

**Research Note :**

## **CONSTRAINTS FACED BY THE FARMERS IN ADOPTION OF IMPROVED CULTIVATION PRACTICES OF CABBAGE IN UDAIPUR DISTRICT OF RAJASTHAN**

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Cabbage is one of the most popular winter vegetables in India. In Udaipur region of Rajasthan, cabbage is grown easily because of the suitable Agro- climatic conditions. It is grown in kitchen garden and track garden, cabbage is used as salad, boiled vegetable, cooked in curries, pickled as well as a dehydrated vegetable. Cabbage is rich in mineral matters and in vitamins A, B1, B2 and C. All cole crops are hardy and thrive best in cool weather except some acclimatized early cauliflower varieties. Two varieties, developed by the ICAR are being cultivated in India; the early varieties and late varieties. The early varieties are Golden Aere, Pride of India, Sel.8, copanhangen, Hari Rani, Meenakshi, Green Express, etc. and the late varieties are Pusa Drumhead and late Drumhead. In studyearer the most suitable varieties recommended by the department of agriculture are the early varieties i. e. Golden Aere, Pride of India and the late varieties Pusa Drumhead (Indian Agriculture, 1996,). Among all the tehsil of Udaipur district Girwa tehsils has maximum area (94 ha.) in study area, which accounts for 83.92 per cent of total under cabbage cultivation; with a production of 434 metric tones, which is about 82.82 percent of the total production in Udaipur district. The productivity of state is very low (compared to national productivity, 17,680 kg/ha.). (Indian Agriculture (1997) it is due to some major constraints faced by the farmers which effect the production and productivities of cabbage in India.

Hence a study on constraints in adoption of improved cultivation practices of cabage was taken.

### **METHODOLOGY**

The present study was conducted in the Girwa tehsil of Udaipur district. From Girwa tehsils, ten villages five villages within 15 Kms. Distant and 5 from beyond the radius of 15 Kms., were selected which consisted of maximum area under cabbage, from each village a proportionate sample of cabbage grower was drawn randomly. Thus, the total sample size constituted of 150 respondents from both categories of village. To determine the perceived constraints, the mean score for each of the constraints was computed and they were ranked accordingly. To determine the perceived remedial measures, 10 major areas as remedial measures were identified for the present investigation.

### **RESULTS AND DISCUSSION**

It is evident from the table No.1 that the less knowledge about seed rate and spacing (M.S. 0.80 and M.S.0.98) was 1<sup>st</sup>. constraint in the minds of respondents in the study area.

Less knowledge about seed treatment (M.S.076), less knowledge about plant protection measures (M.S. 0.72) less knowledge about advantages of nursery preparation (M.S. 0.64), less knowledge about fertilizers (M.S.0.56), less knowledge about HYVs (M.S. 0.48) and less knowledge about appropriate time of sowing (M.S. 0.36)

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were 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> constraints in the minds of peripheral farmers respectively. Whereas, less knowledge was found about seed treatment (M.S. 0.96), less knowledge about advantages of nursery preparation (M.S.0.92), less knowledge about HYVs (M.S.0.76), less knowledge about fertilizers (M.S. 0.56), were 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> constraints in the minds of distant farmers, respectively.

Less skill about seed treatment (M.S. 0.32), less knowledge about critical stages of irrigation (M.S. 0.32), high cost of seeds (M.S. 0.25), high cost of investment for plant protection (M.S.0.24) and high cost of fertilizers (M.S. 0.20) were 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> constraints in the minds of peripheral farmers, respectively.

