

CONSUMER PERCEPTION OF PRODUCT QUALITY AND FARMERS' ECONOMIC WELFARE IN UZHAVAR SANTHAI: AN EMPIRICAL STUDY

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ABSTRACT

Agricultural marketing plays a vital role in improving the socio-economic conditions of farmers and ensuring the availability of quality agricultural products to consumers. In Tamil Nadu, Uzhavar Santhai (Farmers' Markets) was established as a direct marketing initiative to eliminate intermediaries and create a direct link between farmers and consumers. The present study examines the functioning of Uzhavar Santhai in Pudukkottai District with particular emphasis on farmers' economic well-being and consumer perceptions regarding product quality. The study is based on two major hypotheses: first, that there is a significant relationship between farmers' participation in Uzhavar Santhai and their level of economic well-being, and second, that consumers perceive the quality of agricultural products sold in Uzhavar Santhai as significantly better than those available in other markets.

The study adopts a descriptive and analytical research design and utilizes both primary and secondary data sources. Primary data were collected from farmers participating in Uzhavar Santhai and consumers purchasing products from these markets through a structured questionnaire. Various statistical tools such as descriptive statistics, correlation analysis, regression analysis, and comparative analysis were employed to evaluate the relationship between market participation and economic well-being, as well as consumer perceptions regarding product quality.

The findings indicate that participation in Uzhavar Santhai contributes significantly to the economic well-being of farmers by improving income levels, reducing marketing expenses, enhancing price realization, and providing stable market access. Farmers who actively participate in Uzhavar Santhai experience better economic outcomes compared to those relying solely on conventional marketing channels. The study further reveals a positive and significant relationship between farmers' participation and their overall economic well-being, highlighting the effectiveness of direct marketing systems in strengthening rural livelihoods.

From the consumer perspective, the study finds that agricultural products sold through Uzhavar Santhai are perceived to be fresher, healthier, and of superior quality compared to products available in traditional markets. Consumers express higher levels of satisfaction regarding freshness, cleanliness, nutritional value, and reliability of the products purchased from Uzhavar Santhai. The direct interaction between farmers and consumers enhances trust and confidence in product quality, thereby encouraging repeat purchases and consumer loyalty.

The study concludes that Uzhavar Santhai serves as an effective agricultural marketing mechanism that benefits both producers and consumers. It enhances farmers' economic well-being while simultaneously providing consumers with access to high-quality agricultural products. The findings emphasize the need for continued government support, improved infrastructure, greater consumer awareness, and expansion of direct marketing initiatives to strengthen the sustainability and effectiveness

of Uzhavar Santhai. The study contributes valuable insights for policymakers, agricultural administrators, and researchers interested in promoting farmer welfare, consumer satisfaction, and sustainable agricultural marketing practices.

KEYWORDS: Occupational Stress, College Educators, Coping Mechanisms, Psychological Well-being, Kanchipuram District.

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1. INTRODUCTION

Agriculture has historically been the foundation of the Indian economy and continues to be one of the most important sectors contributing to employment, food security, and rural development. A significant proportion of India's population depends directly or indirectly on agriculture for their livelihood. In Tamil Nadu, agriculture remains a major economic activity, particularly in rural districts where farming serves as the primary source of income for thousands of households. Despite the importance of agriculture, farmers often face numerous challenges related to production, marketing, pricing, and income generation. Among these challenges, agricultural marketing has emerged as a critical issue affecting the economic welfare of farmers and the availability of quality agricultural products to consumers.

Agricultural marketing refers to the entire process through which agricultural commodities move from producers to consumers. It involves activities such as assembling, grading, storage, transportation, pricing, and distribution. In conventional marketing systems, agricultural products pass through several intermediaries, including commission agents, wholesalers, and retailers, before reaching the final consumer. While these intermediaries perform important marketing functions, their involvement often results in reduced profit margins for farmers and increased prices for consumers. Consequently, farmers receive only a small share of the final market price, while consumers pay considerably higher prices for agricultural products.

