

# **A Study on Consumers' Perception about Sustainable Agriculture Products**

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## **ABSTRACT**

This study examines the complicated area of customer perceptions in order to provide an improved comprehension of consumers' attitudes, beliefs, and behaviours regarding products derived from sustainable agriculture. Concerns over food security and environmental degradation have led to a rise in interest in sustainable agriculture, which is defined by its dedication to social responsibility, economic viability, and environmental stewardship. Even so, consumer acceptance of sustainable practices is still uneven and dependent on a wide range of factors, including socio-cultural influences, personal values, and product features.

This study employs a mixed-methods approach to investigate the numerous aspects of consumer views towards sustainable agriculture products, building on an extensive examination of the available literature. Qualitative interviews explore the underlying reasons, obstacles, and decision-making processes influencing customers' purchasing behaviours, whereas quantitative surveys are used to measure the prevalence of pro-sustainability sentiments among consumers. Furthermore, the impact of different marketing tactics and informational interventions on customer perceptions and willingness to buy sustainable agriculture products is assessed through the use of experimental approaches.

The study findings in this area have theoretical and practical consequences for the field of sustainable consumption. Policymakers, marketers, and agricultural stakeholders can develop focused strategies to increase adoption of sustainable agriculture practices and promote a more resilient and ecologically conscious food system by clarifying the factors that influence consumer views. Moreover, the knowledge gained from this research could guide future studies and legislative efforts that support sustainability in a variety of consumer categories and geographic settings.

## **INTRODUCTION**

The shift towards sustainable and greener products, particularly in the agricultural sector, has led to a growing interest in sustainable agriculture products. Consumer perception and preference are crucial for producers, marketers, and policymakers to meet market demand. Factors contributing to this interest include environmental concerns, climate change, food safety, and health concerns. Increased transparency and digital platforms have also facilitated informed decision-making. However, meeting consumer expectations is challenging due to varying perceptions of sustainability, cultural norms, socioeconomic status, and personal experiences. Additionally, trade-offs between sustainability and other product attributes may influence preferences. To address these challenges, interdisciplinary research integrating psychology, marketing, economics, sociology, and environmental science is needed. This study aims to explore consumer perceptions and preferences, drivers, barriers, and implications for producers, marketers, and policy makers.

### **NECESSITY AND IMPORTANCE OF THE STUDY**

It is important to research how customers view products from sustainable agriculture for several reasons.

**Environmental Conservation:** Knowing how consumers view items from sustainable agriculture can help determine market demand, which in turn encourages producers to use eco-friendly methods. This study helps to mitigate climate change, reduce pollution, and conserve natural resources by raising consumer understanding and enjoyment of sustainability.

**Market Demand:** The dynamics of the market are mostly shaped by consumer preferences. Examining customer views of products derived from sustainable agriculture helps to understand market demand, which in turn helps to build sustainable supply chains and introduce new products that are in line with consumer values. This has the potential to spur market expansion and innovation in the field of sustainable agriculture.

**Economic Sustainability:** Higher initial production costs are frequently associated with sustainable agriculture practices. On the other hand, rising consumer demand for eco-friendly goods may open up new business prospects for farmers and encourage them to use sustainable farming methods. In order to promote the financial sustainability of sustainable farming techniques, it is important to understand consumer attitudes in order to find effective ways to communicate the value proposition of sustainable agriculture to customers.

**Social Responsibility:** Sustainable agriculture encompasses principles of social responsibility, including fair labour practices, community engagement and equitable access to resources. By examining consumers' perceptions, researchers can assess the extent to which these social aspects of sustainability are prioritized in their purchasing decisions. These insights can inform efforts to promote ethical sourcing and social responsibility in the agricultural industry.

**Policy Implications:** Consumer preferences influence policy decisions regarding agricultural regulations, labelling requirements, and sustainability initiatives. Research on consumer perceptions of sustainable agricultural products provides evidence-based guidance for policymakers, enabling the development of policies that align with public values and promote sustainable practices across the agricultural sector.

### **LITERATURE REVIEW**

**Andrea Beatriz Damico, Yari Vecchio et. al (2023)** In this paper, a sample of 537 young consumers were interviewed face-to-face in the Metropolitan Area of Buenos Aires. They were asked to indicate their level of concern for the planet and the first word they associated with sustainability, to rank in order of importance sustainability-related concepts and to indicate the willingness to buy sustainable products.

