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ICT OPERATIONAL SELF-CONFIDENCE OF THE FARMERS

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ABSTRACT

Realizing the importance of ICT in the development of farmers in the present situation of Science and Technology, now a day, it is expected that farmers should have enough ICT operational or working self-confidence for taking advantages of ICT for their development. It is a fact that higher ICT working self-confidence more will be the chances of exploring ICT tools and services on the job. Considering the significance of ICT operational self-confidence in accelerating the use of ICT amongst the farmers, this study was carried out to understand the level of ICT operational self-confidence of the farmers and the factors responsible behind generation of that self-confidence to operate various ICT tools and services. Ex-post facto research design was adopted for the study. This study was carried out in Anand district of Gujarat. Out of eight talukas of district, five random talukas viz. Anand, Petlad, Sojitra, Borsad and Anklav were selected. From the selected talukas, four random villages where numbers of practicing farmers were higher were selected randomly. Thus, the total selected villages for this study were twenty. Eight to fifteen farmers from each village were selected randomly from each selected village in such a way that total sample size become 200. Pre-tested interview schedule was prepared and personal interview method was used for collection the data from the farmers. Frequency, percentage, arbitrary method and coefficient of correlation were used as statistical tools. From the entire study, it was observed that more number of the farmers were having with medium to very low level of ICT operational self-confidence. Majority of the farmers were confident in operating smart phone, exchanging information through WhatsApp and using farm information source like YouTube. It was also observed that majority of the farmers had less confidence to get land records personally from online source, train other farmer to use internet, operate computer and getting information from I-Khedut portal.Education, annual income, all the selected communicational and psychological characteristics of the farmers had positive and highly significant association with their ICT operational self-confidence.

Keywords: *ICT, self-confidence, operations, tools and services, relationship*

INTRODUCTION

The most important ICT tools for the farming sector include computers, smart phones or mobile telephones and other telecommunication tools (Chauhan*et al.,* 2016). Many ICT potential tools, services and applications are made available in delivering agricultural extension to bring new information services for the farmers of India. The important government initiatives to promote the use of ICT in agriculture include national e-governance plans in agriculture, various touch screen kiosks, KVKs, Kisan call centers, agri-clinics, common service centers, mKisan, Kisan TV and various other applications. The farmers are expected to use various ICT platforms viz., mobiles, web portals, information kiosks, e-markets, e-Nam and e-farm applications for the development of farming and marketing their farm produce. The ICT platforms add farming and market knowledge to give farmers greater confidence in understanding the demand and enhance ability to the control production and manage supply chains (Patel and Vinaya, 2021). The operational or working self-confidence on the job to be carried out or machines to be handled is a basic need to be successful human resources (Pateland Vinaya, 2022;Bhuva*et al.,* 2021). It is not only your knowledge, attitude and understanding that help you to do certain jobs or handle certain machinery, tools or electronic system successfully but the most important matter which is perfectly needed to be successful human resources on work or machinery, tools or electronic system is the operational or working self-confidence. It is a fact that higher ICT working self-confidence more will be the chances of exploring ICT tools and services on the job. It is therefore expected that farmers should have operational self-confidence to take maximum advantages of all the ICT tools and services. Considering the significance of ICT operational

self-confidence in accelerating the use of ICT amongst the farmers, this study was carried to understand the level of ICT operational self-confidence of the farmers and the factors responsible behind generation of self-confidence to operate various ICT tools and services.

OBJECTIVES

(1) To study the ICT operational self-confidence of the farmers

(2) To study the relationship between profile of the farmers and their ICT operational self-confidence

METHODOLOGY

Ex-post facto research design was adopted for the study. The present investigation was conducted in Anand district of Gujarat state. The investigation was carried out in the purposefully selected Anand district of the Gujarat state as the district comprises comparatively more innovative farmers, convenient for researchers to study and not a single such type of study was carried out in the district. Anand district is comprised of eight talukas, out of them; five random talukas viz. Anand,Petalad,Sojitra,Borsad and Anklavwere selected.From the selected talukas, four random villages where numbers of practicing farmers were higher were selected randomly. Thus, the total selected villages for this study were twenty.A random sampling procedure was adopted for the selection of respondents from the selected villages. Based on the availability of total numbers of practicing farmers, eight to fifteen farmers from each village were selected. Finally, a random sample of total of 200 farmers was selected for the study. For measurement of ICT operational self-confidence of the farmers, standardized scale developed by Tankodara& Chauhan, (2021) was used. For collection of information, personal contact method of data collection was used and data were compiled, tabulated and analyzed to draw valid conclusion. Frequency, percentage, arbitrary method andcoefficient of correlation were used as statistical tools.

