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Use Of Information And Communication Technology (ICT) In Rural Areas Of Dibrugarh District Of Assam

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Abstract
Information and Communication Technology (ICT) encompasses a broad range of technologies that facilitate the handling of information and enhance communication. While often considered an extension of Information Technology (IT), ICT emphasizes the integration of telecommunications, intelligent building management systems and audio-visual systems. Thus the extent which rural dwellers use ICTs are ex-rayed so as to know how that affects their level of economic activities. In this backdrop the paper tries to study on the use of ICTs in economic development of rural areas of Dibrugarh district of Assam. Non-probability (purposive) and probability (simple random) sampling techniques are used to create a sampling frame. In order to achieve the desired representation from various sub-groups in the population, purposive sampling was used.
Keywords: *ICTs, Rural Dwellers, Dibrugarh District, Assam*

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I. Introduction

Information and communication technology usually called ICT, is often used an extended synonym for technology (IT) but is usually a more general term that stresses the role of unified communications and the integration of telecommunications, intelligent building management systems and audio visual systems in modern information technology. Information and communication technology (hereafter ICT) consists of all technical means used to handle information and aid communication, including computer and network hardware, communication middleware as well as necessary software. The term ICT is used to refer to the merging of audio-visual and telephone network with computer network through a single cabling or link system.

Information and communication technologies (ICTs) involve innovations in microelectronics, computing (hardware and software), telecommunications and opto-electronics. These innovations allow the processing and storage of large amounts of information, along with rapid distribution of information through communication networks. ICTs include computers, the internet, telephones, radio and television. These technologies help in the delivery of information to where it is required, in a timely manner. ICTs multiply time, shorten distances and eliminate hierarchy and geographical boundaries. This leads to reduced costs of operations. The collective legacy of ICTs is built on empowering people with the ability to communicate instantaneously, which is known to facilitate the development process by increasing efficiency, effectiveness and equity (Chilimo, 2008).

ICTs can be divided into two categories: Old ICTs; these include radio, television, landline telephones and telegraph.

New ICTs; these include computers, satellites, wireless one-to-one communications (including mobile phones), electronic mail (e-mail) and internet.

It is a matter of fact that still eighty percent of India's population resides in villages. And the huge contribution this percentage can make in the developmental field shall, in no case, be ignored. There has been an upsurge in public outcry over the deprivation of yet to be deemed fundamental right, the right to information in the rural areas. Some already advanced areas in their race to cope with the west, have so far denied the rural areas of their want - modernization and technology. And if this race continues unabated like this, it would certainly render our society into a mess of poor ghettos in terms of underexposed and overexposed to information. This consideration and also the idea of integration of urban and rural areas by means of ICT have obliged the Union Government to conceive the idea of implementation of ICTs in rural India. This is being seen a step forward to the realization of the goal of Global village (Time rays, 2011).

At the zenith of the ICE (Information Communication Entertainment) age, convergence is the talk of the globe. Installation of an ICT network at the village level means access to the world within seconds. Through internet, mobile phones, TV, radio, etc. one can know the latest developments in the fields of agriculture, horticulture to name a few. Satellite observation systems to identify when crops were planted and how they are developing can be put in place. Subjects of utmost importance like information on air humidity, soil moisture

content and the second variation of precipitation are readily available now. Villages in deserts are prone to droughts and sometimes due to lack of rainfall droughts hit other areas also. Such thing becomes the cause of famine and ultimately death of many animals and human beings. Therefore, drought prediction at right time can save lacks of lives. The crop failures and the suicides committed by destitute farmers in many states is a matter of shame for an agricultural nation like India. One of the reasons behind this is the use of artificial seeds which the farmers buy out of ignorance. Such a situation can be successfully averted if information on the quality of the seeds or plant buds is readily available. Furthermore suggestions about the time of harvest and warnings on potential crop damage such as swarms of locusts will be a matter of fact for the farmers. Information about anything right from mixed farming, nursery management, pest control, animal husbandry, forestry, land reclamation will be all in hand property of the farmer (Time rays, 2011).

