

KNOWLEDGE OF THE FARMERS TOWARDS THE RECOMMENDED GROUNDNUT PRODUCTION PRACTICES IN UNNAO DISTRICT OF UTTAR PRADESH

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ABSTRACT

The study was conducted in Unnao District of Uttar Pradesh to measure the knowledge of farmers towards recommended groundnut production practices. A total number of 120 respondents were selected purposively from six villages under Fatehpur Chaurasi block to measure the level of knowledge towards recommended groundnut production practices. The data were collected by personnel interview method by using pre structured interview schedule and later appropriate statistical analysis was done to draw logical conclusion. The study revealed that majority 40 per cent of the respondents belonged to the middle aged group and most of the respondents belong to medium level size of land holding i.e 2.5-5 acre. It was found that respondents belong to 30.83 per cent of education i.e Illiterate. The finding also revealed that 39.17 per cent of the respondents had medium level of knowledge towards recommended groundnut production technology practices measure followed by 25.83 per cent and 35.00 per cent of the respondents with low and high level of knowledge respectively. Age, Education, Annual Income, Land holding, Extension contact, Social participation, Mass media exposure, source of information, scientific orientation and Risk bearing capacity were positively and significantly correlated with knowledge of groundnut growers towards improved groundnut production practices at 0.01% of probability.

KEYWORDS: Knowledge, Recommended Groundnut Production Practices

Article History

Received: 21 Apr 2022 | Revised: 22 Apr 2022 | Accepted: 26 Apr 2022

INTRODUCTION

Groundnut is popularly known as 'king of oilseeds', 'wonder nut' and 'poor man's cashew'. They are excellent plant based source of protein and high in various vitamins, minerals and plant compounds. It contains 25.2 per cent of protein, 48.2 per cent of oil, 11.5 per cent of starch, 4.5 per cent of soluble sugar, 2.1 per cent of crude fibre and 6.0 per cent of moisture. India is the second largest groundnut producer in the world. India shares 22 per cent of groundnut production in the world. Area under groundnut cultivation in India is 7 million ha. Production and productivity of groundnut is 8.5 million tonnes and 1.2 million tonnes/ha respectively. The cultivated groundnut or peanut (*Arachis hypogaea* L.) originated in south America. The term Arachis derived from the Greek word "arachos", meaning a weed, and hypogaea, meaning underground chamber, i.e. in botanical term, a weed with fruits produced below the soil surface. (Elakkia *et al.* 2021)

The peanut, also known as the groundnut, goober, pindar or monkey nut, earthnut, and taxonomically classified as *Arachis hypogaea*, is a legume crop grown mainly for its edible seeds. It is widely grown in the tropics and subtropics, being important to both small and large commercial producers. Peanuts grow best in light, sandy loam soil with

a pH of 5.9–7. China ranks first in groundnut production with 17.39 million tonnes. Groundnut is a major oilseed crop that has achieved tremendous popularity in the country. India is the world's leading producer of groundnut with 25.00 per cent share in the production. In Andhra Pradesh, the area covered under oilseeds was 12.29 lakh hectares covering 16.57 per cent of the total cropped area, while the groundnut crop alone covered an area of 82.39 per cent of the total area under oil seeds. Comparatively the state of Uttar Pradesh stands 8th in all the area production and productivity. Within the state Groundnut comprised 8.55 per cent of the total area under five major edible oilseeds.

The minimum support price (MSP) of groundnut has also increased by 32 per cent i.e. from Rs. 4000 (2013-14) to Rs. 5275 (2020-21) as reported by **GOI (2020)**. India, being an agrarian country is home to 650 million farmers including their families which amount to 50 per cent of country's population.

RESEARCH METHODOLOGY

Descriptive research design was adopted for the study as it describes the characteristics or phenomena that are being studied. The present study was conducted in Unnao district of Uttar Pradesh. Out of 16 blocks in Unnao district, Fatehpur chaurasi block is selected purposively based on maximum area covered under groundnut production. From the selected block, six villages were selected purposively based on the maximum area covered under Groundnut production.

OBJECTIVES OF THE STUDY

- To assess the socio-economic profile of the respondents.
- To find out the knowledge of the respondents toward recommended Groundnut production practices.

