

KNOWLEDGE OF FARM FAMILIES ABOUT AGRICULTURAL TECHNOLOGY INFORMATION CENTRE (ATIC) IN UDHAM SINGH NAGAR DISTRICT

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ABSTRACT

The objective of the present study was to find out the knowledge of farm families about Agricultural Technology Information Centre (ATIC) in Udham Singh Nagar district (Uttarakhand). The sample consisted of randomly selected 95 respondents including 80 farmers and 15 farm women from 8 villages of selected panchayat samities who were regularly in contact with the ATIC functionaries for last 5 years. Personal interview technique was used for collecting data from the respondents. Frequency distribution, percentage and mean per cent score were used for analysis of data. The outcome of the study divulges that the respondents had average knowledge about ATIC (54.73%) with overall Mean Per cent Score of 41.62. Further, the respondents possessed good knowledge about concept of ATIC i.e. name (60.0 MPS) and its location (100.0 MPS). However, their knowledge was found to be average in components objective of ATIC (42.10 MPS), information sources (53.05 MPS), diagnostic services (46.0 MPS) and technical guidance (39.21 MPS) provided through ATIC. Regarding different facilities available at ATIC, the respondents possessed poor knowledge particularly in the research products (16.66 MPS) viz. plant materials, livestock species, tools and equipment, value added products and other agro products.

INTRODUCTION

Agriculture is the main occupation and way of life for more than half of Indian population even today. Sustainable prosperity of the farmers and the landless agricultural laborers holds the key for improving the overall human resource development scenario in the country. In the present scenario of the country, when new agricultural technologies are fast emerging and the country is going ahead with its plan of economic liberalization and privatization, there is a need to think seriously about making information easily accessible at the door steps of farmers. So, looking to the information, input, services and other needs of small and resource poor farmers in agriculture and allied areas, the ICAR has initiated ATIC as an innovation in technology dissemination process under NATP for increasing the overall productivity

in agriculture. The ATIC is a "Single Window" support system linking the various units of a research institution with intermediary users and end users

(farmers) in decision-making and problem solving exercise (Dass, 2002). The ATIC at Govind Ballabh Pant University of Agriculture and Technology (GBPUAT), Pantnagar came into existence on 26th August, 2001. Since, the ATIC, Pantnagar has already completed twelve years of its establishment in the district hence, Therefore it is a high time to find out whether the farmers and farm women are aware about ATIC and its facilities. Therefore, the present study was undertaken with the objective to find out the knowledge of farm families about ATIC.

RESEARCH METHODOLOGY

The present study was conducted in Udham Singh Nagar district of Uttarakhand where the ATIC (located at GBPUAT, Pantnagar) has been in operation since 2001. Of seven panchayat samities, two namely *Rudrapur* and *Gadarpur* were selected on random basis. From each panchayat samiti, one village from each direction (North, East, West, and South) which was within a radius of 50 km from the ATIC was selected on random basis. Thus, total eight

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villages were taken from selected panchayat samities. The total sample of the study consisted of 95 respondents including 80 farmers and 15 farm women who were regularly in contact with the ATIC functionaries for last 5 years. Personal interview technique was used for collecting data from the respondents. The data collected from the respondents was scored, tabulated and analyzed by using suitable statistical tools such as frequency distribution, percentage and mean per cent score.

