Critical theory for women empowerment through ICT studies

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Abstract

Purpose – Information and communication technology (ICT) is a powerful tool and an enabler of economic growth in under-developed areas. ICTs have played an important role in women's development and provided opportunities for empowerment. ICTs have the potential to exchange information and empower marginalised communities. The purpose of this paper is to cover Habermas-based critical theory to understand the politics of women's empowerment through the use of ICTs.

Design/methodology/approach – The paper examines the role of ICTs in developing marginalised women from the coastal areas of southern India. The paper is based on a qualitative study and presents a set of questionnaires developed specifically to assess women's development through the use of ICTs.

Findings – This study presents Habermasian based approach to address women's developmental goals.

Originality/value – The paper provides meaningful discussion on ICT for Women's Development (ICT4WD) and explores theories related to the feminist inquiry.

Keywords India, Women, Empowerment, Critical theory, Information technology, Communications technologies, Women empowerment, Women empowerment through ICT, Critical theory for the study of women empowerment

Paper type Research paper

Introduction to marginalized women empowerment through ICTS

The Association for Progressive Communications opines the new information and communication technologies (ICTs) can be classified into three groups (Nicol, 2003) namely information technology (IT) that uses computers, telecommunication technologies such as telephones, broadcasting of radio and television through satellites as well as the networking technologies such as internet which has extended to mobile phone technology, voice over IP (VoIP) telephony, satellite communication and other forms of communication. ICTs are powerful tools that can empower women (Huyer and Sikuska, 2003).

Longwe's (1994) empowerment model provides five-level framework for seeing the process of women empowerment namely, welfare, access, conscientization,

participation and control as well as the need to move from the level of welfare to control. Friedmann (1992) on the conceptualization and critique on empowerment suggests it is encapsulated within a highly restricted system of power and the role of power to empower. Empowerment can also be viewed in the following ways (Griffin, 1987, pp. 117-118):

- empowerment means gaining greater control or having control;

- having a say and being listened to;

- empowerment helps to define and create from woman's perspective;

- being able to influence social choices and decisions affecting the whole society; and

- women being recognized and respected as equal citizens with a contribution to make.

The state of Kerala in south India boasts, high female literacy rate. There are many policies and ICT4D initiatives to uplift low-income communities. Unfortunately the marginalized peri-urban coastal women of Kerala are still struggling to better their lives. The study focuses on the marginalized women involved in fishing sector in a location at Valiathura, Thiruvananthapuram (the capital city of Kerala) in India. The marginalized coastal women live in the under-developed area around urban centre. According to Eldering and Knorth (1998) marginalization refers to a process by which a person becomes distant from the conventional institutions in society. The marginalized groups allow themselves to be acted upon by others rather than to move their own agendas forward (Jaggi, 2003).

Jürgen Habermas is a representative of critical theory (Horkheimer, 1982) and is most frequently cited in information systems research (Stahl *et al.*, 2005). The use of critical theory questions assumptions and theories in order to address the emancipatory interests (Adam, 2001) of the marginalized women in coastal India that is of concern in this study. Critical theory helps to critique marginalized Indian coastal women's world in the light of potential of ICTs to empower. Critical social theorists believe that they cannot merely be observers of social phenomena and by their presence in a social interaction, they influence and are influenced by the social as well as technological systems that they are studying (Ngwenyama and Lee, 1997).

Organizations that work towards upliftment of coastal women and girls in Valiathura were selected for the study. These organizations consider education as the key to empowerment and ICT is used as a tool to enhance teaching and education. Fishing is the primary economic activity by the marginalized people in the area. The marginalized women in Valiathura are involved in selling fish to the local people or work as domestic workers.

There is lack of information on what constitutes empowerment of coastal Indian women through the use of ICTs. There is an urgent need to critically analyse the role of ICTs in empowering marginalized peri-urban women of coastal India. There is lack of sufficient mechanisms that provide ICT resources and infrastructure to the marginalized older women in coastal India. Additionally there are no mechanisms that enable access to low-cost new digital ICT by the marginalized coastal women. However, Indian government made an "effort to bring low-cost connectivity and ICT enabled services to the rural masses" (Pohjola, 2002).