RESULTS AND DISCUSSIONS

Table 1, It shows that 40.00 per cent of the respondents belong to the middle age group. Find out that 30.83 per cent of the respondents has Illiterate. In terms of annual income 53.30 per cent of the respondents has medium level of income in which 48.33 per cent had land holding of 2.5-5 acre. Find out that 57.50 per cent of the respondents has working only agriculture and 38.33 per cent of the respondents has small family. It is also evident that 45.00 per cent of the respondents medium level of extension agent contact. It is evident that 59.20 per cent of the respondents has medium level of social participation and 45.00 per cent of the respondents medium level of mass media exposure. It is seen that term of source of information 41.67 per cent of the respondents had belong to medium level, 45.00 per cent of the respondents had medium level of risk bearing capacity and finally Scientific orientation medium level which is 37.50 per cent, Similar finding is also reported by (**Bagheril and Shabanali 2016**).

Table 2, Shows that a majority of the respondents 39.17 per cent has medium level of knowledge about groundnut production technology. 45.00 per cent of the respondents were partially corrected about improved variety. 40.00 per cent of the respondent was partially corrected about seed rate. 52.50 per cent of the respondents were partially corrected about seed and its treatment. 45.00 per cent of the respondents were fully corrected about Sources of seed material. 40.00 per cent of the respondents were fully corrected about method of sowing. 37.50 per cent of the respondents were partially corrected about spacing. 40.00 per cent of the respondents were partially corrected about fertilizers. 43.33 per cent of the respondents were partially corrected about method of irrigation. 40.00 per cent of the respondents were fully corrected about time of irrigation. 39.17 per cent of the respondents were partially corrected about plant protection measure. 43.33 per cent of the respondents were partially corrected about yield of groundnut. 42.50 per cent of the respondents were fully corrected about information about market price. The Similar finding is also reported by **Shasani et al. (2020)**

Table 3, Reveals that 39.17 per cent of the respondents had medium level of knowledge about recommended groundnut production practices. Considerable percentage of respondents was found having high 35.00 per cent and low level of knowledge 25.83 per cent respectively. The similar finding were also reported by **Jaganathan *et al.* (2012)**

Table 4 concluded that the independent variables i.e. Age, Education, Annual Income, Land holding, Extension contact, Social participation, Mass media exposure, source of information, scientific orientation and Risk bearing capacity were positively and significantly correlated with knowledge of groundnut growers towards improved groundnut production practices at 0.01% of probability. Whereas the independent variable Occupation and family size was negatively and significantly correlated with the knowledge of groundnut grower towards improved groundnut production practices at 0.05 % of probability. Therefore, the null hypothesis was rejected for these variable.

Table 1: Socio-Economic Profile of the Respondents

Sl. No.	Independent Variables	Category	Frequency	Percentage
1.	Age	Young (Up to 35 years)	31	25.80
		Middle(36-55 years)	48	40.00
		Old (above 55 years)	41	34.20
2.	Education	Illiterate	37	30.83
		Primary	11	9.17
		Middle school	21	17.50
		High school	19	15.83
		Intermediate	24	20
		Graduate & above	10	6.67
3.	Occupation	Agriculture	69	57.50
		Agriculture + Labour	21	17.50
		Agriculture + Business	18	15.00
		Agriculture + Service	12	10.00
4.	Annual income	Low(Below Rs 60000)	30	25.00
		Medium(Rs 60,000- Rs1,20,000)	64	53.30
		High(Above Rs 1,20,000)	26	21.70
5.	Family size	Small	46	38.33
		Medium	43	35.84
		Large	31	25.83
6.	Size of land holding	Below 2.5 acre	32	26.67
		2.5- 5 acre	58	48.33
		>5 acre	30	25.00
7.	Extension contact	Low (10-15)	33	27.50
		Medium (16-20)	54	45.00
		High (21-25)	33	27.50
8.	Mass media Participation	Low (7-10)	21	17.50
		Medium (11-13)	54	45.00
		High (14-16)	45	37.50
9.	Social participation	Low (9-12)	24	20.00
		Medium (13-15)	71	59.20
		High (16-18)	25	20.80
10.	Source of information	Low (12-17)	26	21.67
		Medium (18-22)	50	41.67
		High (23-27)	44	36.66
11.	Risk bearing capacity	Low (6-9)	33	27.50
		Medium (10-12)	54	45.00
		High (13-15)	33	27.50
12.	Scientific Orientation	Low (7-10)	32	26.70
		Medium (11-13)	45	37.50
		High (14-16)	43	35.80

Table 2: Distribution of Respondents According to their Knowledge Level (n=120)

