influences one to consume processed sweet potato were attractive packaging (51.0%) and nutritional value (34.7%). Other factors mentioned included; taste (95.0%), freshness (80.8%), shelf life (85.8%), texture (57.5%), economy (price) (57.5%), Nutritional factor (72.5%) and colour (50.8%).

The study by Yang *et al.* (2012) on consumers' WTP for fair trade coffee for Chinese as the coffee consumption rose significantly in recent years in China, used interval regression to investigate individual demographic and consumption characteristics impacted on WTP. Different attribute dimensions when a customer purchases coffee, such as brand, flavour, ethical, and price were assessed in order to understand how customers choose coffee and on what information they base for their choices. The payment card contingent valuation question was adopted to elicit consumers' WTP. The results revealed that ethical and environmental concerns were not significant in influencing consumers WTP. However many demographic and consumption variables had a significant impact to fair trade coffee WTP and were mostly consistent with previous studies.

The study by Hirogaki (2013) on estimating

Consumers' WTP for Health Food Claims employed choice-based conjoint experiment (CBC) method to analyse preferences for different profiles of functional products. The health claims, country of origin, size and price of food products were the attributes considered for preference analysis. The results showed that health coefficient for volume was negative and significant at 5% level indicating that consumers do not place high value on volume and may perceive functional food as nutritious but not tasty; in other words, they face a trade-off between taste and nutrition. Further results show that coefficient for size is negative but not significant. This result implies that this factor will not affect consumers' choice of products; in addition, the coefficient for price is negative but not significant and indicates that price does not have a significant effect on purchase intention.

Laurie and Van Heerden (2012) in their study in South Africa to determine the consumer's acceptability of four products namely OFSP juice, OFSP chips, OFSP doughnuts and the OFSP green leaves made from β -carotene-rich sweet potato, frequency tables were generated and used to assess distribution by region, gender, age group, region by age group and region by gender. Also chi-square test for equal proportions was employed to detect associations between them. In order to investigate the comparative acceptability of the different products, scores were allocated according to the degree of liking. Analysis of variance (ANOVA) was conducted and least significance differences (LSD) was calculated at a 5% significance level to compare means. The results revealed an existence of a notable acceptability varying between 85% and 95% for the four beta-carotene-rich sweet potato products in the six regions under study.

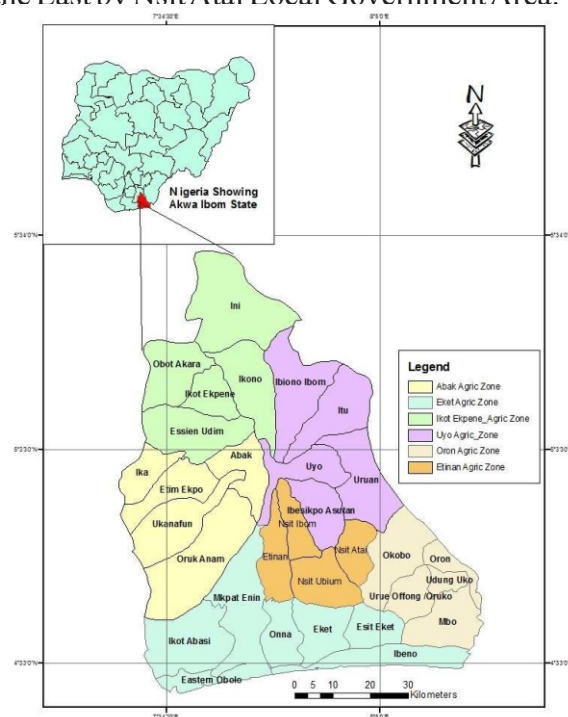
Hence in general, the literature shows mainly two methods: Discrete Choice Experiment and Contingent Valuation methods have been used in various studies. Discrete Choice Experiments (DCE) are based on economic theory that assumes people have clear preferences for goods or services and are able to choose one type of good or service in preference to another. Contingent valuation method (CVM) is a questionnaire based valuation technique whereby WTP is directly obtained from the respondents with respect to a specific good.