**Sujaya H and Sreeramana Aithal (2020)** In this article, a case study identifies the issues of sustainable food consumption and the perceptible behaviour of customers towards organic products in Indian market and the data is obtained from secondary sources of literature reviews, exhaustive journals and also internet sources.

**Erpeng Wang (2023)** In this article, the authors compared Chinese consumers' perceptions of and preferences for sustainable traditional agricultural products and "modern" organic products, and found that sustainable traditional agriculture can signal environment-friendly practices and food safety.

**Azzurra Annunziata, Angela Mariani (2017)** In this paper, consumer segmentation based on the perception of the sustainability attributes of organic and local products was realized using descriptive data collected through a consumer online survey in southern Italy (Campania).

**Julia Lamberz, Thorsten Litfin et. al (2023)** In this paper, a field study was carried out in a supermarket combining eye-tracking technology with a survey of 32 customers to examine how the design of display elements succeeds in conveying sustainability for a new organic juice.

**Hillary M. Sackett, Robert Shupp et. al (2013)** This paper used data collected from a national web-based survey of 1,002 households to examine consumer inferences and valuations of food products promoted as "sustainably produced" and found that consumers perceive farm size and local production as important elements of sustainable agriculture.

**Hillary M. Sackett (2013)** Sackett et al. as mentioned in this paper examined consumer perceptions and valuations of food products making sustainable produced claims utilizing a Best-Worst scaling framework to identify what consumers believe sustainable produced labels mean and their preferences for each of the sustainable farming practices considered, finding that consumers perceive farm size and local production as highly important elements of sustainable agriculture.

**Fatiha Fort, Giulia Palma et. al (2013)** In this paper, a large survey of 800 people living in three French regions: North, Paris and South, the sustainability of food products has three main dimensions: the product's origin, the production season and organic label.

### **OBJECTIVES OF RESEARCH**

1. To scope out the level of awareness among consumers towards sustainable agriculture practices and products.
2. To interpret consumers' attitudes towards sustainability in agriculture and its impact on their purchasing decisions.
3. To inspect the perceived benefits and drawbacks associated with purchasing and consuming sustainable agriculture products.

### **HYPOTHESIS**

**1. H<sub>0</sub>:** Consumers believe that sustainable agriculture products are not healthier and safer than conventional agriculture products.

**H<sub>1</sub>:** Consumers believe that sustainable agriculture products are healthier and safer than conventional agriculture products.

**2. H<sub>0</sub>:** Consumers are not willing to pay a premium for sustainable agriculture products.

**H<sub>1</sub>:** Consumers are willing to pay a premium for sustainable agriculture products due to their perceived benefits.

### **SCOPE OF THE STUDY**

The study of consumer perceptions of products derived from sustainable agriculture has a wide range of applications, including consumer behaviour, marketing tactics, environmental sustainability, and policy consequences. Key areas covered by this study include the following:

- **Product Specifications:** Quality, freshness, safety, nutritional value, and environmental effect are all considered by customers.
- **Consumer Attitudes and Opinions:** Pay attention to the effects on culture, sustainability, and ethics.

- **Buying Behaviour:** Examining how decisions are made, the channels that consumers choose, and their willingness to pay for eco-friendly products.
- **Marketing and Communication:** Evaluating tactics for advancing sustainable goods.
- **Psychological and Demographic Factors:** How perceptions are influenced by age, gender, income, education, and personality.
- **Geographic Variation:** Disparities in regional preferences taking culture and climate into considerations.
- **Supply Chain Transparency:** A transparent supply chain is essential to customer confidence.
- **Policy and Regulation:** How public policies affect the opinions of consumers.

## **RESEARCH METHODOLOGY**

### **RESEARCH DESIGN**

The project will investigate the effects of launching. There is a business using technologies. Quantitative and qualitative will be combined methods of research This approach will help to understand the topic. The validity and reliability of the results can be supported with triangulation of data. The subsequent components will be included in the design:

### **DATA COLLECTION**

**Primary Data:** Primary data are those that are gathered straight from the source for a certain type of research project. It entails gathering original, first-hand data that hasn't been written about or examined before.