The main objective of the study is to understand whether Habermas-based critical theory is applicable to study empowerment of marginalized women through the use of ICTs. The study also examines the role of ICTs in empowering marginalized women from the coastal areas of India. The researcher attempts to answer two research questions:

- Do ICTs have the potential to empower marginalized women from the coastal areas of Valiathura in south India?
- Can we use Critical Theory to study women empowerment through the use of ICTs?

Background of the researcher
The researcher has experience related to studies on ICT for rural women's development and is currently involved in similar research in South Africa. Although she is from a middle class Indian family, the researcher belongs to the Valiathura (India) minority community and lived there for 25 years. She is well aware of the issues that affect the marginalized community in Valiathura, India and the need to empower as well as to uplift the marginalized women.

Her knowledge of ICTs and research expertise on empowerment of rural women in Africa through the use of ICTs during the past five years enhanced this research. The researcher developed an innovative survey questionnaire based on ICT for socio-economic empowerment of rural women for her doctoral study. The same survey questionnaire has been modified for the Indian context and used for this study. Her background, understanding of issues that affect marginalized women and the thirst to empower marginalized women in India as well as South Africa guided this study.

Research methodology and design
This section provides a brief overview of the social research. A qualitative research strategy was used for the ICT4WD study. Habermas's critical theory is the main research paradigm used for the study. The study was conducted during the period October 2010 to July 2011. The techniques used for data collection were face-to-face interviews conducted by the researcher with the coastal organizational staff in December 2010, telephonic informal discussions thereafter with the coastal organizational staff, surveys administered by the community leader and visual methodology. The marginalized coastal women filled in the survey questionnaire and two sister organizations participated actively in this research. The levels of analysis are both organizations and individuals. Critical discourse analysis (CDA) (Cukier *et al.*, 2003, 2004; Fairclough and Clive, 1995) of spoken and written words and content analysis (Krippendorff, 2004) of questionnaire as well as photos were done.

Design of the survey questionnaire
Questions for the survey were designed based on the empowerment elements identified through literature review. A space was provided next to each question for Yes or No answers or tick boxes. Multiple copies of the questionnaire will be provided to the community leader in India. The researcher discussed the topic with the community leader and briefed the topic of study. She will approach at least 30 marginalized women in the coastal areas of Valiathura to create an awareness of the potential of ICTs to empower and to assist the women to fill in the survey. The participants will be requested to fill and sign a consent form along with the survey.

CDA
CDA should deal with discourse dimensions of power abuse and injustice and inequality that result from it (van Dijk, 1998, 1993). Habermas's discourse is a shared way of talking or conversation or creating texts (codes). Discourses can be visual discourse, written or spoken and may be found within the text. A typical example examined is the ICT4WD discourse. Theory of communicative action (TCA) (Habermas, 1984, 1987) is a theory of discourse. Communication is based on Habermas's four validity claims (Lyytinen, 1992) namely truth, legitimacy, sincerity and clarity. The social order ultimately depends on the capacity of actors to recognize the inter-subjective validity of these different claims.

The researcher attempts to explain and recognize these validity claims using content analysis and CDA of interview data and visual data. The unit of analysis for content analysis is the sentence unit and the unit of observation is interview data. Table I provides the guiding questions for CDA based on Habermas's four validity claims. The guiding questions for CDA (Cukier *et al.*, 2003, 2004; Stahl *et al.*, 2005) in Table I were adapted to suit the study. The discussion and findings will provide answers to the guiding questions.

Data representation, analysis and results
This section provides the data collected through survey, interviews with organizations and visual methodology. Although eight photos were provided by the organizations only some are included due to space limitations. Initially four organizations that empower women in India were contacted for the study. Two organizations were selected and the data were collected based on two popular sampling techniques namely convenience sampling and theoretical sampling (Patton, 2002).

