

## FACTORS AFFECTING THE ADOPTION OF IMPROVED PRODUCTION PRACTICES OF GROUNDNUT BY THE FARMERS

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India is the third largest edible oil economy in the world after USA and China. It occupies a distinct position not only in terms of area under oil seeds but also in terms of diversity in cultivated oil seeds. Though the production of oil seeds has increased over time in the country. Yet there is a large gap between their demand and supply. Demand and supply of oil seeds is expressed in terms of edible oils. This has necessitated to trace out these.

Agricultural research and education have been considerable advanced in the India. Research contributions in preceding decade have been enormous in all directions. The extension machinery however has not been able to cope up with the scientific advances. A gap still exists between the productive improved agricultural technologies available and their rapid transfer to the farmers. Unless this gape is filled, the production improved technologies now available in agricultural and allied fields can not be properly harnessed for accelerating production. This should be matter of great concern to all the government and non-government organizations, which are interested in and committed to agricultural advancement.

Other concerned factors, which are responsible to adoption new technologies about groundnut cultivation by the farmers. Keeping the above goals in view, the present investigation was taken up with the objectives. To assess the association between adoption of improved production practices of groundnut and the selected independent variables.

### METHODOLOGY

The present study was conducted in Bikaner district of Rajasthan. The Bikaner district was purposively selected for this study due to hundred percent-irrigated groundnut cultivation, third position in area and production. Bikaner district consist of 5 panchayat samities in total, out of which two panchayat samities (Nokha and Bikaner) were selected considering its maximum area and production of groundnut among all the panchayat samities of the district. From the list so prepared five villages each from the identified panchayat samiti were selected. Thus in all 10 villages were selected for investigation purpose. 30 respondents from each of the selected villages were sampled, out of which 5 from each category (larze, small & marginal) farmers were selected randomly. Thus the total sample size was 300 respondents in which 150 respondents from non-beneficiary group and further 50 respondents were from each category (larze, small, & marginal) from beneficiary and non beneficiary groups respectively.

To assess the association between extent of adoption and selected independent variables of the research study. Already available scale were adopted and some devices were developed by the investigator with the help of subject matter specialists of concerned discipline.

An interview schedule consisting of measuring devices for dependent and independent variables along with face data of the respondents was developed for the investigation purpose and was personally introduced to the respondents following the principles of interviewing. There after, hypothesis was formulated and appropriate

statistical tests were used to arrive at conclusion. Chi-square test was applied in the study.

## RESULTS AND DISCUSSION

**Association between socio-economic status and extent of adoption of improved production practices of groundnut**—The data shows in table 1. reflect that socio-economic status of each category of respondents was found significantly associated with their adoption level regarding improved production practices of groundnut. The results of table reflect that higher socio-economic status respondents would be higher of their extent of adoption. It might be due to that high SES farmers having ability to purchase costly inputs regarding groundnut cultivation and also they have venture saneness and the positive opinion towards innovations. Similar result was also observed by kumar (2001).

Association between Education and extent of adoption of improved production practices of groundnut.

Table 1 indicates that level of education of overall respondents was significantly associated with their extent of adoption of improved production practices of groundnut. While it was not found significant association with the extent of adoption of improved production practices of groundnut in case of non beneficiary marginal respondents.

It shows that , level of adoption increase with the increase of level of education of the respondents. The reason for this might be that educated farmers had progressive out look and ability to adopt innovations than illiterate farmers. The present findings supported by the Kumar (2001).

**Association between irrigation potentiality and extent of adoption of improved production practices of groundnut**—Table 1. depict that irrigation potentiality was found significantly associated with the extent of adoption of improved production practices of groundnut by the larze, small, marginal and overall respondents of both beneficiary and non-beneficiary groups.

It was reflecting that the adoption of respondents increases with increase the irrigation potentiality. This might be due to that assured irrigation facilities increase the risk bearing ability

of the farmers and they adopt innovations.

**Association between Achievement motivation and adoption of improved production practices of groundnut**—It could be seen from table 1. reveals that level of achievement motivation of marginal and small respondents was not found significant with the adoption of improved production practices of groundnut, where as it was found significant associated with the adoption of larze and overall respondents of both groups.

Result shows that level of adoption by larze and overall respondents increase with increases in their level of achievement motivation. Similar result were also reported by Kumar (2001).