- ❖ Questionnaire

**Secondary Data:** Information gathered, analysed, and released by a party other than the original researcher is referred to as secondary data. Instead, being collected directly, this kind of information is gleaned from already-existing sources.

- ❖ Research papers
- ❖ Articles

**Sample size:** 50 (Consumer)

**Analysis Technique:** Random Sampling and Questionnaire technique selected by researcher to collect the data from the respondent.

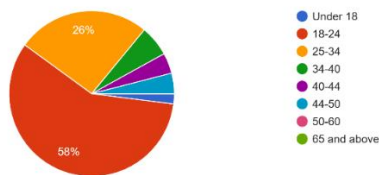
## DATA ANALYSIS AND INTERPRETATION

### ➤ Age

Response	Frequency	Percentage (%)
Under 18	1	2
18 – 24	29	58
25 – 34	13	26
34 – 40	3	6
40 – 44	2	4
44 and above	2	4
<b>Total</b>	<b>50</b>	<b>100</b>

### Survey report

Age  
50 responses



### Data analysis

From the above graph and table, it is observed that out of 50 responses, 1 respondent is from under 18 age group with 2 %, 29 respondents are from 18-24 age group with 58 %, 13 respondents are from 25-34 age group with 26 %, 3 respondents are from 34-40 age group with 6 %, 2 respondents are from 40-44 age group with 4% and 2 respondents are from 44 and above age group with 2 %.

### Interpretation

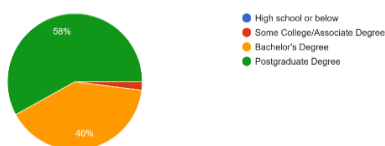
It is observed that most of the respondents are in the age group of **18-24 Years** and the least number of respondents belong to the age group of **Under 18 years**.

### ➤ Education level

Response	Frequency	Percentage (%)
Postgraduate Degree	29	58
Bachelor's Degree	20	40
Some College/Associate Degree	1	2
<b>Total</b>	<b>50</b>	<b>100</b>

### Survey report

Education level  
50 responses



### Analysis

From the above graph and table, it is observed that out of 50 responses, 29 respondents are Postgraduate with 58%, 20 respondents are graduate with 40% and 1 respondent has an associate degree.

### Interpretation

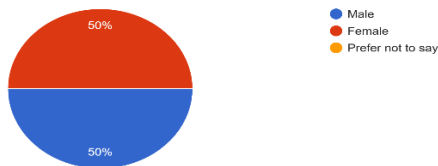
It is observed that most of the respondents are Post graduated and the least number of respondents are those who has associate degree.

#### ➤ Gender

Response	Frequency	Percentage
Male	25	50
Female	25	50
Total	50	100

### Survey report

Gender  
50 responses



### Analysis

In accordance with the table and graph above, which show 50 replies. 50% of the respondents are male, and 50% of the respondents are female.

### Interpretation

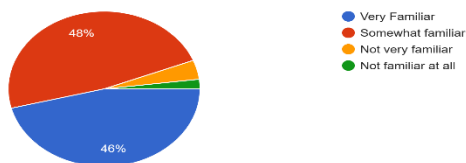
There is an equal number of male and female responses, as may be noted.

#### ➤ Awareness about sustainable agriculture products

Response	Frequency	Percentage
Very Familiar	23	46
Somewhat familiar	24	48
Not very familiar	2	4
Not familiar at all	1	2
Total	50	100

### Survey report

How familiar are you with the terms "sustainable agriculture" and "organic agriculture"?  
50 responses



## Analysis

From the above graph and table, it is observed that out of 50 responses, 23 respondents are very familiar to the sustainable agriculture with 46%, 24 respondents are somewhat familiar with 48%, 2 respondents are not very familiar and 1 respondent has no idea about the same.

## Interpretation

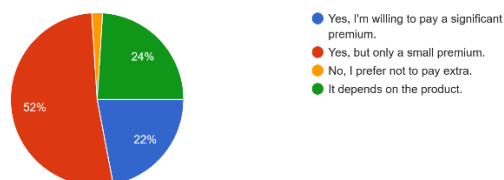
It has been observed that, there is a majority of people who are aware considerably aware about the sustainable agriculture and there are only few people who are unaware about the same.