By the ICT revolution inter-city marketing for women entrepreneurs is possible. This will establish a closed group communication network for community based women organizations to promote inter-city direct sales of products made by artisans and skilled workers. This will be accomplished by providing community based organizations (CBOS) with communication lines by way of cellular phones to enable them to network for marketing their products. Apart from this, daily wage labourers and low remunerative job holders will be largely benefited by information on current job availability. Govt. employees like school teachers and village nurse will get opportunities to upgrade their knowledge every day. Nurses and medical shop owners can better deal with any epidemic by acquiring adequate knowledge of the latest developments in medicine. Dissipation of numerous myths about some diseases like AIDS, leprosy, etc. is possible. And various movements like Pulse Polio Immunisation Movement will be greater than success. A better platform will be met in handling sensitive matters like all prevalent superstitions. This is related to their ethos and must not be taken casually. Educating people by means of classroom teaching is not of much avail but should be supported by conducting audio - visual campus live demonstrations of the facts through internet and other media, and direct confrontation with the persons who overcame such superstitions. Needless to say, this can be done only with the ICT implementation (Time rays, 2011).

Education for school and college students through online tuition centres, radio, TV, mobile phones are available. Information about govt. grants, loans etc. schemes and insurance policies further establishes them firmly on the position to safeguard the future of their progeny. For business minded people like small enterprise trader, kirana shop owner, small industrialists, cottage industry owners, real estate investment is something irresistible. New market exploration if done manually is a tough job but is a matter of few minutes time by means of ICT.

In respect of entertainment, youth activity and sports ICT is going to be a key player. Village youth good in art, theatre, sports will never get a better opportunity than this to come to the mainstream entertainment and sports industry. Also entertainment as a means of recreation will give a sigh of relief for working class people.

However, since large proportion of the population of Assam is concentrated in rural areas which are remote, sparsely populated, difficult to access by virtue of the hilly terrain reaching such services in economical manner without compromising on quality of services is a key challenge (ADB, 2007).

It is stated that using information is a key issue in the information age. The real challenge of our time is not producing information or storing information but getting people to use information (Gholamreza and Naser (2005); Akinbile and Alabi, 2010). Timely availability of relevant information is vital for effective performance of rural dwellers. The enhancement of rural economic activities can be brought about by improving capacity in terms of enhancing access to information , while also the technical nature of economic activities requires that the knowledge of practitioners are constantly updated which can be achieved through their enhanced information seeking behaviour by the use of ICTs (Akinbile and Alabi, 2010). It thus becomes important to find out how use of ICTs affects economic activities of rural dwellers. Thus the extent which rural dwellers use ICTs are ex-rayed so as to know how that affects their level of economic activities. It is against this backdrop that we thought it worthwhile to make a study on the use of ICTs in economic development of rural areas of Dibrugarh district of Assam because no such attempt has made so far in the proposed study area.

Objectives Of The Study

The prime objective of the paper is to examine the extent to which dwellers in the rural areas have access to ICTs. Moreover this paper makes an effort to know the socio-economic background of the sample households.

II. Methodology Of The Study

This paper is based on both quantitative and qualitative data. Data are collected from a cross-section of rural dwellers residing in the development blocks of Dibrugarh district of Assam.

In this paper, non-probability (purposive) and probability (simple random) sampling techniques are used to create a sampling frame. In order to achieve the desired representation from various sub-groups in the population, purposive sampling was used firstly. This sampling technique allows us to initially identify suitable areas in Dibrugarh district of Assam. In order to further increase the chances of obtaining a representative sample, random sampling is applied. The aforementioned sampling techniques can be described in the following two stages:

In stage 1, the study purposively selects the Dibrugarh district of Assam as most of the populations in this district reside in rural areas. This stage was achieved with the help of census data from the population and housing census of 2011. By the same token, the study has been taken purposively seven development blocks of Dibrugarh district.

In stage 2, the study adopts the simple random technique to select its population. In this respect, the seven development blocks of Dibrugarh district as cited as suitable starting points from which to draw a fair distribution of villages. By the same token households have been taken from sample villages.

