



Problems Associated With the Use of ICTs by the Rural People: A Study in Assam

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Abstract

The use of Information and Communication Technology (ICT) is becoming very important for the people to cope up with the digital advancements. The present study was conducted on 120 members of Jorhat and Golaghat District of Assam with the objective of finding out the availability and accessibility to different ICTs tools and the problems faced by the respondents associated with use of ICTs by the rural people. The information was gathered from the respondents using a structured interview schedule through personal interview method. The research design adopted for the present study is exploratory and descriptive. From the study it was found that the majority of the rural people possessed Television. It was found that more than half (56.70%) respondents were belonged to medium level of digital media possession. The respondents had very less participation in training related to ICT and among the various problems faced by the respondents in utilization of digital devices. "Fear of committing any mistake", "High cost of internet packs" and "Poor network connectivity" topped the list with mean score 5.00, 4.98 and 4.66 respectively. The paper recommends for providing formal and informal trainings related using of ICTs in different activities.

Keywords: Problems, ICT, Rural, Assam, Digital

INTRODUCTION

Information and Communication Technology plays a very important role in advancement of education, business, the economy, as well as for social life and the modern information society. In this era of continuous development in digital technology everyone must have the ability to understand and use digital technology in such a way that they can perform the activities with the help of ICT. Digital literacy is directly linked with ICT. People fail to benefit from ICTs because they lack severely in knowledge, skill, awareness, exposure, access to digital devices and services and also they face a lot of problem in use of digital platforms.

Several studies on ICT have shown that it provides a lot of opportunities to reach more people within a short duration of time and easy access to local and global information in one's own place and provide access at any time. Relevancy of information available or disseminated in social media was good and optimum to adapt to their situation (). Nowadays people cannot ignore ICT since it has such a significant impact on our political, social, cultural, and economic life. People think that using certain digital tools will increase their standards which motivate people to utilise new digital technology. These standards can help to increase easy access to information and reducing the fears related to negative consequences of digital technology (Hunady *et al.*, 2020). ICT provides major opportunities to rural livelihoods through improving digital literacy and helping in reduction of poverty by increasing productivity of rural areas (Bhatia and Kiran, 2016).

Both male and female have equal access to the Internet, yet there are differences in the patterns (Jasten and Treceñe, 2020). The women farmers were making constructive use of mobile phones and radios, but not of the TVs or computer related ICTs such as the Internet (Braimok, 2017). Women have a lot of domestic obligations, which discourages them from accessing ICT services. Numerous researchers have also shown that women in the communities have absolutely no access to computer literacy.

One out of ten internet users in rural India was a woman (Ganjoo, 2022). In order to fulfill the necessary needs of day to day life, the urban women were more engaged with digital technology. Whereas, due to lack of education and other facilities, the rural women were very much lagging behind in use of such technology (Dhanamalar *et al.*, 2020)

But some people of the rural areas are unable to use these technologies due to some inconvenience that may be due to lack of availability of ICT tools, lack of knowledge, skills, attitudes and abilities for using digital devices or services. Some people considered high costs as one of the most significant hurdles to ICT adoption. Lack of family support for ICT usage, such as computers/laptops, mobile phones, and the internet, as well as a lack of suitable and competent training, were also significant barriers to digital devices use (Pandey *et al.*, 2015). Also people faced many problems associated with use of digital devices and services. So, if the problems associated with the use of digital devices and services were assessed then new initiatives can be taken to solve the problems of the rural people. There is a need for improving the awareness and infrastructure of ICT tools in rural areas (Mishra *et al.*, 2020).

There is an urgent need of such type of study which will help the policy makers to plan different policies and strategies for the development of digital literacy among the rural people and also help them to find solutions to their problems in use of ICT. Keeping these points in view a study on digital literacy is proposed to document the availability and accessibility to different ICTs by the respondents and to found out the problems faced by the respondents associated with use of digital devices and services.

METHODOLOGY

The present study was conducted in the Jorhat and Golaghat District of Assam. From these two districts, The Krishi Vigyan Kendra Jorhat, Kaliapani, and Krishi Vigyan Kendra Golaghat, Khumtai were selected with the purpose that these two institutions are situated near to Assam Agricultural University. From these two Krishi Vigyan

Kendras all the adopted villages were enlisted and then three numbers of villages from each Krishi Vigyan Kendras i.e 6 numbers of villages were randomly selected. From each selected village twenty respondents were selected randomly where ten were men and ten were women. So the total number of respondents was 120 numbers. The research design adopted for the present study is exploratory and descriptive. Following a review of the relevant literature, a structured interview schedule was prepared to find out the availability and accessibility to different ICTs tools and the problems associated with use of ICTs by the rural people. The schedule was consisting two parts. First part of the schedule consisted of the possible ICT tools that may be available with the respondents and the responses for the extent of use of those ICT tools were scored as "3= Regularly", "2= Occasionally" and "1=Never". The second part of the schedule was consisted of 19 possible problems associated with the use of digital devices and services and the responses were scored as "5= Always", "4= Very often", "3= Sometimes", "2 = Rarely" and "1 = Never". On the basis of the responses, the data were coded, tabulated and analyzed with the help of appropriate statistical tools such as frequencies, percentage, mean and standard deviation

RESULTS AND DISCUSSION

1. Availability and accessibility to different ICTs

The data in the table 1 indicates that there is a variation in availability of ICT tools like television (70.0%), feature phone (62.50%), smart phone (60.00%), internet (56.67%), CD/DVD (45.83%), other storage devices (pen drive, hard disk, memory card) (20.00%), radio (16.67%), laptop (14.17 %) desktop computer (10.83%) and tablet (3.33%).

