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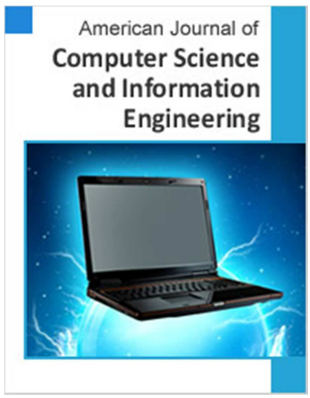

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Role of Union Information and Service Centre in Community Development

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Abstract

The purpose of the present study was to assess the role of Union Information and Service Centre (UISC) in community development. The study was conducted in Akcha union of Thakurgoan sadar upazila under Thakurgoan district. A total of 110 people who were already been taken services from UISC was selected as sample following random sampling technique. Data were collected using a pretested structured questionnaire during 23 March to 28 June 2014. Collected data were compiled, coded, analyzed and interpreted as per objectives of the study. Findings indicated that both male and female get services from UISC. Printing, photocopy, mobile banking, computer compose and internet browsing were the top five services received by the respondents. Majority of the respondents were found agreed that UISC played a positive role in all four selected aspects (education, inter-personal relationship, women empowerment and youth development) of community development. Specifically, respondents got services on public examination result, government circular notice, computer training, information on job market and keeping contact with friend and relatives etc. Respondents got maximum service for educational development followed by youth development, women empowerment and inter-personal relationship. Load shedding, slow speed of internet, inadequate equipment's are identified as the major problems in getting services from UISC. The services of UISC at doorsteps of local people save their time, money and energy.

1. Introduction

1.1. Background of the Study

Information and Communication Technology (ICT) is the use of modern technology to aid the capture, processing, storage and retrieval, and communication of information, whether in the form of numerical data, text, sound, or image (Rahman, 2008). Development of ICT presents many new opportunities as it breaks down the barriers to knowledge and information exchange (Chapman and Slaymaker, 2002) and it is a major source of capacity building (Nor Iadah *et al*., 2010). The present nature, trend and pace of development around the globe have justified that countries and individuals without access to information are resource poor. The vast majority of poor people lives in rural areas and derives their livelihoods directly or indirectly from agriculture and therefore, support for farming is a high priority for rural development (Harris, 2002). However,

many developing countries have not taken up ICTs to the fullest possible extent as a means of reaching increased socio-economic development by entering the knowledge economy (Sofield, 2000). In contrast to the developed countries those have been steadily capitalizing on the rapid pace of ICT, a large number of developing countries, particularly low-income countries have failed in the adaptation of these technologies thus contributing to the "digital-divide" between the developed and developing countries (Sofield, 2000). However, the people who are especially living in grass-roots areas of Bangladesh, they are far away from the reach of their basic informational needs (Anonymous, 2007). To address this issue, government of Bangladesh has already taken initiative to introduce various ICT based e-government service intervention to access and uses the information. Union Information and Service Centre (UISC) is one of those which have the potentiality of bringing the benefits to rural people who do not otherwise have access to information and technology (Akther and Georgsen, 2003). Development can only be effective if rural citizens have access to the information for their day-to-day activities. In recent years, e-governance project in rural areas plays an important role to access to the relevant information and transformation of local government services. A total of 4,501 UISCs have been established at all Union Parishads, all of them inaugurated on 11th November, 2010, in order to translate the dream of 'Digital Bangladesh' into reality (Asad, 2011). UISCs are the 'e-Service delivery outlets' which initiated a new era in information and service delivery for rural and marginalized people. It improves the efficiency of government information, reduces cost, increases transparency, and ensures quality of service (Al-Hujran et al., 2011).