### ➤ Consumers' willingness to pay a premium price for sustainable agriculture products

Response	Frequency	Percentage
Willing to pay a significant premium.	11	22
Small premium	26	52
Depends on the product.	12	24
Prefer not to pay extra	1	2
<b>Total</b>	<b>50</b>	<b>100</b>

## Survey report

Would you be willing to pay a premium price for sustainable and organic agriculture products?  
50 responses



## Analysis

In accordance with the table and graph above, which show 50 replies, 11 respondents are Willing to pay a significant premium for sustainable agriculture with 22%, 26 respondents are able to pay a small premium with 52%, 12 respondents' willingness to pay depends on the products with 24% and 1 respondent is prefer not to pay the extra with 2%.

## Interpretation

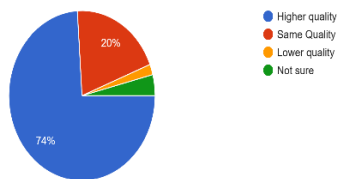
It has been observed that, a majority of consumer is able to pay a small premium for the same and a least number of consumers are preferred not to pay extra amount.

➤ **Consumer perceive the quality of sustainably produced agriculture products.**

Response	Frequency	Percentage
Higher quality	37	74
Same quality	10	20
Lower quality	1	2
Not sure	2	4
<b>Total</b>	<b>50</b>	<b>100</b>

## Survey report

How do you perceive the quality of sustainable agriculture products compared to conventionally grown products?  
50 responses



## Analysis

In accordance with the table and graph above, which show 50 replies, 37 respondents believe that sustainably produced agriculture product posses' higher quality than those of conventionally produced product with 74 %, 10 respondents believe that its posses' same quality to the conventionally produced products with 20 %, 1 respondent believes that it possesses lower quality with 2% and 2 respondents are not sure about the quality comparison with 4 %.

## Interpretation

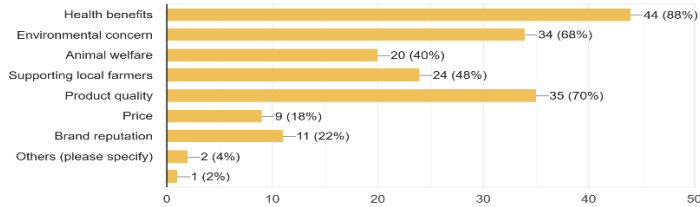
It has been observed that, a majority of population believes that sustainably produced agriculture products possess higher quality than those of conventionally produced products. While a small portion of population thinks that it possesses lower quality.



## ➤ Factors affecting purchase decision of consumer

What factors influence your decision to purchase sustainable and organic agriculture products?  
(Select all that apply)

50 responses



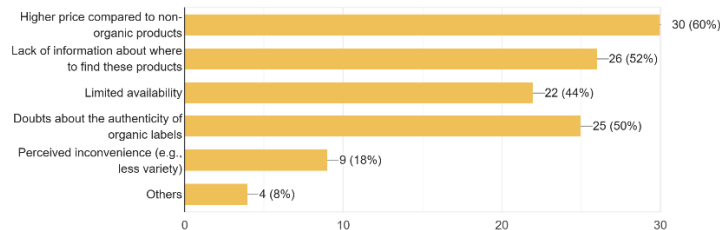
## Analysis & Interpretation

It has been observed that, majority of the population thinks that health benefits, environmental concern and product's quality influencing them to purchase sustainable agriculture products. While, price and brand reputation influence the purchasing decision to a limited extent.

## ➤ Barriers to purchasing sustainable agriculture product

What barriers, if any, prevent you from purchasing sustainable and organic agriculture products more often? (Select all that apply)

50 responses



## Analysis & Interpretation

It has been observed that, major portion of population believes that higher price of sustainable produced product, lack of information about availability, doubts about authenticity of organic labels work as barriers. In addition to this less variety and other factors also act as barriers to a limited extent.

## FINDINGS

This study finds that:

- The majority of respondents are aged 18-24 years, with the least number being under 18.
- The majority of people are well-informed about sustainable agriculture, while a small number are unaware of its importance.
- The majority of consumers can afford a small premium for the same, while the least prefer not to pay extra.
- Most people prioritize health benefits, environmental concerns, and product quality when purchasing sustainable agriculture products, with price and brand reputation having limited influence.

