

KNOWLEDGE OF FARMERS TOWARDS IMPROVED CHILLI CULTIVATION PRACTICES IN GUNTUR DISTRICT OF ANDHRA PRADESH

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ABSTRACT

The study was conducted in Guntur District of Andhra Pradesh during the year 2022. The main purpose of this study is to measure the Knowledge of Chilli growers in Guntur District of Andhra Pradesh. A total 120 respondents were selected randomly from six villages under Amaravati block because most of the respondents were chilli growers. Descriptive research design was adopted for the study and data were collected by personal interview method by using pre structured interview schedule. The findings of the study revealed that age, farming occupation, family size, land holding, annual income, farming experience, mass media exposure, social participation, extension contact of the respondents were found under medium level; majority of the respondents were having low level of education. The findings also revealed that majority (55.83%) of chilli growers had medium level of knowledge on improved chilli cultivation practices, 10.00 per cent and 34.17 per cent of the chilli growers had low and high level of knowledge respectively. It was found that independent variables like age, family size, land holding, annual income, farming experience, mass media exposure, social participation, extension contacts were positively and significantly correlated with knowledge of chilli growers at 0.01 per cent of probability.

KEYWORDS: Knowledge, Chilli Growers

Article History

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INTRODUCTION

Chilli (*capsicum annum L.*) is one of the most important commercial vegetables cum spice crop grown almost in all parts of temperate, tropical and sub tropical regions of the world. There are more than 400 different varieties of chillies found all over the world. It is also called as hot pepper, cayenne pepper, sweet pepper, bell pepper etc. Its botanical name is "Capsicum annum" and it belongs to the family Solanaceae. Chilli occupies an important place in human diet. Among the spices consumed per head, dried chilli fruits constitute a major share currently; chillies are used throughout the world as a spice and also in the making of beverages and medicines. In world chilli is raised over an area of 2020 thousand ha with a production of 3762 thousand tones. In Asia, India is the world leader delete of chilli production followed by china, Thailand, and Pakistan. Most of the chilli grows in India, China, Ethiopia, Myanmar, Mexico, Vietnam, Peru, Pakistan, Ghana and Bangladesh. The above countries produce 85 per cent of red chilli at total production of the chilli all over the world.

In India, chilli is grown over an area of 774.9 thousand ha with total production of 1492.10 thousand tonnes. Andhra Pradesh is the largest producer of chilli in India and contributes 26 per cent of the total area under chilli followed by Maharashtra 15 per cent, Karnataka 11 per cent, Orissa 11 per cent and Madhya Pradesh 7 per cent. The remaining states contributed 22 per cent of the total area under chillies. Indian chillies are considered to be world famous for two important commercial qualities viz., colour and pungency (**Peer et al., 2020**).

Andhra Pradesh stands first in the list of major chilli producing states in India and also has the maximum acreage under chilli cultivation in the country. It alone commands 57.80 per cent of the chilli production in India, with a production of around 7.7 lakh tones of chilli, followed by Karnataka 12.40 per cent, Odisha 4.82 per cent, West Bengal 4.80 per cent, Maharashtra 3.55 per cent, Gujarat 3.53 per cent, and Tamil Nadu 3.22 per cent. The major chilli producing states in India namely, Andhra Pradesh, Karnataka, Odisha, West Bengal, Maharashtra, Gujarat and Tamil Nadu contribute around 83 per cent of the total area under chilli crop cultivation in the country and 90 per cent of the total Indian produce. (**Velayutham, 2015**).

In India during 2019-20, Andhra Pradesh tops the list in dry chilli production of 66.66 lakh tones covered under 1.43lakh ha with 4657kg /ha productivity followed by Telangana, Madhya Pradesh, Karnataka, and West Bengal. Guntur chilli yard being the largest chilli market in Asia influences the domestic and international prices of chillies. Guntur district in Andhra Pradesh produces 15 per cent of all the chillies produced in India and the state of Andhra Pradesh as a whole contributes 38 per cent of India's chilli production. There are more than 400 different varieties found all over world. The major chilli growing districts in Andhra Pradesh are Guntur, Prakasam, Kurnool, and Krishna. Teja, Byadgi, DD Best, 341,273,334 etc. are reported as premium varieties and preferred by exporters (**source India stat, 2020**).