Survey
The questionnaire which has three sections was sent to the marginalized women in Valiathura in October 2010. The first section that contains personal information will remain anonymous for ethical reasons. The second section contains a set of

Four validity claims	Guiding questions
Truth	What is said about ICT for women's development (ICT4WD)?
	Are the issues clearly defined?
	Are the costs and benefits of ICTs identified and assessed?
	Is there evidence to support these arguments?
	Has the relevant information been communicated without omission or distortion?
	Are there ideological claims that are not examined?
Sincerity	Are metaphors used? (e.g. information, computer literacy, etc.)
	Do metaphors or connotative words promote or suppress understanding?
	Do metaphors and connotative words create false assurances?
Clarity	Is there use of jargon?
	Are there terms not explained?
	Is there evidence of obfuscation?
Legitimacy	Who is speaking/who is silent about women empowerment through ICT?
	What is privileged? What is not said about the ICT4WD?
	What is assumed or implied?
	What is missing or suppressed in the ICT4WD discourse?

Sources: (adapted from Cukier *et al.*, 2003, 2004; Stahl *et al.*, 2005)

Table I.
Validity claims – guiding questions for CDA

questionnaires (Table II) based on empowerment elements identified through literature review. This section also contains a space for the women to write additional notes on their perceptions on ICT for development.

Although 30 women were contacted, only 19 "literate" marginalized women who live in the area could fill in the survey questionnaire. The third section is the consent form that was signed by the literate women. The consent from the women, community leader and the organizations allowed me to use their additional notes and photos for this paper.

Some of these women were literate women who are regular visitors to the local resource centre Cheru Resmi Centre (CRC) and Sr Rose Memorial Education Resource Centre (SRMERC) which provide ICT training. Table II provides content analysis of the questionnaire and provides the number of Yes responses to the empowerment-related

Empowerment elements identified through literature review	Sample questions: Yes/No or tick box questions posed in the survey	Number of Yes responds in the survey conducted in Valiathura
Economic independence and self-reliance	Do you save money to buy ICT resources?	19
Ownership/control over assets	Do you own any ICT resources? (cell phone, radio, TV, camera, phone, etc.)	19
Mutual support and caring and sharing	Do you share the assets (cell phone, radio, TV, etc.) with anyone?	15
Freedom to make choices	Do you have the freedom to make choices for yourselves in purchasing ICTs?	17
Self-confidence	Did the use of any of the ICTs (computer, cell phone, radio, video, internet, photography, e-mail, TV, etc.) to increase your confidence?	17
Access to resources and information	Do you have access to the following ICTs (list possible ICTs)	19
Expansion of capabilities	Which of the following ICTs do you use? What did you use the above ICTs for? Did you receive training from a community centre/non-governmental or governmental organisation or family member/friend to use ICTs?	19
Power	Did you encounter any opposition from friends, family or community while using ICTs?	3
Availability and reliability of technology	Were the ICTs used technically reliable?	18
Participation in decision making	Your involvement (participation) in developing any ICTs for health, agriculture, government, etc.	18
Reflecting and communicating gender issues	Are you a member of any (women's) organization that uses ICTs?	8

Table II.
Layout of the questionnaire: ICT for women's development

questions. Malayalam is the spoken language in the region. Some women even wrote a few additional notes in their mother tongue which were then translated.

Majority of the women owned ICTs such as cell phone, radio and TV and had access to it, as evident in Table II. Table III provides details of the number of respondents who used a particular type of ICT and why they used ICTs in general. The women used ICTs such as mobile phone for instant messaging to keep in touch with friends and family, to report violence and other social networking issues. ICTs such as printed publication, radio and TV were used to educate, to access news, weather and health information. Computer and the internet were mainly used to access general information.

Majority of the women in the locality do not use computer, e-mail and internet as evident in Table III. Out of the 19 women who filled in the survey 12 respondents who used ICTs were working or using resources at the centre. The next section provides details on how women use the CRC and SRMERC to fulfil their ICT needs.

Interviews: community involvement in women empowerment CRC

The CRC in Valiathura at Thiruvananthapuram city in the state of Kerala India was established in 1983 by some local community workers in the locality. Initially the executive body consisted of local members and three nuns from ICM congregation. The CRC's success and development is attributed to late Sr Rose Palakkai Varkey, a social worker, who served as the director of the centre till 2003. The centre is exclusively controlled by the nuns from the ICM congregation from 2004.