Contingent Valuation Method is a survey based technique used to examine how consumers evaluate goods and services not found in the market place. Since in this study the aim was to assess the consumer acceptability and estimating consumers' WTP for selected processed OFSP products as new products in the market, then contingent valuation method was chosen as an appropriate method to be employed in this study.

METHODOLOGY

Study Area

The research was conducted in Uyo Local Government Area of Akwa Ibom State. Uyo Local Government Area is situated between latitude $5^{\circ}01'$ North of the Equator and longitude $7^{\circ}56'$ East of the Greenwich Meridian with a total land mass of 985.6559km. Uyo Local Government Area is among the pioneer Local Government Areas in Akwa Ibom State. When Akwa Ibom State was created out of Cross River State in 1987, Uyo Local Government Area became the administrative site of the state. Uyo Local Government Area presently comprises of seventy-five (75) villages and made up of four (4) clans of Ikono, Etoi, Oku and Offot. Uyo Local Government Area is geographically bounded in the North by Itu Local Government Area, in the West by Etinan, Abak and Ibesikpo Asutan Local Government Areas, in the South by Uruan and in the East by Nsit Atai Local Government Area.



Source of Data, Sampling Procedure and Data analyses

Data for this research was obtained from primary sources. The primary data was obtained using a well-constructed and structured questionnaire with subsections reflecting the specific objective of the study.

Multistage sampling procedure was used to select a sample size of 250. The first stage was the random selection of four districts: Offot, Oku, Etoi and Ikon. The second stage was a random selection of four villages in each district making a total of sixteen villages. The last stage was the random selection of fifteen households in each of the villages to make a total number of 250 respondents. Data were analysed using relevant descriptive statistics and customised perception indices based on 5-level likert scales.

RESULTS AND DISCUSSION

Socio-Economic Characteristics of the Respondents

This section shows the reported socio-economic characteristics of the sample, showing distribution in terms sex, age, educational level and marital status.

Table 1: SocioEconomic Characteristics

SocioEconomic Characteristics	Responses	Number of Respondents	Percentage (%)	Mean
Sex	Male	140	56	
	Female	110	44	
				20.5
Age	16-25	42	16.8	
	26-35	52	20.8	30.5
	36-45	70	28	40.5
	46-55	48	19.2	50.5
	56 and above	38	15.2	
	No formal education/Primary School set	42	16.8	
Educational Level	'O' Level	119	47.6	
	NCE/OND	26	10.4	
	HND/B.Sc	55	22	
	Post Graduate Degree	8	3.2	
Marital Status	Married	130	52	
	Non-married	120	48	
Household Size	1-5	95	38	3
	6-10	103	41.2	8
	11 and above	52	20.8	
	1,000-25,000	30	12	13,000
	26,000-50,000	100	40	38,000
Monthly Income (Naira)	51,000-100,000	73	29.2	75,500
	101,000-350,000	35	14	225,500
	400,000 and above	12	4.8	

Source: Researcher's Field Survey Result (2023).

Table 1 shows the sex, age, educational level, marital status and household size of the respondents. It shows that 140 out of the total respondents were male representing 56% of the total respondents while 110 were female representing 44% of the total sample size. From the above analysis, it can be inferred that majority of the respondents were males.

For the age distribution, respondents within the age bracket of 18-25 years of age were 42, and this represents 16.8% of the total sample followed by 52 respondents in the age bracket of 26-35 which represents 20.8% of the total sample. 70 respondents are in the age bracket of 36-45 making up 28% of the total sample, while 48 respondents fall within the age bracket of 46-55 years, representing 19.2% of the total sample size. Respondents from 56 years and above were 38, and they account for 15.2% of the total sample.

Furthermore, the table also presented information on the educational level of the respondents. It shows that 26 respondents have an NCE/OND degree making up 10.4% of the total respondents. Fifty five (55) respondents have a Bachelor's degree representing 22% of the total respondents. 8 respondents have a postgraduate degree representing 3.2% of the total respondents. 119 respondents have an O' Level certificate making up 47.6% of the total respondents, while 42 respondents had no formal education at all/primary school set, accounting for 16.8% of the total sample. It is vivid that majority of the respondents have an O' Level certificate as their highest academic qualification.