### **LIMITATIONS OF RESEARCH**

The research was conducted within the specified criteria. However, the research was limited.

- The concentrates on just 50 clients.
- The data supplied by the respondents served as the foundation for this investigation.

### **SUGGESTIONS AND RECOMMENDATIONS**

- Businesses should approach sustainability holistically, taking into account social, economic, and environmental factors.
- Reach out to new consumer groups to help sustainable products get more market share.
- To inform customers about the consequences for the environment, society, and animal welfare, food and drink goods should have the sustainability label.
- Use social media, marketing initiatives, or promotions to inform customers about products made from sustainable agriculture.
- In order to foster confidence and guarantee that the quality and taste of your products are on par with or better than those of traditional items, be open and honest about your sustainability efforts.

### **CONCLUSION**

The study reveals that the majority of respondents are aged 18-24, with a small number under 18. They are well-informed about sustainable agriculture, but a small number are unaware of its importance. Consumers can afford a small premium for sustainable products, but many believe higher prices, lack of information about availability, and doubts about organic labels are barriers. Limited variety and other factors also act as barriers. The research was limited to 50 clients and focuses on social, economic, and environmental factors.

To promote sustainability, businesses should approach sustainability holistically, reach out to new consumer groups, use sustainability labels on food and drink products, use social media and marketing initiatives to inform customers about sustainable agriculture products, and be open and honest about their sustainability efforts. This will help businesses gain more market share and foster confidence in their products.

### **REFERENCES**

- D'Amico, A., Vecchio, Y., Masi, M., & Di Pasquale, J. (2023, February 27). *Perceptions and Attitudes of Argentine Zoomers towards Sustainable Food Production*. Foods. <https://doi.org/10.3390/foods12051019>
- RESEARCH REVIEW *International Journal of Multidisciplinary*. (n.d.). <https://rrjournals.com/index.php/rrijm>
- Camilleri, M. A., Cricelli, L., Mauriello, R., & Strazzullo, S. (2023, June 1). *Consumer Perceptions of Sustainable Products: A Systematic Literature Review*. Sustainability. <https://doi.org/10.3390/su15118923>
- H, S., & Aithal, S. (2020, November 1). *Shedding Insight on Sustainable Food Consumption: A Case Study on Customer Perceptible Behaviour towards Organic Products*. SciSpace - Paper. <https://typeset.io/papers/shedding-insight-on-sustainable-food-consumption-a-case-5c5kol1tlj>

Wang, E. (2023, June 7). *Revitalize Traditional Agriculture: Chinese Consumer Perception and Preference of “Modern” Organic and Sustainable Traditional Rice Products*. Sustainability. <https://doi.org/10.3390/su15129206>

Annunziata, A., & Mariani, A. (2018, October 22). *Consumer Perception of Sustainability Attributes in Organic and Local Food*. Recent Patents on Food, Nutrition & Agriculture. <https://doi.org/10.2174/2212798410666171215112058>

Lamberz, J., Litfin, T., Teckert, Z., & Meeh-Bunse, G. (2019, October 31). *How Does the Attitude to Sustainable Food Influence the Perception of Customers at the Point of Sale? - an Eye-Tracking Study*. SciSpace - Paper. <https://typeset.io/papers/how-does-the-attitude-to-sustainable-food-influence-the-noh4ptjx3o>

Sackett, H. M., Shupp, R., & Tonsor, G. T. (2013, August 1). *Consumer Perceptions of Sustainable Farming Practices: A Best-Worst Scenario*. Agricultural and Resource Economics Review. <https://doi.org/10.1017/s1068280500004378>

Sackett, H. M. (2013, January 1). *Consumer perceptions, preferences, and willingness to pay for sustainably labeled food products*. SciSpace - Paper. <https://typeset.io/papers/consumer-perceptions-preferences-and-willingness-to-pay-for-6v64tsrkfy>

Fort, F., Palma, G., Sauvegrain, S. A., Sbai, H., & Padilla, M. (2013, January 1). *CONSUMER'S FOOD SUSTAINABILITY PERCEPTION: THE CASE OF TOMATO*. Acta Horticulturae. <https://doi.org/10.17660/actahortic.2013.971.26>