Recognizing the need to improve the efficiency of agricultural marketing and enhance the welfare of farmers, the Government of Tamil Nadu introduced Uzhavar Santhai (Farmers' Markets). The concept was established with the objective of creating a direct marketing platform where farmers can sell their produce directly to consumers without the intervention of middlemen. Through this system, farmers are able to obtain fair prices for their products, while consumers gain access to fresh agricultural produce at affordable rates. The initiative aims to strengthen the economic position of farmers, improve market transparency, reduce marketing costs, and promote sustainable agricultural development.

The Uzhavar Santhai model has become one of the most significant direct marketing initiatives in Tamil Nadu. Since its inception, these markets have facilitated direct interactions between producers and consumers, thereby enhancing trust and transparency in agricultural transactions. Farmers benefit from increased bargaining power, reduced dependency on intermediaries, and improved income opportunities. At the same time, consumers enjoy access to fresh vegetables, fruits, and other agricultural commodities that are often superior in quality compared to those available through conventional market channels. These advantages have contributed to the growing popularity of Uzhavar Santhai among both farmers and consumers.

One of the most important outcomes of direct marketing systems such as Uzhavar Santhai is their potential contribution to the economic well-being of farmers. Economic well-being refers to the overall financial condition and quality of life experienced by individuals or households. For farmers, economic well-being encompasses factors such as income stability, profitability, purchasing power, savings, investment capacity, and improved living standards. Participation in direct marketing platforms can

positively influence these factors by enabling farmers to secure better prices, reduce marketing expenses, and increase their share of consumer spending. Therefore, assessing the relationship between farmers' participation in Uzhavar Santhai and their economic well-being is essential for understanding the effectiveness of the scheme.

In addition to benefiting farmers, Uzhavar Santhai also plays a crucial role in meeting consumer expectations regarding the quality of agricultural products. In recent years, consumers have become increasingly concerned about food quality, freshness, safety, and nutritional value. The growing awareness of healthy eating habits has led consumers to seek fresh and naturally produced agricultural products. Uzhavar Santhai provides consumers with an opportunity to purchase produce directly from farmers, ensuring freshness and reducing the time between harvesting and consumption. As a result, consumers often perceive products sold through Uzhavar Santhai as being superior in quality compared to those available in conventional retail markets.

Consumer perception of product quality is an important factor influencing purchasing behavior and market success. Quality perception includes various attributes such as freshness, appearance, taste, cleanliness, nutritional value, and reliability. Positive consumer perceptions can increase customer satisfaction, encourage repeat purchases, and strengthen the sustainability of direct marketing systems. Therefore, understanding how consumers evaluate the quality of products sold through Uzhavar Santhai is important for improving market performance and ensuring long-term success.

Pudukkottai District, located in the southern region of Tamil Nadu, is predominantly agricultural and supports a large farming population. The district cultivates a variety of crops, including paddy, pulses, vegetables, fruits, and oilseeds. Uzhavar Santhai serves as an important marketing platform for local farmers in the district, providing opportunities to market their produce directly to consumers. However, the effectiveness of Uzhavar Santhai in improving farmers' economic well-being and meeting consumer expectations regarding product quality requires systematic investigation.

Although previous studies have highlighted the advantages of direct marketing systems, limited research has been conducted specifically on the relationship between farmers' participation in Uzhavar Santhai and their economic well-being in Pudukkottai District. Similarly, there is insufficient empirical evidence regarding consumers' perceptions of product quality in Uzhavar Santhai compared to other markets. Addressing these issues is essential for evaluating the effectiveness of the scheme and identifying opportunities for improvement.

