GROUNDNUT MARKETABLE SURPLUS IN SALEM: A QUANTITATIVE ANALYSIS

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Abstract

This study investigates the marketable surplus of groundnut in Salem district, Tamil Nadu, India. Groundnut is a significant agricultural commodity in the region, contributing to the livelihoods of numerous farmers. Understanding the dynamics of groundnut marketing is crucial for optimizing farmers' incomes and promoting sustainable agricultural practices. The research employs a quantitative methodology, involving multistage random sampling and data collection from 100 groundnut cultivators. The study analyzes various aspects of groundnut marketing, including marketing channels, costs, margins, and price spreads. Additionally, it estimates the marketable surplus of groundnut, which is the portion of the crop that producers are willing to sell after accounting for retention needs. The findings of the study reveal that the marketable surplus of groundnut in Salem district is influenced by factors such as production levels, market prices, and government policies. The research identifies potential challenges and opportunities in the groundnut marketing system, providing valuable insights for policymakers, agricultural extension workers, and market intermediaries. Based on the research findings, the study offers recommendations for improving the marketing of groundnut in Salem district. These recommendations include strengthening farmer organizations, enhancing market infrastructure, and promoting value-added processing of groundnut products. By implementing these measures, it is possible to enhance the economic benefits of groundnut production for farmers and contribute to the sustainable development of the agricultural sector in the region.

Keywords: *groundnut, marketing, sustainable, farmers income and price spread.*

Introduction

Salem district, a significant agricultural hub in Tamil Nadu, has a substantial groundnut cultivation sector. Understanding the dynamics of groundnut marketing in this region is crucial for optimizing farmers' incomes and promoting sustainable agricultural practices. Effective marketing plays a pivotal role in accelerating economic growth by ensuring remunerative prices for farmers and motivating them to invest in higher quality inputs and improved technologies. This research aims to comprehensively analyze the marketable surplus of groundnut in Salem district. Marketable surplus, as defined by the portion of a crop that producers are willing to sell after accounting for various retention needs, including seed, consumption, and other non-market uses. By estimating marketable surplus, this study seeks to assess the potential for market-based interventions and policy measures to enhance the economic benefits of groundnut production. The research will employ a quantitative approach, involving data collection and analysis of groundnut production, retention, and marketing practices in Salem. To the Identifying the predominant marketing channels used by groundnut producers and assessing their efficiency and effectiveness. Evaluating the costs

incurred by producers and intermediaries involved in the marketing process, as well as the margins they earn. In this Quantifying the amount of groundnut that producers are willing to sell after accounting for retention needs. To examining the factors that influence the quantity of groundnut marketed, such as production levels, market prices, and government policies. Based on the research findings, suggesting potential policy interventions to improve the marketing of groundnut and enhance farmers' incomes.

This study will contribute to a better understanding of the groundnut marketing landscape in Salem and provide valuable insights for policymakers, agricultural extension workers, and market intermediaries. By optimizing the marketing of groundnut, it is possible to improve the livelihoods of farmers and promote the sustainable development of the agricultural sector in the region.

Review of Literature

Bhogal and Arora in their study on "marketable and marketed surplus of milk in North-west Uttar Pradesh" have defined marketed surplus in terms of the given formula:

$$Ms = \frac{Mp - Mr}{Mp} \times 100$$

where,

Ms = Percentage of marketed surplus for the milk producer per month

Mp = Average milk production in the farm per month

Mr = Average milk requirements of the family of milk producer per month

Marketed surplus means the quantity of total production which is actually marketed in a year, that is, production, minus own consumption. The marketed surplus is not equal to the marketable surplus. According to Singh, marketed surplus represents that portion of the total production which is actually disposed of by the producer either for cash or by barter.

Marketable surplus and marketed surplus are estimated from the given equation:

$$Ms = Qp - Qh$$

$$Mds = Qp - (Qh + Ql)$$

$$Qh = Qc + Qs + Qr$$

where,

Ms = Marketable surplus

Mds = Marketed surplus

Qp = Production of Groundnut

Qh = Quantity of Groundnut kept at home

Qc = Quantity kept for consumption

Qs = Quantity retained for seed

Qr = Quantity given to relatives labour and others

Ql = Quantity lost in storage

Reddy and Chengappa formulated a marketed surplus model for paddy which is given below:

$$M = f(p, w, r, f, z1, z2, z3)$$

where,

M = Marketed surplus,

P = Product price

W = Wage rate

R = Bullock wage rate

F = Fertilizer price

Z1 = Irrigation expenditure

Z2 = Capital expenditure,

Z3 = Area under the crop.

In the present study, marketable surplus is the estimated quantity to be marketed by the producers, which is arrived at after providing some percentage for various items of retention (seed purpose, payment of wages in kinds, domestic consumption and the like). The marketed surplus is the quantity of Groundnut actually sold in the market.

Methodology

In this study multistage random sampling technique has been used with Salem district as the universe, the taluk and block as the stratum, the village as the primary unit of sampling and the groundnut

cultivators as the ultimate unit. Reconnaissance survey of the study area was undertaken to develop comprehension of the process and activities involved in groundnut cultivation under actual farming conditions. order to achieve the objectives of the study, 100 sample groundnut cultivators were stratified into two categories, viz., small farmers and large farmers.