RESULTS AND DISCUSSION

Background information of the respondents

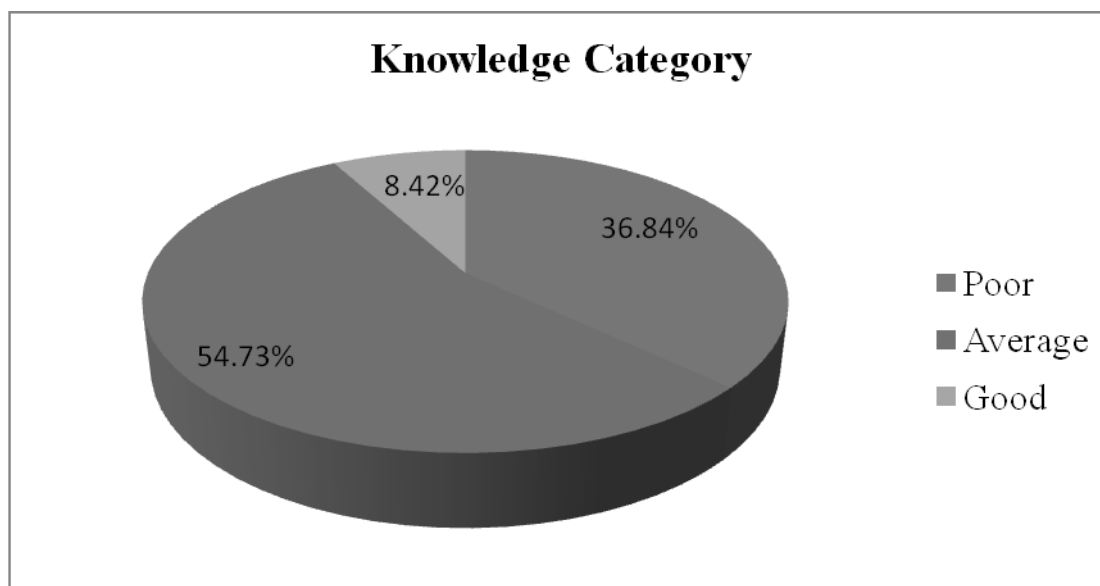
More than 40 per cent respondents belonged to the age group of 46-60 years and 28.42 per cent were between 31-45 years of age. More than half of the respondents were under reserve caste categories which included SC/ST (38.94%) and OBC (11.57%). Regarding education, 34.73 per cent respondents were educated upto graduation level and nearly one fourth of them had the education upto higher secondary level. Agriculture was the main occupation of all the respondents. However, major-

ity of them were also involved in some subsidiary occupation along with agriculture. Majority of the respondents (61.05%) were from joint family having 5-8 members. More than 40 per cent of them had land holding of 5.1- 10.0 acres while more than one third respondents had land holding between 2.6-5.0 acres. With regard to annual income, 33.68 per cent respondents had estimated annual income between Rs 1.6-2.5 lakhs whereas, more than one fourth of the respondents (28.42) had annual income between 1.0-1.5 lakhs.

a) Overall knowledge

Perusal of Fig 1 highlights that more than half of the respondents (54.73%) were in the category of average knowledge whereas, 36.84 per cent belonged to the poor knowledge category. There were only 8.42 per cent respondents in good knowledge category. The overall mean per cent knowledge score was 41.62. The findings are in line with the study conducted by Sharma (2007) who revealed that more than half of the respondents (57%) had average knowledge about different aspects of SGSY.

Fig 1: Distribution of respondents by their overall knowledge about ATIC



Ccomponent-Wise Knowledge

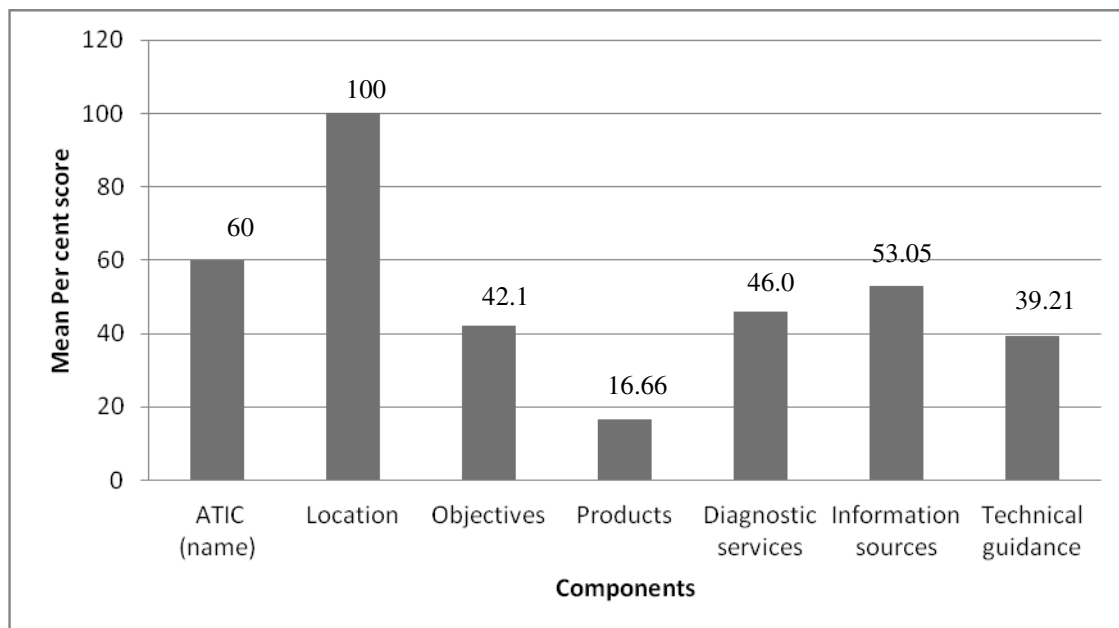
Fig 2 presents component-wise knowledge of the respondents about ATIC. Critical examination of the knowledge score highlights that the respondents

