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WOMEN AND INFORMATION COMMUNICATION TECHNOLOGY MICRO-LEVEL STUDY IN RURAL KERALA

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ABSTRACT

Information Communication Technology [ICT] concentrates on these three aspects - Information, Communication and Technology. The paper is based on a study which covered various aspects of the Users of ICT Gadgets, in terms of their socio-economic profile, pattern of utilization of ICT tools, purpose for which the ICT tools used and also the constraints experienced by SC and ST women in Use of ICT tools. The micro level study was undertaken in two villages of Kollam district in Kerala. These two villages are identified based on the concentration of SC and ST population in the Kollam district, Anchal Block and Two Villages - Kulathupuzha and Thinkalkarikakom are identified and purposively chosen for the study. The researcher has used a structured interview schedule, and also Focus Group Discussion with women. In this paper, outcome of the Focus Group Discussion and Case studies are presented and discussed.

KEYWORDS: *Access, Employment, Information, Technology, Utilization, Enabling*

INTRODUCTION

In the 2000s, India is emerging as a role model for Information Technology infused development, from e-governance to ICT-D. India's importance in this area is partially explained by the symbolic success of its export-oriented Information Technology (IT) industry, often represented as an "engine of growth" for the wider national economy[1]. It means that technology

is playing a pivotal role in the development process and paving way for multiplier effect with the use of technology by the people.

The Information Communication Technology [ICT] has three dimensions - Information, Communication and Technology; to promote information via communication with the help of technology. The Communication is a process that promotes the forces of transformation and survival of communities[2]. The ICT is providing Information as a resource that can affect the life of the people in a given area. It needs to be understood that as the technology enables the transaction of information as a resource.

Any amount access to Information, Communication and Technology (ICT) creates new opportunities to enhance the women skills, knowledge particularly in increasing the productivity of the existing livelihoods and move towards the knowledge and economic empowerment[3]. It reads that ICT is enabling factor and also opening up the opportunities for livelihood in the society.

Higher education system in India is undergoing a dynamic change. Good education is always seen as promoting factor for high career[4]. Bhattacharya and Sharma observed that development of Information Communication and Technology (ICT) has brought a shift in the current education system in India[5]. It implies that ICT influence the delivery of content and same accessed by many at the end point. Therefore, the learning opportunities have widen due to the ICT intervention in the education system.

Whereas in contrast Balit[6] argued that isolated and marginalized sections of the society, in particularly those who are in rural-remote groups face acute constraints with regard to access to information and communication. Thus, they have limited participation and voice in the public sphere and in decision-making process affecting their lives and thus risk further marginalization, politically, socially and economically. It underlines the possible influence of the ICT among the socially excluded and their participation in the public life.

Anita Gurumurthy, Nandini Chami, (2014), the gender gap in income and education levels are key contributors to the gender gap in ICT access[7]. Odambe et al, (2002) argue that in rural areas, women are more likely to be information- and resource-poor, isolated, and less educated compared to men[8]. It implies that these factors play significant role in access to ICT in the rural areas with given level of endowments.

Stauffacher and Kleinwatcher, (2005) have observed that information has the ability to improve standards of living for everyone by enhancing all aspects of our lives, from trade to telemedicine, from education to environmental protection[9]. It means that ICT is capable of influencing the ability of the people which lead to development.

According to Minakshi Ramji, (2006), women and SCs can face problems that may prevent them from free access. Social and cultural norms may also mean that women due to their multiple responsibilities or SCs who are mostly daily labourers have less time to access ICTs. Illiteracy is greater among women and SCs and as such this can pose a problem for access. Lastly, poverty may restrict these groups from owning ICTs[10].

Dalal (2006) argues that while there is recognition of the potential of ICT as a tool for the promotion of gender equality and the empowerment of women, a gender divide' has also been

identified reflected in the lower numbers of women accessing and using ICT compared with men. Unless this gender divide is specifically addressed, there is a risk that ICT may exacerbate existing inequalities between women and men and create new forms of inequality[11].

Patil (2007) observed that, in India the utilization of ICT for women empowerment is in the take-off stage and obviously there are many field and technical problems. The key constraints are insufficient regional specific information, inadequate internet connectivity and electricity, inadequate support from facilitator, lack of Infrastructure facility, lack of construction of content in local language, limited duration of projects, problem of monitoring and evaluation, lack of operators knowledge, lack of the involvement of other ICT channels, lack of marketing management and development skills[12]. Patil et.al (2009), the main barriers to women's use of ICT continue to be lack of proper training especially among the rural and deprived women. In this context Schools, Panchayat offices and Women Self-Help Groups (SHGs) should impart ICT training[13].

