



A STUDY ON VALUE ADDED PRACTICES ON GROUNDNUT GROWERS IN NAMAKKALDISTRICT

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Abstract

Groundnut is a major oilseeds crop and an essential source of income for small farmers in the country. Groundnut is the principal vegetable oil crop in India and occupies the top slot in terms of area as well as production of total oilseeds in the country. However, about 85 percent area under groundnut remains rainfed of which nearly 80 percent comes under dry land where irrigation facilities do not exist at all. There has been gradual increase in the productivity of this crop over the last three decades. However, trade practices and selling concept is not expected level on estimated profit earned by the growers in India. The purpose of promote and increased cultivation and prefer value added product among the growers. This study has been conducted to investigate the factors influencing the practices of Value added process of Groundnut in Tiruchengode, Rasipuram areas of Namakkal district in Tamil Nadu. In this paper, the special focus was on cost incurred to various processes of cultivation and value added practices for getting more price rather than direct sales in the local market. A structured questionnaire was framed and data was collected from the sample respondents.

The collected data were analyzed using SPSS and the inferences were drawn accordingly. The result of the study shows that the cost of cultivation, value added practices have got greater influence in the overall Groundnut production.

Key Words: *Cost Of Cultivation, Value Added, Pricing Strategy*

Introduction

Groundnut is premier oilseeds crop and highly consumption value among the Agricultural products in India. India has exported total 5.33 lakh tones groundnut during Apr to Jan 2019-20 which is higher by 8.92% as against 4.89 lakh tonnes of groundnut in the last year. Indian groundnuts are mainly exported to Indonesia, China, Philippines, Vietnam, Malaysia, Thailand, Algeria, Ukraine, Russia, Iran and Nepal. India imports groundnut from Nepal, Netherlands, Sri Lanka and Sudan. Indian exports could benefit from trade restrictions against Chinese goods across the global market and there has been less cultivation of peanut in Sudan and Senegal, which would also help Indian exporters to explore other markets. India ranks first in groundnut area with 4.94 million hectares (12.20 million acres) accounting for 17.32% of the world area and second in production with 6.70 million tonnes accounting for 14.55% of the world production. In India, among oilseed crops, groundnut crop occupy first position in terms of area and second position in terms of production after soyabean. According to the 3rd advance estimates, groundnut production estimate (kharif and rabi) was 9.34 million tonnes for 2019-20 as against 6.72 million tonnes in 2018-19. NAFED has procured 7.19 lakh tonnes in 2019-20, major share being from Gujarat alone (5 lakh tonnes). It has cultivated in the moderate rainfall with whole seasonal for Agro climatic zone in India. In particular, Tamilnadu state has occupied for Groundnut Cultivation which is mostly covered in middle, western part of zone, except Cauvery delta for both Karif and Rabhi. After harvest, majority of the Growers who sold directly to the market and



getting reasonable price or Gate price for Groundnut price only. This much of price is not equalent for their effort was taken by the growers at the beginning stage of cultivation. The effect of modernized equipments was implemented and they got awareness about value added components for Groundnut which will be converting into oil and distribute for Bye-Products. In this decade, most of the Groundnut Growers who shown willingness towards value added products from Groundnut in tamilnadu. This paper is going to explains about the value added practices on Groundnut in Namakkal District of Tamilnadu.

Table 1: State wise Oilseeds Products in India

S .No	Oil Seeds	States	Production (Million Tonnes)	%Share of Production From All India	Cumulative %Share of Production
1	Groundnut	Gujarath	4.13	40.42	40.42
		Rajasthan	1.93	18.91	59.33
		Tamilnadu	0.94	9.25	68.59
2	Soyabean	Maharastra	6.20	48.07	48.07
		Madya Pradesh	4.61	35.78	83.84
		Rajasthan	1.09	8.49	92.33
3	Sunflower	Karnataka	0.11	46.54	46.54
		Haryana	0.02	9.92	56.46
		Oddissa	0.02	9.62	66.08

Source: Economic Survey 2021-2022, Government of India.

The major oilseeds production in india has given in the table which is extracted from secondary data. The above data indicates that Groundnut production had leading in Gujarath(4.13 million tones) Secondly , Rajasthan state had occupied the production for Groundnut had 1.93 Million tones. Even though, Tamilnadu state has larger number of resources on Groundnut cultivation, but its contribution is only 0.94 Million Tones while we compared Rajasthan state. Next to, Soya been production is leading in Maharashtra state(6.20Mt) which is leading than Rajasthan (1.09) and Madya Pradesh(4.61).The major and familiar oil seeds for Sunflower is occupied in lower level of production while we compared Groundnut and Soya been. The production range is 0.11Mt in Karnataka and 0.02 Mt in Oddissa and Haryana.