Altogether 400 sample households have been taken from seven development blocks of Dibrugarh district given that the study population in Dibrugarh is beyond 5000.

The selection of the sample size is based on Gay's (1996:125) guidelines

According to Gay:

(a) The larger the population size, the smaller the percentage of the population required to get a representative sample;
(b) For smaller populations (N<100) there is little point in sampling;
(c) If the population size is around 1500, 20% should be sampled; and
(d) Beyond 5000, the population size is irrelevant a sample size of 400 is adequate.

Both quantitative and qualitative data were collected from respondents from the household using structural interview schedule. The interview schedule was divided into three sections. First section was on household information of respondents; Second section was on economic status of the household of respondents and third was on the access to ICTs.

By following the above methodology, field survey was conducted in the sample villages of seven development blocks from the month of June 2015 to March, 2016.

Description Of Study Area

Dibrugarh district is located between $27^0 5' 38''$ north to $27^0 42' 30''$north latitude and $94^0 29' 8''$ east longitude. It is surrounded on the south east by Tirap district of Arunachal Pradesh, on the north by Dhemaji district, on the east by Tinsukia district and on the north and southeast by the Sibsagar disrtict. The district covers a geographical area of 3381 s.q. Km. As per 2011 census, the total population has been recorded as 13,26,335 out of which 676,434 males and 649,901 female. Against the rural population 1,082,605, the urban population was 243,730. There are seven development blocks, comprising of 93 gaon panchayats and 1362 revenue villages. The district head quarter is Dibrugarh which deduced its name from 'Dibarumukh'. The respective blocks are Barbaruah, Joypur, Khowang, Lahowal, Panitola, Tengakhat and Tingkhong.

III. Findings And Discussion

Socio-Economic Characteristics Of The Respondents

Caste of the Respondents: The caste of majority (69.2%) of respondents was OBC and few respondents belong to MOBC (3%) of study area. The Tingkhong block has largest number of OBC (89.7%) followed by the Panitola (82.1%), Tengakhat (73.5%), Barbaruah (66.1%), Lahowal (61.1%), Khowang (59.1%) and Joypur (57.1%). Few respondents of Panitola block belong to General caste followed by Joypur, Khowang, Tengakhat, Lahowal, Barbaruah and Tingkhong. The mean age of the respondent is 43 years.

Religion of the Respondents: The religion of majority of respondents (92%) is Hindu and few respondents (0.5%) belong to other religion. Among the Hindu religion, all the respondents of Barbaruah and Panitola block belong to Hindu religion followed by the respondents of Joypur, Tengakhat, Tingkhong, Lahowal and Khowang block of the study area. Few respondents (3.6%) of Joypur block belong to Buddhism.

Types of Family: The Majority of respondents (81.5%) belong to nuclear family and few respondents (18.5%) belong to joint family. Large percentage of respondents of Barbaruah block belongs to nuclear family followed by the respondents of Panitola, Tengakhat, Tingkhong, Lahowal, Khowang and Joypur.

Sex of the Respondent: The majority of respondents are male (89%) and few respondents are female (11%). Panitola block has the highest percentage of male respondents (100%) and Barbaruah block has lowest number of male respondents (83.9%) as compared to other blocks of the study area.

Mean Age of the Respondents: It is found that the mean age of the respondents is 43 years**.**

Level of Education of the Respondents: Many respondents are having high school education (31.0%) followed by the qualification of higher secondary level (22%), M. E. and primary level (14.2%), graduation (12.5%) and post-graduation (0.2%). Majority of respondents having high school leaving certificate reside in Joypur development block.

Occupational Distribution of the Respondents: Majority of respondents are farmers (33.8%) and few are professional (0.2%). Highest percentage of respondents of Tingkhong block (48.5%) and lowest percentage of respondents of Lahowal block (13.9%) are farmers as compared to the respondents of other blocks of the study area.

