



A Study On Marketing Problems Faced By Maize Producers In Selected Taluks Of Coimbatore District

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Abstract: This study explores the marketing challenges encountered by maize producers in the taluks of Pollachi and Mettupalayam in Coimbatore district, Tamil Nadu. Maize, a significant cereal crop in India's agricultural economy, faces various marketing hurdles that affect producers' profitability and sustainability. The research investigates key issues such as price fluctuations, inadequate storage infrastructure, high transportation costs, limited direct market access, and the dependence on middlemen. A descriptive research design was employed, and data were collected from 125 maize farmers through structured questionnaires. Statistical tools like percentage analysis, Likert scale, chi-square test, and ranking methods were used to interpret the data. The findings reveal a general lack of awareness among farmers regarding government schemes, market trends, and digital marketing platforms. The study underscores the need for improved policy awareness, enhanced storage and transportation facilities, promotion of Farmer Producer Organizations (FPOs), and the use of digital tools to empower farmers. Recommendations are proposed to address these marketing constraints and foster a more sustainable and profitable maize production ecosystem in the region.

Keywords: Marketing challenges, awareness, government schemes.

I.INTRODUCTION

Maize, also known as corn, is one of the most widely produced and consumed cereal crops globally, playing a vital role in ensuring food security, improving livelihoods, and contributing to economic growth. Maize is a crop in India and ranks third as a producer of cereals after rice and wheat. It is cultivated in different states, one of which is Tamil Nadu, where Coimbatore is one of the prominent maize-producing districts. The friendly climate and productive soil of Coimbatore over the decades have established it as a major maize-producing center of Tamil Nadu. However, the sale of maize in the state has been beset with many problems. Farmers earlier used to experience issues like volatile prices, poor access to good quality markets, and reliance on middlemen controlling the price and distribution channels. As a staple food for millions, maize production is crucial for human consumption, animal feed, and industrial applications. With over 1.1 billion metric tons produced annually, maize is grown on over 180 million hectares of land worldwide, with the United States, China, Brazil, Argentina, and Ukraine being among the top producers. Maize (*Zea mays*) is among the earliest domesticated crops, with its origin in Mexico some 9,000 years ago.

Objective:

The factors influence the marketing of maize in selected taluks of Coimbatore district.

II.STATEMENT OF PROBLEM

Maize producers in Pollachi and Mettupalayam taluks of Coimbatore district face several marketing challenges that hamper their ability to compete effectively in the market. Although it is important in the agricultural economy but maize producers in the region face problems such as price fluctuations, Inadequate storage facilities, Transportation problems and limited direct market access etc. These challenges not only affect profitability but also the agricultural economy, Effective marketing strategies, Inadequate market structure and limited access to institutional support. Therefore, the objective of this study is to examine the marketing problems faced by maize producers in Pollachi and Mettupalayam taluks of Coimbatore district.

III.RESEARCH METHODOLOGY**TOOLS AND TECHNIQUE USED**

The analysis has been made through the questionnaire.

- Chi-Square Analysis
- T-Test Analysis

CHI-SQUARE ANALYSIS

Chi-Square is a statistical tool commonly used for testing the independence and goodness of fit. Testing independence determines whether two or more observations across two populations are dependent one another. Testing for goodness of fit determines an observed frequency distribution matches a theoretical distribution.

FORMULA

$$\text{CHI-SQUARE} = (\text{Observed Value} - \text{Expected Value})^2 / \text{Expected Value}$$

$$\text{EXPECTED VALUE} = \text{Row Total} * \text{Column Total} / \text{Grand Total}$$

HYPOTHESIS

H0: There is no significant relationship between dependent variable and independent variable.

H1: There is significant relationship between dependent variable and independent variable.

Significance value for chi-square is 0.05. If the calculated value is less than the table value, it is accepted. Else in another situation it is rejected.

T-TEST ANALYSIS

A T-test is a statistical test used to compare the means of two groups to determine if they are significantly different from each other. It is commonly used in hypothesis testing when sample sizes are small, and the population standard deviation is unknown.

LIMITATIONS OF THE STUDY

This study is undertaken to Pollachi and Mettupalayam taluks of Coimbatore district. The study is limited to

specific taluks within Coimbatore district, which may not represent the challenges faced by maize producers in other taluks. The findings depend on the number of respondents surveyed, which may not be large enough to generalize the results. The data was collected through structured questionnaire and analysed based on the information given by the respondents

IV. ANALYSIS AND INTERPRETATION

RESPONDENTS ACCORDING TO FARM SIZE AND MARKETING CHANNEL PREFERENCE OF THE RESPONDENTS

TABLE 1

Farm Size	MARKETING CHANNEL PREFERENCE					Total
	Direct Sales	Govt Procurement	Online Sales	Cooperatives	Middlemen	
Less than 1 acre	2	0	3	3	1	9
1-2 acres	6	0	2	8	9	25
3-5 acres	7	7	8	19	33	74
6-10 acres	2	2	2	4	5	15
Above 10 acres	1	1	0	0	0	2
Total	18	10	15	34	48	125

The table shows that 9 respondents have less than 1 acre, 25 respondents have 1-2 acres, 74 respondents have 3-5 acres, 15 respondents have 6-10 acres, and 2 respondents have above 10 acres. The table shows that 18 respondents prefer direct sales, 10 respondents prefer govt. Procurement, 15 respondents prefer online sales, 34 respondents prefer cooperatives, and 48 respondents prefer middlemen. The table suggests that out of 125 respondents, majority of 74 respondents have 3-5 acres, and only 2 respondents only have above 10 acres and majority of 48 respondents prefer middlemen, and only 10 respondents prefer govt. Procurement.

