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Original Research Article

Socio-economic Characteristics of Information Communication Technology Tools User Farmers and their Association with the Usefulness of the Messages through ICT Tools

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A B S T R A C T

The study was conducted in the year 2017-18 in Shivamogga and Chikamagaluru district of Karnataka state with a sample size of 120 farmers. Simple random sampling procedure was used to select the sample. The data was collected with the help of structured interview schedule. The socio-economic profile of the respondents revealed that majority of the respondents belong to middle age group (51.70%), high school education (41.67%), small land holding category (32.50%), 10-20 years of farming experience (40.83%) and high-income level (61.70%). Whereas, majority of the respondents had medium and low cosmopoliteness (35.00%), medium innovative proneness (55.83%), medium economic motivation (45.00%), medium mass media exposure (37.50%), medium information seeking behaviour (52.50%) and farmers had low political participation (58.34 %). The variables like where variables like Farming experience, Extension Participation, Innovative proneness, Information seeking behavior and Mass media participation had significant relationship at one per cent significance. Whereas, innovative proneness showed five per cent of significance. While the variables like age, education, landholding, annual income, cosmopoliteness, economic motivation and political participation had non-significant relationship with the usefulness of messages.

Keywords

Usefulness, Messages, Socio-economic

Introduction

Agriculture is the main stay of the Indian economy. It has always played and plays an important role in economic and social development of the developing country like India, where around 58% of the Indian population is involved in the farming and allied sectors. Thus, overall development of a county is not possible without agriculture. For the growth of agriculture it is important to disseminate the technology to the field and it is difficult to reach the maximum population with the prevailing traditional method of communication. Information and Communication Technology tools in agriculture are futuristic and presently an emerging field focusing on the enhancement of agricultural development and rural development in India. ICT is one of the important tools which provide the daily information to the farmers based on their needs. Introduction of ICT has made access to the information easy and Cost-effective.

Digitization is forming a digital version of analogy/physical things such as paper documents, microfilm images, photographs, sounds and more. Digitalization will play important role in agriculture innovation. Today, ICT can and should be a key agent for changing people's lives by access to information and sharing of Knowledge, which intern can be put into action in the fields to improve their conditions. With this background the present study was undertaken to assess the usefulness of the messages through ICT tools and to find out the relationship with socio-economic characteristics of ICT using farmers.

Materials and Methods

The study was conducted in Shivamogga and Chikamagaluru districts of Karnataka State. In Shivamogga district the whats app group of KSDA and Kissan call centre were selected. Similarly, e-Krushika app and KVK Kissan mobile agro advisory services in Chikamagaluru district were selected purposively. Under each districts two taluks were selected. Under each taluk two villages were selected with a minimum of 5 km and maximum of 15 km radius from the taluk headquarters, where 15 farmers were randomly selected from each village. Thus the total sample constituted to 120. The data was collected using pretested interview schedule. The responses were scored, classified, analysed and tabulated with the help of frequency and percentage techniques

Selection of the population

The farmers using the ICT tools in the Shivamogga and Chikamagaluru districts were constituted as population of the study.

Selection of respondents

From each village, fifteen farmers were selected by using simple random sampling technique. Thus 120 ICT user farmers were selected for the study.

Results and Discussion

Profile characteristics of the ICT tool user

The result in the table 1 reveals the socio-economic characteristics of the ICT tool user farmers. Age refers to the chronological age of the respondents in completed years. It is found in the Table 1 that majority (51.70%) of the ICT tool user farmers were of middle age, followed by 28.30 per cent farmers were belonged to young aged. The reason may be that the middle-aged farmers had more enthusiasm, physical vigour, self-confidence and more responsibility in the farming may be the reason that youth are more involved in farming as there is better scope of self-employment. Education of the farmers was measured in terms of years of schooling completed by her/ him. Table 1 revealed that 41.70 per cent of the ICT tool user respondents completed high school. It was noticeable that none of the farmers were illiterate. This says that all the farmers were literates and had formal education. There's a growing interest in rural areas to educate their children, education which can make them acquire knowledge and skills for better living even this trend is become common in rural areas.