Income Level of the Households: The majority of households (41.5%) have income from all sources per month are less than Rs.15000 per month and few have income more than Rs. 50000. Highest percentage of households of Joypur development block (58.9%) have income less than Rs. 15000 followed by the households of Tingkhong (52.9%), Lahowal (38.9%), Tengakhat (36.8%), Khowang (36.4%), Barbaruah (32.1%) and Panitola (28.6%).

Access To ICTS At The Households

The study found majority (96.5%) of respondents have heard about ICTs and few (3.5%) have not heard about it. large percentage of respondents of Tengakhat block (98.5%) have heard about ICTs followed by Lahowal, Khowang, Barbaruah, Panitola, Joypur and Tingkhong.

Sources of Awareness about ICTs: The table no.1 shows that many respondents 112 (28.0%) have heard about ICTs through TV (as a single source) and few respondents have heard about ICTs through village headman. But as far as multiple sources are concerned large percentage of respondents have heard about ICTs through other sources.

Table – 1

		Sources of Awareness about ICT							
	Name of the Block	0	TV	Print Media	Village Headman	Others	TV, Print Media	TV, Print Media, Village Headman	Total
	Barbaruah	2	13	0	1	37	1	2	56
		3.6%	23.2%	.0%	1.8%	66.1%	1.8%	3.6%	100.0%
	Khowang	3	18	2	4	60	1	0	88
		3.4%	20.5%	2.3%	4.5%	68.2%	1.1%	.0%	100.0%
	Panitola	1	6	2	0	19	0	0	28
		3.6%	21.4%	7.1%	.0%	67.9%	.0%	.0%	100.0%
	Joypur	2	36	0	0	8	7	3	56
		3.6%	64.3%	.0%	.0%	14.3%	12.5%	5.4%	100.0%
	Lahowal	1	7	1	1	26	0	0	36
		2.8%	19.4%	2.8%	2.8%	72.2%	.0%	.0%	100.0%
	Tengakhat	1	19	5	1	39	2	1	68
		1.5%	27.9%	7.4%	1.5%	57.4%	2.9%	1.5%	100.0%
	Tingkhong	4	13	1	2	44	4	0	68
		5.9%	19.1%	1.5%	2.9%	64.7%	5.9%	.0%	100.0%
Total		14	112	11	9	233	15	6	400
		3.5%	28.0%	2.8%	2.2%	58.2%	3.8%	1.5%	100.0%

Source: Field Study

The Table 1 shows that large percentage of respondents of Joypur development block have heard about ICTs through TV as compared to the respondents of other blocks. The large percentage of respondents of Lahowal block has heard about ICTs through other sources as compared to other blocks. Few respondents of

Joypur, Tingkhong, Tengakhat, Barbaruah and Khowang apart from Panitola and Lahowal have heard about ICTs through TV and print media. Few respondents of Tengakhat, Panitola, Lahowal, Khowang and Tingkhong apart from Barbaruah and Joypur development block.

Field results depict that large percentage of respondents and their family members use the ICT service. Table also shows that the 28 out of 28 (100%) respondents of Panitola block have used the ICT service followed by the respondents of other blocks such as Tengakhat, Khowang, Lahowal, Barbaruah, Joypur and Tingkhong.

Field survey also reveals the purposes of using ICT service by the respondents. As the single objective is concerned many respondents 71 (17.8%) use ICT for communication with family and friends and few respondents use it for purposes like sports and police/law and order. As the multiple objectives are concerned many respondents 99(24.8%) use the ICT for communication with family and friends, education, business and social networking.

In the survey it is found that few respondents do not use the ICT service because of some reasons. As the table no.18 shows that few respondents 5(1.2%) do not use ICT because they are unaware of its existence. Equal percentage of respondents does not use it due to lack of infrastructure and capacity. 3((.8%) respondents do not use it because they do not see the need to use it. Few respondents of Tingkhong 3(4.4%) followed by the respondents of Barbaruah and Khowang cite the unaware of its existence as the cause for not using the ICTs.