The present study, therefore, focuses on two important dimensions of Uzhavar Santhai: the economic well-being of participating farmers and consumer perceptions of product quality. Specifically, the study investigates whether there is a significant relationship between farmers' participation in Uzhavar Santhai and their level of economic well-being, and whether consumers perceive the quality of agricultural products sold in Uzhavar Santhai as significantly better than those available in other markets. The findings of this study are expected to provide valuable insights for policymakers, agricultural administrators, market managers, and researchers interested in promoting farmer welfare, consumer satisfaction, and sustainable agricultural marketing practices.

Overall, the study contributes to a better understanding of the socio-economic and marketing benefits of Uzhavar Santhai and highlights its role in strengthening rural livelihoods and improving the agricultural marketing system in Pudukkottai District.

2. PROBLEM STATEMENT AND RESEARCH GAP

Agriculture remains one of the primary sources of livelihood for rural households in Tamil Nadu, and the economic prosperity of farmers largely depends on the efficiency of agricultural marketing systems. Traditional agricultural marketing channels are often characterized by the involvement of multiple intermediaries, resulting in lower price realization for farmers and higher costs for consumers. To address these challenges, the Government of Tamil Nadu established Uzhavar Santhai (Farmers'

Markets) to facilitate direct transactions between farmers and consumers. The primary objective of this initiative is to improve farmers' income, enhance their economic well-being, and provide consumers with fresh, quality agricultural products at reasonable prices.

Although Uzhavar Santhai has been functioning successfully in several parts of Tamil Nadu, its actual impact on farmers' economic well-being and consumer perceptions of product quality requires further examination. Participation in direct marketing platforms is expected to improve the financial condition of farmers through better price realization, increased sales opportunities, and reduced marketing costs. However, the extent to which farmers' participation in Uzhavar Santhai contributes to their overall economic well-being remains unclear, particularly in Pudukkottai District.

Similarly, consumers increasingly demand fresh, safe, and high-quality agricultural products. Uzhavar Santhai is designed to meet these expectations by enabling consumers to purchase produce directly from farmers. However, it is important to determine whether consumers genuinely perceive the quality of products sold through Uzhavar Santhai as superior to those available in conventional markets. Understanding consumer perceptions is essential for evaluating the effectiveness and sustainability of the direct marketing model.

Despite the significance of these issues, limited empirical studies have simultaneously examined both the economic benefits experienced by participating farmers and the quality perceptions of consumers in the context of Uzhavar Santhai. Therefore, there is a need for a comprehensive study to investigate the relationship between farmers' participation in Uzhavar Santhai and their economic well-being, as well as consumers' perceptions of product quality. Such an investigation will provide valuable insights into the effectiveness of Uzhavar Santhai as a farmer-centric and consumer-oriented agricultural marketing initiative in Pudukkottai District.

- ⇒ Limited Focus on Economic Well-Being of Farmers.
- ⇒ Insufficient District-Level Studies.
- ⇒ Lack of Integrated Farmer-Consumer Perspective
- ⇒ Limited Research on Consumer Quality Perception
- ⇒ Changing Consumer Preferences

3. RESEARCH METHODOLOGY

1. Research Design

The present study adopts a **descriptive and analytical research design** to examine the relationship between farmers' participation in Uzhavar Santhai and their economic well-being, as well as consumers' perceptions regarding the quality of agricultural products sold through Uzhavar Santhai. The descriptive research design is used to understand the characteristics, perceptions, and experiences of farmers and consumers, while the analytical research design is employed to test the proposed hypotheses and establish relationships among variables.

The study is empirical in nature and relies on quantitative methods for data collection and analysis. Statistical tools are used to evaluate the impact of Uzhavar Santhai on farmers' economic well-being and to assess consumer perceptions regarding product quality.

2. Nature of the Study

The study is:

- ⇒ Descriptive in nature, as it describes the functioning and benefits of Uzhavar Santhai.

- ⇒ Analytical in nature, as it examines the relationships among selected variables.
- ⇒ Quantitative in approach, as numerical data are collected and analyzed statistically.
- ⇒ Cross-sectional in design, as data are collected from respondents at a particular point in time.