Results and Discussion

Marketable surplus is the estimated quantity to be marketed by producer and is arrived at after providing some percentage for various items of retention. The items of retention include provision for seed purpose, payment of wages in kind, domestic consumption, and the like. In short, the marketable surplus is the difference between the total production of the groundnut and the total retention per acre. Hence, this section attempts to analyse the retention and marketable surplus of the selected farmers producing groundnut. The marketable surplus and percentage of retention are given in Table.

Table 1 Marketable Surplus of Groundnut

(Quintals per acre)

Size of Farmers	Total Production	Total Retention	Total Marketable Surplus	Percentage of total production
Small	9.78	0.57	9.21	94.17
Large	8.63	0.48	8.15	94.44
Overall	18.41	1.05	17.36	94.30

It is inferred from Table 1 that the total production in sample farms was 18.41 quintals with a retention of 1.05 quintals per acre. The variation in the percentage of marketable surplus to production among the group was found to be minimum. The maximum was 94.44 per cent in large farmers and the minimum was 94.17 per cent in small farmers.

Purpose-wise Retention of Groundnut

The farmers retain a certain portion of groundnut for the domestic use, for seeds and to make generous offers to relatives, friends and labourers. Table 2 shows the purpose-wise retention of groundnut by the sample farmers.

Table 2 Purpose-Wise Retention of Groundnut in Sample Farmers

(Quintals per acre)

Purpose	Small Farmers	Large Farmers	Total
Domestic Use	0.12 (15.69)	0.13 (22.92)	0.25 (19.19)
Seeds	0.31 (58.82)	0.28 (60.42)	0.59 (59.60)
Others	0.14 (25.49)	0.07 (16.67)	0.21 (21.21)
Total Retention	0.57 (100.00)	0.48 (100.00)	1.05 (100.00)

"The figures in brackets indicate the percentage breakdown of the total.

It is understood from Table 2 that the small and large farmers have retained 0.51 quintals and 0.48 quintals of groundnut per acre respectively. The quantity of groundnut retained for several purposes by the small and by the large farmers constitutes 0.57 and 0.48 quintals per acre respectively. Of the total production of groundnut, 59.60 per cent of total retention is for the purpose of seeds and 19.19 per cent is for domestic use and 21.21 per cent is for other purposes. The marketable surplus is the difference between the total production and total retention per acre. The marketable surplus significantly influences the marketing decisions of farmers.

Determinants of Marketable Surplus

In order to identify the factors influencing the marketable surplus of groundnut in the study area, a

multiple linear regression model of the following forms was used.

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + u$ ..... (1)

where

Y - Marketable surplus per farm in quintals

X_1 - Area under groundnut of farm

X_2 - Family size

X_3 - Price received per quintals

u - Disturbance term

$\beta_0 \beta_1$ .....β_3 are the parameters to be estimated. The above model (1) was estimated by the method of least squares and the results are given in Table 3.

Table 3 Determinants of Marketable Surplus of Groundnut

Number of Observation	Regression Co-efficient				R^2	F
	β_0	β_1	β_2	β_3		
100	3.17	76.63* (5.1172)	-0.49 (-0.9814)	0.98* (3.4914)	0.74	34.71

"The figures in brackets indicate the percentage breakdown of the total.

*Indicates that the co-efficient are statistically significant at the 5 per cent level.

It is inferred from Table 3 that as per R^2 value, all the three explanatory variables are jointly responsible for 76 per cent variation in the marketable surplus of groundnut expressed in quintals per farm. Further, R^2 value indicates that the function was considered to be a good fit and the interpretation was made for the significant variables only. The F value shows that the fitted regression is statistically significant at one per cent level.

Among the selected variables, the area under groundnut and price of groundnut were statistically significant at 5 per cent level which were also found to be positively related to the marketable surplus. It indicates that an acre increase in acre under groundnut cultivation, ceteris paribus, would increase the marketable surplus by 76.63 quintals. Similarly one rupee increase in the price of groundnut per quintal would result in an increase of 0.98 quintals of marketable surplus per farmer.

Thus it may be concluded from the analysis that an area under groundnut was found to be highly significant and it had greater influence on the marketable surplus compared to the variable price per quintal.

Conclusion

It is concluded that the analysis of groundnut marketable surplus in Salem district has revealed several key findings. The study identified that the primary marketing channels for groundnut in the region are traditional markets and private traders, with limited involvement of cooperatives and government agencies. While these channels have served the needs of producers, there is a scope for enhancing efficiency and reducing transaction costs through the establishment of stronger farmer organizations and improved market infrastructure. The analysis also highlighted the significant impact of production levels, market prices, and government policies on the marketable surplus of groundnut. Fluctuations in production and market prices can significantly influence the quantity of groundnut that farmers are willing to sell. Government policies, such as price support programs and export subsidies, can also play a crucial role in shaping the market dynamics for groundnut. Based on these findings, the study recommends several measures to improve the marketing of groundnut in Salem district. Strengthening farmer organizations can empower producers to negotiate better prices and access essential services. Investing in improved market infrastructure, such as warehouses and cold storage facilities, can help reduce post-harvest losses and ensure timely marketing of the produce. Promoting value-added processing of groundnut products can enhance their market value and create new

opportunities for farmers. In conclusion, this research provides valuable insights into the groundnut marketing landscape in Salem district. The findings can inform policymakers, agricultural extension workers, and market intermediaries in developing strategies to improve the livelihoods of groundnut producers. By addressing the identified challenges and implementing the recommended measures, it is possible to enhance the economic benefits of groundnut production and contribute to the sustainable development of the agricultural sector in the region.

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