1.2. Statement of the Problem

Telecenters are used in Bangladesh as information centers, knowledge centers, and information resource centers. The information center is also called multipurpose community center, public Internet access point, or information kiosks (Bossio, 2004). Majority of population in the developing world live in rural areas and they have no or little access to the information. Bangladesh is no exception and about one third of its population which lives in rural areas have limited access to the information. Thus studies of the impact of ICT must be more users orientated since the success or failure of ICT applications like telecenters are determined by the extent to which they are utilized by the society (Thirumavalavan and Garforth, 2007). A common problem that has been experienced in many telecenter initiatives is a lack of sustainability that prevents centers from successfully staying operational in the long run and becoming independent from external support and subsidies (Christof, 2003). Telecenters are bringing the benefits of ICTs to poor communities where the technological infrastructure is inadequate and the costs of individual access is relatively high (Kumar and Best, 2007). The inadequate electricity infrastructure is a barrier to expand the telecenters in rural unelectrified areas of Bangladesh. The telecenters are operated mostly in urban areas in Bangladesh. The needs of rural and urban communities differ. So, the initial goals of the telecenters that are urban based, differs from the desire of the rural communities (Bailur, 2007a). The digital gap between the electrified and unelectrified areas still remains in Bangladesh. Most of the rural farming communities are staying in unelectrified areas in Bangladesh. The study found that all the telecenters were established in electrified areas in Bangladesh. Telecenters movements are needed to focus on the unelectrified and rural areas in Bangladesh. Telecenters initiatives are mostly focused on financial sustainability and social development, but there is a natural tension to fulfill these two objectives simultaneously (Kuriyan et al., 2006). The rural communities will have difficulties to obtain new technologies for their livelihood development (Bailur, 2007b). It is difficult to identify the successful telecenters in Bangladesh as the telecenters stared very recently. But the success depends to a large extent on the motivated, creative, and hardworking center-operators. The telecenters appeared sustainable when the local communities are involved and supported from the beginning of the initiatives. They played an important role to create awareness to the other communities and acted as mediator to raise the center into successful. Hence, this study focuses on various factors to investigate the role of Union Information and Service Centre for community development. Identifying these factors will help increase the knowledge of farmers, students and women in using services given by the information service centre. In view of the above circumstances the researchers were interested to get answers of the following questions:

- What are the present activities and status of UISC?
- What is the role of UISC in rural community development?

1.3. Objectives of the Study

The study was conducted with the following specific objectives.

- To explore the present activities & status of UISC;
- To ascertain the role of UISC in community development

1.4. Significance of the Study

The analytical model sketched in the present study may be useful in justifying the extension of different community services for rural development. Information and communication activities are a fundamental element of any rural development activity. Rural areas are often characterized as information-poor and information provision has always been a central component of development. The rural poor typically lack access to information vital to their lives and livelihoods. Building upon the concept of knowledge and information gap, the different ICT initiatives are started with the help of union information and service centre. The Government of Bangladesh (GOB) committed to

become an ICT driven nation and envisage ensuring accessibility of ICT to every people. The ICT policy aims to build Digital Bangladesh, an ICT driven nation comprising knowledge-based society by the year 2021. The main goal of the program is to ensure that information and service can reach to the door steps of ordinary people by using Information Technology. With this, the implementation process of Digital Bangladesh, vision 2021 has started. There are several UISCs successfully running all over the Bangladesh.

2. Methodology

The study was conducted in Akcha union of Thakurgoan sadar upazila under Thakurgoan district. All the service receivers (750) of UISC of Akcha union under Thakurgoan sadar upazila were the population of the study. A list of service receivers was taken from UISC of Akcha union. From that list 110 service receivers were selected as sample respondents following the simple random sampling technique. Data were collected by using pre-designed interview schedule from 23 March 2014 to 28 June 2014. Respondents received 20 different types of services from UISC of Akcha union. Each respondent was asked to check his/her responses against twenty different services of UISC in a five-point rating scale; 'daily use', 'weekly use', 'monthly use', 'yearly use' and 'never' and corresponding assigned weights for each response were 4, 3, 2, 1 and 0 respectively. Activities score of a respondent could range from 0 to 80, while '0' indicating 'no activity' and '80' indicating 'highest level of activity'. For a better understanding regarding to the particular services received by the respondents, an Activity Index (AI) was computed. The AI was calculated by multiplying the frequency counts of each of the services with its corresponding weights such as '4' for 'daily use', '3' for 'weekly use', '2' for 'monthly' use, '1' for 'yearly' use and '0' for 'never'. By adding all these values of each cell together, the score of AI was calculated.

$$AI = (A^d \times 4 + A^w \times 3 + A^m \times 2 + A^y \times 1 + A^n \times 0) \quad (1)$$

Where, AI= Activity Index, A^d= Daily use, A^w= Weekly use, A^m= Monthly use, A^y= Yearly use, A^n= Never use