Table 2: Seasonal Wise Groundnut Production In India

S.No	Year	Kharif (Production In Million Hec)	Rabi(Production In Million Hec)
1	2011-2012	4.3	0.9
2	2012-2013	13.9	0.8
3	2013-2014	4.6	0.9
4	2014-2015	4.0	0.8
5	2015-2016	3.8	0.8
6	2016-2017	4.6	0.8
7	2017-2018	4.1	0.8
8	2018-2019	4.1	0.6
9	2019-2020	4.2	0.7
10	2020-2021	4.2	0.9

Source: Economic Survey 2021-2022, Government of India

Season wise preferred cultivation is essential and effective yield which will getting for every crops where based on the soil type, Agro climatic zone and water supply, wind force level etc., In this connection, Groundnut has cultivated in india is mostly in karifseason. At the same time, southern states are preferred only Rabi season in Irrigation land. The rainfall land is only karif season in Tamilnadu.

Andhra, Telungana. Table explains about the year wise consecutive of cultivation for Groundnut since 2011 to 2021. In karifseason, during 2012-2013 was drastically increased from 4.3 (2011-2012) to 13.9 whereas, same year Rabi season was decreased 0.8(Mt). After 2014-2015 Rabi season range was subsequently the same position(0.8)and karif season was more or less equal(4.1 , 4.2). Therefore, larger number of production for Groundnut in india is Kharif season.

The Importance of Study

There is a tremendous changes on pricing strategy and local market price will be differentiate for after value added product sales by Groundnut Growers. The methods, process which will systematically prepared and implement for enhancement of profitability. Therefore, this study is essential need for promotional activities of Groundnut growers.

Review of literature

Singh JM (2011) conducted a study on Major constraints and utilization pattern of groundnut undertrained conditions in Punjab. The production and utilization pattern of groundnut produced explicit that marketed surplus was 88.48 per cent of the total produce out of which 84.8 per cent was sold immediately after digging and cleaning in the local market and 3.68 per cent was kept for future sale. Specifically, buyer was private trader while some part of produce was sold directly to the consumer. The quantity sold in future received 8.7 per cent increase in price than quantity sold immediately after harvesting. The study concluded that there is urgent need to develop and necessary infrastructure for storage which will help groundnut growers to get remunerative price for their produce resulting in increase in their income. Quality seed should be made available to the growers along with development of irrigation facilities. In order to stop distress sale and price variability government agencies should come forward to ensure good returns to the growers.



Akshata Nayak(2021) Analysed that instability is one of the important decision parameters in development dynamics and more so in the context of agriculture production. Instability of area, production and yield of groundnut has been discussed in both India and Karnataka. The level of instability was marginally higher in groundnut area (8.7 %) during period II compared to period I (2.9%) and period III (7.3%). The variation in production and yield of groundnut was higher during the period III compared to period I and II. The change in mean area is contributing more to change in average production of groundnut in India and Karnataka followed by interaction between change in mean area and mean yield. Change in area variance is the predominant component contributing to the change in variance of production of groundnut in India as well as in Karnataka. The area under cultivation of groundnut cannot be increased overnight as it is grown in rainfed condition; there is unpredictability in the onset of monsoons, annual rainfall and its distribution over the growing season leading to very low yield.

Government of Karnataka Report (2013) Described that Karnataka state was divided into four administrative division's viz., Bangalore, Mysore, Belgaum and Gulbarga. These divisions of the state were chosen for the study, since the policy implication, if any from the study would help in regional planning. The growth, instability and sources of groundnut production in the state were estimated at district level. This would help in district level planning in agricultural sector in general and oilseed sector in particular in the state. Among the oilseed crops grown in the state, it contributes around 71 percent of production to total oilseed production in Karnataka during 2012- 13.

Cynthia Bantilan(2012) point out that huge inefficiency exists in groundnut production system which can be removed by a good seed variety replacement efforts and adoption of low cost technology. A better integration with the processing sector through clusters can also help stabilize the groundnut production in India.

Statement of the Problem

Groundnut is a familiar oilseed crop which is cultivating all over the world under varying proportions. In india, it has cultivating for larger number of small farmers with irrigation facility and rainfed also. After harvest, majority of the small growers (Groundnut) are going to sale for local market. This is not expected profit for the yield of groundnut which is their efforts and expenses were made at the time of cultivation practices. Because of, modernization and utilized equipments, cultivators who decided to do value added product from Groundnut and sale for oil along with bye products. Is there any factors influence the cost of cultivation with irrigation? How for it level of utilization for equipments and logistics and procurement practices are going too handled by them? What are the ultimate challenges and practices for sales after value added products? Hence, this paper makes an attempt to find out the solution for vale added product practices on Groundnut Growers in Namakkal District.