possessed good knowledge about concept of ATIC i.e. name (60.00 MPS) and its location (100.00 MPS). However, their knowledge was found to be average in components objective of ATIC (42.10 MPS), information sources (53.05 MPS), diagnostic services

(46.00 MPS) and technical guidance (39.21 MPS) provided through ATIC. Critical examination of the table further reveals that among different facilities available at ATIC, the respondents possessed poor knowl-

edge particularly in the research products (16.66 MPS) viz. plant materials, livestock species, tools and equipment, value added products and other agro products.

Fig 2: Component-wise knowledge of respondents about ATIC



General information about ATIC

Data in **Table 1** depict the knowledge of the respondents about concept and objectives of ATIC. Regarding awareness about the ATIC, all the respondents were well aware about the centre's location at Govind Ballabh Pant University of Agriculture and Technology, Pantnagar however, only 60 per cent respondents knew the complete and exact name of the centre i.e. Agricultural Technology Information Centre while for others it's just a source from where they can purchase agricultural inputs and farm based publications. The main objective of the centre is to provide a single window delivery system for the information, services and products developed by the university to the end users (farmers). It is evident from the table that only 42.10 per cent respondents knew about the facilities viz. products, services and information provided by the ATIC in terms of seeds, plant materials, diagnostic services like soil and water testing, veterinary clinic, plant clinic, farm literature etc. and majority of them (57.90%) were not aware about single window delivery approach i.e. supply

or provision of all these facilities under a one roof or through a single window. The similar findings were reported by Tiwari (2011) who revealed that all the respondents were aware about MGNREGA programme running within their village however, only a few per cent respondents knew the complete name of the programme. Regarding the objectives of the programme, all the respondents knew about 100 days of guaranteed wage employment provided under the programme though none of them were unable to specify that it is basically for enhancing their livelihood security.

Table 1: Knowledge of respondents regarding concept and objectives of ATIC n=95

S.No.	Items	f	%
1.	ATIC (name)	57	60.00
2.	Location	95	100.00
3.	Objective- To provide a single window delivery sys-tem for the infor- mation , services and products developed by the university.	40	42.10

Research Products

In depth knowledge assessment of the respondents about various research products available at ATIC revealed that all the respondents had good knowledge about different varieties of seeds available at ATIC however, none of them knew about other products like plant materials, processed products, livestock species, tools and equipment and other agro-products developed by the university. The reason behind this might be that only seeds of cereals, pulses, spices and vegetables were made available by the centre and other products were not available at the ATIC itself and farmers have to purchase these from other research units of the university like Crop Research Centre, Horticulture Research Centre, Vegetable Research Centre etc as per the guidance given by ATIC functionaries (Table 2).

Table 2: Knowledge of respondents regarding research products available at ATIC n=95

S.No.	Items	f	%
1.	Seeds	95	100.00
2.	Plant materials	0	0
3.	Livestock species	0	0
4.	Tools and equipments	0	0
5.	Value added products	0	0
6.	Other agro products	0	0

Diagnostic Services

With regard to second component of ATIC i.e. diagnostic services, Table 3 depicts that majority of the respondents knew about veterinary clinic (66.31%). The probable reason of having good knowledge regarding veterinary clinic might be that a good percentage of the respondents were engaged in dairy farming thus had a regular visit to the clinic either for vaccination of their cattle or for the treatment or diagnosis of any ailment or disease. Similarly, 55.78 per cent respondents knew about soil testing services followed by plant clinic (51.57%) and seed quality testing (49.47%). There were only 13.68 per cent respondents who knew about water testing services whereas, none of them had knowledge about testing and calibration of small equipment.

Further, when the respondents were asked about the location of the testing laboratories from where they can avail all these services, 66.31 per cent

of the respondents knew about the location of veterinary clinic at Veterinary College. Similarly, 55.78 per cent knew that they can avail the facility of soil testing and water testing from the Agronomy department of Agriculture College. Likewise, 49.47 and 51.57 per cent respondents knew about the location of seed quality testing at Seed Processing Unit, Nagla and plant clinic at Pathology lab of Agriculture College, respectively.

