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KNOWLEDGE OF FARMERS TOWARDS URD CROP PRODUCTION TECHNOLOGY IN MIRZAPUR DISTRICT OF UTTAR PRADESH

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ABSTRACT

The study was conducted in Mirzapur District of Uttar Pradesh to measure the knowledge of farmers towards improved Urd crop production technology in Mirzapur district of Uttar Pradesh. A total number of 120 respondents were selected randomly from three villages under Sikhadwas block because the productivity, production and area were found maximum. 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 (53.33%) of the respondents belonged to the middle aged group and most of the respondents belong to marginal level of land holding i.e less than 1 hac. It was found that respondents belong to 40.83 per cent of education i.e graduate. The finding also revealed that 72.50 per cent of the respondents had medium level of knowledge towards improved Urd crop production practice measure followed by 17.50% and 10 % of the respondents with low and high level of knowledge respectively.

KEYWORDS: *Knowledge, Extension Participation Production Technology, Income*

INTRODUCTION

The importance of agriculture in the socio-economic fabric of India can be realized from the fact that the livelihood of majority of the country population depends on agriculture. The agriculture sector contributing 19 % of the total Gross Domestic Product (GDP) with more than 58% population dependence.

Pulses belong to one of the largest family *fabaceae*. These are unique crops in having an inbuilt capacity for fixing atmospheric nitrogen. Thus these crops meet their own nitrogen requirement to a great extent. They also leave nitrogen in the soil that enrich the soil and become available to the succeeding crop. Besides, by opening up of the soil by their deep root system and due to their plant type and varying maturity duration, the pulse ideally fit in the intercropping, relay cropping and multiple cropping systems of our agriculture. Pulses are main source of protein in the Indian vegetarian diet. India is a major pulse growing country in the world. In recent years considerable emphasis has been laid on the improvement of the yield levels of pulse crop by placing them in the list of national priorities.

In India, the area, production and productivity of pulses were 25.23 million hectares , 19.27 million tons and 764 kg per hectare, respectively during 2013-2014. The area under pulses has increased from 19 million ha. In1950-51 to 25.23 million ha. In 2013-2014 However, the per capita daily availability of pulses has come down significantly from 51.1 gram

per day in 1971 to about 41.9 gram in 2013-2014 as against WHO recommendation of 80 gram per day. Mainly due to stagnation in the production of pulses over the last three decades. In general, pulses give lower yield than cereals. This led to the assumption that pulses may have a lower genetic potential for yield than cereals. However, available evidences show that grain legumes have as high or-even higher genetic potential for yield as the cereal crops. **(DAC & FW, 2013-14).**

This crop is itself a mini-fertilizer factory, as it has unique characteristics of maintaining and restoring soil fertility through fixing atmospheric nitrogen in symbiotic association with *rhizobium* bacteria, present in the root nodules. Crop is suitable for inter cropping with different crops such as cotton, sorghum, pearl millet, green gram, maize, soybean, groundnut, for increasing production and maintaining soil fertility. It is extensively grown under varying climatic conditions and soil types in India. It is also cultivated in many tropical and sub-tropical countries of Asia, Africa and Central America, although, India, Pakistan, Bangladesh, Burma and Sri Lanka are the principal countries contributing to the world production. The black gram in India is mainly grown in the states of Madhya Pradesh, Uttar Pradesh, Bihar, Punjab, Maharashtra, West Bengal and Tamil Nadu. Black gram is mostly grown as a rain fed crop during summers in Northern India and in winters in Peninsular and Southern India. With increase in irrigation potential, the area under black gram cultivation has registered an increase in recent years. During 2013-14, Urd bean accounted for an area of 3.19 million hectare, production 1.7 million tonnes and average productivity 596 kg per hectare. The production of pulses, in general and black gram in particular, has not been able to keep pace with the rapid increase in demand by ever increasing population. This has resulted in decreasing trends of their per capita availability (40 gm/capita day during 1987). **(Farmer.gov.in)**.

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 Mirzapur district of Uttar Pradesh. Out of 12 blocks in Mirzapur district, Sikhadwas block is selected randomly based on maximum area covered under Urd production. From the selected block, three villages were selected randomly based on the maximum area covered under Urd production

OBJECTIVES OF THE STUDY

- To assess the socio-economic profile of the respondents.

- To find out the knowledge of the respondents toward Urd crop production technology practices.

RESULTS AND DISCUSSION

Table 1: Socio-Economic Profile of the Respondents

S. No	Independent Variables	Category	Frequency	Percentage
1.	Age	Young (Upto 35 years)	29	24.17
		Middle (36-46 years)	64	53.33
		Old (above 55 years)	27	22.5
2.	Education	Illiterate	0	0
		Primary	5	4.17
		Middle	11	9.17
		High school	24	20.00
		Intermediate	31	25.83
		Graduation	49	40.83
3	Occupation	Only Farming	51	42.5
		Farming and service	19	15.83
		Farming and business	50	41.67
4	Land holding	Less than 1 hac	52	43.33
		1 to 2 hac	43	35.83
		More than 2 hac	25	20.84
5	Caste	General	39	32.51
		OBC	62	51.66
		SC/ST	19	15.83
6	Annual income	Low	6	5.0
		Medium	105	87.5
		High	9	7.5
7	Extension participation	Low (0.68)	15	12.5
		Medium (0.68 to 1.32)	73	60.84
		High (1.32)	32	26.66
8	Mass media exposure	Low (5.30)	23	19.16
		Medium (5.30 to 7.00)	61	50.84
		High (7.00)	36	30.00