**Association between risk orientation and adoption of improved production practices of groundnut**—The results incorporated in table 1 shows that significant association was found out with risk orientation and extent of adoption of improved production practices of groundnut by the overall respondents. While it was found not-significantly in case of non-beneficiary marginal respondents. It means that hired the risk oriented respondents higher would be their extent of adoption except in case of non-beneficiary marginal farmers because they have less risk orientation due to their poor economic conditions. Similar results were also reported by Nikhade et al. (1989).

**Association between knowledge about KVK and adoption of improved production practices of groundnut**—Table 1. reveals that knowledge about KVK of the marginal and small respondents of non-beneficiary group and marginal respondents of beneficiary group was not found significantly with their knowledge about KVK and extent of adoption, while it was found significantly associated with extent of adoption of improved production practices of groundnut by the larze, small and overall respondents of beneficiary group and big and overall respondents of non-beneficiary group. It shows that higher knowledge respondents were having extent of adoption.

This might be due to fact that farmers who are continuous contact with the extension agencies remain abreast with latest technical know how and can received help and guidance as and when needed.

**Table 1. Overall association between extent of adoption of different categories of respondents and the selected independent variables N=300**

S. No.	Selected independent variables	Beneficiaries (N=150) 'X' Value				Non-Beneficiaries (N=150) 'X' Value			
		Big	Small	Marginal	Overall	Big	Small	Marginal	Overall
1.	Socio economic status	9.452**	7.031**	5.864*	57.362**	9.763**	6.254*	6.202*	85.881**
2.	Education	8.002**	7.219**	9.280**	22.826**	6.286*	9.479**	2.756NS	10.187**
3.	Irrigation potentiality	14.880**	8.333**	6.581*	57.482**	7.018**	10.108**	4.103*	123.71**
4.	Achievement motivation	7.460**	2.083NS	0.126N	19.635**	5.081*	0.657NS	0.277NS	25.349**
5.	Risk Orientation	9.523**	8.340**	5.864*	47.378**	7.018**	4.678*	1.403NS	62.403**
6.	Knowledge about the KVK	5.357*	4.687*	1.298NS	12.178**	4.324*	2.770NS	0.598NS	14.198**
7.	Attitude towards KVK	9.920**	6.271*	12.121**	43.083**	9.763**	0.214NS	3.395NS	24.080**
8.	Sources of information	14.890**	5.357*	5.764*	64.705**	8.449**	5.851*	7.510**	49.613**

NS = Non significant \* = Significant at 5% level of significance \*\* = Significant at 1% level of significance

**Association between attitude towards KVK and extent of adoption of improved production practices of groundnut**—The data shows in table 1 reflect that attitude of respondents of non-beneficiary respondents group was not found significant with their extent of adoption, while it was found significantly associated with category of larze, small marginal and overall of beneficiary respondents group, and larze and overall respondents of non-beneficiary respondents group. It shows that which farmer have positive attitude towards KVK were having higher extent of adoption of improved production practices of groundnut. It might be due to that extension worker solve the problems of respondents in follow-up stage.

**Association between sources of information and extent of adoption of improved production practices of groundnut**—The data depict in table 1 indicates that sources of information of larze, small, marginal and overall categories of both beneficiary and non-beneficiary respondents group and their level of adoption regarding improved production practices of groundnut was observed significantly. It means, that extent of adoption increases with increase in degree of sources of information in case of each category of respondents.

This fact may be due to the availability of different sources of information which were easily accessible to the respondents. A sources is usually expected technology to the respondents.

The findings is similar with the findings of Patel (1995).

## CONCLUSION

It can be concluded that Socio-economic status, Education, Irrigation potentiality, Achievement motivation, Risk orientation, Knowledge about KVK, Attitude towards KVK and Sources of information of overall respondents were significantly associated with the extent of adoption of improved production practices of groundnut. But in case of Achievement motivation, small and marginal respondents and Knowledge about KVK, marginal respondents from beneficiary group were found non-significant.

While, in case of non-beneficiary group Achievement motivation, Knowledge about KVK and Attitude towards KVK of small respondents and Education, Achievement Motivation, Risk orientation, Knowledge about KVK and attitude towards KVK of marginal respondents were non-significantly associated with the extant of adoption of improved production practices of groundnut.

## REFERENCES

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