

ADOPTION OF IMPROVED PRACTICES OF CABBAGE GROWING FARMERS

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ABSTRACT

The present study was conducted in Udaipur district of Rajasthan to study the farmers' extent of adoption of the improved cultivation practices of cabbage of the study area. Five peripheral and five distant villages were selected on the basis of maximum area under cabbage. From each village, a proportionate sample of cabbage grower was drawn randomly. Each category of the villages consisted half of the sample size i.e.75 respondents. A total sample size constituted of 150 respondents. The study revealed that the majority of the respondents belonged to medium adoption group in both the categories of respondents. The study also revealed that there was significant difference in adoption between both the categories of respondents regarding HYVs, nursery preparation, seed treatment, time of sowing, seed rate and spacing, manure and fertilizers, irrigation management, plant protection measures and harvesting except three improved practices i.e. soil and field preparation, age of seedling for transplanting and weed management where difference was not significant. Peripheral respondents had high adoption as compared to distant respondents regarding major improved practices of cabbage cultivation.

Key words : Adoption, Improved Practices of Cabbage, Farmers.

INTRODUCTION

In India, cabbage is grown over an area of 2.58 lakh hectares with the production of 59.09 lakh tones and yield of 22.9 MT/ha (during 1999). In Rajasthan, cabbage covers 472 hectares area with the production of 1.763 metric tones (during 1996-97). In Udaipur, the Girwa tehsil covers 94 hectares with the production of 434 metric tones.

The productivity of cabbage in Girwa tehsil was 4,617 kg/ha, which was very low than National (17,680 kg/ha) and world (23,630 kg/ha) level productivity of this crop (1996-97). This reflects an utmost need to study the factors responsible for poor production. The predominant reasons for low adoption were namely; lack of knowledge of technology, constraints in adoption and resource factors. Many of the farmers were unaware of the technology and preferred to follow traditional methods of cultivation. The present study was therefore, planned to study the farmers' extent of adoption of the improved cultivation practices of cabbage of the study area.

METHODOLOGY :

The present study was conducted in Udaipur district of Rajasthan. The Girwa tehsil of Udaipur district was selected for the investigation considering maximum cropped area under cabbage cultivation. From Girwa tehsil, the first five villages were selected which consisted of maximum area under cabbage and fell in the 15 kms peripheral from tehsil headquarter. Similarly, another five villages, which had maximum area under

cabbage and beyond the radius of 15 kms from tehsil headquarter (Udaipur city), were selected. From each village, a proportionate sample of cabbage grower was drawn randomly. Each category of the villages consisted half of the sample size i.e.75 respondents. Thus the total sample size constituted of 150 respondents. The data were collected with the help of well- structured interview schedule by holding the interview with the farmers at their farm / homes.

RESULTS AND DISCUSSION

Distribution of the respondents according to their level of adoption—To get an overview of the respondents with respect to level of adoption, the cabbage growers were grouped into three strata viz; low adoption group, medium adoption group and high adoption group. This stratification was based on the calculated mean and standard deviation of the adoption scores obtained by the respondents.

It is evident from the table no.1 that 37 (49.34 per cent) peripheral respondents were having medium level of adoption about improved practices of cabbage cultivation, while 25 (33.33 per cent) respondents belonged to high adoption group and only 13 (17.33 per cent) peripheral respondents were placed in the low adoption group. In case of distant respondents regarding their level of adoption, it was found that 40 (53.33 per cent) respondents had medium level of adoption, whereas, 35 (46.67 per cent) respondents belonged to adoption group.

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As a whole, it was found that 77 (51.33 per cent) respondents belonged to medium level of adoption group whereas, 48 (32 per cent) respondents were found to be under low adoption group and only 25 (16.67 per cent) respondents were placed in the high adoption group. These findings are in agreement with the findings of Bareth (1991) and Chandawat (1997).

Table 1. Level of adoption of improved practices of cabbage growers

Level of adoption	Peripheral (N=75)		Distant (N=75)		Total (N=150)	
	Frequency	%	Frequency	%	Frequency	%
Low (<47)	13	17.33	35	46.67	48	32.00
Medium(47-70)	37	49.34	40	53.33	77	51.33
High (>70)	25	33.33	0	0	25	16.67

Comparison of level of adoption between peripheral and distant respondents with regard to different package of practices of cabbage cultivation.

It was felt imperative to analyze the differences, if any, between peripheral and distant respondents with regard to their adoption level about different improved practices of cabbage cultivation. For this purpose, the mean score was computed for each practice in both the categories of respondents. Standard deviation was also computed and 'Z' test was applied.

To compare the level of adoption of improved cultivation practices of cabbage growers of the two categories, 12 major improved practices were taken in account.

It is evident from the table no.2 that there was no significant difference in adoption between both the categories of respondents regarding three improved practices i.e. soil and field preparation, age of seedling for transplanting and weed management. In case of other improved practices i.e. HYVs, nursery preparation, seed treatment, time of sowing, seed rate and spacing, manure and fertilizers, irrigation management, plant protection measures and harvesting, there existed significant difference between respondents of both categories.

It was also noted peripheral respondents had high adoption as compared to distant respondents regarding major improved practices of cabbage cultivation. This might be due to the fact that most of the peripheral

farmers had more land under cabbage than distant farmers. Because cabbage is a perishable commodity that requires easy access to the market and timely selling. So peripheral farmers were able to do this easily. Whereas distant farmers faced this problem, who had less area under cabbage and the produces\ so obtained was also sold locally for the want of time and facility in term of transport. Thus, the peripheral respondents had more adoption about improved technology of cabbage cultivation as compared to distant respondents.

Table 2. Comparison of level of adoption between peripheral and distant farmers with regard to different package of practices of cabbage cultivation.

S. N.	Practices	Maximum marks	Peripheral		Distant		Z value
			M.S.	S.D.	M.S.	S.D.	
1.	Soil and field preparation	5	3.96	0.662	3.84	0.731	1.090NS
2	HYVs	19	12.2	1.888	9.96	2.295	6.588**
3	Nursery preparation	6	3.40	0.697	2.60	0.805	6.509**
4	Seed treatment	6	2.80	0.979	2.40	0.800	2.741**
5	Time of sowing	9	6.40	0.854	5.24	1.487	5.888**
6	Seed rate & spacing	8	4.08	1.183	3.20	0.986	4.949**
7	Age of seedling for transplanting	2	1.80	0.664	1.68	0.859	0.957NS
8	Manures & fertilizers	14	8.60	1.335	6.68	1.296	8.936
9	Weed management	8	6.00	1.138	5.88	0.999	0.705NS
10	Irrigation management	5	3.80	0.748	3.20	0.748	4.918**
11	Plant protection	14	6.60	1.624	5.28	1.287	5.739**
12	Harvesting	4	2.96	0.859	2.64	0.932	2.285**

NS=Non-significant at 1% L.S. ** Significant at 1% L.S.

CONCLUSION

The study concluded that the majority of the respondents belonged to medium adoption group in both the categories of respondents. The study also concluded that there was significant difference in adoption between both the categories of respondents regarding HYVs, nursery preparation, seed treatment, time of sowing, seed rate and spacing, manure and fertilizers, irrigation management, plant protection measures and harvesting except three improved practices i.e. soil and field preparation, age of seedling for transplanting and weed management where difference was not significant. Peripheral respondents had high adoption as compared to distant respondents regarding major improved practices of cabbage cultivation.

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