Listening to Radio Programmes: Majority of respondents (61.5%) do not listen to radio programmes and a few respondents (38.5%) listen to the radio programmes. Large percentage of respondents of Barbaruah (73.2%) block and a few respondents of Joypur block (14.3%) listen to the radio as compared to the respondents of other development block of the study area.

Results show that environmental programme (6.2%) is the preferred radio programme followed by the farm and home broadcasting programme (3%), health and family welfare programme (1.2%) and women's programme (.5%). As far as the multiple programmes are concerned, others programmes are the preferred programmes for the respondents. Results shows that 9 (13.2%) respondents of Tengakhat block preferred to environmental programme followed by the respondents of Tingkhong, Lahowal, Khowang, Panitola and Barbaruah.

So far as the farm and home broadcasting programme is concerned 5(8.9%) respondents of Barbaruah block prefer to the said programme followed by the respondents of Tingkhong, Tengakhat and Lahowal blocks.

Respondents of Joypur block (3.6%) prefer to health and family welfare programme followed by the respondents of Khowang and Tengakhat. Only two blocks viz. Lahowal and Barbaruah prefer to women programme.

Many respondents of Barbaruah block prefer to other programmes followed by the respondents of Khowang, Tengakhat, Panitola, Lahowal, Joypur and Tingkhong.

Listen to Radio Programmes in a Week: Majority of respondents (23%) listen to radio programme at most three times in a week and few respondents do not listen to it. it also shows that many respondents of Barbaruah block listen to radio programmes at most three times in a week followed by Tengakhat, Panitola, Khowang, Tingkhong and Lahowal. 11 respondents of Barbaruah block listen to radio programmes daily followed by Khowang, Joypur, Lahowal, Panitola, Tengakhat and Tingkhong. A few respondent of Barbaruah block listen to radio programmes once in a week followed by Khowang, Panitola, Lahowal and Tengakhat.

Table – 2

Name of the Block	Frequency of Listening to Radio Programmes					Total
	0	Daily	Once in a Week	At most three times in a week	Do not use	
Barbaruah	15	11	7	22	1	56
	26.8%	19.6%	12.5%	39.3%	1.8%	100.0%
Khowang	48	13	7	19	1	88
	54.5%	14.8%	8.0%	21.6%	1.1%	100.0%
Panitola	14	3	1	10	0	28
	50.0%	10.7%	3.6%	35.7%	.0%	100.0%
Joypur	48	8	0	0	0	56
	85.7%	14.3%	.0%	.0%	.0%	100.0%
Lahowal	25	5	1	5	0	36
	69.4%	13.9%	2.8%	13.9%	.0%	100.0%

Tengakhat	40	2	1	25	0	68
	58.8%	2.9%	1.5%	36.8%	.0%	100.0%
Tingkhong	56	1	0	11	0	68
	82.4%	1.5%	.0%	16.2%	.0%	100.0%
Total	246	43	17	92	2	400
	61.5%	10.8%	4.2%	23.0%	.5%	100.0%

Source: Field Study

Time Spends On Listening To Radio Programmes

Table no.3 reveals that least percentage of respondents spends 3-5 hours and more than 5 hours on listening to radio programmes in a day. Many respondents spend (25%) spend 30 minutes or less than that on listening to radio programmes in a day. few respondents (13%) spend 1-2 hours on listening to radio programmes in a day. It also shows that many respondents 29 out 56 (51.8%) of Barbaruah block spend 30 or less than 30 minutes in a day to listen the radio programmes followed by the respondents of Panitola, khowang, Tengakhat, Lahowal, Tingkhong and Joypur block.

A few respondents of Barbaruah block 12 (21.4%) spend 1-2 hours in a day to listen radio programmes followed by the few respondents of Khowang, Tengakhat, Joypur, Lahowal, Panitola and Tingkhong.

