

Attitude of Farmers Towards Agricultural Technology Information Centre of UAS, Bangalore

CHITRASHREE KANNUR, K. H. NAGARAJ AND S. GANESAMOORTHY

Department of Agricultural Extension, College of Agriculture, UAS, GKVK, Bengaluru-560 065

e-mail : anulalitha@gmail.com

ABSTRACT

A study to analyze the attitude of farmers towards Agricultural Technology Information Centre (ATIC), UAS, Bangalore was conducted during 2019. Ninety beneficiary farmers who visited ATIC during the last three years were selected purposively. The study revealed that more than half (51.11%) of the respondents had more favourable attitude followed by favourable attitude (28.89%) and less favourable attitude (20.00%) towards ATIC. Among the attitude statements, ATIC is established at appropriate place in the University was ranked first by the beneficiaries with a score of 423 since ATIC is located at the entrance of the University which is convenient for the farmers. ATIC personnel properly attends the visitor was ranked second with a score of 401 which might be due to the fact that they might have received proper hospitality and satisfied with the solutions obtained for their queries. The statement, diagnostic services of ATIC are poor was ranked last with a score of 208 which might be due to the non-existence of soil, water and plant diagnostic facilities at ATIC. Further the characteristics of beneficiary farmers *viz.*, farming experience, scientific orientation, achievement motivation, information seeking behavior, education, extension participation, extension agency contact, risk orientation, innovative proneness, cosmopolitanism and mass media exposure had positive and significant association with their attitude.

Keywords: Attitude, Beneficiary farmers, Agricultural Technology Information Centre

AGRICULTURAL Technology Information Centre (ATIC) at UAS, Bangalore was started during the year 1999 under the National Agriculture Technology Project (NATP). ATIC is a single window delivery system for agricultural information as well as products such as seeds, planting material, biofertilizers, nutrient mixtures, value added products, bio-pesticides and other technologies developed by the University and related institutions. In addition, a platform was created to allow optimistic interaction between farmers and subject matter specialists for effective technology transfer and livelihood improvement at ATIC. A unit of horticulture nursery is also established at ATIC, UAS, Bangalore in collaboration with Nurserymen Co-operative Society, State Department of Horticulture, Lalbagh, Bengaluru. Establishment of e-Krishi UAS-B portal is another feather to the ATIC along with the existence of Video-Conferencing facility with ATIC as expert centre and at KVKs as student centers. Thus, ATIC is functioning as a repository of agricultural information.

The role of agricultural extension in India is assuming greater importance in the context of globalization, privatization and liberalization for ensuring food and nutritional security. Agro Advisory Services play a key role in increasing farmers' income through increased yield and reduced farm expenses. Agro Advisory Centers provide advisory services to farmers on suitability, procurement, and application of various inputs such as seed, fertilizer, pesticide and improved farming practices. Despite pluralistic agro-advisory approaches in India, the coverage and use of these advisory services by farmers is limited (Krishi Kosh, 2012). In this context, in order to assess the functional viability of ATIC established by UAS, Bangalore, a study to analyze the attitude of beneficiary farmers towards ATIC and to elicit suggestions from the beneficiaries was conducted.

METHODOLOGY

The investigation was conducted during the year 2019 and an Ex-post facto research design was followed to

assess the attitude level of the beneficiary farmers regarding the activities of ATIC and to analyze the association between profile characteristics of beneficiary farmers with their attitude level. The study was therefore carried out involving ATIC, UAS, Bangalore. Ninety beneficiary farmers who visited ATIC during the last three years (2016, 2017 and 2018) were selected purposively. Based on the objectives of the study, interview schedule was prepared and the information was elicited from beneficiary farmers with the help of pre-tested interview schedule. Later the collected data was analyzed by using frequencies, percentages, mean, standard deviation, chi square and regression analysis.

RESULTS AND DISCUSSION

Overall attitude of beneficiary farmers towards ATIC

The results presented in Table 1 revealed that, more than half (51.11%) of the respondents had more favourable attitude followed by favourable attitude (28.89%) and less favourable attitude (20.00%) towards Agricultural Technology Information Centre of UAS, Bangalore. Most of the beneficiary farmers had more favourable attitude towards ATIC, UAS-B which might be due to the fact that ATIC might have provided technical knowledge relevant to their requirement. If the farmers had learnt the things by doing, their attitude would have been changed because most of the farmers believed in self-action. In addition to this, beneficiaries who visited ATIC were literates and their by understood the services of ATIC easily. The findings are in conformity with the findings of Kazeem *et al.* (2017), Shamshadunnisa (2017) and Dishant *et al.* (2017).

