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A Study on Impact Assessment of ATIC toll free number of CCCSHAU, Hisar

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ABSTRACT

The study was carried out in Haryana state, with an objective to assess the impact of ATIC toll free number of Chaudhary Charan Singh Haryana Agricultural University, Hisar on farming community. Empirical data were collected telephonically from 100 respondents comprising 80 males and 20 females through a structured interview schedule and analyzed using standard methodology. Findings revealed that that more than fourth-fifth of the farmers mentioned fellow farmers as the main source of information regarding ATIC toll free number. Nearly one-third of the respondents call to toll free number only as and when required for crop production related advisory. Most of them were satisfied with their purpose of call and showed their willingness to call again. The major constraints reported by respondents were 'language problems', short duration of time' and 'facility available only few days in a week'. Hence, the paper concludes that the toll free number of ATIC, CCSHAU, Hisar was proved to be fruitful and utilized by majority of the farming community due to the reason that it helps in sorting out the small problems and need not to visit the centre personally.

Introduction

The research-farmer linkages mediated by the extension system played a decisive role in the advancement of food security through the green revolution in India during 60s and 70s (Chaudhary et al., 2011). In India, a special attention was paid to development of an agricultural research infrastructure immediately after independence. The Indian Council of Agricultural Research (ICAR) acts as a repository of information and offers consultancy on agriculture, horticulture, resource management, animal sciences, agricultural engineering, fisheries, agricultural extension, agricultural education, home science, and agricultural communication (Malhan and Rao, 2007). But, a gap between extension and farmers is becoming broader due to lack of basic infrastructures and facilities, trained human resource and funding for operating costs (Elias et al., 2016). Considering this gap, ICAR under the "Innovation in Technology Dissemination" component of National Agricultural Technology Project (NATP) has allocated a sum of Rs. 1482 million. Under this component, a series of strategic investments are made to introduce programmes and institutional adjustment at national, state, district, block and village level and operational changes in the methodology in which the extension workers are trained, interact with farmers and communities, communicate information and coordinate with the private sector (Chander and Rathod, 2020). As a part of this strategy, Agricultural Technology Information Centres (ATIC) are established in 40 centres located in ICAR Institutes and State

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Agricultural Universities for serving the farming community on a 'single window system' concept.

ATIC at Chaudhary Charan Singh Haryana Agricultural University, Hisar came into existence in Feb, 2002 with several objectives i.e. to provide a single window delivery system for the products and species required by the potential users; to facilitate direct access to the institutional resources available in terms of advice, technology, products etc., for the farmers and to provide feedback from the users to the institute. The centre also have a toll free helpline no. 1800-180-3001 that enables the farmers for easy and instant access to information on crop related problems for their problems/queries related to farming. Apart from Haryana, adjoining states farmers can also dial the toll free telephone no's: 18001803001 (Hisar), 180018031111 (Karnal) and 18001804002 (Rewari) for their problems/queries related to farming (www.hau.ac.in).

Keeping in view the above mentioned points and importance of toll free number for speedy transmission of technology and latest technical updates to farmers, the study was undertaken to assess the impact of ATIC toll free number of CCCSHAU, Hisar on farming community.

Methodology

The study was carried out in Haryana state during 2018-19. A multistage sampling design was used for the selection of the respondents. A list of farmers who called ATIC toll free number of CCS HAU, Hisar for redressal of their field problems during the period of December, 2016 to December, 2017 was collected from O/o Agricultural Technology Information Centre. Approximately 4800 farmers/callers call on the toll free number of ATIC during this period. Out of them, 100 farmers/callers including 80 male and 20 farm women were selected randomly and data were collected telephonically with the help of well-structured and pre-tested interview schedule especially prepared for this purpose. Empirical data were tabulated and analyzed using 26th version of the Statistical Package for Social Sciences (SPSS) for computing frequency, percentage, weighted mean score and rank order.

