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ADOPTION OF POST HARVEST MANAGEMENT PRACTICES AMONG ONION GROWERS IN GHAZIPUR DISTRICT OF UTTAR PRADESH

Ruchi Singh[1]; Prof (Dr.) Jahanara[2]; Satyabrata Mohanty[3]
M.Sc. Scholar[1], iruchi596@gmail.com
Department of Agricultural Extension & Communication
Sam Higginbottom University of Agriculture, Technology & Sciences, Prayagraj

Abstract: Post-harvest management has the potential to create rural industries in developing countries like India, where 70 per cent of the people live in villages and 65 per cent of them depend on agriculture. Onion being of semi-perishable nature i.e. low storage life, it's marketing and storage has great significance for obtaining higher net returns. The present study was conducted during 2019-20 in purposively selected area Ghazipur district covering 06 villages and a sample of 120 onion growers were selected through proportionate random sampling method. The study revealed the association between the socio-economic characters with that of the adoption behaviour towards improved production practices.

Keywords: SES, Innovativeness, Extension contact, Mass Media exposure, Adoption and Postharvest management

INTRODUCTION

The importance of post-harvest management is that it has the capability to meet food requirements of a growing population by eliminating losses, making more nutritive food items from raw commodities, i.e., fruits and vegetables, and by proper processing and fortification. Post-harvest management has the potential to create rural industries in developing countries like India, where 70 per cent of the people live in villages and 65 per cent of them depend on agriculture. Onion being of semi-perishable nature i.e. low storage life, it's marketing and storage has great significance for obtaining higher net returns. The demand for onion is inelastic. If production is less than requirement, the prices shoot up but if the production is in excess of demand, very low prices are established. The tremendous fluctuation in prices of onion in market are due to varying production level of onion, it's semi perishable nature, export-import policy of government etc. Storage is one of the most important aspects of the post-harvest handling of fruits and vegetables. A substantial quantity of fruits and vegetables go waste in our country due to lack of proper storage. The primary purpose of storage is to control the rate of transpiration, respiration, ripening and also any undesirable biochemical changes or disease infection. The quality and safety of onions depends on proper handling and storage.

MATERIALS AND METHODS

The present study was conducted in Ghazipur district of Uttar Pradesh state which is purposively selected based on research objectivity and criteria of sampling concerning adoption behaviour of post-harvest management practices of onion growers. In Sadar block of Ghazipur, 6 villages were selected randomly for the present study. Total 120 number of respondents were selected from each selected village for the present study. The primary data was collected with the help of pre-tested- structured interview schedule, designed especially in the light of objectives, whereas secondary data was collected from sources like thesis, journals, literature etc.
Percentage analysis were done to analyse the data. And ranking was done according to results obtained.

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Percentage: The term 'Percentage' means a fraction whose denominator is 100 and the number of the fraction is called percentage.

$$P = \frac{X}{N} \times 100$$

Where, P = Percentage X = Frequencies of respondents N = Total number of respondents.

RESULTS AND DISCUSSION

In the table below, the data reveals that the majority (49.17 %) of the farmers belonged to middle age group and 21.66 per cent were of old age and 21.66 per cent belonged to young age. In education, about 30.83 per cent of the respondents were illiterate and 15 per cent of the respondents had primary school level of education and 35 per cent respondents had secondary school education whereas 11.67 per cent had up to high school followed by 6.67 per cent of respondents having intermediate level of education and 0.83 per cent respondents were graduate and above education respectively. 74.17% of the respondents are practicing farming (agriculture) as their major occupation followed by farming and subsidiary 10% respectively. 54.16 percent of the respondents are coming to the category range of 1 lac- 2.5 lac followed by income of 2.5lac-5 lac (24.17%) followed by above 5 lac (12.50%) and 9.17 percent of the respondents have annual income below 1 lac. The above table shows that 60per cent of the respondents are in Nuclear family, followed by the joint family (40%) respectively.14.17 percent of respondents had thatched house whereas 48.33 percent respondents had semi-cemented house and remaining 37.50 percent had cemented house. The data regarding land holdings indicated that the majority (34.17%) of respondents belonged to the category of large farmers followed by 33.33 per cent of respondents belongs to medium farmers. While, only 22.50 & 1 per cent of respondents belongs to the category of small & marginal farmers. Majority(81.67%) of the respondents were having low level extension contact, 11.67 per cent had medium, whereas 6.66 per cent of the respondents were found with high extension contact. The data has been presented in Table I.