Mehta (2013) study revealed that 69 percent of India's population lives in rural areas; the majority of India functions with substantial barriers to education attainment and social mobility, and work in an unorganized, casual labor market which yields very little income. The rural population is at an inherent disadvantage in India as they lack the pre-requisites to participating in their country's economic growth in the tertiary, modern services sector[14]. Jewan Singh et al (2010) study found that ICT enhances community participation, community empowerment and improve the socio-economic condition of the community[15]. Han Ei Chew et al (2010) found that the impact of information and communication technologies, especially landline and mobile phones, computers, and Internet cafés in facilitating economic growth in the developing world[16].

The available literature on the ICT and its accessibility indicates that ICT is capable of influencing the process of development in the society. The process is also subjected to the many factors that work as enabling and also disabling factors for the application of ICT by people in the grassroots level. Hence, the authors have interacted at the field level with Schedule Caste Community households to understand their level of access to various ICTs; and their influence on their decision relating to their socio-economic and political life. The study would be relevant in the context of empowerment of the Schedule Caste households and access through modern technology.

1. Focus of the Paper

The UN Resolution in October 2015 has resolved [Item No. 5 b] and focused on "enhance the use of enabling technology, particularly Information and Communication Technology, to promote the empowerment….". In this context, it significant to understand the level of access to various Information and Communication Technology [ICT] in terms of use of Mobile Phone, Use of Television, Access to Radio, Access to Computer and Internet facilities in the rural areas.

This paper is based on a micro-level study covering aspects on how far the ICT tools are owned and used by Schedule Caste and Schedule Tribes Women; aspects on which the women are getting information or exchange information. The paper is based on a study which covered various aspects of the Users of ICT Gadgets, in terms of their socio-economic profile, pattern of utilization of ICT tools, purpose for which the ICT tools used and also the Constraints experienced by SC and ST women in Use of ICT tools.

The micro level study was undertaken in two villages of Kollam district in Kerala. These two villages are identified based on the concentration of SC and ST population in the Kollam district, Anchal Block and Two Villages - Kulathupuzha and Thinkalkarikakom are identified and purposively chosen for the study.

The SC women is found to be more in the Kulathupuzha and ST women are more in the Thinkalkarikakom in the Anchal Block. From village each sample village, 75 women was targeted as sample respondents, and totally 150 respondents is base for the study. But, due to ground level problems and non-availability of the respondents at the time of field visit, the researcher was able to meet and interact with a sample of 88 ST women and 62 SC women, thus reaching a total of 150 women respondents. The researcher has used a structured interview schedule, and also Focus Group Discussion with women.

Initially, there was challenge for the researcher in terms of non-cooperation by the women and demonstrated lot of resistance in answering the questions asked by the researcher. Because, most of these ICT Gadgets are costly and when questioned about its ownership, SC and ST women have found different and also difficult to answer them. They are bothered as the Researcher is taking stock of the facilities owned by the SC and ST women in the village. Later, with persistent efforts made by the researcher, the women could come-out of their shell and provided information.

2. Output of Focus Group Discussions and Case Studies

The researchers focused to bring out the influence of ICT gadgets on women Users and their family. It is a complex process of assessment of effects, that involves use of information received through the ICT gadgets and measuring its effects on the Users and on their living condition. Hence, the researcher has used the Case Study methodology to bring out the positive effects and influence of the ICT gadgets on the living condition of the women Users.

Based on the preliminary observations made in the Focus Group Discussions, the researcher has identified cases for further investigation so as to document the effects of the utilization of ICT gadgets on the Women Users and their way of living. This chapter presents the output of the discussions and Case Studies on the effect and impact.

3. Output of Focus Group Discussion

The Focus Group Discussions was conducted in the study villages. About 15 tribal girl student and 15 women from different age groups have participated in the discussions .**It is to get a clearer picture of the women's perception and using towards ICT. In this focus group discussion it was possible to effectively assess the use of accessing ICT in the everyday lives of rural women and the development needs of the rural tribal communities.**

The Focus group discussion was conducted in a Prematric hostel for tribal girls in Kulathupuzha situated in Villumala.13-18 years old tribal girls were participated in the two day discussion .These students need to travel 3-4 km to school from their home .since it is a forest area the fright of elephants would set hurdles on their way. Most of their parents are labors and working far away from their place .so the school authority provided a prematric hostel near the school, for the sake of students safety and make their studies easy. Students are comfortable in the hostel .All of them are under BPL category .each of them owned 50 cent to 1 acre .They are leading nuclear

families. T.V and mobile phone are the most familiar devices used by tribal girl's \ students in ICT gadget list. Telephone is very rare .they is not that aware of internet, though it is a part of their school studies but as a beginner they have some knowledge about internet.

