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RESEARCH PAPER

A study on utilisation pattern of e-Tools (ICT-Tools) by extension personnel working in private sector of Vijayapur district

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Abstract: The use of Internet and mobiles by extension personnel is now very common in India. ICT in agriculture is potential ground concentrating on the growth and development of the primary sector and other related fields. It also helps in the development of agriculture policy to ensure an equitable diffusion of technologies. The diffusion of advanced ICTs has contributed for the development of economy of both developing and developed nations. Extension personnel use the internet for social, research and educational purposes. Access to such information sources is a crucial requirement for the sustainable development of the farming systems. Hence the present study was undertaken to assess the utilization pattern of extension personnel about e-tools. The study was conducted using "Ex-post facto" research design in Vijayapur district of Karnataka during 2019. The data were collected from 80 extension personnel working in private sector, through pre-tested interview schedule, where in the questions were designed to generate information on, e-tools (ICT-tools) usage, information needs and the actual use of e-tools. The results indicated utilization pattern with, 43.75 per cent of the extension personnel belonging to high utilization category of e-tools, followed by medium (32.5 %) and low (23.75 %). Further, extent of utilisation of e-tools followed the popular of priority of 'Whats App group' (100 %), 'Video conference' (28.75 %), 'Krishi Marata Vahini' (27.50 %), 'Agromet advisory Service' (21.25 %), 'Raitamitra' (12.50 %),) and 'Information kiosk' (6.25 %).

Key words: e- tools, Extension personnel, Internet, Raitha Mitra Yojana

Introduction

"Any ICT intervention that improves the livelihoods of poor rural families will likely to have significant direct and indirect impacts on enhancing agricultural production, marketing and post-harvest activities – which in turn contribute to poverty reduction". The term ICT was coined by Stevenson in 1997 which stands for the information and communication technologies and can be broadly interpreted as technologies that facilitate communication, processing and transmission of information by electronic means. It is defined as technologies involved in collecting, processing, storing, retrieving, dissemination and implementation of data and information using microelectronics, optics, telecommunication and computers

ICT in agriculture is potential ground concentrating on the growth and development of the primary sector and other related fields. It also helps in the development of agriculture policy to ensure an equitable diffusion of technologies. The diffusion of advanced ICTs has contributed for the development of economy of both developing and developed nations (Adhiguru and Vimaladevi, 2012). ICT facilitates the access to local and global information and knowledge. They are very helpful and are the modest ways for two-way communication. ICTs and their application have enormous impact due to growth and development in telecommunication; their tools combined with computer technology requires enhanced network-based information and communication podiums, such as internet. Telecommunications infrastructures are the driving forces of ICTs as they have capacity to link various ICT elements together irrespective of locations and can offer a congregating platform for this element. The merging of various elements of ICTs has improved development in all domains of human activities (Smitha, 2018).

The extension personnel are using a wide variety of e-tools for seeking and dissemination of improved technologies to the farming community. The knowledge on

e-tools by the agriculture extension personnel is a prerequisite for the use of e-tools. Manty (2011) found that for getting the information, extension personnel in North Karnataka used web based search engine (100 %) followed by internet (97.5 %), web based agricultural information portals (95 %), Kiosk (87.5 %), Decision Support System (85 %), e-newspaper (82.5 %) and video conferencing (77.5 %), Similarly, Verma and Sharma (2014) in their study found that, the use of computers is made by extension personnel to the extent of 43.76 per cent in agricultural operations. The study further revealed that the use of internet in agriculture is made to the extent of 39.81 per cent, use of mobile phones 68.69 per cent, use of Kissan call centers 36.79 per cent and the use of information kiosks 27.72 per cent. They concluded that majority of extension personnel apply ICT tools in their agricultural extension activities.