RESULTS AND DISCUSSION

Statement wise responses of farmers for measurement of ICT operational self-confidence is provided in table 1.

Table 1: Farmers according to their ICT operational self-confidence oriented statement wise responses (n= 200)

Sr. No.	ICT operational self-confidence oriented statements	Responses				
		SA	A	UD	DA	SDA
		No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
1	I am fully confident in operating smart phone.	118 (59.0)	63 (31.5)	11 (5.5)	07 (3.5)	01 (0.5)
2	I feel nervous while doing on-line financial transaction.	67 (33.5)	47 (23.5)	12 (6.0)	39 (19.5)	35 (17.5)
3	I feel confident while using Kisan Call Center.	34 (17.0)	61 (30.5)	55 (27.5)	12 (6.0)	38 (19.0)
4	Use of modern ICT in my life gives me tension.	08 (4.0)	05 (2.5)	12 (6.0)	41 (20.5)	134 (67.0)
5	I have enough skill to use *Kiosk* to find information.	11 (5.5)	18 (9.0)	23 (11.5)	12 (6.0)	136 (68.0)
6	I can get land records personally from online source.	53 (26.5)	33 (16.5)	14 (7.0)	10 (5.0)	90 (45.0)
7	I can train other farmer to use internet.	21 (10.5)	25 (12.5)	24 (12.0)	07 (3.5)	122 (61.0)
8	I confidently use farm information source like YouTube.	115 (57.5)	67 (33.5)	07 (3.5)	04 (2.0)	07 (3.5)
9	I feel confident while getting information from I-Khedut.	41 (20.5)	30 (15.0)	25 (12.5)	29 (14.5)	75 (37.5)
10	I can easily operate computer.	40 (20.0)	26 (13.0)	24 (12.0)	16 (8.0)	94 (47.0)
11	I can easily exchange information through WhatsApp.	141 (70.5)	42 (21.0)	05 (2.5)	06 (3.0)	06 (3.0)
12	I have experienced that Google is my good friend.	25 (12.5)	19 (9.5)	72 (36.0)	21 (10.5)	62 (31.0)

SA= Strongly Agree, A=Agree, UD= Undecided, DA=Disagree, SDA= Strongly Disagree

It can be seen from Table 1 that great majority (91.5 per cent) of the farmers were strongly to simply agree with the sentence that they can easily exchange information through WhatsApp. Similar way, great majority (90.5 per cent) of the famers simply or strongly agreed with having full confidence of using smart phone. 91.0 per cent of them were from the group of strongly agree to simply agree with confidently use farm information source like YouTube. However, 87.5 per cent of them were simply disagreeing to strongly disagree with modern ICT gives tension in their life.The tables 1 also shown that 85.5 per cent of the farmers were unsure disagree to strongly disagree with having enough skill to operate kiosk to find information.Three-fourth (75.0 per cent) of them were from unsure, agree to strongly with feeling confident while using Kisan call center. 77.5 per cent of them were unsure, disagree to strongly disagree with the statement says Google is their good friend. Similar way 67.0 per cent of them was unsure to strongly disagree with easily operating computer. 64.5 per cent farmers were unsure to strongly disagree with confidently getting information from I-Khedut portal.In case of providing training to other farmers about internet, 61.0 per cent were strongly disagreed. It can also be seen from above table that 57.0 per cent of farmers were from the category of simple agree to strongly agree with feeling nervousness while doing online financial transaction. Half of them were simple disagree to strongly disagreed with getting land records personally from online sources.

Overall ICT operational self-confidence was measured on the basis of responses of the farmers for all the statements of the scale. The overall ICT operational self-confidence of the farmers is as per the table 2.

