

International Journal of Agriculture Extension and Social Development

Volume 7; SP-Issue 11; December 2024; Page No. 23-26

Received: 10-10-2024
Accepted: 15-11-2024

Indexed Journal
Peer Reviewed Journal

Knowledge of respondents towards improved ground nut production technology in Anantapuramu district of Andhra Pradesh

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DOI: <https://doi.org/10.33545/26180723.2024.v7.i12Sa.1433>

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Abstract

The present study entitled “Knowledge of Respondents Towards Improved Ground nut Production Technology in Anantapuramu District of Andhra Pradesh” was carried out during the session 2021-24. One hundred twenty farmers were selected from 20 villages, six respondents from each village. Data was collected by using pre-tested schedule and analyzed using appropriate statistical tools. It was found that majority of respondents were having medium level of socio-economic profile. On analyzing the knowledge level, highest number of respondents i.e. 55.25 per cent were having medium level of knowledge followed by 30.5 per cent having high and 14.25 per cent having low levels. On analyzing the attitude level, highest number of respondents i.e., 50.55 percent were having medium level of attitude followed by 25.44 per cent having high and 24.01 per cent having low levels. In case of adoption level, it was found that most of the respondents 52.40percent have medium adoption level followed by 32.10 per cent having high 15.5 per cent having low level. Independent variables namely age education, annual income, land holding, mass media exposures, and extension contact and economic motivation had positive and significant relationship with adoption respectively. The major constraints faced were delay in sowing due to monsoon prolong, complexity, lack of skill and knowledge, unavailability of labourers, high cost of input and storage facilities respectively.

Keywords: Knowledge, production technology, adoption, ground nut, Anantapuramu

Introduction

India is the second-largest producer of groundnuts in the world. It is the major oilseed crop in India and it plays a major role in bridging the vegetable oil deficit in the country. Groundnuts in India are available throughout the year due to a two-crop cycle harvested in March and October. Ground Nuts are important protein crops in India grown mostly under rain-fed conditions. The awareness and concern for quality amongst the Indian groundnut sellers and processors are growing steadily. Multiple sorting and grading are fast becoming a norm.

Peanut or groundnut (*Arachis hypogaea*), is a species in the legume or "bean" family. Peanuts are known by many other local names such as earthnuts, ground nuts, goober peas, monkey nuts, pygmy nuts and pig nuts. Despite its name and appearance, the peanut is not a nut, but rather a legume. They have a rich nutty flavour, sweet taste, crunchy texture and over and above a relatively long shelf life. Peanuts are similar in taste and nutritional profile to tree nuts such as walnuts and almonds. peanuts has symbiotic nitrogen-fixing bacteria in root nodules. The capacity to fix nitrogen means peanuts require less nitrogen-containing fertilizer and improve soil fertility, making them valuable in crop rotations.

Ground nuts are good source of protein, healthy fats, fiber and vitamins and minerals like vitamin E, magnesium,

folate copper and arginine. They can help with weight loss, improves heart health and reduce the risk of stroke. Ground nut also contains antioxidants which can help which can help to fight inflammation and oxidative stress, and may reduce the risk of chronic diseases like cancer.

Materials and Methods

The present study was purposively undertaken in kuderu block of anantapur district in Andhra Pradesh. Fifteen villages were purposively selected on the basis of majority of farmers practicing wheat cultivation. From each selected village, 10 farmers were selected randomly making a sample of 120 respondents. Pretested interview schedule was used for collection of data. The collected data were classified, tabulated and analyzed in the light of the objectives. Descriptive research design was followed and the variables were measured by using suitable scale and procedure adopted by various researchers in past with few modification. Appropriate statistical tools were used to draw the inferences.

Results and Discussion

• Socio-economical characteristics of the respondents

The socio-economic characteristics of the respondents were studied and the data are given below.

Table 1: Socio-economic characteristics wise distribution of the respondents(N=120)

Age		
Category	Frequency	Percentage
Young (25-35 years)	12	10.00
Middle (35-55 years)	78	65.00
Old (Above 55 years)	30	25.00
Education		
Category	Frequency	Percentage
Low (Illiterate+primary)	14	11.67
Medium (6-12)	66	55.00
High(above12)	40	33.33
Size of Land Holding		
Low (Lessthan1hectare)	22	18.34
Medium (1-2 hectares)	44	36.66
High (more than 2 hectares)	54	45.00
Annual Income		
Low (upto Rs.40,000)	16	13.34
Medium (Rs.40,001-80,000)	37	30.83
High (above80,000)	67	55.83
Mass Media Exposure		
Low	38	31.67
Medium	50	41.67
High	32	26.66
Extension Contacts		
Low	41	34.17
Medium	50	41.67
High	29	24.16
Economic Motivation		
Low	32	26.67
Medium	54	45.00
High	34	28.33

Table-1. Shows that majority (65.00%) of respondents belongs to middle level of age group. It was observed that (55.00%) of the respondents belongs to medium level (literate up to intermediate) category. It was found that (45.00%) of the respondents belongs to high level land holding (>2 ha), similarly it was observed that (55.83%) of the respondents belongs to high level of income i.e. above

80,000). It was found that (41.67%) of the respondents belongs to medium level of mass media exposure category, (41.67%) of the respondents belongs to medium level extension contacts category, (45.00%) of the respondents belongs to medium level economic motivation category. Similar result is also reported by Kumaran and Bose (2013) ^[4].