The main objectives of CRC are to generate greater awareness of socio-economic issues among the fisher people of Thiruvananthapuram, Kerala, India and to improve economic status of fisher women. Taking into account the organization's role in marginalized women's development, unstructured interviews were conducted with CRC staff in December 2010 and in 2011. The centre provides special programmes for improving the lives of older people and assists marginalized women to form women leaders. The centre assists in educating the fishing community about survival needs, security needs and self-esteem needs. Illicit liquor brewing and alcoholism still prevail

How many respondents used the ICT?	ICTs used	Why did they use ICTs in general
17	Radio, TV, cell phone, video camera, phone/fax	Instant messaging; Security; To educate; To report violence; Access news and weather; Access health information; To keep in touch with family and friends; Exchange information via e-mail; To surf the internet for information; Social networking
3	E-mail	
5	Internet	
8	Print publications	
5	Computer	

Table III.
Survey: number of respondents who used ICTs and why they used

in Valiathura. The area is under-developed with regards to the needs of the coastal women (Plate 1).

Other short-term objectives of the centre are to improve health status of women and children; to ensure adult literacy and education programmes; to provide alternative jobs during the health season; to provide basic computer education to school children and educated parents; to prevent exploitation of marginalized fisher folk; to provide vocational training courses and to provide income generation activities for girls and women between 15 and 20 age group.

Some functions provided by the centre include assistance to or care for older persons. In all, 69 people are cared for by the centre. Medicines are provided for the old. A physiotherapist visits the old people at the centre once a month and helps with physiotherapy. Centre provides support to older fisher people by providing loans to husbands of women who have the centre's membership to purchase catamarans, nets and boats.

Other income generation activities by Cheru Resmi staff for the improving the status of coastal women include stitching and embroidery (Plate 2) classes. These are done by women, on demand, for embroidered clothing for star hotels and local people. They have provided embroidered and tailor made table cloth, tray cloth, bedspread, glass cover, table runner and handkerchief to these hotels and to the local people.

Centre provides classes and seminars on HIV/AIDS awareness, pre-natal classes for pregnant women. The other activities involve providing tuition and breakfast for kids of marginalized women, who are between eight and ten years of age and staff involvement in the running of nursery for local fisher kids, adult education. The centre provides loan to women working in the centre (or for those who have membership of CRC) for marriages, construction or purchase of houses, purchase of fishing equipments by their husbands.

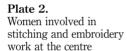### ICT training at SRMERC, Valiathura, India
In early 2005 during the death anniversary of Sr Rose her friends gathered to discuss future activities of the CRC. In loving memory of the nun the local community leaders

Source: Photographer: Mrs T. J. Iona Fernandez

Plate 1.
Cheru Resmi Centre,
members and staff

Source: Photographer: Mrs T. J. Iona Fernandez

started a centre SRMERC. The main objective of the centre was motivating the poverty-stricken brilliant coastal students to take up education seriously. CRC provides support for SRMERC's educational activities through the provision of land and building for the resource centre.

Activities and resources provided by SRMERC
SRMERC created an atmosphere to provide systematic training and tuition for students undergoing their secondary (high school) education (Classes VIII-X) as well as for higher secondary education. These students of 12-17 age groups are mainly the kids of the marginalized coastal people. There are nearly 100 students studying in SRMERC. There are two classrooms, a library, a computer lab equipped with seven computers and LCD projector at the SRMERC.

In total, ten qualified and trained teachers, mostly from coastal areas undertake lessons in various subjects for minimal remuneration. The institute collects a nominal fee from the students. For the last six years, the performance of the students at the centre is 100 per cent. This result is remarkable considering the general trend in educational achievement of the students from the coastal areas.

The overall results for the fishing community schools are between 50 and 70 per cent for many years. The achievement of SRMERC suggests when coastal students are given adequate support and facilities; they perform well in academic tests and examinations. This also suggests that such institutions are necessary in the coastal areas considering their illiterate background of their parents, insufficient facilities and home conditions that are not conducive for learning.