The land holding was operationalized by considering the size of the land owned and cultivated by the respondents. It is depicted from Table 1 that 32.50 per cent of ICT tool user farmers were small farmers. The reason for this might be that due to the fragmentation of ancestral holding from generation to generation which had led to small landholding. This may also be due to the converting the agricultural lands into non-agricultural purpose like industries, commercial areas, etc., this led farmers owned small lands.

Table.1 Distribution of ICT tool user farmers according to their socio-economic characteristics (n=120)

Sl. No.	Categories	Frequency	Percentage
1	**Age**		
	Young (< 30 years)	34	28.30
	Middle (31 - 55 years)	62	51.70
	Old (> 55 years)	24	20.00
2.	**Education**		
	Illiterate	00	00.00
	Primary school	06	05.00
	Middle school	19	15.83
	High school	50	41.67
	P.U.C	32	26.67
	Graduate	05	04.16
	Post graduate	08	06.67
3.	**Land holding (in acres)**		
	Marginal farmers (Up to 2.50)	22	18.30
	Small farmers (2.51 - 5.00)	39	32.50
	Medium farmers (5.01 - 10.00)	35	29.20
	Big farmers (more than10)	24	20.00
4.	**Farming experience**		
	< 10 years	40	33.33
	10 - 20 years	49	40.83
	> 20 years	31	25.84
5.	**Annual income (in Rs.)**		
	Low (Up to 1 lakh)	12	10.00
	Medium (1 – 2.5 lakh)	34	28.30
	High (>2.5 lakh)	74	61.70
6.	**Cosmopoliteness**		
	Low (< 11.06)	42	35.00
	Medium (11.06– 13.32)	42	35.00
	High (> 13.32)	36	30.00
		Mean = 12.19	**S.D. = 2.25**
7.	**Innovative proneness**		
	Low (< 19.47)	35	29.17
	Medium (19.47- 23.56)	67	55.83

	High (> 23.56)	18	15.00
		Mean = 20.84	**S.D. = 2.72**
8.	**Extension participation**		
	Low (< 3.03)	53	44.17
	Medium (3.03- 5.62)	47	39.17
	High (> 5.62)	20	16.66
		Mean = 3.9	**S.D. = 1.72**
9.	**Economic motivation**		
	Low (< 15.18)	42	35.00
	Medium (15.18- 18.88)	54	45.00
	High (> 18.88)	24	20.00
		Mean = 16.41	**S.D. = 2.47**
10.	**Mass media exposure**		
	Low (< 4.10)	44	36.67
	Medium (4.10- 5.92)	45	37.50
	High (> 5.92)	31	25.83
		Mean = 4.70	**S.D. = 1.21**
11.	**Information seeking behaviour**		
	Low (< 16.32)	40	33.33
	Medium (16.32- 21.22)	63	52.50
	High (> 21.22)	17	14.17
		Mean = 17.95	**S.D. = 3.27**
12	**Political participation**		
	Low (< 1.39)	70	58.34
	Medium (1.39- 4.18)	34	28.33
	High (> 4.18)	16	13.33
		Mean = 2.32	**S.D. = 1.85**

Table.2 Association between usefulness of messages through ICT tools and profile of the farmers

(n = 120)

Categories	Chi-square values
Age	45.55^{NS}
Education	1.43^{NS}
Land Holding	64.39^{NS}
Farming Experience	34.32**
Annual Income	36.32^{NS}
Cosmopoliteness	2.19^{NS}
Innovative Proneness	10.72*
Extension Participation	20.71**
Economic Motivation	2.49^{NS}
Information seeking behaviour	4.85**
Political Participation	1.05^{NS}
Mass media Participation	14.77**

*significant at 5% level of significance,
**Significant at 1% level of significance,
NS-Non-Significant

Farming experience from Table 1 shows that majority (40.80%) of the ICT tool user respondents had 10 to 20 years of farming experience. The reasons for this was due to the majority of the respondents were in medium age group, the farmers might have started farming in their early age. This led majority of respondents had 10 to 20 years of farming experience.