Finally, the largest numbers of respondents were married, specifically 130 in number, accounting for 52% of the entire sample, while non-married were 120 respondents, accounting for 48% of the sample.

The result shows that 95 out of the total respondents have household size of 1-4 persons, representing 38% of the total respondents, 103 (41.2%) have a household size of 5-10, while 52 (20.8%) have family size of 11 and above.

Information on table 4.2 also shows that 30 (12%) of the respondents earn a monthly income (in Naira) of 1,000-25,000. 100 respondents earn a monthly income of 26,000-50,000, representing 40% of the total respondents. 73

respondents earn 51,000-100,000 representing 29.2% of the total respondents. 35 respondents earn 101,000-350,000 making up 14% of the total respondents, while 12 (4.8%) respondents earn 400,000 and above.

Generally, the results presented in table 1 are in agreement with the studies and findings of pervious works carried out in the same study area (Akpan, et al, 2016, Udoh, E. J., et al, 2017, and Nyong, I. E. et al, 2024).

Perception of consumers about Organically Produced Vegetable

The result 2 shows that 170(68%) of the respondents believe that organically produced vegetables are healthier than conventionally produced vegetables, while 80(32%) agreed to this. This garnered a mean score of 3.18, with a standard deviation of 0.953. This result corroborates Oguamanam (2015).

Table 2 Perception about Organically Produced Vegetable

S/N	Opinion	SA	A	D	SD	Mean	Std. Deviation	Ranking
1.	I believe organically produced vegetables are healthier than conventionally produced vegetables.	108 (43.2%)	62 (24.8%)	47 (18.8%)	33 (13.2%)	3.18	.953	2 nd
2.	I think organically produced vegetables taste better than conventionally produced vegetables.	50 (20%)	70 (28%)	89 (35.6%)	41 (16.4%)	2.40	.924	3 rd
3.	Organically produced vegetables are worth the higher price	81 (32.4%)	51 (20.4%)	49 (19.6%)	69 (27.6%)	2.22	1.085	1 st
4.	I trust that organically produced vegetables are free from harmful chemicals.	94 (37.6%)	103 (41.2%)	26 (10.4%)	27 (10.8%)	3.32	.768	4 th
5	I am willing to pay more for organically produced vegetables	60 (24%)	71 (28.4%)	30 (12%)	89 (35.6%)	2.40	.924	3 rd
6	Organic vegetables have longer shelf-life	69 (27.6%)	46 (18.4%)	84 (33.6%)	51 (20.4%)	2.22	1.085	1 st

Source: Researcher's Compilation, 2023.

Organically produced vegetables taste better than conventionally produced vegetables, as 120(48%) of the respondents agreed to this, while a slight majority of 130(52%) disagreed to this; with a mean score and standard deviation of 2.40 and 0.924 respectively. 132(52.8%) of the respondents agreed that organically produced vegetables are worth the higher price, while 118(47.2%) disagreed to this. This represents a mean score of 2.22 and a standard deviation of 1.085.

The results in table 2 also indicate that 197(78.8%) of the respondents disagreed that organically produced vegetables are free from harmful chemicals., while 53(21.2%) respondents agreed to this. This has a mean score of 3.32 and a standard deviation of 0.768. 131(52.4%) of the respondents agreed that they are willing to pay more for organically produced vegetables, while 119(47.6%) disagreed to this; with a mean score and standard deviation of 2.40 and 0.924 respectively. Finally, 115(46%) of the respondents agreed that organic vegetables have longer shelf-live, while 135(54%) disagreed to this. This represents a mean score of 2.22 and a standard deviation of 1.085.

Level of acceptability of Organically Produced Vegetables by Consumers

The responses in table 3 revealed that 183(73.2%) of the respondents agreed that they regularly include organic vegetables in their diet, while 57(26.8%) respondents disagreed to this; with a mean score of 3.38 and a standard deviation of 0.766.