Table – 3

	Time Spend on Listening to Radio Programme in a Day					Total
Name of the Block	0	>5 hours	3-5 hours	1-2 hours	<=30 minites	
Barbaruah	15	0	0	12	29	56
	26.8%	.0%	.0%	21.4%	51.8%	100.0%
Khowang	48	1	0	14	25	88
	54.5%	1.1%	.0%	15.9%	28.4%	100.0%
Panitola	14	0	0	2	12	28
	50.0%	.0%	.0%	7.1%	42.9%	100.0%
Joypur	48	0	0	7	1	56
	85.7%	.0%	.0%	12.5%	1.8%	100.0%
Lahowal	25	0	1	4	6	36
	69.4%	.0%	2.8%	11.1%	16.7%	100.0%
Tengakhat	40	0	0	10	18	68
	58.8%	.0%	.0%	14.7%	26.5%	100.0%
Tingkhong	56	0	0	3	9	68
	82.4%	.0%	.0%	4.4%	13.2%	100.0%
Total	246	1	1	52	100	400
	61.5%	.2%	.2%	13.0%	25.0%	100.0%

Source: Field Study

Watching TV Programmes: Result shows that majority of respondents (84.8%) watch TV programmes and few do not (15.2%) watch the programmes. Large respondents Panitola block (92.9%) and few respondents (72.1%) of Tingkhong block watch TV programmes as compared to other blocks of the study area.

Preferred TV Programmes: Results show that the preferred programme is entertainment followed by the programmes like news and agricultural programmes (as single programme). It also shows that large percentage of respondents prefer to news, entertainment, education, agricultural programme as compared to other programmes. The table also shows that majority of respondents of Panitola block prefer news, entertainment, education, agricultural programmes followed by the respondents of Khowang. Joypur, Tengakhat, Borbaruah and Tingkhong block.

Majority of respondents prefer most the other programmes as compared to the programmes as cited. Few respondents prefer most farming as the single programme. Table also shows that large percentage of respondents of Panitola block prefers most the other programmes as compared to respondents of other blocks. Few respondents of Joypur block prefer to farming followed by the respondents of Lahowal, Tingkhong, Tengakhat, Khowang, Panitola and Babaruah block.

Preferred TV Telecasting Economic Programmes: Result shows that majority of respondents prefer most the other programmes as compared to the programmes as cited. Few respondents prefer most farming as the single programme. Table also shows that large percentage of respondents of Panitola block prefers most the other programmes as compared to respondents of other blocks. Few respondents of Joypur block prefer to farming followed by the respondents of Lahowal, Tingkhong, Tengakhat, Khowang, Panitola and Babaruah.

Frequency of Watching TV Programmes: Many respondents watch the TV programme at most three times in a day. Few respondents do not watch TV programme.

It shows that many respondents of Tengakhat block watch the TV programme at most three times in a day followed by the respondents of Panitola, Lahowal, Tingkhong, Barbauah and Joypur. It shows that least percentage of respondents Tingkhong, Tengakhat and Khowang block do not watch the TV programme.

Table – 4

		Frequency of Watching the TV Programmes in a Day					
	Name of the Block	0	Once in a day	Twice in a day	At most three times in a day	Do not watch	Total
	Barbaruah	6	6	24	20	0	56
		10.7%	10.7%	42.9%	35.7%	.0%	100.0%
	Khowang	14	10	28	35	1	88
		15.9%	11.4%	31.8%	39.8%	1.1%	100.0%
	Panitola	2	0	10	16	0	28
		7.1%	.0%	35.7%	57.1%	.0%	100.0%
	Joypur	6	4	42	4	0	56
		10.7%	7.1%	75.0%	7.1%	.0%	100.0%
	Lahowal	4	8	8	16	0	36
		11.1%	22.2%	22.2%	44.4%	.0%	100.0%
	Tengakhat	10	6	9	41	2	68
		14.7%	8.8%	13.2%	60.3%	2.9%	100.0%
	Tingkhong	19	3	16	28	2	68
		27.9%	4.4%	23.5%	41.2%	2.9%	100.0%
Total		61	37	137	160	5	400
		15.2%	9.2%	34.2%	40.0%	1.2%	100.0%

Source: Field Study

Use of the Computer: Field survey shows that few respondents have the knowledge about how to use the computer. The majority of respondents do not know how to use it. It also shows that large respondents of Joypur development block have knowledge about how to use computer and few respondents of Tingkhong block have the knowledge how to use computer as compared to other development blocks of the study area.