To measure role of UISC towards community development, a 5-point Likert type scale ranging from '1' as 'strongly disagree' to '5' as 'strongly agree' used for the measurement. The respondents were asked to rate 20 statements based upon a five-point Likert type scale on four aspects which is associated with community development. These aspects were development in case of education, development in case of inter-personal relationship, development in case of women empowerment and development in case of youth. For a better understanding regarding to the particular community development a Development Index (DI) was computed. The DI was calculated by multiplying the frequency counts of each of the services with its corresponding weights such as '5' for 'strongly agree', '4' for 'agree', '3' for 'undecided', '2' for 'disagree' and '1' for 'strongly disagree'. By adding all these values of each cell together, the score of DI was calculated. After collection of data, all the information contained in the interview schedule was edited before leaving a respondent. All the collected data were then checked and cross checked, compiled, coded and entered into the computer for analysis and interpretation using SPSS program. Qualitative data were converted into quantitative form by means of suitable scoring. Data were presented mostly in tabular forms. Statistical measures like number, percentage, range, mean and standard deviation were calculated for describing the data.

3. Results and Discussion

3.1. Present Activities of UISC

Respondents received following 20 different types of services from UISC of Akcha union. Present activities across different types of services from UISC according to their activity index have been shown in Table 1.

Table 1. *Present activities across different types of services from UISC based on activity index.*

SL No	Services	Extent of Response					AI*	Rank
		D*	W*	M*	Y*	N*		
01	Printing	0	53	34	0	23	227	1
02	Photocopy	2	24	59	20	5	218	2
03	Mobile banking	0	35	42	8	25	197	3
04	Computer compose	1	16	59	20	14	190	4
05	Internet browsing	0	41	20	3	46	166	5
06	Character certificate	0	0	0	103	7	103	6
07	E-mail	0	21	15	7	67	100	7
08	Photography	0	0	7	80	23	94	8
09	Birth certificate	0	0	0	93	17	93	9
10	Citizenship certificate	0	0	0	87	23	87	10
11	Public Examination Results	0	0	0	73	37	73	11
12	VGD, VGF data list	0	0	0	72	38	72	12
13	Trade license	0	0	0	59	51	59	13
14	Computer training	0	0	0	38	72	38	14
15	Video conferencing	0	1	13	2	94	31	15
16	Online University Admission	0	0	0	29	81	29	16
17	Government circulars and notices download	0	3	4	7	96	24	17
18	Government forms download	0	0	0	5	105	5	18

SL No	Services	Extent of Response					AI*	Rank
		D*	W*	M*	Y*	N*		
19	Passport processing	0	0	0	3	107	3	19
20	Telemedicine	0	0	0	2	108	2	20

D= Daily W= Weekly M= Monthly Y= Yearly N= Never AI= Activity Index
Source: Field Survey, 2014

Data contained in Table 1 indicates that 'printing' is the top most service received by the respondents as the highest (AI=227) followed by 'photocopy' as the second highest service (AI=218). Then 'mobile banking' as the third highest (AI=197) service, 'computer compose' as the fourth highest (AI=190) and 'internet browsing' as the fifth highest (AI=166) service received by the respondent. The findings reveal that printing, photocopy, mobile banking, computer compose and internet browsing was the top five services received by the respondent from union information and service centre frequently that means these five services are very essential services for their personal and social life.

3.2. Present Status of Gender Wise Services of UISC

Number of male and female respondent takes different types of services from UISC in year 2013 has been shown in Table 2. Data contained in Table 2 reveal that in year 2013, 563 person (male- 274 & female- 289) went to union information and service centre for printing purpose followed by 556 person (male-320 & female- 236) went for photocopy, 489 person (male-292 & female-197) went for photography, 371 person (male-194 & female-177) went for VGD, VGF data list, 348 person (male-221 & female-127) went for mobile banking, 337 person (male-228 & female-109) went for computer compose, 263 person (male-147 & female-116) went for character certificate, 227 person (male-157 & female-70) went for checking public examination, 209 person (male-123 & female-86) went for government circular & notices, 208 person (male-115 & female-93) went for birth certificate, 206 person (male-133 & female-73) went for applying online university admission, 203 person (male-113 & female-90) went for browsing internet, 194 person (male-42 & female-152) went for video chat with relatives and friends, 150 person (male-75 & female-75) went for computer training, 120 person (male-84 & female-36) went for citizenship certificate, 99 person (male-93 & female-6) went for sending and checking e-mail, 68 person (male-55 & female-13) went for downloading government form, 50 person (male-50 & female-0) went for trade license purpose, 02 person (male-02 & female-0) went for passport processing and finally only 01 person (male-01 & female-0) went for receiving telemedicine purpose. The findings also revealed that total 4664 person received twenty different types of services from union information and service centre where 2719 person were male and 1945 person were female which indicates besides male, a large number of female clients are receiving different types of services from service centre and also concern about information and communication technology. This involvement will help female client socially, culturally and economically benefited. Printing and video conferencing are two major services received by female in year 2013. Data contained in Table 2 also revealed that respondents received top ten services from Akcha union information and service centre were: (1) Printing (2) Photocopy (3) Photography (4) VGD, VGF data list (5) Mobile banking (M-cash, B-cash) (6) Computer compose (7) Character certificate (8) Public examination Results (9) Government circulars and notices (10) Birth certificate.