Table 2: Knowledge of respondents regarding ground nut production technology

S. No.	Statements	Evaluation		
		Fully correct (%)	Partially correct (%)	Not correct (%)
1.	Field preparation - Traditional method-2- 3times ploughing - Use of zero tillage machine - Surface seeding method	60(50.00%)	42(35.00%)	18(15.00%)
2.	Improved variety - ICGV-SM-08501 - KADIRI-6 - TAG-25	42(35.00%)	47(39.17%)	31(25.83%)
3.	Seed and its treatment - NSKE - Carbendazim - Pseudomonas fluorescens	20(16.16%)	64(53.34%)	36(30%)
4.	Sowing time - May 15 to June end - Nov to December	41(34.17%)	51(42.50%)	28(23.33%)
5.	Spacing 30 cm * 10cm 45 cm * 10cm	40(33.33%)	51(42.50%)	29(24.17%)
6.	Fertilizers 20:40:60 KgNPK/ha 20:50:30 kgNPK/ha	24(20.00%)	74(61.66%)	22(18.34%)

7.	Irrigation 11-12 8-9	33(27.50%)	60(50.00%)	27(22.50%)
8.	Weeding and hoeing operations 2 times 3 times 4 times	11(9.17%)	47(39.16%)	62(51.67%)
9.	Weed control - Quizalofop-ethyle 5% - Imazethapyr 10% - Diclosulam 84% - Pendimethalin 38.7%	21(17.5%)	71(59.16%)	28(23.34%)
10.	Diseases - early leaf spot - red rust - bud necrosis - root rot - Leaf blight	32(26.67%)	45(37.5%)	43(35.83%)
11.	Harvesting 95-120days 110-115days 120-125days	33(27.50%)	37(30.83%)	50(41.67%)
12.	Yield 883-750 kg/ha 1500-2000 kg/ha	23(19.17%)	77(64.17%)	20(16.66%)

Table 3: Overall Knowledge level of farmers towards improved ground nut production Technology of the respondents (N=120)

Knowledge Level			
Category	Knowledge score	Frequency	Percentage
Low level	13-20	25	20.83
Medium level	21-27	65	54.17
High level	28-34	30	25.00
Total		120	100.00

Table-3 reveals that majority of the respondents (54.17%) fell in the medium knowledge level group, whereas (25.00%) per cent respondents were observed in the high knowledge level group and remaining (20.83%) percent respondents formed low knowledge level group. It is concluded that majority of farmers were having medium knowledge level followed by high and low knowledge level respectively. The similar results were also observed by

Singh (2003) [7].

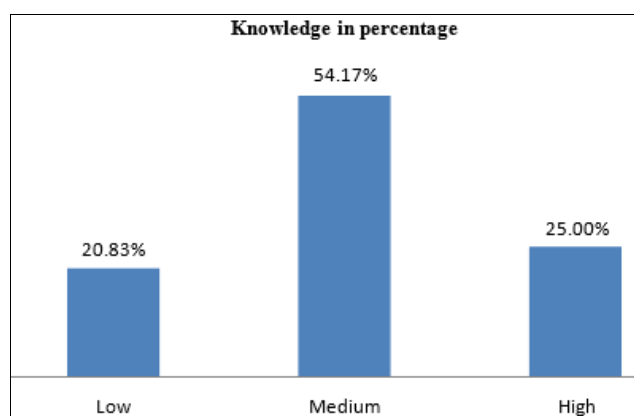


Fig 1: Table3 Knowledge in percentage of respondents

Table 4: Relationship between the selected independent variables with knowledge of farmers towards improved ground nut production technology. (N=120).

Sr. No.	Variables	Correlation coefficient ('r' value)
1.	Age	0.9884713*
2.	Education	0.91766294*
3.	Size of Landholding	0.32231732*
4.	Annual income	0.0134255NS
5.	Mass media exposure	0.9011271*
6.	Extension contacts	0.75124363*
7.	Economic motivation	0.9994664*
*	=	Significant at 0.05 level of probability.
**	=	Significant at 0.01 level of probability.
NS	=	Non Significant.

Table-4 indicated that out of seven independent variables, six variables are i.e. age, education, size of landholding, mass media exposure, extension contacts, economic motivation positively and significantly correlated with knowledge of farmers towards improved ground nut

production practices whereas the independent variable annual income of the respondents was availed negatively and non-significantly correlated with knowledge of farmers towards improved wheat production practices.

Conclusion

It was concluded that the socio-economic profile of the sample group were medium level. It was evident that the knowledge of farmers towards improved ground nut production technology were found medium level. The factors influencing in knowledge of farmers towards improved ground nut production technology are age, education, size of land holdings, mass media exposure, extension contacts, and economic motivation. Farmers should be trained by the Agriculture Scientists for seed treatment and timely availability of chemical specially culture should be ensured either by the Agriculture University or State Department of Agriculture. A regular mass media support at the appropriate time in the form of radio talks, television programmes and technical articles in the newspaper, magazines etc. should be ensured for equipping the farmers with latest ground nut production technologies.

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