Annual income is the total income earned by the family from the different source for a period of one year, in the Table 1 it depicts that 61.70 per cent of the farmers belonged to high income category. The reason may be that the respondents in the study area cultivated plantation crops like coffee and arecanut, commercial crops like banana, cocoa, pepper, vanilla with some medicinal and aromatic crops all these provide good returns to the farmers. Cosmopoliteness is the degree to which an individual is visiting or oriented outside to his/her immediate social system. The finding from Table 1 indicates that the ICT tool user farmers were equally (35.00%) belonged to low and medium level of Cosmopoliteness respectively. The reason was that probably villages located to near urban area, they might not be visiting to nearby towns for various reasons like entertainment, religious purpose, getting information and purchase of inputs etc.,

Innovative proneness is the degree to which a farmer adopts new ideas or technology relatively earlier than others in his/her social system. The figures in Table 1 says that majority 55.83 per cent of ICT user farmers had medium category of innovative proneness, the probable reason that the farmers were educated till the Pre-university education and had medium and small landholding and also it was may be due to the respondent's average level of interest in adoption of latest technologies. Extension participation refers to the involvement by the ICT tool user farmers who participated in different extension activities conducted

by the different organizations. The numerical in the Table 1 describes that 39.17 per cent of ICT tool users had medium level of extension participation. The probable reason for medium extension participation of the respondents may be that the awareness about organization of extension programmes like training programmes, demonstrations, Krishi melas, field days, campaigns etc., were felt limited importance.

An individual's orientation towards the achievement of the maximum economic ends such as maximization of farm profit is economic motivation. 45.00 per cent of farmers had medium economic motivation. It could be due to farmers earnings was average which led medium economic motivation was observed.

Mass media participation refers to the people's exposure and degree of participation in the various mass media like radio, television, newspaper and other reading materials. In table 1 37.50 and 36.67 per cent of the respondents had medium and low mass media participation. The study considered to assess the mass media participation in radio and TV only. Though radio and TV plays important role in dissemination of agriculture information here the influence of other media such as internet, mobile, social networking groups are also played pivotal role in sharing the information among the farmers.

Information seeking behaviour refers to the frequency of contact by ICT tool users with various information sources to seek the farm and other information. It could be interpreted from the Table 1 that majority 52.50 per cent of the respondents had medium level of information seeking behaviour. The probable reason could be that the farmers had interest in acquiring knowledge on recent up comings and interested on recent technologies for the adoption. It could be deduced from the Table 1 that 58.34 per cent of the respondents had low political participation, the reason for this was due to majority of the respondents were small and medium farmers these farmers might showed less importance in participation in organizational activities

Relationship with the profile of the ICT tool user farmers and the usefulness of the messages through ICT tools

Table 2 reveals the association between usefulness of the messages in ICT tools with the profile of the farmers. There was a significant association between farmers farming experience and usefulness of messages in ICT tools. The farming experience of the farmers always lead better practices in the agriculture. The experience of the individual increases his competency in their profession. Even the same tendency was observed in the farming experience.

There was a significant association between farmers innovative proneness and usefulness of the messages in ICT tools. The reason for this was may be that the farmers had established network in the society which led to acquisition of latest information in agriculture. Hence, it was observed that innovative proneness showed significant association.

There was a significant association between farmers extension participation and usefulness of messages. The reason for this might be that the extension activities play major roles in imparting new things among farmers by attending Krishi mela, exhibitions, campaigns etc., so extension activities might have given a clear understanding of the new technologies. This might be the reason that the significant association between usefulness of messages through ICT tools and the extension

participation.

There was a significant association between usefulness of the messages through ICT tools and information seeking behaviour of the farmers. The reason for this was may be that the frequent visits of the farmers to near-by towns helps to know many aspects in the society which led to acquisition of new things. Hence, it may showed significant association with usefulness of messages through ICT tools.

There was a significant association between usefulness of the messages through ICT tools and mass media exposure of the farmers. Mass media provides factual and useful information. The media one or other way helps in development of people in the society. Thus, there is a significant association between usefulness of messages and mass media exposure.

Conclusion

Among the modern ICT modes, mobile telephony has been most recent and widely accepted mode of delivering information. Increasing usage of the mobile telephony and the mobile- enabled information services, provide ways to improve information dissemination and the usage of the messages, will further helps in improving awareness, education, better adoption of technology, better market and efficiencies, etc., These in turn will catalyse the rural sector development and economic growth

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