3. Area of the Study

The study is conducted in **Pudukkottai District, Tamil Nadu**. The district is predominantly agricultural and has active Uzhavar Santhai markets that facilitate direct transactions between farmers and consumers. The study covers both farmers participating in Uzhavar Santhai and consumers purchasing products from these markets.

4. Sources of Data

Primary Data

Primary data constitute the main source of information for the study. Data are collected directly from respondents through a structured questionnaire and personal interviews. The questionnaire is administered to:

- ⇒ Farmers participating in Uzhavar Santhai
- ⇒ Consumers purchasing products from Uzhavar Santhai

Secondary Data

Secondary data are collected from:

- ⇒ Department of Agricultural Marketing and Agri Business, Tamil Nadu
- ⇒ Uzhavar Santhai annual reports
- ⇒ Government publications
- ⇒ Agricultural statistics reports
- ⇒ Books and journals
- ⇒ Research articles
- ⇒ Websites of agricultural departments
- ⇒ Published dissertations and theses

5. Population of the Study

The population consists of:

Farmer Population

All farmers participating in Uzhavar Santhai in Pudukkottai District.

Consumer Population

All consumers purchasing agricultural products from Uzhavar Santhai in Pudukkottai District.

6. Sampling Technique

The study adopts a Simple Random Sampling Technique to select respondents. This technique ensures that every respondent has an equal opportunity of being selected and minimizes sampling bias.

7. Sample Size

A total sample of **200 respondents** is selected.

Category-wise Distribution

Respondent Category	Sample Size
Farmers	100
Consumers	100
Total	200

The selected sample size is considered adequate for statistical analysis and hypothesis testing.

8. Period of Study

The study covers the period from **2024–2025**.

Data relating to farmers' participation, economic benefits, and consumer perceptions during this period are considered for analysis.

4. DATA ANALYSIS AND INTERPRETATION

4.1 Relationship between Farmers' Participation in Uzhavar Santhai and Their Level of Economic Well-Being

Null Hypothesis (H_{04})

There is no significant relationship between farmers' participation in Uzhavar Santhai and their level of economic well-being.

Alternative Hypothesis (H_{14})

There is a significant relationship between farmers' participation in Uzhavar Santhai and their level of economic well-being.

The Pearson correlation analysis was conducted to examine the relationship between farmers' participation in Uzhavar Santhai and their level of economic well-being. The correlation coefficient ($r = 0.815$) indicates a strong positive relationship between the two variables. This suggests that increased participation in Uzhavar Santhai is associated with improved economic well-being among farmers. The significance value ($p = 0.000$) is less than the 0.05 level of significance, indicating that the relationship is statistically significant. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted. The findings confirm that participation in Uzhavar Santhai plays a vital role in enhancing the economic well-being of farmers in Pudukkottai District.

Table 1: Correlation Analysis between Farmers' Participation in Uzhavar Santhai and Economic Well-Being

Variables	Pearson Correlation (r)	Sig. (2-tailed)	N
Farmers' Participation in Uzhavar Santhai	1	-	100
Economic Well-Being	0.815**	0	100

The model summary presents the explanatory power of the regression model used to assess the impact of farmers' participation in Uzhavar Santhai on economic well-being. The correlation coefficient ($R = 0.815$) indicates a strong positive relationship between the independent and dependent variables. The coefficient of determination ($R^2 = 0.664$) reveals that 66.4% of the variation in farmers' economic well-being is explained by their participation in Uzhavar Santhai. The adjusted R^2 value of 0.661 indicates that the model remains highly reliable even after adjusting for sample size and predictor variables. The results demonstrate that participation in Uzhavar Santhai is a major contributing factor to farmers' economic well-being.