RESEARCH METHODOLOGY

A 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 Guntur district of Andhra Pradesh. Out of 57 blocks in Guntur district, Amaravati block is selected purposively based on the maximum area under chilli cultivation. From the selected block, six villages were selected purposively based on the maximum area and production under chilli cultivation. Twenty respondents from six villages were identified through a purposive sampling technique which constituted a total number of 120 respondents. The information was elicited from the respondents with the help of structured interview schedule. Pen, pencil, camera was also used during the data collection. The primary data was collected with the help of personal interview schedule with specially focused objectives for the study. Secondary data was collected from library, journals, books, papers and other materials related to study. The entire data were transformed into score for tabulation. To interpret the results and to show the relationship between independent and dependent variables, Mean, Standard Deviation, Frequency, Percentage, Correlation Coefficient was followed.

Objectives of the Study

- To ascertain the socio-economic profile of the respondents.
- To ascertain the knowledge of the respondents in chilli cultivation.

RESULTS AND DISCUSSIONS

Table 1: Socio-Economic Profile of the Respondents

SI. No	Independent Variables	Category	Frequency	Percentage
1.	Age	Young (Up to 35 years)	32	26.67
		Middle (36-55 years)	64	53.33
		Old (above 55 years)	24	20.00
2.	Education	Illiterate	67	55.83
		Literate	9	7.5
		Primary Education	11	9.17
		Middle Education	14	11.67
		High Education	10	8.33
3	Occupation	Graduate & above	9	7.5
		Agriculture alone	69	57.5
		Agriculture + Labour	41	34.1
		Agriculture + Business	10	8.33
4	Land holding	Small (Up to 2 hac)	47	39.17
		Medium (2 to 3 hac)	49	40.83
		Large (More than 5 hac)	24	20.00
5	Family size	Small	32	26.67
		Medium	68	56.67
		Large	20	16.66
6	Annual income	Low (< 50,000 Rs)	46	38.33
		Medium (50,001- 1,00,000 Rs)	53	44.16
		High (> 1,00,000 Rs)	21	17.50
7	Farming experience	Low (5-7)	36	30.00
		Medium (8-9)	52	43.33
		High (10-11)	32	26.67
8	Mass media exposure	Low (5-8)	34	28.33
		Medium (9-11)	57	47.50
		High (12-14)	29	24.16
9	Social participation	Low (10-14)	38	31.66
		Medium (15-18)	56	46.67
		High (19-22)	26	21.66
10	Extension contact	Low (5-7)	36	30.00
		Medium (8-9)	64	53.33
		High (10-11)	20	16.67

From the Table 1, it is shown that Majority (53.33%) of the respondents belonged to the middle age group. Nearly two-third (57.5%) of the chilli growers were doing agriculture alone as their occupation. About 40.83 per cent had land holding of 2 ha to 5 ha. It is evident that majority (56.67%) of the respondents were under medium family size. It is also evident that 43.33 per cent of the respondents had medium level of farming experience, it is seen that in terms of mass media exposure, 47.50 per cent of the respondents possessed a medium level of mass media exposure. About 46.67 per cent of the respondents had medium level of social participation. Lastly 53.33 per cent of the respondents had medium level of extension contact.

Table 2: Knowledge of the Respondents towards Improved Chilli Growers

SI. NO	Statement	Knowledge level					
		Fully Correct		Partially Correct		Not Correct	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1.	Time is suitable for chilli cultivation	14	11.66	68	56.67	38	31.67
2.	Chilli varieties recommended	16	13.33	79	65.84	25	20.84
3.	The plant spacing	17	14.17	73	60.83	30	25.00
4.	Amount of FYM application needed for 1 ha	14	11.66	68	56.67	38	31.67
5.	Name any green manure	82	68.33	24	20.00	14	11.67
6.	The recommended dose for application of N:P:K	27	22.50	67	55.83	26	21.67
7.	IPM for damping off disease of chilli	20	16.67	45	37.50	55	45.83
8.	IPM for fruit rot of chilli	27	22.50	56	46.67	37	30.83

The above table, Table 2 shows that majority of the respondents (56.67%) were partially aware about time suitable for chilli cultivation, (65.83%) of the respondents were partially aware about recommended chilli varieties and (60.83%) of the respondents were partially aware about the plant spacing. About (56.67%) were partially aware of amount of FYM application and (68.33%) of the respondents were fully aware of green manure; also (55.83%) of the respondents were partially aware of the recommended dose for application of N:P:K. About 45.83 per cent of the respondents were not aware of IPM for damping off disease of chilli. About 46.67 per cent of the respondents were partially aware of IPM for fruit rot of chilli.