Sl. No.	Statement	Recommended Practices	Knowledge level					
			Incorrect		Partially Correct		Fully Correct	
			f	%	F	%	F	%
1	Different variety of Groundnut: T-28 Chandra		34	28.33	54	45.00	32	26.67
2	Seed rate of the Groundnut	<ul style="list-style-type: none"> Bunch type- 100-120kg/ha. Spreading type- 80-100kg/ha. 	37	30.83	48	40	35	29.17
3	Treatment of seed	<ul style="list-style-type: none"> Thiram or captain 	27	22.50	63	52.50	30	25.00
4	Sources of seed material	<ul style="list-style-type: none"> Private shop Government center 	32	26.67	34	28.33	54	45.00
5	Method of showing	<ul style="list-style-type: none"> Hand dibbling Behind desi plough. 	35	29.17	37	30.83	48	40.00
6	Row to row and plant to plant distance	<ul style="list-style-type: none"> Bunch type- 60x20 cm Spreading type- 45x15cm 	40	33.33	45	37.50	35	29.17
7	fertilizer management & organic manure requirement	<ul style="list-style-type: none"> FYM=10-15t/ha N:P:K=25:60:60 kg /ha 	35	29.17	48	40.00	37	30.83
8	Irrigation methods of groundnut	<ul style="list-style-type: none"> Surface irrigation Check basin 	30	25.00	52	43.33	38	31.67
9	Irrigation times of groundnut		37	30.83	35	29.17	48	40.00
10	Plant protection Measures (Disease/Pest)	Diseases <ul style="list-style-type: none"> Leaf spot Pest White grub Aphids 	27	22.50	47	39.17	46	38.33
11	Yield of groundnut	<ul style="list-style-type: none"> Bunch type-15-20q/ha. Spreading type-20-30q/ha. 	21	17.50	52	43.33	47	39.17
12	Information about market price	Depend on the groundnut quality.	19	15.83	50	41.67	51	42.50

Table 3: Distribution of Respondents According to their Overall Knowledge level (n=120)

S. No.	Knowledge Level	Frequency	Percentage
1	Low (14-21)	31	25.83
2	Medium (22-28)	47	39.17
3	High (29-35)	42	35.00
	Total	120	100.00

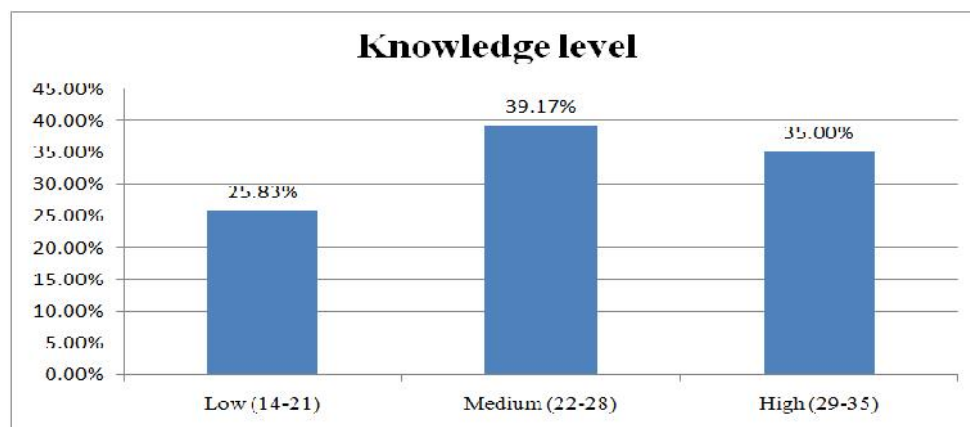
**Figure 1: Distribution of Respondents Based on their Overall Knowledge of Recommended Groundnut Production Technology.**

Table 4: Association between Selected Independent Variables with Knowledge

Sl. No.	Variable	Regression Co-Efficient
1	Age	0.994*
2	Educational level	0.545*
3	Occupation	-0.991*
4	Annual income	0.672*
5	Family size	-0.392*
6	Land holding	0.696*
7	Extension contact	0.740*
8	Social participation	0.753*
9	Mass media exposure	0.990*
10	Source of information	0.997*
11	Scientific orientation	0.986*
12	Risk bearing capacity	0.740*

*- significant

CONCLUSIONS

It is concluded that most of the respondents was middle age group and their educational level is also medium. Most of the respondents possessed middle level of risk bearing capacity. The respondents were mostly medium level as their source of information to get the information on recommended groundnut production technology. Majority of the occupation of the respondents is agriculture. Majority of the annual income of the respondents was medium level and most of the extension agent contact of the respondents is medium level. The overall knowledge of the respondents was found under medium level. The independent variable age, education, annual Income, land holding, extension contact, Social participation, mass media exposure, source of information and risk bearing capacity were positively and significantly correlated with knowledge of respondents towards recommended groundnut production practices.

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