Table 2. *Number of male and female respondents takes different types of services from UISC in the year 2013.*

SL No	Services	Respondents		
		Male	Female	Total
01	Printing	274	289	563
02	Photocopy	320	236	556
03	Photography	292	197	489
04	VGD, VGF data list	194	177	371
05	Mobile banking	221	127	348
06	Computer compose	228	109	337
07	Character certificate	147	116	263
08	Public examination Results	157	70	227
09	Government circulars and notices	123	86	209
10	Birth certificate	115	93	208
11	Online University Admission	133	73	206
12	Internet browsing	113	90	203
13	Video conferencing	42	152	194
14	Computer training	75	75	150
15	Citizenship certificate	84	36	120
16	E-mail	93	6	99
17	Government forms download	55	13	68
18	Trade license	50	0	50
19	Passport processing	2	0	2
20	Telemedicine	1	0	1
Total		2719	1945	4664

Source: Field Survey, 2014

3.3. Role of UISC in Community Development

UISC can act as vehicles for launching various services for empowering disadvantaged communities through networking and sharing of information and knowledge. Such services may include informal ICT-based training and specific applications in areas such as e-agriculture, e-learning, e-health, e-business and e-government. UISC serves as development hubs for exchanging business and marketing information. Access to applications and services and systematic knowledge-sharing in marginalized communities and rural areas is either non-existent or very limited. Individual and household access remains out of reach in the vast majority of rural and disadvantaged communities, in particular for women and people with disabilities. UISC in some cases have revolutionized communities by creating new opportunities for socio-economic development. Therefore,

UISC are seen as cost-effective tools in the realization of those socio-economic development goals where information dissemination and access are important. This section describes the distribution of the respondents according to their development in case of four different aspects. These aspects included: 1) development in case of education; 2) development in case of inter-personal relationship; 3) development in case of women empowerment; 4) development in case of youth.

3.3.1. Development in Case of Education

In this new knowledge-based society, access to information and knowledge has become essential resources for educational development. UISC are providing immense services to the promotion of education. Students of all disciplines and societies use the various services for their assignments, information and communications. Developments in case of education based on their development index have been presented in Table 3.

Table 3. *Statements regarding development in case of education based on their development index.*

SL No	Statements	Extent of Response					DI*
		SA*	A*	UD*	DA*	SDA*	
01	Getting public examination results save cost of time	87	23	0	0	0	527
02	Getting government circulars and notices save cost of travel	84	26	0	0	0	524
03	Downloading documents for study helps in knowledge gathering	69	40	1	0	0	508
04	Quality of education & information can be increased	45	64	1	0	0	484
05	Applying university admission through net save money	48	54	8	0	0	480

***** SA= Strongly Agree, A= Agree, UD= Undecided, DA= Disagree, SD= Strongly Disagree, DI= Development Index
Source: Field Survey, 2014

Data contained in Table 3 reveal that most of the respondents opined that 'getting public examination results save cost of time' as the highest concern (DI=527) followed by on 'getting government circulars and notices save cost of travel' as the second highest (DI=524). Then 'downloading documents for study helps in knowledge gathering' marked as third highest (DI=508) and 'quality of education & information can be increased' found as fourth highest (DI=484) concern. Lowest concern was in respect of 'applying university admission through net save money' (DI=480).

3.3.2. Development in Case of Inter-Personal Relationship

An inter-personal relationship is a strong, deep, or close association or acquaintance between two or more people that may range in duration from brief to enduring. This association may be based on inference, love, solidarity, regular business interactions, or some other type of social commitment. Developments in case of inter-personal relationship based on their development index have been presented in Table 4.

