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Relationship with Profile Characteristics of Farmers and Their Extent of use of ICTs

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ABSTRACT

The study revealed that majority (65.83%) of the respondents belonged to medium extent of use, followed by low (21.67%) and high (12.50%). The relationship between profile characteristics and extent of use of ICTs by the farmers indicated that computed r-value of education, farming experience, information seeking behaviour, extension contact, economic status, achievement motivation, scientific orientation and innovativeness were positively correlated with extent of use of ICTs and the association was found significant at 1 per cent level of probability. While age, land holding and socio-politico participation showed non-significant relation with extent of use of ICTs.

Key words : ICTs use, Farmers, Profile, Relationship.

Farmers are information hungry and they need information on all aspects of agriculture right from sowing of seeds to marketing. Our extension staff strength is not adequate to provide information to each and every farmer. In this context, Information and Communication Technologies (ICTs) play an important role in reaching the unreached.

Information and Communication Technologies (ICTs) are the basket of technologies which assist in storage, processing and dissemination of the information. ICT includes any communication device or application encompassing radio, television, mobiles, internet, kiosks, call centres, satellite systems etc; Hence the present study was undertaken with an objective to find out the relationship between profile characteristics of farmers and their extent of use of ICT in Guntur district of Andhra Pradesh.

MATERIAL AND METHODS

The research was conducted during the year 2011 in Guntur district of Andhra Pradesh. The selected crops include paddy, cotton and chilli. Ex-post facto research design was followed. Guntur district of Andhra Pradesh was selected purposively. One mandal for each crop with highest area of cultivation was selected for the study purposively. Thus a total of three mandals viz., Bapatla for paddy, Amaravathi for cotton and Veldurthy for chillies were selected for the study. Four villages from each mandal were selected randomly with a total twelve villages. For each crop forty farmers were selected by following proportionate random sampling constituting the total sample size to 120. The researcher made use of Interview schedule which was administered on selected sample representing the research population.

The collected data was subjected for statistical analysis and interpretation. The indicator of the investigation that the paper seeks to study is the relationship between the profile characteristics of the farmers and their extent of use of ICTs.

RESULTS AND DISCUSSION

It is evident from Table 1. that majority (65.83%) of the respondents belonged to medium extent of use, followed by low (21.67%) and high (12.50%).

The above results clearly indicate that among the ICT tools, radio, television and mobile were used and the other ICT tools were not used. The reason might be that whatever the developments took place in communication might have not been reached indicating the need for establishing the information kiosks. More awareness is to be created on call centres and their toll free numbers to make use of their services.

Table 1. Distribution of total respondents according to the extent of use of ICTs.

(n=120)

S.No	Category	Frequence	Percentage
1.	Low	26	21.67
2.	Medium	79	65.83
3.	High	15	12.50
	Total	120	100.00

Mean = 115.11 SD=9.69

Table 2. Relationship between independent variables of respondents and extent of use of ICTs.

(n=120)

S.No	Independent variable	r-value
1.	Age	-0.2026NS
2.	Education	0.7255**
3.	Farming Experience	0.7289**
4.	Land Holding	0.2358NS
5.	Information seeking behaviour	0.7708**
6.	Socio-politico participation	0.2452NS
7.	Extension contact	0.7227**
8.	Economic status	0.7536**
9.	Achievement motivation	0.7390**
10.	Scientific orientation	0.7534**
11.	Innovativeness	0.7581**

** 1% Level of significance NS=Non Significant

Relationship between profile characteristics and extent of use of ICTs

An attempt has been made to find out the association between independent variables and dependent variables through correlation coefficient (r) values. The results are presented in Table 2.

The r-values in table 2. indicated that education (0.7255), farming experience (0.7289), information seeking behaviour (0.7708), extension contact (0.7227), economic status (0.7536), achievement motivation (0.7390), scientific orientation (0.7534) and innovativeness (0.7581) were positively correlated with extent of use of ICTs and the association was found significant at 1 per cent level of probability. The r-values of age (-0.2026), land holding (0.2358) and socio-politico participation (0.2452) showed non-significant relation with extent of use of ICTs.

The above findings could be explained as, the higher the education, farming experience, information seeking behaviour, extension contact, economic status, achievement motivation, scientific orientation and innovativeness, the higher would be the extent of use of ICTs.

There is no relationship between the socio-politico participation and the extent of use of ICTs. Similarly there is no relationship between the land holding and the extent of use of ICTs and also between the age and the extent of use of ICTs. These findings were in accordance with the findings of Senthikumar (2000), Geetha (2002), Maniar (2002), Sridevi (2003) and Ganeshkumar *et al.,* (2008).

Multiple Linear Regression of selected independent variables with extent of use of ICTs.

An attempt has been made to find out the amount of contribution made by the independent variables in explaining the variation in the dependent

Table 3.Multiple Linear Regression of selected independent variables with extent of use of ICTs.

(n=120)

S.No	Independent variable	Regression coefficient	Standard error	t-value
1.	Age	-0.5622	0.9616	-0.5847NS
2.	Education	2.4079	0.8835	2.7251**
3.	Farming Experience	7.1350	1.1768	6.0628**
4.	Land Holding	5.6604	2.5032	2.2612NS
5.	Information seeking behaviour	0.8778	0.5192	1.6905NS
6.	Socio-politico participation	0.3142	0.1800	1.7453NS
7.	Extension contact	0.9534	0.3417	2.7896**
8.	Economic status	3.1896	0.5944	5.3659**
9.	Achievement motivation	0.7056	0.5502	1.2824NS
10.	Scientific orientation	1.6809	0.6455	2.6037NS
11.	Innovativeness	0.5783	0.5623	1.0285NS

a = 20.5687 R^2 =0.8943

** = 1% Level of significance

$Y=20.5687-0.5622X_1+2.4079X_2$**$+7.1350X_3$**$+5.6604X_4+0.8778X_5+0.3142X_6 +0.9534X_7$**$+ 3.1896X_8$**$+ 0.7056X_9+1.6809X_{10}+0.5783X_{11}$

NS=Non Significant

variable through multiple linear regression. The results are presented in table 3.

It was observed from Table 3. that the eleven independent variables with the extent of use of ICTs by the farmers taken on Multiple Linear Regression Analysis gave the R^2 (Co-efficient of multiple determination) value of 0.8943. Hence, it could be inferred that all the independent variables put together contributed 89.43 per cent of the total variation in the extent of use of ICTs by the farmers, leaving the rest to extraneous factors. The independent variables viz.,education, farming experience, extension contact, economic status of the respondents had contributed significantly at 0.01 level of probability towards the variation in the extent of use of ICTs.

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