Table 3: Distribution of the Respondents According to their Overall Knowledge

SI. NO	Category	Frequency	Percentage
1.	Low (19-27)	18	10.00
2.	Medium (28-35)	64	55.83
3.	High (36-43)	38	34.17
	Total	120	100.00

The table 3 reveals that (55.83%) of the respondents had medium level of knowledge on improved chilli cultivation practices. Considerable percentages of chilli growers were found having high 34.17 per cent and low level of knowledge 10.00 per cent on improved chilli cultivation practices respectively.

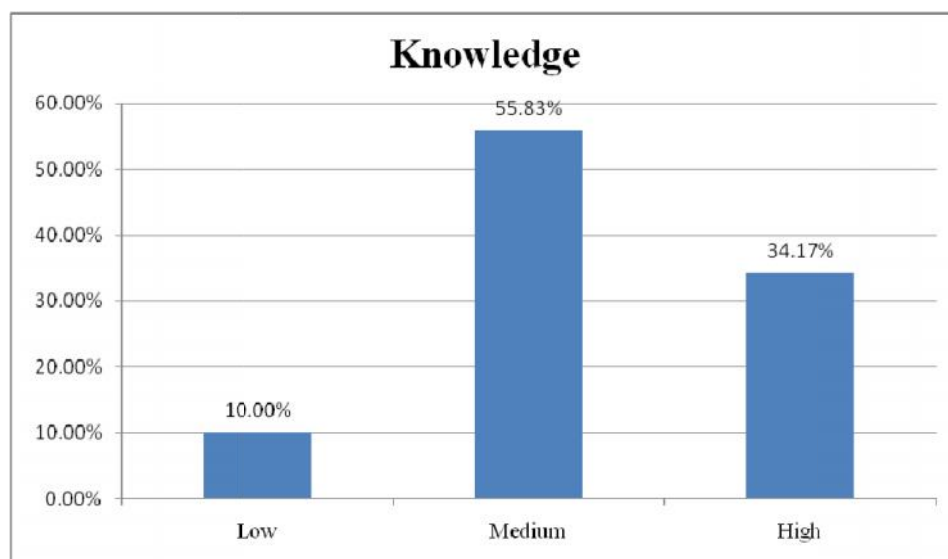
**Figure 1: Distribution of the Respondents based on their Overall Knowledge of Improved Chilli Cultivation Practices.**

Table 4: Relationship between the Selected Independent Variables with Knowledge of Respondents towards Chilli Cultivation Practices were Depicted Below

Sl. No	Variables	Correlation coefficient
1	Age	0.802*
2	Education	-0.323*
3	Occupation	-0.406*
4	Family size	0.770*
5	Land holding	0.146*
6	Annual income	0.280*
7	Farming experience	0.802*
8	Mass media exposure	0.815*
9	Social participation	0.654*
10	Extension contact	0.685*

*= Correlation is significant at the level of 0.01% probability

From the Table 4, it was concluded that the independent variables i.e. Age, family size, land holding, annual income, farming experience, mass media exposure, social participation, extension contacts were positively and significantly correlated with knowledge of chilli growers. Whereas the variable education and occupation were negatively and significantly correlated with knowledge of chilli growers respectively.

CONCLUSION

It is concluded that the age of the majority of the respondents were middle and their educational status is low. Majority of the respondents were engaged in farming occupation and having medium level of family size. Most of the respondents were under medium level of land holding, it also proved that the majority of the respondents were found under medium level annual income. Majority of the respondents have medium level of farming experience and most of the respondents having medium level of mass media exposure and most of the respondents were under medium level of social participation. Majority of the respondents belongs to medium level of extension contact. It was found that most of the respondents had medium level of knowledge about improved chilli cultivation practices. It was found that the independent variables like age, family size, land holding, annual income, farming experience, mass media exposure, social participation, extension contacts were positively and significantly correlated with knowledge of chilli growers at 0.01 per cent probability. It is suggested that studies on knowledge of the farmers on recommended package of practices of practices should be conducted. Hence, the government should provide awareness and should conduct demonstrations regarding their problems.

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