Table 4. *Statements regarding development in case of inter-personal relationship based on their development index.*

SL No	Statements	Extent of Response					DI
		SA	A	UD	DA	SDA	
01	More frequent contact with friends and relatives through mobile phone	81	28	1	0	0	520
02	Money transfer through mobile banking for family members helps better living	53	44	12	1	0	479
03	Communication with absent family members improve personal relationship	39	46	19	6	0	448
04	Improve social bonds through video conferencing	21	55	34	0	0	427
05	Getting instant message from relatives by email	17	41	46	6	0	387

Source: Field Survey, 2014

Data contained in Table 4 revealed that most of the respondents opined 'more frequent contact with friends and relatives through mobile phone' as the highest concern (DI=520) followed by on 'money transfer through mobile banking for family members helps better living' as the second highest (DI=479). Then 'communication with absent family members improve personal relationship' marked as third highest (DI=448) and 'improve social bonds through video conferencing' found as fourth highest (DI=427) concern. Lowest concern was in respect of 'getting instant message from relatives by email' (DI=387).

3.3.3. Development in Case of Women Empowerment

Empowering women to participate fully in economic life across all sectors is essential to build stronger economies, achieve internationally agreed goals for development and sustainability, and improve the quality of life for women, men, families and communities. Developments in case of women empowerment based on their development index have been presented in Table 5. Data contained in Table 5 revealed that most of the respondents opined that 'women become more educated and increasing their knowledge through internet' as the highest concern (DI=490) followed by on 'women can get basic ICT skills through computer training' as the second highest (DI=475). Then 'younger women can get huge knowledge about job market' marked as third highest (DI=474) and 'women become more employable and be able to contribute more to family' found as fourth highest (DI=458) concern. Lowest concern was in respect of 'women participate in decision making role' (DI=419).

Table 5. *Statements regarding development in case of women empowerment based on their development index.*

SL No	Statements	Extent of Response					DI
		SA	A	UD	DA	SDA	
01	Women become more educated and increasing their knowledge through internet	56	48	6	0	0	490
02	Women can get basic ICT skills through computer training	36	73	1	0	0	475
03	Younger women can get huge knowledge about job market	47	50	13	0	0	474
04	Women become more employable and be able to contribute more to family	44	48	10	8	0	458
05	Women participate in decision making role	37	34	22	16	1	419

Source: Field Survey, 2014

3.3.4. Development in Case of Youth

Youth development is a process that prepares a young person to meet the challenges of adolescence and adulthood and achieve his or her full potential. Youth development is promoted through activities and experiences that help youth develop social, ethical, emotional, physical, and cognitive competencies. Developments in case of youth based on their development index have been presented in Table 6.

Table 6. *Statements regarding development in case of youth based on their development index.*

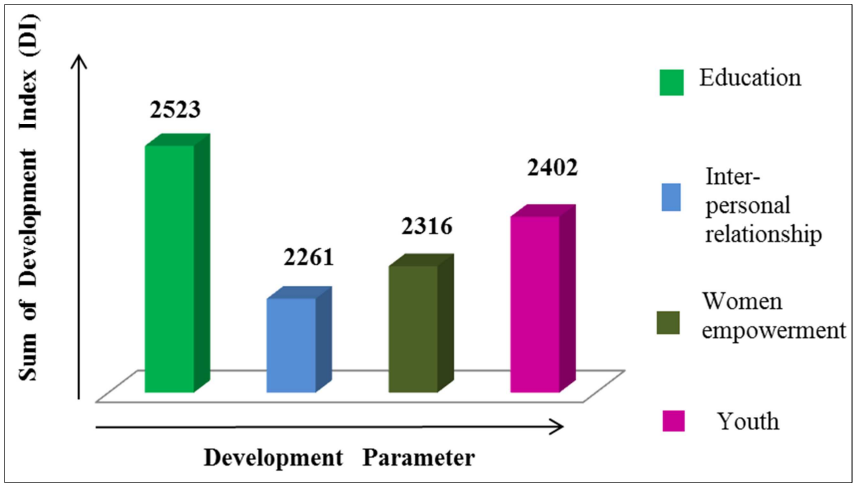
SL No	Statements	Extent of Response					DI
		SA	A	UD	DA	SDA	
01	Computer training makes young generation very skillful	75	35	0	0	0	515
02	Getting huge knowledge about job market through net	66	37	7	0	0	499
03	Browsing net gives them huge knowledge about the world	58	52	0	0	0	498
04	Youth can get better knowledge about foreign scholarship	40	52	18	0	0	462
05	Downloading song gives them recreation	22	59	24	5	0	428

