

## Profitability Analysis of Groundnut Production in Nalgonda District of Telangana

\*K.Venkat Reddy<sup>1</sup>, Dr.Prabhu Kumar<sup>2</sup>,

<sup>1</sup>Research scholar, management science, JNTUH, Hyderabad

<sup>2</sup>Director I/C school of management (SMS), JNTUH, hyderabad-500085

Corresponding Author: K.Venkat Reddy

**Abstract:** The study examined the profitability analysis of groundnut production in nalgonda district of telangana State. Multistage random sampling techniques were employed to select 60 respondents. The tools for collection of primary were structured questionnaires. The data were analyzed using both descriptive such as percentage and frequency and inferential statistics. These included percentage, frequency and farm budget model. Farm budget model was used to estimate cost and returns from groundnut production in the study area. The study revealed that the average cost of production per hectare was 13,746.13 The study further revealed that the average revenue and net farm income per hectare were 44,838.05 and 44187.65 respectively. The problems encounter by the farmers included shortage of labour and pest and diseases was major problems. The study concluded that groundnut farming is profitable in the study area. It is recommended that Government should link farmers to relevant loan agencies, extension services should be made available to farmers to get more profit and improve seed should be made available and affordable to the farmers.

**Keywords:** Production, Profitability, Budgetary- Techniques, Groundnut,

Date of Submission: 22-08-2017

Date of acceptance: 05-09-2017

### I. Introduction

Groundnuts (*Arachis hypogaea* L) also known as peanuts . It is the 13<sup>th</sup> most important food crop and 4<sup>th</sup> in oil seed crop of the world. Groundnut seeds (kernels) contain 40-50% fat, 20-50% protein and 10-20% carbohydrates. The seeds are nutritional source of vitamin E, niacin, folic acid, calcium, phosphorus, magnesium, zinc, iron, riboflavin, thiamine and potassium and are consumed directly as raw, roasted or boiled kernels or oil extracted from the kernels is used as culinary oil. It is also used as animal feed (oil pressing, seeds, green materials and straw) and industrial raw material (oil cakes, and fertilizer). The use of groundnut plant makes it an excellent cash crop for domestic markets as well as for foreign trade in several developing and developed countries

### II. Objectives Of The Study

The broad objective of the study was to analyse the profitability of groundnut production in nalgonda and the specific objectives were to:

- i. describe the socio-economic characteristics of the groundnut farmers in the study area,
- ii. estimates the cost and returns associated with groundnut production, and
- iii. Identify the problems faced by groundnut farmers in the study area.

### III. Method Of Data Collection

The data for the research were mainly from primary source. These were obtained through a structured questionnaire, which were distributed to groundnut farmers in the study area, secondary data/information were also obtained from printed materials such as Journals, textbooks, internet, periodicals, conference proceedings as well as yearly records of production from relevant agencies.

#### 3.1 Sampling technique

Multistage stratified random sampling technique was employed for the selection of the district, mandals, villages and farmer respondents. Nalgonda district in was purposively selected for the study based on maximum area in the state under ground nut. In this district groundnut is grown over an area of 53,000 hectares. In nalgonda district, all the mandals having orchards were arranged in the descending order of the area under groundnut and three mandals viz. Athamakur(s), mothey, madigudem. which have largest area under groundnut were selected purposively for the present study. Two villages from each selected mandal were chosen purposively using the above said procedure making the total number of selected villages to 10. The list of

farmers growing ground nut in the selected villages was obtained from their respective village records. From the list of ground nut growers, a total of 60 farmers were randomly selected for studying the production aspect of ground nut

**3.2 Methods of data analysis**

The methods of data analyses used include: descriptive statistics and budgeting techniques. The budgeting technique was employed to estimate costs and returns from groundnut production. The net income is the difference between the gross margin and the total fixed cost, Gross Margin is given as:

$$GM = GI - TVC \quad - \quad - \quad (1)$$

Where:

GM = Gross Margin (in Rs)

GI = Gross Income (in Rs)

TVC = Total Variable Cost (in Rs)

Furthermore Net farm Income was calculated which is given

as:

$$NFI = GM - TFC \quad - \quad - \quad (2)$$

Where: NFI = Net farm Income (in Rs)