Table I : Overall Socio-economic characteristics of the respondents*:*

Sl.no.	Variables	Category	Frequency(Percentage)
1.	Age	Young (21-35) Middle (36-55) Old (56 & above)	35(29.17) 59(49.17) 26(21.66)
2.	Education	Illiterate Primary Secondary High school Intermediate Graduation & above	31(25.84) 17(14.17) 42(35.00) 20(16.67) 8(6.67) 2(1.65)
3.	Occupation	Farming system F.S.. + subsidiary Others	89(74.17) 12(10.00) 19(15.83)
4.	Annual income	Below 1 lac 1 lac- 2.5 lac 2.5 lac -5 lac Above 5 lac	12(10.00) 66(55.00) 28(23.34) 14(11.66)
5.	Family type	Nuclear Joint	48(40.00) 72(60.00)

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6.	House type	Thatched house Semi cemented house Cemented house	17(14.17) 71(59.66) 32(26.17)
7.	Land holding	Below 1 ha 1-2ha 2-6ha Above 6ha	47(39.17) 56(46.67) 17(14.16)
8.	Extension contact	Low (4-6) Medium(6-8) High (8-10)	18(15.00) 75(62.50) 27(22.00)
9.	Sources of Information	Low (6-11) Medium (11-16) High (16-21)	21(17.50) 60(50.00) 39(32.50)
10.	Innovativeness	Low Medium High	29(24.17) 51(42.50) 40(33.33)
11.	Risk Orientation	Low Medium High	20(16.67) 69(57.50) 31(25.83)
12.	Scientific Orientation	Low Medium High	24(20.00) 57(47.50) 39(32.50)

Table 2: Distribution of respondents based on their extent of Adoption towards Onion improved production practices

S.No.	Statements	Adoption Level		
		Fully Adopted	Partially Adopted	Not Adopted
1	Harvesting of Onions according to proper maturity indices.	108(90.00)	10(8.33)	2(1.66)
2	Collection of vegetables from the field on time	85(70.83)	24(20.00)	11(9.16)
3	Keeping the harvested produce in shady place	90(75.00)	25(20.00)	5(4.16)
4	Curing of onions are done properly	108(90.00)	12(10.00)	0(0.00)
5	Proper cleaning or washing before marketing	86(71.66)	21(17.50)	13(10.83)
6	Sorting of vegetables	19(15.83)	31(25.83)	70(58.33)
7	Grading of vegetables	24(20.00)	61(550.83)	35(29.16)
8	Cooling of vegetables	35(29.16)	63(52.50)	21(17.50)
9	Use of modern packing material	10(8.33)	44(36.66)	66(55.00)

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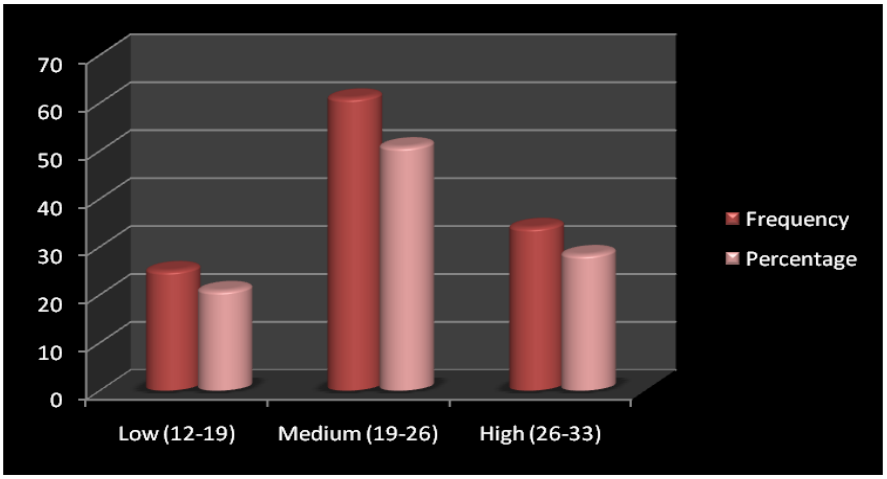
10	Use of chemical to reduce post harvest losses	89(74.16)	23(19.16)	8(6.66)
11	Safe loading & unloading	31(25.83)	70(58.33)	19(15.83)
12	Safe transportation	27(22.50)	60(50.00)	33(27.50)