Results and discussion

Source of information, frequency and purpose of calling ATIC toll free number of CCS HAU, Hisar

Table 1 explains the different types of media used by callers and the extent of their utilization for seeking information regarding ATIC toll free number of CCS HAU, Hisar. It was observed that more than fourth-fifth of the respondents (88.00%) mentioned that web of mouth of 'fellow farmers' was the main source of acquiring information regarding toll free number followed by 'friends and relatives' (82.00%), 'newspaper' (78.00%), 'SMS services' (76.00%), 'KVKs/Directorate/ATIC/ University' (70.00%), 'State Agriculture Department' (65.00%), 'internet/new media' (54.00%), 'university magazine' (49.00%), 'radio' (45.00%), 'university website' (38.00%), 'publicity material' (33.00%), television' (23.00%) and 'private organizations/ NGOs, etc.' (19.00%) respectively. It showed that personal localities source like friends, neighbours, opinion leaders and progressive farmers played an important role in transfer of technologies to fellow farmers. Moreover, mass media should

Table 1 Source of information, frequency and purpose of calling ATIC toll free number of CCS HAU, Hisar (n=100)

Particulars	Frequency (percentage)	Rank order
Source of information		
University magazine	49 (49.00)	VIII
Newspaper	78 (78.00)	III
Publicity material	33 (33.00)	XI
Radio	45 (45.00)	IX
Television	23 (23.00)	XII
SMS services	76 (76.00)	IV
Internet/New media	54 (54.00)	VII
University website	38 (38.00)	X
State Agriculture Department	65 (65.00)	VI
KVKs/Directorate/ATIC/University	70 (70.00)	V
Friends and relatives	82 (82.00)	II
Fellow farmers	88 (88.00)	I
Private organization/NGOs etc.	19 (19.00)	XIII
Frequency of calling		
Frequently/regularly	07(07.00)	V
Monthly	04(04.00)	VI
Once in a season	19(19.00)	III
Rarely	24(24.00)	II
As and when required	35(35.00)	I
Only once till date	11(11.00)	IV
Purpose		
Crop production related advisory	81(81.00)	I
Plant protection related advisory	77(77.00)	II
Vegetables/Horticulture related issues	43(43.00)	VII
Forestry related advisory	33(33.00)	IX
Medicinal plants related advisory	21(21.00)	XI
Availability of university seeds	76(76.00)	III
University publication	46(46.00)	VI
University products	59(59.00)	V
Grievances from university	22(22.00)	X
Weather advisory services	65(65.00)	IV
Others	40(40.00)	VIII

Note: Data are based on multiple responses.

be used effectively for creating awareness about the ATIC toll free number as they are potential sources of spreading the information at the earliest. Contrary to above findings, Kumar *et al.,* (2019) illustrated that one-fourth of the respondents (25.00%) mentioned that farm magazine/newspapers/publicity material were the main source of information about ATIC toll free number of CCS HAU, Hisar. With regard to frequency of calling, nearly one-third of the respondents (35.00%) call to toll free number only 'as and when required', followed by called 'rarely' (24.00%), 'once in a season' (19.00%), 'only once till date' (11.00%), 'frequently/regularly' (07.00%) and 'monthly' (04.00%). The farmers expressed that they call to toll free number whenever they encountered problems rather than on a regular basis. Regarding purpose of calling, majority of the callers called for crop production related advisory ranked Ist with a highest percentage score of 81.00. This was followed by plant protection related advisory, availability of university seeds, weather advisory services, University products, University publication, vegetables/horticulture related issues, others purposes, forestry related advisory, grievances from university and medicinal plants related advisory. This trend might be due to the fact that toll free helpline number provides latest discipline-wise information and also guides/motivates callers to adopt new scientific and profitable practices. The results were in track with the findings of Anupama (2005) and Kumar and Singh (2007). Contrary to this, Singh and Kalra (2019) reported that most of the farmers enquired about plant protection related information on ATIC helpline number as they lack in-depth knowledge regarding plant protection measures.

Knowledge level about day & timing of ATIC toll free number

Examination of the data presented in Table 2 indicated that approximately 90 per cent of the callers (88.00%) claimed that they knew the days of the week when toll free number is available. When further enquired, it was found that more than half of them (53.40%) knew the 'correct days', while 32.95 per cent were 'partial correct' and remaining mentioned 'incorrect days' (13.63%). With regard to timing of toll free number, more than two-third of the respondents (68.00%) claimed that they knew the timing. But out of those, less than half of them (47.05%) told 'correct timing' followed by 'partial correct timing' and 'incorrect timing' of the helpline number. It reflected that most of the respondents were aware about the day and timing of ATIC toll free number of CCSHAU, Hisar, as this number played an important role in dissemination of scientific and technical knowledge to them and also improved adoption of technologies. Moreover, few of the caller's possess poor knowledge which might be due to poor publicity of ATIC toll free number by the university administration. This can be done by giving wide publicity to the ATIC facilities through various educational means and mass media sources. The findings are in line with the study conducted by Pandey and Solanki (2013) who reported that majority of the respondents possessed average knowledge about ATIC facilities.

