LEVEL OF KNOWLEDGE ABOUT RESEARCH RECOMMENDATIONS OF ANAND AGRICULTURAL UNIVERSITY AMONG THE AGRO-INPUT DEALERS OF ANAND DISTRICT

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ABSTRACT

The investigation was carried out in Anand district of Gujarat State. All the talukas of Anand district were selected for the study. Only those agro-input dealers were selected who sell fertilizers, pesticides and seeds all to gather. A sample of 100 agro-input dealers who had not undertaken Diploma in Agricultural Extension Services for Input-dealers (DAESI) were selected from different talukas of Anand district by using proportionate random method of sampling. Moreover, 40 agro-input dealers who had undertaken DAISE course were also selected. Thus, total numbers of the agro-input dealers were 140. The majority of the agro-input dealers had medium to high level of overall knowledge about research recommendations (70.00 per cent). Great majority (87.00 per cent) of the agro-input dealers who had not undertaken the course in DAESI had low to medium level of knowledge about research recommendations and overwhelming majority (95.00 per cent) of the agro-input dealers who had undertaken the course in DAESI had medium to high level of knowledge about research recommendations. All agro-input dealers had more knowledge about plant protection, followed by crop practices and variety. There were 26.84 per cent, 10.90 per cent and 7.57 per cent knowledge about research recommendations regarding plant protection, crop practices and variety were more in case of the agro-input dealers who had undertaken the course in DAESI. There was highly significant difference in knowledge about research recommendations among the agro-input dealers regarding variety, crop practices and plant protection. There were highly significant difference in overall knowledge about research recommendations and knowledge about research recommendations regarding variety, crop practices and plant protection between two groups of 100 agro-input dealers, who had not undertaken DAESI (Diploma in Agricultural Extension Services for Input-dealers) course and 40 agro-input dealers, who had undertaken this course.

Keywords : *agro-input dealers, knowledge, research recommendations*

INTRODUCTION

Being the largest component of India's economy, agriculture is of outmost importance for the vast number of people. Agriculture sector employs 54.6% of the total workforce. The Agricultural Universities are major partners in growth & development of agricultural research and education. Anand. Agricultural University conducts various experiments at different research stations as per problems of the farmers related to agricultural activities. After conducting the research, different research recommendations are given by research stations and Agricultural Universities. Private sector plays major role for dissemination of the knowledge about new farmers purchase agriculture input like seeds, fertilizers and plant protection chemicals from the agro-input dealers and seek guidance and suggestions. If the agro-input dealers have proper knowledge about research recommendations, they can transfer that to the farmers for improving farming by boost up production which ultimately resulting in increasing living standard of farmers.

OBJECTIVES

(1) To examine the level of knowledge about research recommendations of the agro-input dealers

(2) To compare the level of knowledge about research recommendations of the agro-input dealers of Anand district who had undertaken course in DAESI with those who had not undertaken the course

METHODOLOGY

The present investigation was carried out in Anand district of Gujarat State. All the talukas of Anand district were selected for the study. Only those agro-input dealers were selected who sell fertilizers, pesticides and seeds all to gather. A sample of 100 agro-input dealers who had not undertaken Diploma intechnologies and new recommendations. The

Agricultural Extension Services for Input-dealers (DAESI) were selected from different talukas of Anand district by using proportionate random method of sampling. Moreover, 40 agro-input dealers who had undertaken DAISE course were also selected. Thus, total numbers of the agro-input dealers were 140. To study the knowledge of the agro-input dealers about research recommendations of AAU, a knowledge test was developed. The interview schedule was prepared in the local language in light of the objectives of the study and was pre-tested. The data of this study were collected through personal interview. The collected data were classified, tabulated, analyzed and interpreted in order to make the findings meaningful.

RESULTS AND DISCUSSION

Overall knowledge about research recommendations of the agro-input dealers

The overall knowledge of the agro-input dealers about research recommendations of AAU was studied by using developed test. The data regarding overall knowledge about research recommendations of AAU among agro-input dealers are presented in Table 1.

Table 1: Distribution of the agro-input dealers ccording to their overall knowledge about research recommendations n=140

No.	Knowledge	Frequency	Per cent
1	Very low (Up to 6.00)	04	02.86
2	Low (6.01 to 12.00)	37	26.43
3	Medium (12.01 to 18.00)	71	50.71
4	High (18.01 to 24.00)	27	19.29
5	Very high (24.01 to 30.00)	01	00.71

The data given in Table 1 illustrated that slightly more than half (50.71 per cent) of the agro-input dealers had medium level of knowledge about research recommendations, followed by 26.43 per cent, 19.29 per cent, 2.86 per cent and 0.71 per cent of the agro-input dealers were with low, high, very low and very high level of knowledge about research recommendations, respectively.

This finding is more or less in concurrence with Mande (2011) and Ganiger (2012), Sharma (2014) and Thorat (2015).