Table 3: Acceptability of Organic Vegetables

S/N	Question	Yes	No	Mean	Std. Deviation	Ranking
1.	I regularly include organic vegetables in my diet	183 (73.2%)	67 (26.8%)	3.38	.766	4 th
2.	I find organic vegetables readily available in my local market.	158 (63.2%)	92 (36.8%)	3.12	.898	2 nd
3.	I would choose organic vegetables over conventionally grown vegetables when given the option.	168 (67.2%)	82 (32.8%)	3.07	.871	3 rd
4.	I believe that organic vegetables are a sustainable choice for the environment.	139 (55.6%)	111 (44.4%)	2.48	1.070	1 st
5	I encourage others to consider consuming organic vegetables.	156 (62.4%)	94 (37.6%)	3.12	.898	2 nd

Source: Researcher's Compilation, 2023

The responses further revealed that 158(63.2%) of the respondents agreed that they find organic vegetables readily available in the local market. Conversely, 92(36.8%) of the respondents also disagreed to this. This has a mean score of 3.12 and a standard deviation of 0.898. Furthermore, the responses in table 3 revealed that 168 (67.2%) of the respondents agreed that

they would choose organic vegetables over conventionally grown vegetables when given the option, while 82(32.8%) disagreed to this. This has a mean score of 3.07 and a standard deviation of 0.871. 139(55.6%) of the respondents agreed that organic vegetables are a sustainable choice for the environment, while 111(44.4%) disagreed to this; with a mean score of 2.48 and a standard deviation of 1.070. This result is in line with the findings of Laurie and Heerden (2012). Finally, 156(62.4%) of the respondents encourage others to consider consuming organic vegetables, while 94(37.6%) do not; with a mean score of 3.12 and a standard deviation of .898.

Consumer's Awareness of Organic Vegetables

The responses in table 4 revealed that 240(96%) of the respondents are aware of the term "organic vegetables" before taking this survey, while 10(4%) respondents disagreed to this; with a mean score of 2.12 and a standard deviation of 0.898. 243(97.2%) have a good understanding of what "organic" means in the context of vegetables, while 7(2.8%) do not have this understanding. This represents a mean score of 3.23 and a standard deviation of 0.746.

Table 5:Willingness to Pay for Organic Vegetables (n = 250)

S/N	Opinion	SA	A	D	SD	Mean	Std. Deviation	Ranking
1.	If prices of organic vegetables are increased by 10-50%, I will increase quantity bought	59 (23.6%)	74 (29.6%)	77 (30.8%)	40 (16%)	2.18	.853	3 rd
2.	If prices of organic vegetables are increased by 10-50%, I will decrease quantity bought.	107 (42.8%)	63 (25.2%)	43 (17.2%)	37 (14.8%)	3.40	.768	4 th
3.	If prices of organic vegetables are increased by 10-50%, I will change to substitute	41 (16.4%)	46 (18.4%)	89 (35.6%)	74 (29.6%)	2.32	1.065	1 st
4.	If prices of organic vegetables are increased by 10-50%, I will abandon the use of organic vegetables.	17 (6.8%)	23 (9.2%)	99 (39.6%)	111 (44.4%)	3.22	.924	2 nd
5	If prices of organic vegetables are increased by 10-50%, I will still use the same quantity	60 (24%)	67 (26.8%)	85 (34%)	38 (15.2%)	2.23	.924	2 nd

Source: Researcher's Compilation, 2023

The results in table 5 further indicate that 210(84%) of the respondents disagreed that if

prices of organic vegetables are increased by 10-50%, they will abandon the use of organic vegetables, while only 40(16%) respondents agreed to this. This has a mean score of 3.22 and a standard deviation of 0.924. Finally, 127(50.8%) of the respondents agreed that if prices of organic vegetables are increased by 10-50%, they will still use the same quantity, while 123(49.2%) disagreed to this; with a mean score and standard deviation of 2.40 and 0.924 respectively.

Test of Hypotheses

The following hypotheses were formulated for the study:

Ho₁: There is no significant relationship between socio-economic characteristics of consumers and consumer's willing to pay for organically produced vegetable..

Ho₂: There is no significant relationship between socio-economic characteristics of consumers and consumer's perception about organically produced vegetable.