TABLE 1
Overall attitude of beneficiary farmers towards ATIC (n=90)

Category	No.	%
Less favourable (<48.96)	18	20.00
Favourable (48.96-52.74)	26	28.89
More favourable (>52.74)	46	51.11

Statement wise attitude of beneficiary farmers towards ATIC

The results presented in Table 2 revealed that among the attitude statements, ATIC is established at appropriate place in the university was ranked first with a score of 423 as majority of the beneficiary farmers strongly agreed because ATIC is located at the entrance of the university which is convenient for the farmers to commute. ATIC personnel properly attends the visitor was ranked second with a score of 401 since beneficiaries might have got proper hospitality and satisfied with the care taken by the ATIC personnel. The statement, diagnostic services of ATIC are poor was ranked last with a score of 208 which might be due to the non-existence of soil, water and plant diagnostic facilities at ATIC. The findings of Nisha *et al.* (2014) are in line with the present results.

Association between profile characteristics of beneficiary farmers with their attitude towards ATIC

Data presented in Table 3 revealed that the independent variables such as farming experience, scientific orientation, achievement motivation and information seeking behaviour had significant association with the attitude of beneficiary farmers towards ATIC at one per cent level of significance. While, education, extension participation, extension agency contact, risk orientation, innovative proneness, cosmopolitaness, mass media exposure had significant association at five per cent level of significance. The reason might be that majority of the farmers had relatively good knowledge that ATIC provides all services such as inputs, planting materials, publications, etc., at one place through single window delivery system which made them to have favourable attitude towards ATIC.

Extent of contribution of profile characteristics of beneficiary farmers on their attitude towards ATIC

A cursory look at Table 4 reveals that, the variables like education, scientific orientation, extension contact, extension participation of beneficiary farmers had positive and significant relationship with their attitude towards ATIC. However remaining variables as listed in Table did not show any significant relationship. The co-efficient of determination (R^2) of the independent

TABLE 2
Statement wise attitude of beneficiary farmers towards ATIC (n=90)

Attitude statements	Beneficiary farmers	
	Attitude score	Rank
ATIC is established at appropriate place in the university (+)	423	I
ATIC personnel properly attends the visitor (+)	401	II
ATIC provides expert services and advice to the farmers (+)	392	III
Price of farm publications sold at ATIC are not reasonable (-)	384	IV
Scientists of all subjects are present always and readily helping (+)	376	V
Required extension literature is not available (-)	348	VI
The visit to ATIC has not influenced me to change anything in my farm (-)	309	VII
ATIC is less helpful to increase the agricultural production of the farmers (-)	301	VIII
The ATIC is simply another seed sale centre rather than providing a quality extension agency for farmers (-)	270	IX
This centre is simply an illusion established to divert the attention of the farmer (-)	267	X
ATIC is a single window approach for the stakeholders where all sort of services and products are available at one point (+)	256	XI
ATIC is just duplication of the services of department of agriculture and university (-)	252	XII
The centre is well renowned among the farmers due to excellence in extension (+)	248	XIII
Latest and vital information are hosted in e-Krishi portal (+)	221	XIV
Diagnostic services of ATIC are poor (-)	208	XV

TABLE 3
Association between profile characteristics of beneficiary farmers and their attitude towards ATIC (n=90)

Independent variables	Chi-square value	Contingency Co-efficient
Age	1.69 NS	0.13
Education	11.16 *	0.33
Family size	2.60 NS	0.16
Annual income	3.11 NS	0.18
Size of Landholding	6.99 NS	0.26
Farming experience	11.78 **	0.34
Scientific orientation	13.01 **	0.35
Risk orientation	15.11 *	0.37
Achievement motivation	12.67 **	0.35
Innovative proneness	12.61 *	0.35
Cosmopolitaness	9.99 *	0.31
Mass media exposure	12.66 *	0.35
Extension agency contact	13.67 *	0.36
Extension participation	12.81 *	0.35
Information Seeking Behaviour	14.43 **	0.37
Distance from ATIC	5.78 NS	0.24

variables was 0.889 indicating 88.90 per cent of total variation in the attitude explained by all the 16 selected independent variables put together. Hence, these variables could be considered as good predictors of attitude of the beneficiary farmers towards ATIC. It also implies that there might be other variables contributing to the variation which are not included in the study.