Source: Field Survey, 2014

Data contained in Table 6 reveal that most of the respondents opined that 'computer training makes young generation very skillful' as the highest concern (DI=515) followed by on 'getting huge knowledge about job market through net' as the second highest (DI=499). Then 'browsing net gives them huge knowledge about the world' marked as third highest (DI=498) and 'youth can get better knowledge about foreign scholarship' found as fourth highest (DI=462) concern. Lowest concern was in respect of 'downloading song gives them recreation' (DI=428).

3.3.5. Overall Development Index

The overall Development Index of education, inter-personal relationship, women empowerment and youth were 2523, 2261, 2316 and 2402 respectively. Distribution of development parameter according to overall Development Index has presented in Figure 1.



Source: Field Survey, 2014

Figure 1. *Distribution of development parameter according to Development Index.*

Data contained in Figure 1 revealed that respondents gave their highest most concern on educational development followed by youth development as second highest and women empowerment as the third highest concern. Lowest concern was in respect of inter-personal relationship development.

3.4. Problem Confrontation of the Respondents

Respondents face different types of problems during getting services from UISC. A rank order of 13 problems regarding UISC according to their Problem Confrontation Index (PCI) has been presented in Table 7.

Table 7. *Rank order of the problems faced by the respondents according to their Problem Confrontation Index (PCI).*

SL No	Problems	Extent of Response			PCI	Rank
		High	Medium	Low		
01	Load shedding	93	17	0	313	1
02	Slow speed of internet	61	47	2	279	2
03	Lack of adequate equipment's	18	65	27	211	3
04	Poor publicity of services	28	41	41	207	4
05	Poor physical facilities	15	52	43	192	5
06	Poor management system	15	38	57	178	6
07	Inconvenient hours	11	37	62	169	7
08	Lack of skilled staff and technicians for ICTs	6	35	69	143	8
09	Lack of privacy	6	17	87	139	9
10	Relatively high cost of services	2	14	94	128	10
11	Poor location of UISC	1	12	97	124	11
12	Attitude & behavior of entrepreneur is rude	0	4	106	114	12
13	Lack of security	0	1	109	111	13

Data contained in Table 7 reveal that among the problems 'Load shedding' got the highest PCI score (313) and ranked first. Load shedding mainly due to interrupted supply of electricity. Load shedding problem can be overcome by using generator. 'Slow speed of internet' was identified as another major problem showed second highest PCI score (279) and ranked as second. Slow internet speed mainly due to network problem of the operator. This problem can be overcome by using high speed internet package. 'Lack of adequate equipment's for everyone' showed third highest PCI score (211) and ranked as third. This may due to shortage of money. Government should supply adequate equipment to UISC for better service. 'Poor publicity of services' showed fourth highest PCI score (207) and ranked as fourth. Poor publicity mainly due to lack of consciousness and can be overcome by arranging some seminar, workshop, presentation on UISC. 'Poor physical facilities' showed fifth highest PCI score (192) and ranked as fifth.

4. Conclusions

Irrespective of sex, age, education, family size, etc. all level of people got services in 20 different areas of community development from UISC except agricultural related information. Printing, photocopy, mobile banking, computer compose and internet browsing were the major services frequently received by the respondent from union information and service centre. A vast majority of people (4664) got service from a single UISC in a year. On the other hand, majority of the respondents were found agree with that UISC has positive role in all four selected aspects of community development. Hence it may be concluded that UISC had significant role in community development. Respondents got maximum service for educational development followed by youth development, women empowerment and inter-personal relationship. Necessary steps should be taken to deliver useful information to the farmers in the form of crop care and animal husbandry, fertilizer and feedstock inputs, droughts mitigation, pest control, irrigation, weather forecasting, seed sourcing and market prices. Government should arrange more seminars, conference, workshops and more campaign to promote awareness of UISC. This awareness program should focus on the role of UISC in reducing digital gape. It is very important to run UISC smoothly across the country. Government should take responsibilities to monitor, give logistic support, formulate policy and coordinate with the Ministry of Science and Technology.

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