Research Gap

The past 2 decades, groundnut Growers who belonged to dependent with nearest market or preferred their sales practices after harvest. In recent days, in the effect of labour cost and other maintenance for Groundnut cultivation, value added product is felt need approach of the Producers. Based on the



previous research studies, reports where depicts that there is no proper processing practices and value added product's methods, innovation, equipment usage were investigated in contemporaries level. This much of elements, components are need for empirical in nature, This is the research gap of this study.

Scope of the study

The outreach of the study which will extend other parts of geographical areas for the same cultivators in future. The entire process of logistic and supply chain with cost control and equipment usage is going to estimate under quantitative technique. This can be focused into a model of research study for value added product from Groundnut cultivators

Objectives of the Study

1. To examine the value added practices and challenges of Groundnut Growers
2. To analyze the various stages of value added practices on Groundnut Growers .

Methodology

The study is basically descriptive method with empirical in nature. A random sample was utilized with primary data from 70 small Growers of Groundnut in Namakkal District .The purpose of analysis chi square and regression were adopted for dependent and independent variables.

Results and Discussions: Based on the observation from the field, we can conclude the opinion from the Groundnut growers. Besides, the results were drawn from the data had been classified and analysed with suitable statistical toolsie., Chi square, Regression.

Table-3: Nature of Irrigation and Contribution for Value Added Product

Contribution For Value Added Product Irrigation	Operate Equipment For Squeeze Oil	Procuring Nuts From Aailed Growers	Arrange Logistics For Market and Allocate Bye Product	Brand Support With Customer Relation	Total
Rainfed And Well	0 0.0%	10 66.7%	3 16.7%	3 16.7%	18 100.0%
Cannel	0 0.0%	14 42.4%	16 48.5%	3 9.1%	33 100.0%
Bore- Well	4 36.4%	3 27.3%	4 36.4%	0 0.0%	11 100.0%
River Based Supply	4 50.0%	0 0.0%	0 0.0%	4 50.0%	8 100.0%
Total	8 11.4%	27 41.4%	23 32.9%	10 14.3%	70 100.0%

Source: Primary Data

There is significant associate between nature of irrigation with Contribution for value added product status at 0.01 percent level.chi – square value in 44.817.

There is a connectivity with operating activities on value added products and type of irrigation. Irrigation involves a larger number of manual work and expenses towards procuring water supply to



Groundnut cultivate. In case rainfed and cannel type of irrigation which leads tlo expenses are less. Therefore , there is a requirement for time and expenses towards water supply is going to influence for promoting their value added aspects are considered as Pull-Factor. Table explains that 50% (4 persons out of 8) of river based water supply users who contribute for operate equipment for squeeze oil, .Secondly, 66 % of the Groundnut Growers who procured nuts from another (nearby zone Groundnut growers) Growers where belonged to rainfed and Well- Irrigation (10 persons out of 27) Next to, 48% and 36% of the growers who belonged to operational activity on value added products on Ground nut which is pertains to logistics for marketing work and bye –products responsible Growers who belonged to cannel and Bore-well water each respectively(16 persons out of 23) It is inferred that rainfed based Groundnut growers and Cannel based irrigation of Groundnut Growers who involved more responsible and carry out the works which are involved value added products from Groundnut in the study area.

Table- 4: Challenges and Practice on Value Added Product

Challenges Practice-On Value Added	Collective Value Added Product And Sale Of Bye Products	Collective Value Added Product And Oil Sales	Domestic Consume Only	Total
Coordination among small farmer is tough	12 35.3 %	20 60.7 %	0 0.0 %	32 100.0 %
Not bothering for Pricing	0 0.0	13 39.5%	4 23.5 %	17 100.0 %
Customer identification	16 100 %	0 0.0 %	0 0.0 %	16 100.0 %
Preserve stock and sale of bye product	3 100 %	0 0.0%	0 0.0 %	3 100.0%
Total	31 44.3 %	33 50.0%	4 5.7 %	68 100.0%

Source: Primary Data

There is significant associate between challenges with Practices on value added Product at 0.01 percent level.ch- square value in 47.290.