Overall Knowledge about Research Recommendations between Two Groups of the Agro-Input Dealers Who Had Not Undertaken DAESI Course and Who Had Undertaken the DAESI Course

The data regarding overall knowledge about research recommendation of AAU between two groups of 100 agro-input dealers, who had not undertaken DAESI (Diploma in Agricultural Extension Services for Input-dealers) course and 40 agro-input dealers who had undertaken DAESI course were presented in table 2.

Table 2 : Overall knowledge about research recommendations between two groups of the agro-input dealers

n=140

Sr. No.	Knowledge	Without DAESI course		With DAESI course	
		Number	Per cent	Number	Per cent
1	Very low (Up to 6.00)	04	04.00	00	00.00
2	Low (6.01 to 12.00)	36	36.00	01	02.50
3	Medium (12.01 to 18.00)	51	51.00	20	50.00
4	High (18.01 to 24.00)	09	09.00	18	45.00
5	Very high (24.01 to 30.00)	00	00.00	01	02.50

It is evident from the data presented in Table 2 that slightly more than half (51.00 per cent) of the agro-input dealers who had not undertaken the course in DAESI had middle level of knowledge about research recommendations, followed by 36.00 per cent, 9.00 per cent and 4.00 per cent of them had low, high and very low level of knowledge about research recommendations, respectively. While none of them had very high level of knowledge about research recommendations.

The data given in Table 2 illustrate that half (50.00 per cent) of the agro-input dealers who had undertaken the course in DAESI had medium level of knowledge about research recommendations, while 45.00 per cent, 2.50 per cent and 2.50 per cent of them had high, very high and low level of knowledge about research recommendations, respectively. It was worthy to note that none of the agro-input dealers had very low level of knowledge about research recommendations. The reason for this might be that in DAESI course systematic study on agricultural technologies had been made by them.

Knowledge about Research Recommendations regarding Variety, Crop Practices and Plant Protection among the Agro-Input Dealers

There were total 30 items in final knowledge test to measure the knowledge about research recommendations among the agro-input dealers. Out of these 30 items, 7, 10 and 13 were regarding variety, crop practices and plant protection, respectively. The data practices and plant protection among the agro-regarding knowledge about research input dealers were presented in Table 3. recommendations regarding variety, crop

Table 3: Knowledge about research recommendations regarding variety, crop practices and plant protection among the agro-input dealers

n=140

Sr. No.	Knowledge about research recommendations	Total score	Mean score	Per cent
1	Variety	07	2.75	39.29
2	Crop practices	10	4.25	42.50
3	Plant protection	13	7.64	58.57

The data presented in Table 3 disclosed that the agro-input dealers had 58.57 per cent knowledge about research recommendations regarding plant protection, followed by 42.50 per cent and 39.29 per cent knowledge about research recommendations regarding crop practices and variety, respectively.

The probable reasons for above findings might be that the agro-input dealers might have less contact with University and less marketing of the seeds of different varieties which were developed by University. Farmers purchase more plant protection chemicals from the agro-input dealers, so that agro-input dealers might have tried to get more knowledge about plant protection.

Knowledge about Research Recommendations regarding Variety, Crop Practices and Plant Protection between the Two Groups of Agro-Input Dealers Who Had Not Undertaken DAESI Course and Who Had Undertaken the DAESI Course

The data regarding knowledge about research recommendations regarding variety, crop practices and plant protection among the groups of agro-input dealers were presented in Table-4.

Table 4: Knowledge about research recommendations regarding variety, crop practices and plant protection between the two groups of agro-input dealers who had not undertaken DAESI course and who had undertaken the DAESI course n=140

No.	Knowledge about research recommendations	Total score	Without DAESI course (n=100)		With DAESI course (n=40)		Difference of knowledge about research recommendations between groups	
			Mean score	Per cent	Mean score	Per cent	Mean score	Per cent
1	Variety	07	2.60	37.14	03.13	44.71	0.53	07.57
2	Crop practices	10	3.94	39.40	05.03	50.30	1.09	10.90
3	Plant protection	13	6.64	51.08	10.13	77.92	3.49	26.84
	Overall knowlege	30	13.19	43.97	18.27	60.90	5.08	16.93

The data mentioned in the Table 4 concluded that the agro-input dealers who had not undertaken the course in DAESI had 51.08 per cent knowledge about research recommendations regarding plant protection, followed by 39.40 per cent and 37.14 per cent knowledge about research recommendations regarding crop practices and variety, respectively and the agro-input dealers who had undertaken the course in DAESI had 77.92 per cent knowledge about research recommendations regarding plant protection, followed by 50.30 per cent and 44.71 per cent knowledge about research recommendations regarding crop practices and variety, respectively. So, there were 26.84 per cent,

10.90 per cent and 7.57 per cent more knowledge about research recommendations regarding plant protection, crop practices and variety in case of the agro-input dealers who had undertaken the course in DAESI.