3.1 Pattern Mobile and Telephone Utilization

Everyday students in the tribal hostel are allowed to use mobile phone for 5-10 minutes. That is only for calling their parents. In home, the girls used call friends and other uses are taking photos, listening music and videos, calculations etc. Android phones are very rare in them.

One girls experiences sharing in the group discussion ….During time of excursion she was deviated from the group and become alone; at that time mobile phone helped her to get the right way and she reached safely in to the group.

A girl came to know her SSLC results through the phone. Another girl came to know the results of Intermediate Board Examination .Other one has been listening music in mobile phone after coming from work in the plantation. It makes her more relaxed.

One girl explained a situation in which the mobile has helped her very much in a difficult situation. She could participate in Student Police Cadet when her teacher gave information to be present in the school at the right time. Mobile phone helped her to contact the teacher who provided the information. It created an opportunity for the girl.

In many cases, the women labour were informed about the MGNREGS work in advance, through SMS from the Mobile Phone.

3.2 Pattern of Radio Use

Very few Tribal women are familiar with Radio. Even if it is in the mobile phone due to the range [signal] problem they could not get it all the time.

Radio is very informative and communicate device for women. Many women heard the speech of Prime Minister from the programme *Manki Bath.* There was a connectivity problem some time, so could not listen to full speech.

Veena [SC woman] They are use to listen to Radio daily for during the last 6 years. Now due to range problem they could not hear it properly. Otherwise many used to listen news, speeches (especially Prime Minister Narendra modi speech manki bath), weather report, film, songs, etc.

One girl explained a situation in which the radio has helped her very much in a difficult situation .she faced a general knowledge questions [mostly related to name and position of few leaders] from her teacher in class. She could answer well, because she had listen those topic in Radio.

Vidya, housewife used to listen radio every day. She regularly listen news, music; comedy etc. It has helped to improve the general knowledge and develop interest in the music. Mostly useful to relax in the evening.

3.3 Pattern of Television Use

Television is the most familiar device to all. Most of the women are aware about the positive aspects of it.

Saranya: she is one of the higher secondary students; she regularly watch news, weather, music, serial, documentary, educational programmes. She is one of the regular viewers of the documentary programme safari.

Majority of the housewives using cable Television. They used to see educational programmes in Amrita Channel, Victors and local news in Manorama, Reporter, Amrita, Mangalam, Surya, Asianet The problems in use of Television are - there is no adequate signal during the rainy season, eye problem, power cut and not able to watch. The type of information, they are getting through Television is related - agricultural news, Horoscope, Cookery shows, Yoga and meditational programme, Music and Exam results

Deepthi [worker] "we can make new dishes from the cookery show. we used to try new items by seeing cookery show. we used to see agricultural programmes like kissan, krishi deepam..

Shalini [working with book shop]: For her *kodiswaran* programme in Asianet is very informative. We can increase our G.K level by watching that programme. Doctor's phone in programme inspired us .now I have set my ambition to become a doctor.

3.4 Computer and Internet usage Pattern

Among the women, mostly students are using computer for the purpose of drawing, playing games, animation, coloring and typing. They are totally unaware of internet. Most of them replayed they are in the Beginner level of computer and internet literacy.

Most useful to learn new skills - Using the Internet, Reading books, Watching TV generally Reading newspapers, Using computers, Watching educational TV (eg documentaries/Learning Zone and also Listening to the radio

The output of the Discussion is indicating that women are aware of the ICT gadgets. But still they are not reached remote villages on large scale. However, whoever is aware and own the ICT gadgets are putting the same into maximum usage. In this discussion they gave some suggestions for their betterment.

1. There is no range all the time, tower is necessary.
2. Lack of awareness internet and computer so training programmes are needed.
3. Internet café is necessary
4. Computer centre is necessary
5. Government have to provide computer
6. Make them aware about government schemes
7. Solve the range problems
8. Increase the efficiency of akshaya centre

4. Case Studies:

An attempt has been made to discuss with some individuals to document the perception and attitude of the women on the ICT gadgets.