TFC = Total Fixed Cost (in Rs)

**IV. Result And Discussion**

**Socioeconomic Characteristics Of Groundnut Farmers**

The Socioeconomic characteristics of groundnut farmers in the study area revealed mean age of 40.56 years. Most of the farmers are married with (82.03%) only 17.97% are single. About 53.33% of the sampled ground nut farmers were males and 46.66% were females. It was observed that a higher percentage of cashew farmers (43.33%) are primary education. About 23.33% of ground nut farmers illiterates and SSC, inter and collage had completed 20.00, and 16.66 and 13.33 respectively. most of the farmer primary occupation agriculture (91.66) observed in the study

**Table 1:** Socioeconomic characteristics of groundnut Farmers

Sl. No.	PARTICULARS	UNIT	SAMPLE SIZE	REMARKS
			(n = 60)	
<b>I.</b>	<b>General information of the sample</b>			
1	Age	Years	40.56	
2	Occupation			
a.	Main (agriculture)	No.	55 (91.66)	
b.	Subsidiary occupation	No.	5 (8.33)	
3	Education			
a.	Illiterate	No.	14 (23.33)	
b.	Primary	No.	26 (43.33)	
c.	SSC	No.	12 (20.00)	

*Profitability Analysis Of Groundnut Production In Nalgonda District Of Telangana*

d.	Inter	No.	10 (16.66)	
e.	collage	No.	8 (13.33)	
	Total	No.	60 (100.00)	
4.	Sex			
	Male	No.	32 (53.33)	
	Female	No.	28 (46.66)	
	Total	No.	60 (100)	
5.	Marital status			
	Married	Ha	52 (82.03)	
	Single	Ha	8 (17.97)	
	Total	Ha	60 (100)	

**Profitability analysis**

The Net Income analysis for groundnut farmers is shown in Table 2. The average variable cost/ha was 13095.73 which represents 95.25% of the total farming cost, while depreciation on fixed cost was 650.40(4.73%) of the total cost of farming. Thus the total cost (TC) of farming operation/ha was 13746.13 the total revenue (TR), gross margin (GM) and, net farm income (NFI) per hectare 44838.05, 31091.92, 44187.65 respectively.

Base on the above figures, it is implied that groundnut farming is profitable in the study area.

**Table 2.** Average cost and return for groundnut production per hectare(Rs)

Items	Frequency	Percentage (%)
A variable cost		
Seed	1341.99	10.24
Fertilizer	2130.89	16.27
Pesticides	390.19	2.97
Insecticide	79.77	0.60
Labour	607.21	4.63
Ridging	1391.24	10.60
Weeding	1211.13	9.24
Harvesting	1133.40	8.65
Transport	355.26	2.71
Rent	4454.65	34.01
Total variable cost	13095.73	95.25
B Fixed assets		
Depreciation on asset	650.40	4.73
Total fixed cost	650.40	
Total cost	13746.13	
Total returns	44838.05	
Net farm income (NFI)	44187.92	

**Table 3:** Average cost and returns of groundnut farmers per hectare

Variable	Values (Rs/kg)
a) Variable Cost	13095.73
b) fixed cost	650.40
<b>Total cost of Production</b>	<b>13746.13</b>
<b>c) Returns</b>	
Total Average output	<b>930.25kg</b>
Average price/kg	48.20/kg
<b>Total Revenue</b>	<b>44,838.05</b>
Gross Margin (TR-TVC)	31091.92
NFI (GM-TFC)	44187.65

**Constraints associated with groundnut production in the study area**

The production constraints of the respondents analysed include: pest and diseases infestation, Lack of improved and high yielding varieties, low groundnut prices, Lack of irrigation water , inadequate credit facilities, and shortage of labour which are all ranked according to their magnitude. The result of table 4 showed that labour problem ranked first as one of the major problems faced by groundnut farmers in the study area. This is represented by 91.60%. Insufficient irrigation water ranked second with 83.33%, Lack of minimum support price is third with 80.00%, inadequate credit facilities fourth with 78.33%, Lack of improved and high yielding varieties fifth with 75.00% while Lack of latest technical knowledge, Lack of crop insurance Pest and disease problems Lack of sufficient soil testing facilities occupied the Sixth, Seventh, Eighth and ninth positions with 71.66%, 70.00%, 66.66% and 50% respectively.