This data showed that rural households are more likely to own a mobile phone, a smart phone or a television and that if they can use these gadgets effectively; there is a lot of scope for growth in rural regions.

Table 1 Distribution of the respondents according to availability of ICT tools**N=120**

ICT Tools	Availability				Extent of Access					
	Yes		No		Regularly		Occasionally		Never	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Television	84	70.00	36	30.00	50	41.67	34	28.33	36	30.00
Radio	20	16.67	100	83.33	9	7.50	11	9.17	100	83.33
Feature phone	75	62.50	45	37.50	69	57.50	6	5.00	45	37.50
Smart phone	72	60.00	48	40.00	67	55.83	5	4.17	48	40.00
Desktop computer	13	10.83	107	89.17	4	3.33	6	5.00	110	91.67
Laptop	17	14.17	103	85.83	3	2.50	4	3.33	113	94.17
Tablet	4	3.33	116	96.67	0	0.00	2	1.67	118	98.33
CD/DVD	55	45.83	65	54.17	24	20.00	31	25.83	65	54.17
Internet	68	56.67	52	43.33	51	42.50	17	14.17	52	43.33
Others (pen drive, hard disk memory card, etc)	24	20.00	96	80.00	3	2.50	10	8.33	107	89.17

Multiple response

2. Digital Media possessions

Table 2 reveals that more than half (56.70%) of the total respondents had medium level of digital media possessions, followed by 18.30 per cent of the respondents had high level of digital media possessions while 25.00 per cent of the respondents had low level of media possessions.

Table 2 Distribution of the respondents according to digital media possessions

N=120

Category	Frequency	Percentage	Mean	SD
Low level (< 1.33)	30	25.00		
Medium level(1.33-5.83)	68	56.70	3.56	2.27
High level (>5.83-8.1)	22	18.30		

3. Training attended related to use of digital devices

The scenario of participation of respondents in training on operation of different digital devices is very less as the table 3 shows that only 16.67 per cent of the respondents attended training on use of computer and only 11.67 per cent of the respondents attended training on use of internet.

It was found that only some of the people from young age group had taken training on computer operation. Some of them have learned how to use the internet during those training sessions, including how to send and receive emails and access various websites and URLs. This suggests that organisations at all levels should take the initiative to instruct people on how to utilise mobile phones, as well as various websites and applications, for a variety of reasons that will help them solve problems related to farming, their personal lives, or their economy.

Table 3 Distribution of the respondents according to training attended related to use digital devices

N=120

Training area	Attended		Not attended	
	F	%	F	%
Use of computer and performing different activities	20	16.67	100	83.33
Use of Internet	14	11.67	106	88.33

Multiple response

4. Ranking of the problems associated with use of digital devices and services

The problems faced by the respondents associated with the use of digital devices and services were presented in the table 4. Ranking technique was utilized to identify the problems faced by the respondents with the use of ICT. Based on the mean score in each problem, the ranks were assigned and presented among the various problems faced by the respondents in utilization of ICTs, "Fear of committing any mistake" was ranked I (5.00), followed by "High cost of internet packs" ranked II (4.98), "Poor network connectivity" ranked III (4.66), "Erratic power supply" ranked IV (4.57) and "High cost of repairing digital devices" ranked V (4.44).

From the table it can be concluded that these problems might affect the practice level of the respondents on digital activities and services. This can ultimately affect in digital literacy. Syiem and Raj (2015), and Malakar P. (2021) also reported similar constraints related to use of different digital devices and services.

Table 4 Ranking of the problems associated with use of digital devices and services

SL. No	Statements	Mean Score	Rank
1	Fear of committing any mistake	5.00	I
2	High cost of Internet packs	4.98	II
3	Poor network connectivity	4.66	III
4	Erratic power supply	4.57	IV
5	High cost for repairing digital devices	4.44	V
6	High cost of digital devices	4.21	VI
7	Language problem	4.15	VII
8	Lack of confidence in operating digital devices	4.09	VIII
9	ICT services (Internet Café/Common Service Center) are far away	4.08	IX
10	Lack of repairing centers in the area	4.07	X
11	Due to busy in home activities	4.05	XI
12	Low socio economic background	3.98	XII
13	Lack of training on using digital devices	3.88	XIII
14	Lack of knowledge on operating digital devices	3.50	XIV
15	Hesitate to learn from juniors	3.44	XV
16	Lack of digital devices	3.44	XVI
17	Ignored by family members in making them learn about operating digital devices	3.36	XVII
18	Low education level	3.10	XVIII
19	Low interest level	2.54	XIX

CONCLUSION:

Based on the findings of the present study it can be concluded that the majority of the rural people possessed Television. Rural households are more likely to own a mobile phone, a smart phone or a television and that if they can use these gadgets effectively; there is a lot of scope for growth in rural regions. The findings also showed that the respondents had very less participation in training related to ICT. Due to which the rural respondents also faced many problems while operating digital devices and these problems might have affected the practice level of the respondents on digital activities and services. Therefore, there is an urgent need for providing formal and informal trainings related to use of ICTs in different activities. Also organizations at all levels should take the initiative to instruct people on how to utilise mobile phones, as well as various websites and applications, for a variety of reasons that will help them solve problems related to farming, their personal lives, or their economy.

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