Table 2: Farmers according to their overall ICT operational self-confidence (n= 200)

Sr. No.	ICT operational self-confidence	Number	Per cent
1	**Very low** (12 to 21.6score)	13	06.5
2	**Low** (above 21.6 to 31.2score)	53	26.5
3	**Medium** (above 31.2 to 40.8score)	48	24.0
4	**High** (above 40.8 to 50.4score)	49	24.5
5	**Very high** (above 50.4 to 60score)	37	18.5

After studying statement wise detail responses of farmers about ICT operational self-confidence, their level of all over self-confidence was also measured. The data given in Table 2 reveals that slightly more than one-fourth (26.5 per cent) of the farmers were having with low level of ICT operational self-confidence, followed by 24.5 per cent of them with high and almost similar (24.0 per cent) amount of them were having with medium level of self-confidence. Nearly one-fifth (18.5 per cent) of the farmers had very high and 6.5 per cent had very low level of ICT operational self-confidence. It can be concluded from finding of table 2 that nearly three-fifth (57.0 per cent) of the farmers came under the category of medium to very low level of ICT operational self-confidence. The probable reason behind this result might be medium to low level of knowledge of farmers about ICT. This result is not in line with the results obtained byChaudhari *et al.*, (2018), Mehta and Sonawane, (2012), Thorat, (2010), Patel, (2006) and Jyothi*et al.* (2020).

Relationship between the profile of farmers and their ICT operational self-confidence is presented in table 3.

Table 3: Relationship between profile characteristics of farmers and their ICT operationalself-confidence (n=200)

Sr. No.	Particular	r value
X_1	**Age**	-0.500**
X_2	**Education**	0.703**
X_3	**Farm experience**	-0.449**
X_4	**Landholding**	0.088
X_5	**Herd size**	0.067
X_6	**Annual income**	0.283**
X_7	**Family occupation**	0.121
X_8	**Social participation**	0.132
X_9	**Cosmopoliteness**	0.305**
X_{10}	**Extension contact**	0.269**
X_{11}	**Farm literature media exposure**	0.461**
X_{12}	**Achievement motivation**	0.719**
X_{13}	**Innovativeness**	0.564**
X_{14}	**Scientific orientation**	0.710**
X_{15}	**Risk orientation**	0.713**
X_{16}	**Economic motivation**	0.697**
X_{17}	**Market orientation**	0.676**

* = Significant at 0.05 level,

** = Highly Significant at 0.01 level

The result exhibited in table 3 indicates that the level of the ICT operational self-confidence was observed higher amongst those farmers, who were middle to young in age with comparatively more educate, having with more annual income and less experience of various farm operations, more frequent visit of town area, better communicational characteristics like exposure of farm media and good contact with extension personals. It was also seen that famers who were having with more motivation towards achievement, economic values with highly oriented towards market situations as well as taking risk in farming, believe in science and technology and more innovative in nature had more ICT operational or working self-confidence.

The other side of the result of the same table also indicates that the level of the ICT operational self-confidence was observed identical with the irrespective level of their possessed land area, number of animals, occupation of family and participation in various social organizations. It can be said that these variables had non-significant association with farmers' ICT operational self-confidence.

CONCLUSION

On the basis of entire study, it can be concluded that more number of the farmers were having with medium to very low level of ICT operational self-confidence. Majority of the farmers were confident in operating smart phone, exchanging information through WhatsApp and using farm information source like YouTube. Majority of the farmers had less confidence toget land records personally from online source,train other farmer to use internet, operate computer and getting information from I-Khedut portal. Education, annual income, all the selected communicational and psychological characteristics of the farmers had positive and highly significant association with their ICT operational self-confidence.

IMPLICATION

The findings of the study will be helpful to planners and policy makers to plan and implement the policy on ICT particular for farming community on the basis of understanding the factors responsible behind the generation of ICT operational self-confidence for farmers. Line departments can organize the skill oriented training programs on ICT with a view to enhance the level of self-confidence of the farming community on the basis of findings of this study.

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CONFLICT OF INTEREST

No conflict of interest among researchers.

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