**Table 4:** Production problems faced by the groundnut growers

S.No.	Problems	Number of Respondents	Percentage
1.	Labour problem	55	91.60
2.	Lack of improved and high yielding varieties	45	75.00
3.	Pest and disease problems	40	66.66
4.	Lack of irrigation water	50	83.33
5.	Lack of latest technical knowledge	43	71.66
6.	Lack of sufficient soil testing facilities	30	50.00
7.	inadequate credit facilities	47	78.33
8.	Lack of crop insurance	42	70.00
9.	Lack of minimum support price	48	80.00

**V. Conclusion**

The result of the study shows that Females are more engaged in groundnut farming than men. The farmers in the study area are in their active age and literate. Groundnut farming in the study area is profitable. The problems that were found to be associated with groundnut farming in the study area include: pest and diseases infestation, Lack of improved and high yielding varieties, low groundnut prices, Lack of irrigation water , inadequate credit facilities,

**VI. Recommendation**

Based on the findings, the study recommends the following

- Extension activities should be increased in the study area
- focus on improve techniques of groundnut production and encourage farmers to use available resources efficiently and effectively.
- Groundnut producers should be granted access to loan facilities from formal financial institutions
- Government should provide inputs at subsidized rate and in good time to the farmers.

**References**

- [1]. Naik, Dibakar and Mohanty, Binod (1991). An Anatomy of Production and Marketing of Groundnut Oil in Orissa. Indian Journal of Agricultural Marketing, 5(1):5157.
- [2]. Pal, S. (1989). Stagnant Production and Changing Production Instability of Oilseed in India. Agricultural Situation in India, 44(5):353-358.
- [3]. Patel, G.N. and Agarwal, N.L. (1994). Growth and Instability in production of groundnut in Saurashtra region of Gujrat. Agricultural Situation in India, June:171-175.
- [4]. Radha, Y. and Eswara Prasad, Y. (1995). Price Analysis of Groundnut in Different Markets of Andhra pradesh. Agricultural Marketing 38(3):9-11.
- [5]. Raheja, S.K. (1984). Cost of Production of Oilseed in India In: Symposium on Oilseed Production and Utilization Constraint and Opportunities. Sep. 1984, New Delhi, India 4.
- [6]. Raju, V.T. and Kakadia, B.H. (1984). Marketing of Groundnut in Rajkot District of Gujarat State. Indian Journal of Agricultural Economics, 39(3):234.
- [7]. Raju, V.T., Bhatt, B.D. and Bhatt, B.H. (1985). Share of the groundnut Growers in the Consumers Rupee in Saurashtra Region of Gujarat State, Indian Journal of Agricultural Economics, Vol. XL(3):406.
- [8]. Rao, C.A.R., Haffis, S., Katyal, J.C. and Reddy, Y.V.R. (1993). Growth and Instability in Production of Oilseed Crops in India: A Critical Analysis, Indian Journal of Dry Land Agricultural Research and Development, 8(1):47-53.
- [9]. Singh, C., Singh, P. and Singh R. (2003). Groundnut Modern Techniques of Raising Field, Crops, pp-263-276.
- [10]. Singh, G. and Chandra, H. (2004). Production and Economic Factors Growth in Cultivation of Groundnut in India. Journal of Oilseeds Research, 21(1):
- [11]. Singh, Katar and Ranjana (1982). A New Strategy for Increasing Oilseeds Production with Groundnut Crop in Saurashtra Region of Gujarat, Indian Journal of Agricultural Economics, Vol. XXXVII (3) : 380-385.

IOSR Journal of Business and Management (IOSR-JBM) is UGC approved Journal with Sl. No. 4481, Journal no. 46879.

K.Venkat Reddy. "Profitability Analysis of Groundnut Production in Nalgonda District of Telangana." IOSR Journal of Business and Management (IOSR-JBM) , vol. 19, no. 9, 2017, pp. 81–84.