Effectiveness of advisory given, satisfaction level and willingness of caller's to call again at ATIC toll free number

From the Table 3 it is apparent that more than half of the respondents (57.00%) consider the advisory given by the experts on the toll free number as effective in their field situations followed by very effective (22.00%), somewhat effective (14.00%) and not effective at all (07.00%). This might be due to the fact that ATIC toll free number provides reliable and relevant information on various aspects that can significantly help them to reduce risk and uncertainty which ultimately empower them to make good decisions at right time. Nearly half of the callers (47.00%) were fully satisfied with the results of the advisory given by the experts at the helpline number followed by satisfied, somewhat satisfied and not satisfied at all. With regard to willingness to call again, majority of the callers (78.00%) were willing to call again if an advisory service is required related to their agricultural activities in near future. 12 per cent were in a stage of dilemma to decide that whether they will call or not and remaining 10.00 per cent of the respondents were not willing to call again at toll free number. Further, it can be concluded that that the toll free of ATIC, CCS HAU, Hisar was proved to be fruitful and liked by majority of the farming community due to the reason that for sorting out the small problems and need not to visit the centre personally. The findings of the study were in conformity with those of Singh and Kalra (2019) who reported that high majority of the farmers were satisfied with advisory/diagnosis services, farm literature/publications services, helpline services and technological products provided by the ATIC.

Major constraints faced while using ATIC toll free number

It was revealed that 'language problems' was very serious constraint faced by the respondents ranked as 1st with highest weighted mean score of 1.05 followed by 'short duration of time', 'facility available only few days in a week', 'number

Table 2 Knowledge level about day & timing of ATIC toll free number (n=100)

Category	Knowledge		Extent of Knowledge			Total score	Weighted mean score (WMS)
	Yes	No	Correct	Partial correct	Incorrect		
Days	88	12	47	29	12	311	3.11
Timing	68	32	41	20	07	170	1.70

Table 3 Effectiveness of advisory given, satisfaction level and willingness of caller's to call again at helpline number (n=100)

Particulars	Frequency (percentage)	Rank order
Effectiveness of advisory given by experts		
Very effective	22 (22.00)	II
Effective	57 (57.00)	I
Somewhat effective	14 (14.00)	III
Not effective at all	07 (07.00)	IV
Satisfaction level		
Fully satisfied	47 (47.00)	I
Satisfied	26 (26.00)	II
Somewhat satisfied	17 (17.00)	III
Not satisfied at all	10 (10.00)	IV
Willingness to call again		
Willing to call again	78 (78.00)	I
Not willing to call again	10 (10.00)	III
Cannot say	12 (12.00)	II

busy', 'incomplete information by experts', 'non-connectivity', 'non-availability of experts', 'clarity of sounds/voice', 'call drop', 'use of technical terms by experts', 'over explanation of experts' and 'others' ranked 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th and 12th with WMS of 1.02, 0.96, 0.80, 0.69, 0.64, 0.58, 0.51, 0.44, 0.38,0.20 and 0.16, respectively (Table 4). It reflected that large number of the respondents expressed 'language problems' as serious constraint faced by them, which need to be given priority in future. Therefore, it is recommended that university administration should pick the experienced experts which are familiar with the local language and provides solution to the farmers/callers problems in an easy understandable language.

Remedies suggested by caller's for the betterment of ATIC toll free number

Table 5 indicates the most of the respondents suggested for 'more toll-free number/lines should be made available by university' ranked as 1st with highest weighted mean score of 1.28. This was followed by 'number of days must be increased', 'time duration should be increased', 'easily understandable language by experts', 'experienced experts should be on duty at helpline number', 'others', 'call drop issue must be solved', 'follow up/feedback procedure must be there', 'behavioral training to the experts on duty at helpline number', 'call back facility must be there' and 'Whats App number must be there' ranked 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th and 11th with WMS of 1.15, 1.06, 0.99, 0.78, 0.75, 0.58, 0.55, 0.37, 0.31, and 0.17, respectively.