Case - 1: Mrs. Ajitha.S [36 years old] she is residing at Villumala, Thingalkarikakom village. She has studied up to 10th standard. Her husband is also completed only school level of education. Her family is a nuclear family. She has used to collect information about the world through mobile phones, news papers, and TV. Usually she receives both internal and external [personal and public] news through mobile from her friends and relatives.

The programmes of her choice in the Television includes watching yoga, agricultural programmes, news, sports, cooking, health programmes, music channels, films, serials, etc. It helps her to update information on day to day affairs. By watching agricultural programmes; she is accustomed with gardening and earns money by selling organic vegetables. She practices yoga everyday from the Television which helps her to cure all the problems of mind and body. Music programmes help her to rejuvenate her mind to do the house hold activities in a more relaxed way.

Knowledge - providing quiz programmes like *kodeeswaran* updates her general knowledge. She enjoys the entertainment programmes like *kuttipattalam* with her family. She considers Television as an inevitable thing in her family life.

Case -2: Ms. Sujitha. K [26 years old] she is residing at villumala, Thingalkarikakom village. She is a graduate and unemployed too. So she is preparing and appearing for competitive exams. Her family consist of four members and the entire family is living with her father's meager income. Mobile applications, Television programmes and Newspaper provides the information about world and day to day affairs which helps in her preparations for examinations. Apart from this, now-a-days government propagates mobile apps by informing about qualified exams through personal messages. She is also make use of the famous schemes of the Prime Minister KAUSHAL VIKAS YOJANA [PMKVY] through the mobile phone. It provides required technical training for her to get a better job. She has trained in computer training.

Case-3: Ms. Reshma [21 years old] she residing at **Villumala, Thingalkarikakom** village. She has studied up to degree level. Now she is studying in St. Johns College Anchal. She used to collect information about the world through mobile phone, news paper, and Television. Usually, she receives messages about home events and other general news through mobile from my friends and relatives. Mobile phones plays a vital role in my life to collect and gather information's to communicate. Moreover, Television also supports much to get more information.

Through mobile phones she has able to get information's and download project regarding works. She has been watching Television programmes on educational, entertainment programmes and takes notes on it to make use of it in my daily works. So, she has much benefited by real progress. Thus, she collect information that improve her knowledge and help the needy in time.

Case-4: Ms.Vanaja [41 years old] and residing at **Villumala, Thingalkarikakom** village she has completed her secondary education and now working as a sales assistant in a showroom. She is also working in MGNREGA which help in managing and running her family. She is married and living with her two sons. She makes use of mobile to contact her showroom many times. Also she uses internet in the mobile to search online customers and for replying necessary enquiries of theirs. Mobile enables her to make a good coverage for her business transactions. She can access the organizations special classes on new products through mobile and also get

information about launching new products through mobile. She has been helped and enabled by the Mobile phone in her occupation.

Case -5: Ms. Archana [40 years old] and she is residing at **Villumala, Kulathupuzha** village she has studied up to higher secondary level. She is living with two daughters and struggling to run her family as a widow. She is compelled to manage the expenses of daughters' education as well as family maintenance with her meager wages.

She is working as a Chairperson of SHG Federation. She is more depended on computer and mobile for her daily routine and office work. She got computer training in the Akshaya programme that helped her to do her works more fruitfully. Mobile is helpful for her as she can contact her fellow workers for enquiring about the closing of accounts, meetings and daily activities. Apart from this she can acknowledge the latest up-comings through computer and mobile. Now, she has carrying work on the effective steps to be taken in SHG through computer. In this task, Internet helped her a lot in this regard. She is also using mobile phone daily and computer. Now, mobile phone and computer are playing an essential role in her life.

Case -6: Ms.Vinita [35 years old] she residing at **villumala, kulathupuzha** village. She is a spinster and running a tailoring shop. Mobile helps her lot in her works through mobile application and internet. She can update latest designs in dress patterns and also new stitching styles will be explained in detail. With this new technology, she got a lot of customers who are interested in her works. Now, she has a plan to open a new boutique. For this she has made contact with resellers through Phone and she can buy materials through online. She hopes she will get online customers through *face-book* and *whats app*.

Summing up: The case studies indicate that the ICT gadgets are part of their life and they have enabled to do their work effectively and efficiently. The information is a resource that becomes knowledge when it is delivered / accessed and applied properly. The ICT gadgets are channels to deliver the Information and Knowledge to women that in turn used by them to take decisions. So, the ICT gadgets are enabling technology for rural women, particularly to SC and ST women.

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