**Table 1. Constraints faced by the farmers in adoption of improved cultivation practices of cabbage**

Sl. No.	Constraints	Peripheral		Distant	
		Mean	Ranks	Mean	Ranks
1	Less knowledge about HYVs	0.48	6	0.76	5
2	High cost of seeds	0.25	10	0.32	12
3	Less knowledge about advantage of nursery preparation	0.64	4	0.98	3
4	Less knowledge about seed treatments	0.76	2	0.96	2
5	Less skill about seed treatments	0.32	8	0.40	10
6	Less knowledge about seed rate and spacing	0.80	1	0.98	1
7	Less knowledge about appropriate time of sowing	0.36	7	0.52	8
8	Less knowledge about critical stages of irrigation	0.36	9	0.56	7
9	Less knowledge about fertilizers	0.56	5	0.64	6
10	High cost of fertilizers	0.20	12	0.44	9
11	Less knowledge about plant protection measures	0.72	3	0.92	4
12	High cost of investment for plant protection measures	0.24	11	0.36	11

Less knowledge about appropriate time of sowing (M.S.0.52), high cost of fertilizers (M.S.0.44), less skill about seed treatment (M.S. 0.40), high cost of investment for plant protection (M.S.0.36), and high cost of seed (M.S. 0.32) were 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> constraints in the mind of distant farmers, respectively. These finding are conformity with the finding of Pandey,(1989); Poonia, (1995) and Bareth, (1991).

**Remedial measures offered by the farmers for removing the constraints in adoption of improved practices of cabbage**—It was felt to know the remedial measures offered by the respondents for removing the constraints in adoption of improved practices of cabbage. These remedial measures may be of different types and might have been practiced by the farmers on the priority basis.

A close look at the data presented in the table-2 shows that the respondents of both the categories of farmers in the present investigation gave first priority to "improved seed of cabbage should be made available to the farmers on the subsidized rate in their own areas", for removing the constraints in adoption of improved practices of cabbage. Second, third, fourth, fifth, sixth and seventh rank as far as remedial measures offered by the peripheral farmers got to "cooperative Society and rural banks should provide short term loan on nominal rate of interest", "fertilizers on low cost should be provided to them in their own villages", "regular follow-up from the extension agencies is required to create the confidence on the part of the farmers", "timely training programmes for the farmers are essential to update them about the cabbage growing", in order to improve irrigation facilities the farmers should be provided with credit facilities from the rural banks" and "the vegetable produce should be purchased by the Govt. agencies from their field itself". On the other hand distant respondents also offered second, their, fourth, fifth, sixth and seventh ranks as remedial measures for removing the constraints in adoption of improved cultivation practices of cabbage, these are "the vegetable produced should be purchased by the Govt.



Table 2. Remedial measures offered by the respondents.

Sl. No.	Agents	Peripheral		Distant	
		Mean	Ranks	Mean	Ranks
1	Improved seed of cabbage should be made available to the farmers on the subsidized rate in their own area.	1.92	1	2.36	1
2	Fertilizers on low cost should be provided to them in their own villages.	1.28	3	1.48	4
3	Co-operative societies & Rural banks should provide short-term loan on nominal rate of interest.	1.32	2	1.60	3
4	The vegetable produced should be purchased by the Govt. agencies from their field itself.	1.32	2	1.60	3
5	In order to improve irrigation facilities the farmers should be provided with credit facilities from Rural bank.	0.72	6	0.88	7
6	Timely training programme for the farmers on improved cabbage cultivation.	1.04	5	1.32	6
7	Regular follow-up from the extension agencies, confidence on the part of farmers.	1.24	4	1.40	5
8	Improved implements for cabbage growing should be supplied to the farmers on low cost basis.	0.44	9	0.60	9

9	The farmers should be talked about more regarding how part of knowledge rather than principles parts of knowledge.	0.52	8	0.80	8
10	Scientific solutions are required to be found out to lessen the residual effect of chemical used for cabbage growing.	0.36	10	0.48	10

agency from their field itself", "Co-operative society & rural banks should provide short term loan on nominal rate of interest", fertilizers on low cost should be provided to them in their own area", "regular follow up from the extension agencies is required to create the confidence on the part of farmers", "timely training programmes for the farmers are essential to update them about the cabbage growing" and "in order to improve irrigation facilities the farmers should be provided with credit facility from rural bank".

## CONCLUSION

The study revealed that majority of cabbage growers were experienced the constraints such as less knowledge, high cost of inputs, and less skill regarding the adoption of improved cabbage cultivation practices. The top ranks remedial measures offered by the respondents is the improved seed of cabbage should made available to the farmers on the subsidized rate in their own area for the increase of cabbage production.

## REFERENCES

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