Table 4 Major constraints faced while using ATIC toll free number (n=100)

Constraints	Total score	Weighted mean score (WMS)	Rank order
Non-connectivity	64	0.64	VI
Number busy	80	0.80	IV
Clarity of sounds/voice	51	0.51	VIII
Call drop	44	0.44	IX
Facility available only few days in a week	96	0.96	III
Short duration of time	102	1.02	II
Incomplete information by experts	69	0.69	V
Over explanation of experts	20	0.20	XI
Language problems	105	1.05	I
Non-availability of experts	58	0.58	VII
Use of technical terms by experts	38	0.38	X
Others	16	0.16	XII

Note: Scale: 0 = Not so serious, 1= Serious, 2 = Very serious

Table 5 Remedies suggested by caller's for the betterment of ATIC toll free number (n=100)

Suggestions	Total score	Weighted mean score (WMS)	Rank order
Number of days must be increased	115	1.15	II
Time duration should be increased	106	1.06	III
More toll-free number/lines should be made available by university	128	1.28	I
Call drop issue must be solved	58	0.58	VII
Call back facility must be there	31	0.31	X
Easily understandable language by experts	99	0.99	IV
Behavioral training to the experts on duty at helpline number	37	0.37	IX
Experienced experts should be on duty at helpline number	78	0.78	V
Whats App number must be there	17	0.17	XI
Follow up/feedback procedure must be there	55	0.55	VIII
Others	75	0.75	VI

Note: Scale: 0 = Not so serious, 1= Serious, 2 = Very serious

The possible reason to suggest remedies for betterment of ATIC toll free number may be associated to the fact that these helpline numbers provides latest agricultural information, resolves farming problems at cheaper & faster rate and also guides/motivates farmers to adopt new scientific and profitable practices. The finding were partially supported by the reports of Kumar et al., (2019) who indicated that time duration of ATIC toll free number should be increased followed by daily toll free facilities should be provided, connectivity problem, language problem of the scientist, etc.

Conclusion

The facility of ATIC toll free number by CCS HAU, Hisar is one of the major extension linkages between the university and farmers, with very high impact on various agricultural activities conducted by the farming community. The farmers making call on toll free number are very much satisfied with advisory provided to them with exception of minor technical constraints. To resolve the constraints, the callers suggested that duration of the toll free number (days & timing) must be increased along with more focus on audience language, so that the scientific knowledge can be provided to the callers in effective and efficient manner.

References

Anupama (2005). The extent of utilization of Punjab Agricultural University farmers helpline by farmers and farm women of Punjab. M.Sc. Thesis, Punjab Agricultural University, Ludhiana, India.

Chander, M. and Rathod, P. (2020). Reorienting Priorities of Extension and Advisory Services in India during and Post COVID-19 Pandemic: A Review. *Indian Journal of Extension Education*, 56(3): 1-9.

Chaudhary, S., Clause, M.H., Clause, R., Guntuku, D. (2011). Extension 3.0: The Use of Mobile Phones to Design Farmer-Centered Extension Services. Retrived from *http:// extensionconference2011.cta.int/ sites/ default/ files/Extension%20Conference_Abstracts_Tools.pdf.*

Elias, A., Nohmi, M., Yasunobu, K. (2016). Farmers' Satisfaction with Agricultural Extension Service and Its Influencing Factors: A Case Study in North West Ethiopia. Journal of Agricultural Science & Technology, 18(1), 39–53.

Kumar, A., Shehrawat, P.S., Malik, A., Kumar, R., Yadav, K.K., Kumar, R. and Singh, V. (2020). Perception, perceived utility and implications suggested by the cotton grower's callers on ATIC toll free number. *International Journal of Education & Management Studies,* 10(2): 145-147.

Kumar, V. and Singh, B. (2007). Impact of the Agricultural Technology Information Centre of Central Marine Fisheries Research Institute: Success cases. *Indian Journal of Extension Education.* 43 (1&2): 16-19.

Malhan, I.V., Rao, S. (2007). Agricultural Knowledge Transfer in India: a Study of Prevailing Communication Channels. Library Philosophy and Practice.

Pandey, M. and Solanki, D. (2015) Constraints faced by the scientists in functioning of Agricultural Technology Information Centre (ATIC). *International Journal of Scientific Research*, 4(1): 209-210.

Singh, D. and Kalra, R.K. (2019). Level of Satisfaction of Farmers from the Services Provided by Agricultural Technology and Information Centre (ATIC) Run by Punjab Agricultural University. *International Journal of Bio-resource and Stress Management*. 10(5): 575-579.