The Karnataka Government initiated 'Raitha Mitra Yojana' a'Farmer's Friend Scheme' during 2001 for providing effective extension services to the farmers (https://raitamitra.karnataka.gov.in). Raitha Samparka Kendras (RSKs)

also known as Agricultural Extension Centres are established under Raitha Mitra Yojane at hobli or sub-block level i.e., between village level and block level of administration to address a wide range of local issues related to agriculture. The RSKs act as a common platform for farmers to access and interact with agriculture based technology and information at the grass root level. These Kendras are intended to provide technical information on crop selection, crop production, and crop protection related know-how, market and weather information to the farmers. They also provide seed and soil testing facilities locally and facilitate on-site provision of critical inputs like seeds, bio-fertilizers, plant protection chemicals, etc. RSKs also provide a forum for the on-farm demonstration on new technologies developed by both public and private sectors and act as an interface for public and (or) private sector technologies and inputs. Access to such information sources is a crucial requirement for the sustainable development of the farming systems. Hence the present study was undertaken to assess the utilization pattern of extension personnel about e-tools.

Material and methods

The study was conducted using "Ex-post facto" research design in Vijayapur District of Karnataka during 2019. The Vijayapur districts was selected purposively as no such study was conducted on ICTs and sampling area which comes under college of Agriculture Vijayapur jurisdiction. All the taluks coming under Vijayapur District namely Vijayapur, Basavana Bagewadi, Sindagi, Indi and Muddebihal were considered and selected for the study. A list of extension personnel working in private sector was obtained from Joint Director of Agriculture (JDA) office. A total of 80 extension personnel working in private sector were selected for the study. The e-tools selected for the study were Raitamitra, Krishi Maratha vahini, Whats app groups, mobile, agriculture information Kiosks, video conferencing, Kissan mobile advisory service and Agromet services.

Data was collected for study with the aid of well designed, pre-tested and comprehensive schedule exclusively prepared for the study. Primary data was elicited from the extension personnel through personal interview method and statistical tools of analysis in the study are mean, frequency, percentage standard deviation and correlation.

Results and discussion

Utilisation of e-tools by the extension personnel

The results in Table 1 indicates that of the overall utilisation of e-tools by the extension personnel in Vijayapur District, with almost equal number of respondents were found to be distributed in all the utilisation categories namely by, 43.75 per cent respondents belonged to high utilisation, 32.50 % medium category, and low marginally (23.75 %). These findings are partially supported by the findings of Vishwatej (2013) and Manty (2011).

Extent of utilisation of e-tools

The data in Table 2 has depicted the extent of utilization of individual e-tools by the extension personnel of developmental Departments in Vijayapur district. Majority (93.75 %) of extension personnel were utilising 'Krishi Marata Vahini' services, out of which 37.50 per cent of extension personnel using if weekly twice, followed by daily (27.50 %) , weekly once (18.75 %) and fortnightly (10.00 %). There has been a need for extension personnel to update with prices in nearby markets and most of the extension personnel were registered to the services to get daily updates of market prices, even though many farmers sharing the market information with fellow farmers.

Majority (51.25 %) of extension personnel were utilising 'Raitha Mitra' services, out of which 26.25 per cent of the respondents were using weekly twice, followed by weekly once (15 %) , daily (5.00 %) and fortnightly (5.00 %) to know about new schemes, information on agriculture and allied information.

Out of majority (100 %) of extension personnel were utilising services of 'Whats App groups'. cent per cent of extension personnel were using daily. All these e-tool is quite common and very popular now a day's. 'Whats App' has been preferred more as this tool was simpler, easy to use, low internet data requirement; hence, and increasingly popular in rural India. Less numbers (27.50 %) of extension personnel were utilising 'Information kiosk' services, out of which of 13.75 per cent the extension personnel were using weekly twice, followed by weekly once (7.50 %) and daily (6.25 %). Less utilisation is might be due to its non- availability and low accessibility and poor maintenance of Kiosk in the study area.

Nearby half of the extension personnel (43.75 %) were utilising 'Agromet Advisory Services', out of which 21.25 per

Table 1. Distribution of the private extension personnel according to overall utilization of e-tools (n = 80)

Sl. No.	Category	Frequency	Percentage
1	Low	19	23.75
2	Medium	26	32.50
3	High	35	43.75
Mean = 32.60	S.D. = 6.60		