Test of Hypothesis One

Ho₁: There is no significant relationship between socio-economic characteristics of consumers and consumer's willing to pay for organically produced vegetable.

Table 6: Pearson Correlation Result for Test of Hypothesis One

		Socioeconomic Characteristics to of Consumers	Consumer's Willing to Pay for Organically Produced Vegetable.
Socioeconomic Characteristics of Consumers	Pearson Correlation	1	.840**
	Sig. (2-tailed)		.000
	N	250	250
Consumer's Willing to Pay for Organically Produced Vegetable.	Pearson Correlation	.840	1
	Sig. (2-tailed)	.000	
	N	250	250

**_. Correlation is significant at the 0.05 level (2-tailed).

Source: Researcher's Compilation, 2023

Table 6 shows the correlation result between socio-economic characteristics of consumers and consumer's willing to pay for organically produced vegetable. The correlation coefficient of $r = 0.840$ shows a positive relationship between socio-economic characteristics of consumers and consumer's willing to pay for organically produced vegetable. However, a p

(0.000) < 0.05 shows a significant relationship between socio-economic characteristics of consumers and consumer's willing to pay for organically produced vegetable. Thus, the null hypothesis which states that there is no significant relationship between socio-economic characteristics of consumers and consumer's willing to pay for organically produced vegetable, was rejected in favour of the alternate hypothesis.

Test of Hypothesis Two

Ho₂: There is no significant relationship between socio-economic characteristics of consumers and consumer's perception about organically produced vegetable.

Table 7: Pearson Correlation Result for Test of Hypothesis Two

		Socioeconomic Characteristics of Consumers	Consumer's Perception About Organically Produced Vegetable.
Socioeconomic Characteristics of Consumers	Pearson Correlation	1	.890**
	Sig. (2-tailed)		.000
	N	250	250
Consumer's Perception About Organically Produced Vegetable.	Pearson Correlation	.890	1
	Sig. (2-tailed)	.000	
	N	250	250

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Researcher's Compilation, 2023

Table 7 shows the correlation result between socio-economic characteristics of consumers and consumer's perception about organically produced vegetable. The correlation coefficient of $r = 0.890$ shows a positive relationship between socio-economic characteristics of consumers and consumer's perception about organically produced vegetable. However, a $p(0.000) < 0.05$ shows a significant relationship between socio-economic characteristics of consumers and consumer's perception about organically produced vegetable. Thus, the null hypothesis which states that there is no significant relationship between socio-economic characteristics of consumers and consumer's perception about organically produced vegetable, was rejected in favour of the alternate hypothesis.

Concluding Remark and Recommendations

The study investigated consumer acceptability

and willingness to pay for organic vegetables in Uyo Local Government Area. The research revealed valuable insights into the socio-economic characteristics of consumers, their perceptions about organically produced vegetables, and their willingness to pay for these products. Key findings included a positive consumer perception of organic vegetables, with 84.5% of respondents indicating a preference for organic produce. Additionally, 59.5% of the participants expressed their willingness to pay a premium for organic vegetables, showcasing a potential market opportunity for organic farmers and retailers in Uyo. The research findings highlight a promising market for organic vegetables in Uyo LGA. Consumers demonstrate a favourable perception of organic produce, driven by factors such as health benefits, taste, and environmental sustainability. The willingness of a significant portion of respondents to pay more for organic vegetables underscores the potential economic viability of organic farming in the study area. This positive reception suggests a growing awareness and demand for healthier and sustainably produced food among consumers in Uyo LGA.

Based on the major findings, the following recommendations were made:

1. Government and non-governmental organizations should encourage local farmers to adopt organic farming methods and provide support in the form of training and resources.
2. Awareness campaigns should be created to educate consumers about the benefits of organic vegetables, emphasizing their health advantages, environmental impact, and superior taste.
3. A certification system should be established for organic products to build trust among consumers.
4. Government and agricultural agencies should facilitate better market access for organic farmers by creating farmers' markets and collaborations with local grocery stores and supermarkets.
5. Government and agricultural institutions and agencies should invest in research to improve organic farming techniques, increase crop yield, and enhance the overall quality of organic vegetables.

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