From the table 1, It shows that 53.33 per cent of the respondents belong to the middle age group. Find out that 40.83 per cent of the respondents has graduate. In terms of annual income 87.50 per cent of the respondents has medium level of income in which 43.33 per cent had land holding of less than 1 hac . Find out that 65.00 per cent of the respondents has working only agriculture and 42.50 per cent of the respondents has small family. It is also evident that 60.84 per cent of the respondents medium level of extension participation and 50.84 per cent of the respondents medium level of mass media exposure. Similar finding is also reported by **Chandawat** *et al.* **(2014)**

Table 2: Knowledge of the Respondents towards Improved URD Crop Production Technology

Sl. No.	Particular	Frequency	Percentage
1	Recommended Varieties	88	73.33
2	Soil and its prepation	120	100
3	Planting material	120	100
4	Spacing	85	70.83
5	Sowing time	120	100
6	FYM	115	95.83
7	N.P.K	98	81.66
8	Cultural practices	120	100
9	Water management	120	100

Table 2 Contd

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	Diseases		
10	Major insect of urd	120	100
	Control measure as recommended	71	59.16
11	**Insect pest**		
	Major insect pest of urd	120	100
	Control measure as recommended	74	61.66

The data in Table 2 revealed that 73.33 percent of the respondent had knowledge about recommended varieties viz. Azad-1, Pant U-1, Punt Urd-35, type-1. Regarding soil preparation cent percent of the respondent had correct knowledge about soil type.

Cent percent of the respondent had correct knowledge of planting material, and 70.83 percent of respondent had knowledge of recommended spacing. Cent percent of the respondent had correct knowledge about right time of sowing. In case of recommended manure application, 95.83 percent of the respondent had correct knowledge of FYM while 81.66 percent had correct knowledge of chemical fertilizer application. Cent percent of the respondent had correct knowledge of cultural practices, and about method of irrigation and time of irrigation. About 48.33 percent of the respondent had knowledge of disease and 59.16 percent had knowledge of recommended control measure practices, while 53.33 percent had knowledge of insect pest and 61.66 percent had knowledge regarding control measure practices. Cent percent of the respondents had knowledge about harvesting of Urd and its production Similar finding is also reported by **Saritha *et al.* (2012)**

**Table 3: Distribution of Respondents according to their
Overall Knowledge Level**

S. No.	Category	Number	Percentage
1.	Low level knowledge	21	17.50
2.	Medium level knowledge	87	72.50
3.	High level knowledge	12	10.00
	Total	120	100.00

The analysis of the data in table 3 revealed that majority of (72.5%) of the respondent had medium level of knowledge fallowed by low level (17.50%) knowledge and (10.00%) of high level of knowledge. The similar finding were also reported by **Karangami (2017).**
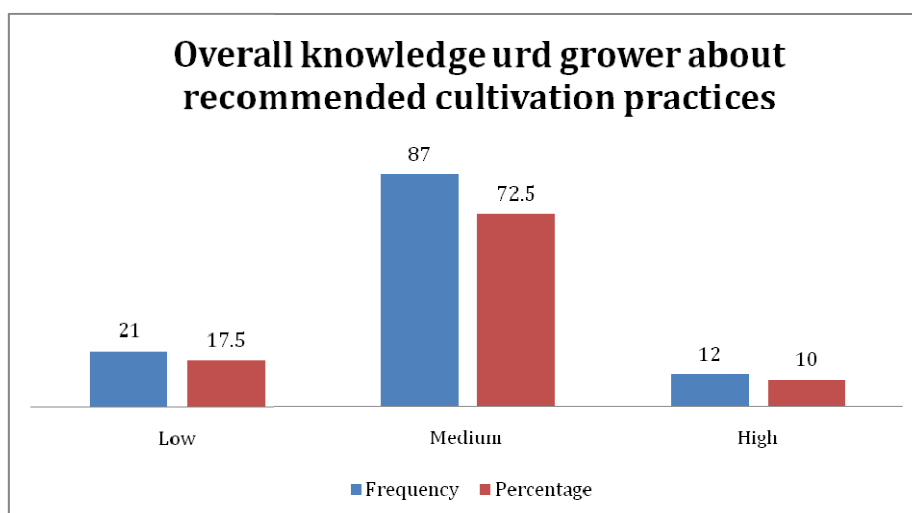
**Figure 1: Distribution of Respondents based on their Overall Knowledge towards Improved
Urd Crop Production Technology.**

CONCLUSION

It is concluded that the age of the majority of the respondents was middle and their educational level is also medium. Majority of the respondents possessed medium level of extension participation. The respondents were mostly utilizing medium level mass media exposure on Urd production. Most of the occupation of the respondents is agriculture. Majority of the annual income of the respondents was medium level. The overall knowledge of the respondents was found under medium level It is suggested that the government should provide awareness and should conduct demonstrations regarding the above related problems.

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