The data depicted in Table 5 indicates that nearly half (45.55%) of the beneficiary farmers suggested that subsidy should be provided on purchase of inputs. Hence, it was ranked first. Further, more than one third (36.67%) of the beneficiary farmers suggested that digital payment should be made available was ranked second. In addition to these, beneficiary farmers also suggested that there should be provision for providing handouts, supply of poultry and livestock and different size of seed packages. Similar findings were reported by Songara (2007). These suggestions would help in taking remedial measures for effective functioning and encourage farmers to visit ATIC.

TABLE 4
Extent of contribution of profile characteristics of beneficiary farmers on attitude towards ATIC (n=90)

Independent variables	Regression co-efficient (β)	Standard Error	't' value
Age	0.121	0.495	0.17
Education	0.396	0.583	2.83 *
Annual income	0.169	0.727	1.03
Size of Landholding	0.153	0.269	1.37
Family size	0.193	1.105	0.36
Farming experience	0.536	1.368	0.30
Extension participation	0.812	0.558	2.65 *
Mass media exposure	0.292	0.573	1.24
Extension agency contact	0.461	1.558	2.69 *
Achievement motivation	0.864	1.122	1.57
Risk orientation	0.296	0.897	1.26
Scientific orientation	1.397	0.582	3.51 *
Cosmopolitaness	0.193	0.043	0.36
Innovative proneness	0.233	0.673	1.77
Information seeking behaviour	0.391	0.335	0.62
Distance from ATIC	0.119	0.758	1.80

$R^2=0.889$; ** Significant at 1 per cent level
* Significant at 5 per cent level; NS-Non-Significant

TABLE 5
Suggestions expressed by the beneficiary farmers for improving the activities of ATIC (n=90)

Suggestions	No.	Per cent	Rank
Subsidy should be provided for inputs	41	45.55	I
Digital payment should be made available	33	36.67	II
Handouts should be made available	31	34.44	III
Required size of package of seeds should be made available	26	28.89	IV
Poultry and other livestock should be made available	19	21.11	V
Testing laboratories should be within ATIC itself	18	20.00	VI
Trainings and workshops should be organized for the farmers	8	8.89	VII

Though nearly half of the respondents had more favourable attitude towards ATIC, nearly same

per cent of beneficiary farmers had less favourable to favourable attitude. Hence, there is a need to create awareness, enhance the knowledge of farmers about the services and their attitude through several educational approaches. In the study, an effort has been made to seek out the suggestions from the beneficiary farmers in order to overcome the constraints that are adversely affecting the functioning and effectiveness of the centre. The University may consider the suggestions and formulate strategies to improve further the activities of the ATIC.

REFERENCES

- DISHANT JOJIT JAMES AND LAKSHMINARAYAN, M. T., 2017, Attitude of Agricultural Extension Functionaries towards Information and Communication Technology Tools. *Mysore J. Agric. Sci.*, **51** (4) : 872 - 876.
- KAZEEM, A. A., DARE, A., OLALEKAN, A., ABIODUN, S. E. AND KOMOLAFE, T. L., 2017, Attitudes of farmers to extension trainings in Nigeria : Implications for adoption of improved agricultural technologies in Ogun state southwest region. *J. Agril. Sci.*, **62** (4) : 423 - 443.
- KRISHI KOSH, 2012, Evaluation of role and impact of crop advisory services on farm practices and farmer's income in Guntur district of Andhra Pradesh - a case of Rallis crop advisory centre. Retrieved from <http://krishikosh.egranth.ac.in/handle/1/67773>
- NISHA CHOUHAN, CHITRA HENRY AND SHARMA, S. K., 2014, Attitude of farmers towards ATMA. *Indian J. Extn. Edu. & Rural Development*, **22** (1) : 48 - 50.
- SHAMSHADUNNISA, S., 2017, Knowledge and attitude of extension field functionaries towards ATMA in Southern Karnataka, *M.Sc. Thesis* (unpub.), University of Agricultural Sciences, GKVK, Bengaluru.
- SONGARA, H. S., 2007, Impact Assessment of Agricultural Technology Information Centre (ATIC) - A formative evaluation, *Ph.D. Thesis*, MPUAT, Udaipur.
- UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE, Agricultural Technology Information Centre (ATIC). Retrieved from <https://www.uasbangalore.edu.in/index.php/extension/atic>

(Received : August, 2019 Accepted : November, 2019)