It can be found from the above table that the agro-input dealers who had not undertaken the course in DAESI had 43.97 per cent overall knowledge about research recommendations and the agro-input dealers who had undertaken the course in DAESI had 60.90 per cent overall knowledge about research recommendations. So, there was 16.93 per cent more overall knowledge about research

recommendations was more in case of the agro-input dealers who had undertaken the course in DAESI.

The reason for above findings might be that in DAESI course, systematic study on agricultural technologies *vis;* variety, crop practices and plant protection had been made by them.

Comparison of the Knowledge about Research Recommendations regarding Variety, Crop Practices and Plant Protection among the Agro-Input Dealers

Comparison of the knowledge about research recommendations regarding variety, crop practices and plant protection among the agro-input dealers was tested with independent 't' test. The data regarding these were presented in Table 5.

Comparison of the level of knowledge about research between two groups of the agro-input dealers

Comparison of the level of knowledge about research recommendations of AAU between two groups of 100 agro-

Table 5: Comparison of the knowledge about research recommendations   n=140

No.	Knowledge about research recommendations	Mean score	't' value
1	Variety	2.75	9.487 **
	Crop practices	4.25	
2	Variety	2.75	17.432 **
	Plant protection	7.64	
3	Crop practices	4.25	11.872 **
	Plant protection	7.64	

The 't' values from Table 5 indicates that there was highly significant difference in knowledge about research recommendations among the agro-input dealers regarding variety, crop practices and plant protection.

input dealers, who had not undertaken DAESI (Diploma in Agricultural Extension Services for Input-dealers) course and 40 agro-input dealers who had undertaken DAESI course was tested with independent 't' test. The data regarding these were presented in Table 6.

Table 6: Comparison of the level of knowledge about research between two groups of the agro- input dealers who had not undertaken DAESI course and who had undertaken the DAESI course

No.	Knowledge about research recommendations	Without DAESI course (n=100) Mean score	With DAESI course (n=40) Mean score	't' value
1	Variety	02.60	03.13	2.283 **
2	Crop practices	03.94	05.03	4.429 **
3	Plant protection	06.64	10.13	7.043 **
	Overall knowledge	**13.19**	**18.27**	**7.490 ****

The 't' values indicates that there were highly significant difference in overall knowledge about research recommendations and knowledge about research recommendations regarding variety, crop practices and plant protection between two groups of 100 agro-input dealers, who had not undertaken DAESI (Diploma in Agricultural Extension Services for Input-dealers) course and 40 agro-input dealers, who had undertaken DAESI course. The reason for this might be that in DAESI course systematic study on agricultural technologies had been made by them.

CONCLUSION

The majority of the agro-input dealers had medium to high level of overall knowledge about research recommendations (70.00 per cent). Great majority (87.00 per cent) of the agro-input dealers who had not undertaken the course in DAESI had low to medium level of knowledge about research recommendations and overwhelming majority

(95.00 per cent) of the agro-input dealers who had undertaken the course in DAESI had medium to high level of knowledge about research recommendations. All agro-input dealers had more knowledge about plant protection, followed by crop practices and variety. There were 26.84 per cent, 10.90 per cent and 7.57 per cent knowledge about research recommendations regarding plant protection, crop practices and variety were more in case of the agro-input dealers who had undertaken the course in DAESI. There was highly significant difference in knowledge about research recommendations among the agro-input dealers regarding variety, crop practices and plant protection. There were highly significant difference in overall knowledge about research recommendations and knowledge about research recommendations regarding variety, crop practices and plant protection between two groups of 100 agro-input dealers, who had not undertaken DAESI (Diploma in Agricultural Extension Services for Input-dealers) course and 40 agro-input dealers, who had undertaken this course.

REFERENCES

Anonymous (2014-2015). Year end Review for the Ministry of Agriculture for the year 2014-2015, GOI.

Ganiger, S. (2012). *Knowledge, perception and role performance of input dealers in agro advisory services in northern dry zone of Karnataka* (Master's thesis, Acharya N G Ranga Agricultural University, Hyderabad, India).

Girawale, V.B. and Naik, R.M. (2016) Determinants in Knowledge about Recommended Package of Practices of Root & Tuber Crops. Guj. J. Ext. Edu. 27(1):43-44

Mande, J. V. & Darade, N. W. (2011). Training Needs of Farm Input Dealers for Transfer of Agricultural Technology! *Journal of Community Mobilization and Sustainable Development*, 6 (2), 141-144.

Sharma, K. C. & Sharma, B. L. (2014). Training needs of Krishi input dealers for transfer of agricultural technology in eastern Rajasthan! *Agriculture Update*, 9 (3), 316-319.

Thorat, G. N. (2015). Correlates of knowledge of poultry entrepreneurs about poultry management practices! *Gujarat journal of Extension Education*, 26 (1), 127-131.