Internet Connection in the Households: Field survey reveals that few respondents (39.8%) of study area have internet connection in their households. It is observed that many respondents of Panitola and Tengakhat block have internet connection in their households and few respondents of Barbaruah have internet connection in their households as compared to other blocks. It also shows that majority of respondents of respondents have mobile internet followed by modem, dial up and modem and others. In regard to mobile internet, the majority of respondents of Tengakhat block have mobile internet and few respondents of Barbaruah block have mobile internet as compared to other blocks. Many respondents know how to use internet. Many respondents of Panitola and Tengakhat block know how to use internet as compared to other blocks of the study area and few respondents of Barbaruah block know how to use internet as compared to other blocks of the study area.

Majority of respondents browse most often the social websites so far as single website is concerned and few respondents browse news as compared to other websites. In regard to browse of more than one website is concerned, majority of respondents browse news, education related, entertainment, and social (23.4%) and least percentage of respondents browse news, education, entertainment, social, business work as compared to other Websites.

Many respondents of Panitola block and few respondents of Joypur block browse the social websites. So far as news, education related, entertainment and social websites are concerned many respondents of Tengakhat block and few respondents of Tingkhong block browse it as compared to the respondents of other blocks of the study area.

Table 5 depicts that many respondents use the internet once in a day and few respondents do not use it. As far as the access to internet by respondents of seven developments is concerned, then it is found that many respondents of Joypur block and few respondents of Lahowal block access to internet.

Table – 5

Name of the Block	Frequency of Use of Internet in Day					
	0	Once a day	Twice a day	At most three times in a week	Do not use	Total
Barbaruah	41	8	5	2	0	56
	73.2%	14.3%	8.9%	3.6%	.0%	100.0%
Khowang	53	19	11	5	0	88
	60.2%	21.6%	12.5%	5.7%	.0%	100.0%
Panitola	14	5	8	1	0	28
	50.0%	17.9%	28.6%	3.6%	.0%	100.0%
Joypur	31	17	4	4	0	56
	55.4%	30.4%	7.1%	7.1%	.0%	100.0%
Lahowal	21	1	7	6	1	36
	58.3%	2.8%	19.4%	16.7%	2.8%	100.0%
Tengakhat	34	11	16	5	1	68
	50.0%	16.2%	23.5%	7.4%	1.5%	100.0%
Tingkhong	47	3	11	5	2	68
	69.1%	4.4%	16.2%	7.4%	2.9%	100.0%
Total	241	64	62	28	4	400
	60.2%	16.0%	15.5%	7.0%	1.0%	100.0%

Source: Field Study

Results show that few respondents have e-mails ID. It also reveals that many respondents of Joypur development block have e-mail ID and a very few respondents of Barbaruah block have e-mail ID.

Majority of respondents use e-mail by themselves and few respondents ask outsider to browse for them. Many respondents of Joypur development bock use and few respondents of Tengakhat block use e-mail by themselves. Only the respondents of Khowang block ask outsider to browse for them.

Majority of respondents use e-mail for communication with family and friends and few respondents use it for different objectives like business, communication with family and friends and emergencies. Table shows that majority of respondents of Panitola block use e-mail for communication with family and friends and a few respondents of Barbaruah block use e-mail for communication with family and friends.

Table 6 shows that many respondents use e-mail once in a day and a few do not use it. Table also reveals that many respondents of Panitola block and a few respondents of Barbaruah block use e-mail in a day.