TABLE 2

Chi-Square Tests				
Pearson Chi-Square	Value	Df	Significance	Result
	21.3	16	.1672	Not Significant

The Pearson Chi-Square test was conducted to examine the relationship between farm size and the choice of marketing channels used by farmers. The test produced a chi-square value of 21.3 with 16 degrees of freedom and a p-value of 0.1672. Since the p-value is greater than the conventional significance level of 0.05, the result is not statistically significant. This indicates that there is no strong evidence to suggest a meaningful association between the size of the farm and the preferred method of marketing agricultural produce.

RESPONDENTS ACCORDING TO GENDER AND MARKETING CHANNEL PREFERNCE OF THE RESPONDENTS

TABLE 3

	GENDER	N	Mean	Std. Deviation	Std. Error Mean
MARKETING CHANNEL PREFERENCE	MALE	78	2.76	1.130	.128
	FEMALE	45	2.64	1.090	.163

The table shows the average scores for marketing channel preference based on gender. Male farmers have a mean score of 2.76, while female farmers have a slightly lower mean score of 2.64. This suggests that both male and female farmers have similar preferences when it comes to choosing marketing channels, with only a small difference between them. The standard deviations (1.130 for males and 1.090 for females) show that there is some variation in responses within each group, but it's not very large. Overall, the data indicates that gender does not have a major influence on marketing channel preference, as both groups show relatively close average scores.

TABLE 4

F	Sig.	t	df	Sig. (2-tailed)	RESULT
.035	.852	.536	121	.593	NO SIGNIFICANT
		.541	94.674	.590	

The table shows the results of a statistical test to compare marketing channel preferences between male and female farmers. The significance value for equality of variances (Levene's Test) is 0.852, which is much higher than 0.05. This means the assumption of equal variances is met. The t-test result shows a t-value of 0.536 with a significance level (p-value) of 0.593. Since this p-value is greater than 0.05, the result is not statistically significant.

v. FINDINGS

The data shows that most farmers (74 out of 125) have medium-sized farms ranging from 3 to 5 acres. Very few farmers (only 2) have farms larger than 10 acres. In marketing channels, the most preferred channel is using middlemen (48 farmers), followed by cooperatives (34 farmers). Direct sales, online sales, and government procurement are less commonly used. A Chi-Square test was done to check whether the farm size affects the choice of marketing channel, and the result was not statistically significant ($p = 0.1672$). This means there is no strong connection between the size of a farm and the marketing channel chosen. In terms of gender, both male and female farmers have similar preferences. Male farmers have a slightly higher average score (2.76) compared to female farmers (2.64), but the difference is very small. The t-test also showed no significant difference between the two groups ($p = 0.593$), suggesting that gender does not play an important role in choosing marketing channels.

SUGGESTIONS

Since farm size and gender do not strongly influence marketing channel preferences, support programs should focus more on improving access to all types of marketing channels for all farmers, regardless of their land size or gender. As many farmers rely on middlemen, efforts should be made to make alternative channels like cooperatives, online platforms, and direct sales more attractive and accessible. This can help farmers get better prices and more control over their sales. Training and awareness programs could help farmers understand the benefits of these other channels and how to use them effectively. Government initiatives can also focus on strengthening cooperatives and improving online sales infrastructure in rural areas.

VI. CONCLUSION

The study on marketing problems faced by maize producers in selected taluks of Coimbatore district shows that farmers face several challenges in selling their produce effectively. Most farmers depend on middlemen, which often leads to lower profits due to price cuts and lack of bargaining power. While cooperatives and online platforms are available, they are not widely used, possibly due to lack of awareness or access. The analysis also shows that factors like farm size and gender do not have a major impact on the choice of marketing channels. This suggests that the marketing problems are common across different groups of farmers. Overall, the study highlights the need for better market access, more awareness about alternative channels, and stronger support systems to help maize farmers get fair prices and improve their income.

VII. REFERENCES

- Inbathamizhan, M., Tiwari, M., C Kumar, S. (2023). An economic analysis of marketing of maize and constraints faced by the maize growers in production and marketing in Ariyalur district of Tamil Nadu in India. *Journal of Experimental Agriculture International*, 45(7), 165-171.
- S.Sownthariya a*, Ravi Kumar Theodore b, N.Sriram c, C. Velavan d and Patil Santosh Ganapatie, Constraints Faced by Maize Farmers of Tamil Nadu in Use of Smartphone for Accessing Agricultural Information 2023. *Asian Journal of Agricultural Extension, Economics C Sociology Volume 41, Issue 9, Page 955-962, 2023; Article no. AJAEES.104155 ISSN: 2320-7027*
- S Arivarasan, V Balamurugan, T Anitha and M Balakrishnan (2022), An economic analysis of production and marketing and constraints faced by the maize farmers in Cuddalore district of Tamil Nadu, *The Pharma Innovation Journal 2022; SP-11(10): 816-819.*
- N. Rajalakshmi, T. Unnamalai and R. Gopinath, Study on Motivational Factors Behind the Cultivation of Maize in Perambalur District, *International Journal of Management (IJM)*, 11(10), 2020, pp. 2165-2171