Table 2: Model Summary of Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	0.815	0.664	0.661	2.846

The ANOVA table evaluates the overall significance of the regression model. The calculated F-value of 193.754 with a significance value of 0.000 indicates that the regression model is statistically significant at the 5 percent level. Since the p-value is less than 0.05, the model effectively explains the relationship between farmers' participation in Uzhavar Santhai and their economic well-being. This finding confirms that participation in Uzhavar Santhai significantly influences the economic well-being of farmers and validates the suitability of the regression model for the study.

Table 3: ANOVA for Regression Model

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1568.421	1	1568.421	193.754	0
Residual	793.579	98	8.098		
Total	2362	99			

The regression coefficient table measures the extent to which farmers' participation influences economic well-being. The unstandardized coefficient ($B = 0.912$) indicates that a one-unit increase in farmers' participation in Uzhavar Santhai results in an increase of 0.912 units in economic well-being. The standardized beta coefficient ($\beta = 0.815$) further confirms a strong positive effect of participation on economic well-being. The t-value of 13.919 and significance value of 0.000 indicate that the predictor variable is highly significant. Therefore, farmers' participation in Uzhavar Santhai has a substantial and

positive impact on their economic well-being, leading to the rejection of the null hypothesis and acceptance of the alternative hypothesis.

Table 4: Regression Coefficients

Model	Unstandardized Coefficient (B)	Std. Error	Beta	t	Sig.
Constant	10.582	1.184	-	8.937	0
Farmers' Participation	0.912	0.066	0.815	13.919	0

4.2 Consumers' Perception of Product Quality in Uzhavar Santhai

Null Hypothesis (H_{05})

Consumers do not perceive the quality of agricultural products sold in Uzhavar Santhai as significantly better than those sold in other markets.

Alternative Hypothesis (H_{15})

Consumers perceive the quality of agricultural products sold in Uzhavar Santhai as significantly better than those sold in other markets.

The mean score analysis reveals that consumers hold highly favorable perceptions regarding the quality of agricultural products sold through Uzhavar Santhai. Among the quality attributes, Freshness recorded the highest mean score (4.56), indicating that consumers strongly believe that products sold in Uzhavar Santhai are fresher than those available elsewhere. Nutritional Value (4.47) and Overall Quality Satisfaction (4.38) also received high ratings, reflecting positive consumer attitudes toward product quality. The attributes of Taste (4.38), Reliability (4.35), Cleanliness (4.29), and Appearance (4.21) further demonstrate consumer satisfaction. The relatively low standard deviation values indicate consistency in respondents' opinions. Overall, the findings suggest that consumers perceive Uzhavar Santhai products as high-quality agricultural

Table 5: Mean Score Analysis of Consumers' Perception towards Product Quality

Quality Attribute	Mean	Std. Deviation
Freshness	4.56	0.58
Taste	4.38	0.67
Appearance	4.21	0.71
Cleanliness	4.29	0.69
Nutritional Value	4.47	0.62
Reliability	4.35	0.65
Overall Quality Satisfaction	4.38	0.65

The group statistics compare consumer perceptions of product quality between Uzhavar Santhai and other markets. The mean quality score for Uzhavar Santhai (4.38) is significantly higher than that of other markets (3.62). This difference indicates that consumers perceive agricultural products sold through Uzhavar Santhai as superior in quality compared to products available in conventional markets. The standard deviation values show a moderate level of variation in consumer responses, but the overall

trend clearly favors Uzhavar Santhai. These findings highlight the effectiveness of direct farmer-to-consumer marketing in delivering quality products to consumers.

Table 6: Group Statistics for Product Quality Comparison

Market Type	N	Mean Quality Score	Std. Deviation
Uzhavar Santhai	100	4.38	0.65
Other Markets	100	3.62	0.73

The independent samples t-test was conducted to determine whether the observed difference in product quality perception between Uzhavar Santhai and other markets is statistically significant. The calculated t-value of 7.852 with 198 degrees of freedom and a significance value of 0.000 indicates a highly significant difference between the two market types. Since the p-value is less than 0.05, the null hypothesis is rejected and the alternative hypothesis is accepted. The mean difference of 0.76 further demonstrates that consumers rate the quality of products sold in Uzhavar Santhai considerably higher than those sold in conventional markets. The results confirm that consumers perceive Uzhavar Santhai products as significantly better in terms of freshness, nutritional value, cleanliness, reliability, and overall quality.

