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Benefits of the Use of ICT Services Perceived by Farmers for Acquiring Agricultural Information in Central U.P.

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ABSTRACT

ICT services are yet to make any breakthrough in agricultural information dissemination and other areas. There are many information servers available in online communication services at grass root levels; some of them like telephone, computer, internet, and other ICT services are more effective for the transfer of agricultural technologies. ICT can help an average Indian farmer to get relevant information regarding agro-inputs, crop production technologies, agro-processing, market support, agro-finance and management of farm agri-business. Therefore, an attempt has been made to find out the benefits of the use of ICT services perceived by farmers for acquiring agricultural information. So, six villages from the Bakshi ka Talab block in the Lucknow district in 2018 was surveyed using a randomized survey with a questionnaire and interview schedule with a sample of 20 respondents from each village. Out of the 120 respondents, the study revealed that ICT tools like radio 51.67 per cent as low, T.V. 48.33 per cent as a medium, Mobile phone 51.67 per cent as medium, Internet 47.50 per cent as medium, Social media 48.33 percent as low level of benefits perceived by respondents respectively. It is concluded the there is a need for improving the awareness and infrastructure of ICT tools in rural areas.

Keywords: Agricultural information, ICT, Respondents, Rural development, Sustainability

INTRODUCTION

Agriculture is one of the prospective areas in which ICT can effectively be applied particularly for the social and economic development of the Indian agrarian community. Information and communication are always necessary for agriculture. Since people have started growing crops, raising livestock, and catching the fish, they have hunted information from one another. With the introduction of information and communication technologies, traditional agriculture has been reformed, eventually contributing to the significant improvements in agricultural productivity and sustainability. Empowering farmers with the right information at the right time and place is essential for improving the efficiency and viability of small and marginal holdings. Information and Communication Technologies allow the agriculture industry, to increase information flow to all industry participants at a decreased cost. The agricultural extension mechanism is becoming dependent on ICT to provide appropriate and location-specific technologies for the farmers to furnish timely and proficient advice to the farmers. The dissemination of adequate, efficient and tailored technologies related to agro-climatic zone, size of farm and soil type, etc. to the farmers is deficient in Indian agriculture and it is the real challenge in front of policymakers in India. Experiences of integration of ICTs in the agricultural institutes have been showing encouraging results and also complementing conventional communication methods (Bisht *et al.,* 2010; Kale *et al.,* 2015).

METHODOLOGY

The study was conducted at Lucknow district of Uttar Pradesh in 2018. The study examined the benefits of the

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use of ICT services perceived by farmers for acquiring agricultural information. Random sampling was employed to select respondents from six villages namely Asti, Bargadi, Bhauli, Hardhaurpur, Kathwara and Shivari of Bakshi ka Talab block. There were 20 respondents selected by simple random sampling form each village. The total number of respondents was one hundred and twenty (120). A well-structured interview schedule was used for collecting the data from the respondents. Frequency and Percentage, two statistical parameters were used for calculating or analyzing the collected data. Lucknow district was purposefully selected as the researcher belongs to this district and is well acquainted with the people of the area. It served a great deal of convenience for the research worker in them of accessibility easy of rapport buildings, time and education level of farmer and ICT sources.

RESULTS AND DISCUSSION

Most of the respondents' i.e. 51.66 per cent belonged to the middle age group, most of the respondents' i.e. 27.5 per cent having up to a high school of education level, most of the respondents i.e. 64.17 per cent were marginal category' , most of the respondents i.e. 43.33 per cent were Agriculture + Service category of occupation and 45 percent had medium annual income.

Table 1 reveals that that a higher percentage of the respondents 44.16 per cent had medium extension participation. The majority of the respondents i.e. 61.67 per cent found no membership of any organization. 45.00 per cent were having a medium level of information-seeking behavior followed by 33.33 per cent having high and 21.67 per cent were having a low level of information-