Table – 6

Name of the Block	Frequency of Use of e-mail in a Day					
	0	Once in a day	Twice in a day	At most three times in a day	Do not use	Total
Barbaruah	53	2	1	0	0	56
	94.6%	3.6%	1.8%	.0%	.0%	100.0%
Khowang	79	6	2	1	0	88
	89.8%	6.8%	2.3%	1.1%	.0%	100.0%
Panitola	24	4	0	0	0	28
	85.7%	14.3%	.0%	.0%	.0%	100.0%
Joypur	47	7	0	1	1	56
	83.9%	12.5%	.0%	1.8%	1.8%	100.0%
Lahowal	33	2	0	1	0	36
	91.7%	5.6%	.0%	2.8%	.0%	100.0%
Tengakhat	64	4	0	0	0	68
	94.1%	5.9%	.0%	.0%	.0%	100.0%
Tingkhong	63	5	0	0	0	68

		92.6%	7.4%	.0%	.0%	.0%	100.0%
Total		363	30	3	3	1	400
		90.8%	7.5%	.8%	.8%	.2%	100.0%

Source: Field Study

Results show that majority of respondents use mobile phone and a few respondents use the landline. It also reveals that respondents of Joypur and Barbaruah block use the mobile phone mostly and few respondents of Tingkhong block use the mobile phone.

Majority of respondents use mobile phone to ring or call as far as the single objective is concerned .but so far as the multiple objectives are concerned, majority of respondents use it for ring, to send SMS, to conduct, to listen music, to access internet.

The table no.7 shows that majority of respondents use the mobile phone several times in a day and few respondents do not use it. Table also reveals that large respondents of Tengakhat block use the mobile phone several times in a day and few respondents of Joypur block use mobile phone several times in a day as compared to the respondent of other blocks.

Table – 7

		Frequency of Use of the Mobile Phone in a Day					
Name of the Block		0	Once in a day	Twice in a day	Several times in a day	Do not use	Total
Barbaruah		2	12	15	27	0	56
		3.6%	21.4%	26.8%	48.2%	.0%	100.0%
Khowang		5	14	17	50	2	88
		5.7%	15.9%	19.3%	56.8%	2.3%	100.0%
Panitola		2	1	4	20	1	28
		7.1%	3.6%	14.3%	71.4%	3.6%	100.0%
Joypur		2	44	6	3	1	56
		3.6%	78.6%	10.7%	5.4%	1.8%	100.0%
Lahowal		2	10	3	20	1	36
		5.6%	27.8%	8.3%	55.6%	2.8%	100.0%
Tengakhat		3	10	2	52	1	68
		4.4%	14.7%	2.9%	76.5%	1.5%	100.0%
Tingkhong		7	19	13	29	0	68
		10.3%	27.9%	19.1%	42.6%	.0%	100.0%
Total		23	110	60	201	6	400
		5.8%	27.5%	15.0%	50.2%	1.5%	100.0%

Source: Field Study

50% respondent has used the mobile phone several times in a day. Majority of respondents of Tengakhat block (76.5%) use mobile several times in a day. 78.6% respondent of Joypur and few respondents of Panitola (3.6%) use mobile phone once in a day. Large respondents of Barbaruah (26.8%) and few respondents of Tengakhat block (2.9%) use mobile phone twice in a day. Few respondents of Panitola block do not use mobile phone followed by the respondents of Lahowal, Khowang, Joypur and Tengakhat.

Use of Fax Machine: Field results show that the use of fax machine among the dwellers of the study area is very insignificant. (3.6%) respondents Barbaruah block use fax machine followed by the respondents of Joypur (1.8%), Tingkhong (1.5%) and Khowang (1.1%). They use fax machine once in a week for e purpose of business.

Use of CD-ROM: Survey results show that least percentage of respondents (1.8%) used CD-ROM. Few respondents of Joypur (5.4%) used CD-ROM followed by the respondents of Khowang (2.3%), Barbaruah (1.8%) and Tengakhat block (1.5%). They used it for writing and storing information and use it once in a week.

IV. Conclusion

After detail analysis the study concluded that majority of rural dwellers source of information from extension agents, fellow friends and village Panchayats. The findings also showed that usage of ICTs is not uniform in the study area. The frequency of use of mobile and TVs are higher than the used of other ICTs.

Rural dwellers of study area should be trained to use about computer and community information centre may play the vital role in this regard. There should enough execution of e-literacy programmes among the dwellers of study area.

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