S. No.	**Extent of adoption**	**Frequency**	**Percentage**
1.	Low (12-19)	25	20.84
2.	Medium (19-26)	61	50.82
3.	High (26-33)	34	28.34
Total		**120**	**100**

Table 2 clearly indicates that 50.82 per cent of the growers had medium level of adoption, followed by 28.34 per cent who had high level of adoption followed by 20.84 per cent who had low level of adoption.

Figure1. Distribution of respondents among different categories with respect to adoption level



RELATIONSHIP BETWEEN SOCIO-ECONOMIC CHARACTERISTICS AND ADOPTION BEHAVIOUR OF ONION GROWERS:

Table3: Relationship between socio-economic Characteristics and adoption behavior of onion growers:

Sl.No.	**Characteristics**	**"r" value**
1.	Age	0.601*
2.	Occupation	0.220*
3	House Type	0.203*
4	Family Type	0.112NS
5	Annual Income	0.142*
6	Material Possession	0.116NS
7	Extension contact	0.363*
8	Source Of Information	0.271*
9	Social Contact	0.231*

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10	Innovativeness	0.924*
11	Risk orientation	0.929*
12	Scientific orientation	0.800*

* = Significant at p = 0.005

The result of correlation analysis in above table 4.16 revealed that characteristics namely Age (0.601*), House type (0.203*), Occupation (0.220*) , Annual income (0.142*), Innovativeness (0.924*), Extension contact (0.363*), Source of information (0.271*), Social contact (0.231*), Risk orientation(0.939*), Scientific orientation(0.800*) were positively and significantly at 0.005 per cent level related to extent of adoption about onion growers respectively. Thus, it can be concluded that all above mentioned characteristics of the respondents were found to positively but non-significant correlate with extent of adoption, indicating that higher in frequency of socio economic profile of respondents result higher the extent of adoption of respondents but non-significantly.

CONCLUSION

About 50.82 per cent of the onion growers were medium level adopters means they were more energetic, knowledgeable, dynamic and having more interest in adopting modern vegetable technologies. Middle-aged respondents preferred vegetable cultivation. Higher the education, greater the adoption of commercial vegetable cultivation practices. Those vegetable growers earned more were better adopters of modern production technology and the farmers who had favourable attitude towards vegetable cultivation were better adopters. Correlation coefficient of family type and material possession was found to be negative and non- significant for the total sample under study while

REFERENCES

[1]. **Agarwal, Neha (2013).** A study on adoption behavior of onion growers in relation to their socio-economic and psycho characteristics in Sehore district , Madhya Pradesh. M.Sc (Ag.) Thesis submitted to Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya Gwalior.

[2]. **Goyal, Sunil (2011)**. Resource use efficiency of onion cultivation at different levels of adoption in Sehore District of Madhya Pradesh M.Sc. (Ag.) Thesis Submitted to Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jbalapur.

[3]. **Kumar D.U.(2011).** Adoption behavior of chickpea growers in Kaushambi district. M.sc(agri) Thesis (unpublished) submitted to MPKU, Rahuri

[4]. **Kharade (2010).** Gap analysis in onion production technology. Asian journal of Extn. Edu. Vol. 28:134-136

[5]. **Kulkarni (2012).** Economics of marketing of onion in selected tehsils of Amravati district. International Research journal of Agricultural Economics and Statistics. 3(1) : 12-15

[6]. **Patel, Ayodhya Prasad (2015)**. A economic analysis of production and marketing of onion in Panna District of M.P. M.Sc (Ag.) Thesis submitted to Jawaharlal Nehru Krishi Vishwa Vidyalay, Jabalpur.

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