Table 2. Extent of utilization of e-tools (n = 80)

e-tools	Extent of Utilization									
	Daily		Weekly twice		Weekly once		Fortnightly		Never	
	f	%	f	%	f	%	f	%	f	%
Krishi Marata Vahini	22	27.50	26	37.50	15	18.75	8	10.00	9	11.25
Raitamitra	4	5.00	12	15	21	26.25	4	5.00	39	48.75
Whats app group	80	100.00	-	-	-	-	-	-	-	-
Information Kiosk	5	6.25	6	7.50	11	13.75	-	-	58	72.50
Agromet Advisory Service	17	21.25	13	16.25	5	6.25	-	-	45	56.25
Video conference	23	28.75	16	20	17	21.25	6	7.5	18	26.25

Table 3. Utilisation pattern of e-tools for specific information by private extension workers (n = 80)

Sl. No.	Specific information		Krishi Marata vahini	Raita mitra	Whats app group	Inform ation kiosk	Agromet advisory service	Video conference
1.	For keeping up-to-date subject information	f	-	35	42	-	-	58
		%	-	43.75	52.50	-	-	72.5
2.	To gain current and general information	f	-	42	56	20	6	40
		%	-	52.50	70.00	25	-	50.00
3.	For finding relevant information in the area of specialization	f	-	36	52	-	-	37
		%	-	45.00	65.00	-	-	46.25
4.	For professional development	f	-	25	45	-	-	26
		%	-	20.00	56.25	-	-	32.50
5.	For communication/ for information share	f	-	-	65	-	-	38
		%	-	-	81.25	-	-	47.50
6.	Transfer of technology	f	-	-	75	-	-	46
		%	-		93.75			57.50
7.	Updates related market information	f	76	-	35	-	-	-
		%	95.00	-	43.75	-		-
8.	Weather information	f	-	-	38	-	25	-
		%	-	-	47.50	-	20.00	-
9.	Post- harvest practices	f	-	28	50	-	-	25
		%	-	35.00	62.50			20.00
10.	Live stock	f	-	-	22	-	-	-
		%	-	-	27.50	-	-	-
11.	Agriculture information (Crop protection, cultivation practices, and alternate crops etc.)	f	-	44	52	-	-	35
		%	-	55.0	65.00	-	-	43.75

cent of the extension personnel using daily once, followed by weekly once (16.25 %) and weekly twice (6.25 %). The possible reasons could be lack of awareness among extension personnel in Vijayapur district.

Majority (77.50 %) of extension personnel were utilising 'Video Conferencing'. Among the respondents 21.25 per cent were using daily, followed by weekly once (16.25 %), fortnightly (7.54 %) and weekly twice (6.25 %). It helps to give training to the extension personnel. as 'Video Conferencing' can made available in their mobile, most of the respondents used to chat with their family, friends and colleagues.

Utilisation pattern of e-tools for specific information by private extension workers

The data in Table 3 depicted the utilisation pattern of e-tools for specific information by private extension workers. For keeping up-to-date subject information majority (72.50 %) of extension personnel were utilising 'Video Conferencing' tool, followed by Whats app group (52.50 %) and Raitamitra (43.75 %) in order of preference.

To gain current and general information, majority (56 %) of extension personnel were utilising 'Whats app group' tool, followed by Raitamitra (52.50 %) , Whats app group (52.50 %) Video Conferencing' (50 %) and Raitamitra (43.75 %).

For finding relevant information in the area of specialization majority 65.00 %) of extension personnel were utilising 'Whats app group' followed by 'Videoconferencing' tool, (46.25 %) and Raitamitra (45.00 %). In order to Transfer the technology, majority (93.75 %) of extension personnel were utilising 'Whats app group' tool, followed by 'Videoconferencing' (57.50 %) only.

For getting information on agriculture (Crop protection, cultivation practices, and alternate crops etc.), majority (65.00 %) of extension personnel were utilising 'Whats app group' tool, followed by Raitamitra (55.00 %) and 'Videoconferencing' tool (43.75 %).

It is crucial to make the extension personnel more e-literate as they can use the advanced e- tools like apps, portals etc., to access the information at a faster rate and transfer the technologies at faster rate. It can be made possible by organizing training programmes on use of e-tools by the administration. The findings of the study indicated low and medium utilisation level of extension personnel towards e-tools considered in the study. So there is lot of scope to increase utilisation level of extension personnel with respect to e-tools by manipulating some of the profile characteristics *viz,* cosmopoliteness and Innovative proneness.

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