In recent days, the consumers who shown willingness to buy for traditional based processing for oil seeds. It includes several processes from the oil seeds while processing by the Growers. The structural based manufacturing (Small-Scale) and channelization for marketing are highly challengeable from the Growers. Even though, challenges and risks are more in the value added products from the Groundnut where practiced by the Groundnut growers in Namakkal District. Table explains that 60% of the growers on contribute for collective value added product and sale of bye-products where belonged to the challenges for coordination among small farmers is tough task (20 persons out of 33 persons). The statement on price of Groundnut at the grower's place is not bothering is 39% of collective value added product and sales by the groundnut grower's duty on value added practice (1 person out of 33). It is inferred that coordination activities on Groundnut Grower's effort and functional aspects of value added products on Groundnut production to marketing and coordination are challengeable one.



Regression Model Summary

Model Summary b							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	F	Sig.
1	.929a	.863	.855	263.990	1.618	118.304	.000b
a. Predictors: (Constant), Cost incurred on Maintenance while cultivation, Cost incurred on Equipment, Cost incurred on procurement, Cost incurred on Transportation, Cost incurred on Advertising, Cost incurred on logistic management							
b. Dependent Variable: Production of different varieties							

The above Table explains about the regression estimates. It is clear from the above that the R² value which represents the relationship between the dependent and independent variables. The R value (0.863) represents that these independent variables are good fitting of 86.3 percent of cost incurred on production activities of different varieties of Groundnut cultivated in the study area. The F value (118.304) shows that the level of significance is quite fitting and good for the whole model. The Durbin- Watson statistics (1.618) indicated that there is no first order auto correlation (either positive or negative) for the value is much near to the optimal threshold.

Table 5: Regression Coefficients

Coefficients a					
				Unstandardized Coefficients	Standardized Coefficients
B	Std. Error	Beta		t	Sig.
(Constant)	176.651	44.542		3.966	.000
Cost incurred on preparation of land	.032	.010	.202	3.053	.003**
Cost incurred on maintenance work	.021	.013	.261	1.579	.117
Cost incurred on Equipment for oil	.092	.043	.150	2.131	.035*
Cost incurred on procurement	.078	.037	.251	2.132	.035*
Cost incurred on Advertising	.056	.057	.089	.970	.334
Cost incurred on Transportation and workers(operating work during oil)	.004	.013	.052	.301	.764
a. Dependent Variable: Practices on oil produce					

** 1 percent level of significance * 5 percent level of significance



			Production of Different Varieties	Land Area under Cultivation
Spearman's Rho	Production of Different Varieties	Correlation Coefficient	1.000	.764**
Sig. (2-tailed)			.	.000
N			120	120
Land Area under Cultivation		Correlation Coefficient	.764**	1.000
Sig. (2-tailed)			.000	.
N			120	120
**. Correlation is significant at the 0.01 level (2-tailed).				

The results of the above table show that calculated regression coefficients estimate of independent variables to that of the dependent variable. As per the model the dependent variable is production of varieties of Groundnut in the study area and the independent variables are the different cost incurred in the process of cultivation is first stage and operating activities on value added practices and process of second stage works on sales related after harvest. The cost is divided into 5 categories i.e. cost incurred on preparation of land, cost on maintenance work, cost on Equipment purchase, cost on procurement of nuts and cost incurred on Advertising for brand, cost on logistics and transportation. Here an attempt is made to identify the statistical significance of these independent variables to that of the independent variable. It is found that cost incurred on preparation of land has got more impact in the production of Groundnut which is 1 percent level of significance where as cost incurred on maintenance work and cost incurred on Equipment purchase has also got positive impact on the production of Groundnut at 5 percent level of significance. On the other hand cost incurred on Advertising, cost incurred on transport and cost incurred on procurement of nuts has got less but positive impact on the production of Groundnut in the study area. Thus the overall model exhibits. That the cost incurred on different activities during the value added process has got to play a vital role in enhancing the overall production of different categories of Growers in the study area. The coefficient of cost incurred on preparation of land is 0.202 which means that every unit increased in cost on preparation of land and 20 percent increase in the production is predicted holding all the other variables constant. In the same way the coefficient of all other independent variables reflect on the same. In order to find the relationship that exists between the land area under cultivation and various activities on value added product of Groundnut has cultivation.

Conclusion

The conversion of product has direct utilization of consuming purpose is very much needed in this scenario. The purpose of Groundnut cultivation also sale by the growers are mainly concentrated for earn more profit rather than existing price of direct nut sales in the market. The value added practices are systematically prepared and adopted for operational activities where pertains to materials management. During conversion of oil from the Nuts, the additional components of nut wastages are used for compost and raw material for poultry farm surface cover protection. Secondly, the wastages from oil squeeze where utilized for fodder on Cattles. The process of logistic arrangement and advertising charges have been more than transport and labor charges. Here, labour charges are included their own efforts by the grower's work itself. The Grower's coordination and logistic approach is the challenges. This can be overcome by them after certain period and this is need of hour for enhancing groundnut production in the study area.



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