It is clear from the table that respondents possessed average knowledge regarding different diagnostic services and the reason behind less awareness about the services was due to the location of testing laboratories outside the ATIC.

Table 3: Knowledge of respondents regarding diagnostic services n=95

S.No.	Items	f	%
A. a.	Soil Testing	53	55.78
b.	Water Testing	13	13.68
c.	Seed Quality Testing	47	49.47
d.	Plant Clinic	49	51.57
e.	Veterinary Clinic	63	66.31
f.	Testing and calibration of small equipments	0	0
B.	Location of Diagnostic Centres		
a.	Veterinary College	63	66.31
b.	Agronomy dept. , agriculture college	53	55.78
c.	Pathology dept., agriculture college	49	51.57
d.	Seed processing unit, Nagla	47	49.47

Information Sources

The knowledge of the respondents pertaining to this component (Table 4) depicts that majority of the respondents (89.47%) knew that ATIC use to put stall at the time of farmer’s fair from where they can obtain information on different aspects of agriculture along with purchase of technical inputs. Respondents also possessed good knowledge about farm literature developed by the centre viz. books, diaries, calendars, magazines etc. as most of them had taken the membership of different farm publication of ATIC. Similarly, more than fifty per cent respon-

dents knew about the exhibition, krishi sammelan and kisan gosthies organized by the centre to disseminate information on different aspects of agriculture and allied areas.

The table further depicts that only 23.15 per cent respondents knew about frontline demonstrations as a source for getting agricultural information and it was because of the less number of frontline demonstration conducted by extension functionaries at the farm field. When the extension functionaries were asked for the reason they elicited that due to inadequate transportation facility and lack of supporting staff, they were not in a position to organize frontline demonstrations regularly at the farmer's field. Similarly, majority of the respondents (87.36%) did not know about the audio-visual aids provided through ATIC. When the ATIC functionaries were asked for the reason they reported that they were not developing audio-visual aids from last 6-7 years due to lack of technical staff and were only concentrating in publishing low cost farm literature. This was the reason that only a few per cent (12.63%) respondents who had a very longer association with ATIC knew about the audio-visual aids provided through ATIC.

Table 4: Knowledge of respondents regarding information sources n=95

S.No.	Items	f	%
a.	Farmer's Fair	85	89.47
b.	Farm Literature	83	87.36
c.	Exhibition/ Kisan Gosthi/ Krishi Sammelan	50	52.63
d.	Frontline demonstrations	22	23.15
e.	Audio-Visual aids	12	12.63

Technical guidance

When the knowledge of the respondents was judged regarding technical guidance provided through ATIC, it was found that majority of the respondents (87.36%) knew about the free helpline service of ATIC. When they were asked about different helpline numbers, most of them knew about the toll free number- 1551 whereas, only 28 per cent of them knew the other helpline numbers of ATIC i.e. 05944-234810 and 235580. The other sources of obtaining technical guidance known by the respondents

were personal visit by ATIC subject matter specialist (36.84%) and through personal letters (26.31%). There were only 6.31 per cent respondents who knew about information kiosk established at ATIC, Pantnagar as one of the sources for seeking technical guidance on various aspects of agriculture. The poor knowledge of the respondents was due to the reason that all the farmers who were visiting the centre were not exposed to this facility and the scientists generally make use of information kiosk only when the concerned subject matter specialist was not present at the centre (Table 5).

Table 5: Knowledge of respondents regarding technical guidance n=95

S.No.	Items	f	%
a.	Helpline	83	87.36
b.	Information Kiosk	6	6.31
c.	Personnel visit	35	36.84
d.	Through letters	25	26.31

CONCLUSION

Based on the findings it could be concluded that the respondents possessed average knowledge about ATIC as reflected by the overall Mean Percent Score (41.62). The possible reason regarding poor knowledge of farm families might be due to poor publicity of ATIC and inadequate provision of inputs and diagnostic services at the centre because of lack of infrastructure facilities. Hence, there is a need to create awareness about ATIC. This can be done by giving wide publicity to the ATIC through various educational means and mass media sources. Similarly, regular field visits should be conducted by the ATIC functionaries at the farmer's field in order to make them understand the significance of ATIC and motivate them to utilize the services available at the centre.

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