Table 1: Awareness level of respondents

S.No.	Variable	Category	Respondents	
			Frequency	Percentage
1.	Extension participation	Low (0-4 score)	27	22.50
		Medium (5-9 score)	53	44.16
		High (10-15 score)	40	33.34
2.	Social participation	No membership of any Organization	74	61.67
		Membership of one Organization	30	25.00
		Membership of two Organization	12	10.00
		Membership of more than one Organization	4	3.33
		No membership of any Organization	74	61.67
3.	Information seeking behavior	Low (0-3 score)	26	21.67
		Medium (4-7 score)	54	45.00
		High (8-12 score)	40	33.33
4.	Innovativeness	Low (0-3 score)	42	35.00
		Medium (4-8 score)	54	45.00
		High (9-12 score)	24	20.00
5.	Attitude towards ICT services	Agree (0-6 score)	43	35.83
		Neutral (7-11 score)	55	45.84
		Disagree (12-15 score)	22	18.33
6.	Mass media exposure	Low (0-5 score)	31	25.83
		Medium (6-10 score)	41	34.17
		High (11-15 score)	48	40.00
		Total	**120**	**100**

Table 2: Distribution of respondents according to the benefits of the use of ICTs as perceived by the farmers (N=120)

ICT services	Perceived Benefits by farmers			Total
	Low	Medium	High	
Radio	62	32	26	120
	51.67%	26.66%	21.67%	100%
T.V.	24	58	38	120
	20.00%	48.33%	31.67%	100%
Mobile phone	18	62	40	120
	15.00%	51.67%	34.17%	100%
Internet	16	57	47	120
	13.33%	47.50%	39.17%	100%
Social media	58	34	28	120
	48.33%	28.34%	23.33%	100%

seeking behavior. Most of the respondents i.e. 45.00 percent were found to have medium innovativeness, 45.84 per cent had a neutral attitude towards ICT services followed and 40.00 per cent of respondents were found to be in high mass media exposure category.

The data compiled in Table 2 shows that majority of the respondents 51.67 per cent feel a low level of benefits, while, 26.66 per cent of them feel medium and only 21.67 per cent felt high level of benefits, related to agriculture, respectively. Most of the respondents i.e. 48.33 per cent feel a medium level of benefits regarding TV as ICT tools, whereas, 31.67 per cent of them feel medium and 20.00 per cent feel a low level of benefits regarding agricultural information, respectively. About the Mobile phone majority of respondents, 51.67 per cent feel a medium level of benefits regarding agricultural information followed by 34.17 per cent feel a high level of and 15.00 percent feel a low level of benefits about disseminating agricultural information, respectively. The highest number of respondents, 47.50 per cent feel a medium level of benefits through the Internet while, 39.17 per cent high level and 13.33 per cent feel a low level of benefits about the use of the internet for gaining agricultural information, respectively. The higher number of the respondents, 48.33 per cent feels a low level of benefits through social media for agriculture followed by 28.34 percent of respondents feel medium and 23.33 per cent feel a high level of benefits about disseminating agricultural information to the farmers, respectively. Out of the 120 respondents, the study revealed that ICT tools like radio 51.67 per cent as low, T.V. 48.33 per cent as a medium, Mobile phone 51.67 per cent as medium, Internet 47.50 per cent as medium, Social media 48.33 per cent as low level of benefits perceived by respondents respectively. Paliwal (2015) reported that the benefits perceived by the respondents in use of ICTs were knowledge of developmental programs for women and children, saves time, getting the latest information, information within no time, increase education, to know credit sources, get an answer to every query and reduce face to face meetings.

CONCLUSION

It is well known that by the above study ICT can revolutionize agriculture in many ways. ICT projects are yet to make any breakthrough in agricultural information dissemination and other areas. There were some ICT tools like- Radio, TV, Mobile phone, Internet and Social media; purposively selected to find out the extent use of ICT tools as always for obtaining the agricultural information. The study revealed that out of the 120 respondents, the study revealed that ICT tools like radio 51.67 per cent as low, T.V. 48.33 per cent as a medium, Mobile phone 51.67 per cent as medium, Internet 47.50 percent as a medium, Social media 48.33 per cent as a high level of benefits perceived by respondents respectively. The deployment of ICTs needs to be stressed more. ICT for agricultural projects needs to be compared and evaluated precisely. It is need of the hour to obtain apposite information through ICTs and to deploy advanced ICTs in agriculture. There is a need for improving the awareness and infrastructure of ICT tools in rural areas. Evaluation of the effectiveness of existing strategies and policies to run ICT projects in agriculture based on the feedback of grass root level workers/officers working directly with farmers in rural regions. Improving digital access by farmers with technological advances and skills improvement.

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