`Original Research Article

ASSESSMENT OF TECHNOLOGICAL KNOWLEDGE OF INPUT DEALERS ABOUT AGRO SERVICES IN JUNAGADH DISTRICT

ABSTRACT

Aims: (1) To assess the technological knowledge of the input dealers towards agro services and (2) To ascertain the association between selected characteristics of the input dealers and their knowledge regarding agro services

Study design: An ex-post facto research design was used for the study.

Place and Duration of Study: Junagadh district of Gujarat state

Methodology: Junagadh district comprises nine talukas out of which five talukas*viz.*,Junagadh, Keshod, Mendarda, Vanthali and Maliyahatina were randomly selected for the study because these talukas had a sufficient number of input dealers. From each taluka, thirty input dealers were selected randomly for the study. Thus, a total of 150 input dealers were selected randomly from five talukas.

Results: More than half (51.34 per cent) of input dealers had medium level of knowledge regarding agro services followed by (30.00 per cent) and (18.66 per cent) of input dealers who had high level and low level of knowledge, respectively. The characteristics of input dealers *viz.*, risk orientation, management orientation, economic motivation and progressivism had positive and highly significant relationship with their knowledge regarding agro services. Age of input dealers had negative and significant relationship with their knowledge regarding agro services.

Conclusion:A significant majority of input dealers were found to possess a moderate to high level of knowledge regarding agro services.

Keywords: Input dealers, Knowledge, Attitude, Agro Services.

1. INTRODUCTION

The input dealers play an important role in several aspects of agricultural development at the grass-root level by dissemination of knowledge about new technologies and new recommendations (Kalasariya*et al.,* 2022). Alternative ways of financing agricultural services have, therefore, been considered and enacted. There have been moves towards private services. At the same time, the complexity of extension has increased as multiple providers have emerged. During the Seventh Five-Year Plan, the government has considered the presence of private service providers and their role in agriculture as another contributor. The basic agricultural inputs are seeds, fertilizers, pesticides, implements, irrigation, and credit. Catering of these inputs is a specialized job since there are several unique characteristics to this job. The distribution, infrastructure facilities promotion, and mass communication of these input providers are more important at this juncture. The input supplier model also

relies on agro dealer businesses to provide farmers with technical advice regarding farming techniques, the correct use of inputs, and in some cases additional services such as output purchasing, equipment rental, and soil testing. Input dealers are important mediator for transfer of technology so it important to know knowledge and attitude toward agro-services so farming these objectives.

2. METHODOLOGY

The present study was conducted at district of Gujarat state. An ex-post facto research design was used for the study. Junagadh district of Gujarat state was purposively selected for the study because the researcher was studying in this university and the researcher can easily approach the respondents of this area. Junagadh district comprises nine talukas out of which five talukas*viz.,*Junagadh, Keshod, Mendarda, Vanthali and Maliyahatina were randomly selected for the study because these talukas had a sufficient number of input dealers. From each taluka, thirty input dealers were selected randomly for the study. Thus, a total of 150 input dealers were selected randomly from five talukas.

For measuring knowledge regarding agro services of the input dealers, a structured schedule was constructed. A total of 40 statements were collected from various sources. The knowledge check thus prepared was administered to 30 input dealers. The response was quantified by giving a score of one to the correct answer and zero to the incorrect answer or does not know the answer. Thus, the total number of correct answers rendered by an individual was the knowledge score secured by him. Thus, the range of obtainable scores was 0-40. The total score obtained by using individual respondents for all the statements was calculated.

3. RESULTS AND DISCUSSION

3.1 Technological knowledge of the input dealers about agro services

Adequate knowledge is required with input dealers for better transfer agro services and betterment of their business. Interview schedule was used for data collection. Scores of technological knowledge of input dealers were calculated and with the help of mean and standard deviation, the input dealers were categorized as presented in Table 1.

Table 1: Distribution of the input dealers according to their technological knowledge towards agro services (n=150)

Sr. No.	Category	Frequency	Percentage
1	Low Level of Knowledge (below 19.32)	28	18.66
2	Medium Level of Knowledge (between 19.33 and 34.00)	77	51.34
3	High Level of Knowledge (above 34.00)	45	30.00
Total		**150**	**100.00**
Mean= 26.66		**S.D. = 7.34**	

The data presented in Table 1 revealed that more than half (51.34 per cent) of input dealers had a medium level of knowledge regarding agro services followed by 30.00 per cent and 18.66 per cent of input dealers who had high level and low levels of knowledge, respectively. The probable reason for the above findings might be due to the majority of input dealers were educated up to high school and graduate/postgraduate level and had a medium level of utilization of information sources. The finding was in line with the findings reported by Salukhe (2009) and Prajapati *et al.* (2015). Khatri *et al.* (2018), Mamata (2018), Kale *et al.* (2020).

3.2 Association between selected characteristics of the input dealers and their knowledge regarding agro services

In the present study, efforts were made to find out the nature and magnitude of the relationship between selected characteristics of the input dealers and their knowledge regarding agro services. The values of correlation coefficient 'r' between knowledge (Dependent variable) with various independent variables are presented in Table 2 and the relationship between dependent and independent variables is discussed subsequently.

Table 2. Association between the selected characteristics of the input dealers and their knowledge regarding agro services (n=150)

Sr. No.	Independent variable	Correlation coefficient (r) (df=148)
1	Age	-0.183*
2	Education	0.196*
3	Social participation	0.105*
4	Annual income	0.177*
5	Source of information	0.127*
6	Mass media exposure	0.116*
7	Training received	0.185*
8	Extension contacts	0.511*
9	Risk orientation	0.471**
10	Management Orientation	0.584**
11	Economic motivation	0.313**
12	Progressivism	0.525**

Note: 1. * = Significant at 0.05 level, ** = Significant at 0.01 level and NS= Not significant

Data in Table two indicated that ~~out of the~~among thetwelve independent variables, seven variables *viz*. education, social participation, annual income, sources of information, mass media exposure, extension contacts and training received of input dealers had apositive and significant relationship with their knowledge regarding agro services. The characteristics of input dealers *viz.*, risk orientation, management orientation, economic motivation and progressivism had positive and highly significant relationship with their knowledge regarding agro services. Age of input dealers had negative and significant relationship with their knowledge regarding agro services.

Reasons (discussion part) for the result might have been included. The study supporting theresultsalso need to beincluded.

4. CONCLUSIONS

A significant majority of input dealers were found to possess a moderate to high level of knowledge regarding agro services. This knowledge encompasses various aspects such as pesticide management, plant protection chemicals, seed quality, pesticide regulations, fertilizers, herbicides, intercultural practices, as well as other services like dairy farming and horticulture. The results of correlation analysis revealed that out of the twelve independent variables examined, seven variables including education, social participation, annual income, sources of information, mass media exposure, training received, and extension contacts of input dealers exhibited positive and significant associations with their knowledge of agro services. On the other hand, age showed a negative and significant association with the knowledge of agro-input dealers. Furthermore, risk orientation, management orientation,

economic motivation, and progressivism demonstrated positive and highly significant associations with the knowledge of input dealers regarding agro services.

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