Table 7: Independent Samples t-Test for Product Quality Comparison

Variable	t- value	df	Sig. (2-tailed)	Mean Difference
Product Quality Perception	7.852	198	0	0.76

The statistical analyses provide strong evidence that farmers' participation in Uzhavar Santhai significantly enhances their economic well-being, while consumers perceive the quality of agricultural products sold through Uzhavar Santhai as superior to those available in other markets. The correlation and regression analyses demonstrate that increased participation contributes positively to income stability, financial security, and overall economic welfare. Similarly, the consumer perception analysis confirms that Uzhavar Santhai products are viewed as fresher, healthier, and more reliable than products sold through conventional marketing channels. These findings highlight the effectiveness of Uzhavar Santhai as a farmer-centric and consumer-oriented agricultural marketing initiative that promotes both rural economic development and consumer satisfaction.

5. CONCLUSION

The present study examined the relationship between farmers' participation in Uzhavar Santhai and their economic well-being, as well as consumers' perceptions regarding the quality of agricultural products sold through Uzhavar Santhai. The findings provide substantial evidence that Uzhavar Santhai has emerged as an effective direct marketing mechanism that benefits both farmers and consumers in Pudukkottai District.

The analysis revealed a strong and significant positive relationship between farmers' participation in Uzhavar Santhai and their level of economic well-being. The correlation and regression results demonstrated that active participation in Uzhavar Santhai contributes significantly to improved income levels, better savings potential, enhanced financial security, and improved living standards among farmers. By providing direct access to consumers, Uzhavar Santhai enables farmers to receive fair prices for their produce, reduce marketing costs, and minimize dependence on intermediaries. Consequently,

the scheme plays an important role in strengthening the economic position of farming households and promoting rural prosperity.

The study also found that consumers hold highly positive perceptions regarding the quality of agricultural products sold through Uzhavar Santhai. The mean score analysis indicated high levels of satisfaction with attributes such as freshness, nutritional value, taste, cleanliness, reliability, and overall product quality. Furthermore, the independent sample t-test confirmed that consumers perceive products available in Uzhavar Santhai as significantly superior to those sold in conventional markets. The direct farmer-to-consumer marketing model ensures that products reach consumers quickly after harvest, thereby maintaining freshness and quality standards.

The hypothesis testing results supported both research hypotheses. The first hypothesis established that farmers' participation in Uzhavar Santhai significantly influences their economic well-being, while the second hypothesis confirmed that consumers perceive the quality of products sold through Uzhavar Santhai as significantly better than those available in other markets. These findings validate the effectiveness of Uzhavar Santhai in achieving its dual objectives of enhancing farmer welfare and satisfying consumer expectations.

Overall, the study concludes that Uzhavar Santhai serves as a successful agricultural marketing initiative that promotes sustainable rural development by improving farmers' economic conditions and ensuring access to quality agricultural products for consumers. The scheme not only strengthens the agricultural marketing system but also contributes to greater transparency, trust, and efficiency in the marketing process.

Based on the findings, it is recommended that the Government of Tamil Nadu continue to strengthen Uzhavar Santhai through improved infrastructure facilities, enhanced market management practices, increased awareness programs for farmers and consumers, and expansion of direct marketing opportunities. Such measures will further improve farmer participation, consumer satisfaction, and the long-term sustainability of Uzhavar Santhai. The study therefore highlights the importance of direct marketing initiatives as an effective strategy for achieving inclusive agricultural growth, rural economic development, and consumer welfare.

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