Another noteworthy aspect of the education in the fishing community is that girls generally outperform boys in school exams. Additionally, girls' participation in higher education (HE) is laudable in comparison with boys. This may be due to the fact that boys are becoming bread winners of the family after their high school or higher secondary education. However, SRMERC prioritize girls' education as very important and worthwhile because girls are also able to educate their future generations.

SMART class at SRMERC
The state of Kerala in India is comparatively in better position in India in terms of educational provisions. However, the coastal regions are still remaining backward in education. At the same time, Kerala still follows didactic teaching approaches in schools, for example, the use of blackboard chalk and board method of teaching is very common even now. There is a lack of technological interventions in education, though there are many advanced technologies and general approaches available in the other parts of the world.

A group of individuals in the local communities acknowledged the need for technological interventions. Five women volunteers and one male volunteer who are former students of SRMERC currently offers smart classes covering key academic areas such as maths, science (physics, chemistry and biology) and social science under the guidance of Mr Juno Lopez. This is evident in Plates 3 and 4.

These volunteers receive support from the centre for their HE through scholarships. This can be considered as an innovative approach benefiting both the volunteers themselves and their younger ones through their volunteer service. The biggest achievement is the final result for Grade 10 in 2011. In all, 18 students trained by the SRMERC staff have scored more than 60 per cent in Grade 10 amongst whom ten of them scored more than 80 per cent. One student scoring A + in all subjects (Kerala state ratio for all A + is only 63:1 in the year 2011). Majority of the students are children of fishermen, coolies and other such daily labourers.

Plate 5 illustrates inauguration of the summer vacation programme in 2011 for ICT literacy provided by SRMERC. During the programme women and girls were also provided training on basic computer skills and the use of internet.

Coastal Higher Education Society (CHES). SRMERC provides scholarships for five of its best outgoing students for two years of higher secondary school (HSS) education for the last five years, every year. After the two years of HSS, they become eligible for professional education. It is important to state that the professional education in

Source: Provided by Mr Robert Panipilla, SRMERC

Plate 3.
Technological intervention
in education at SRMERC

Plate 4.
Smart class at SRMERC

Source: Provided by Mr Robert Panipilla, SRMERC

Plate 5.
Inauguration of summer
vacation programme:
SRMERC

Source: Provided by Mr Robert Panipilla, SRMERC

private institutions is very expensive in India. In order to support able and hardworking students from the fishing communities for their HE, some humanists of the local village, Valiathura came together to the amount required.

In order to meet this purpose the CHES was formed. Till now CHES has collected nearly 40 lakhs Indian rupees for the above said purpose and the amount was

deposited in the bank as a corpus in the name of a trust. The five founders of CHES are the members of the trust. The centre is using the interest of the corpus for distributing scholarships for the coastal students. Until now, CHES has supported several students including eight engineering students (three boys and five girls), six BSc. Nursing students (five girls and one boy), one MBBS student (girl), one Bachelor of Physiotherapy student (girl) and one MBA student (boy).

Computer Instructors Training Course (CITC). Until now, five CITC courses are held in SRMERC. This service runs during the day. However, other services are conducted during the mornings and evenings. CITC conducted during the day in SRMERC is targeted for the local people. Girls and women are the participants and beneficiaries of this course. Details are provided in Table IV.

Five CITC course students, in the above list of students are women and students mentioned employed, were working in institutions such as schools, hospitals, computer and desktop publishing centres. The CRC and SRMERC are working in a same locality. As the result the students who are studying in SRMERC either in secondary or CITC, are naturally their family who is connected with CRC's activities.

Discussion of findings

Conducting research based on the coastal women in Southern India can be quite challenging and time consuming. The researcher needs to know the community very well and develop a relationship with the community. An outsider or a researcher who is not from the community needs patience and empathy to what the coastal women of Valiathura endured for many years. Moreover the knowledge of the local language is essential to communicate with the women in India. Table V provides additional notes written by the marginalized women as part of the survey. Some of the notes were translated into English from Malayalam, the local language.

The eight sample notes provided by the women in Valiathura in Table V reflect the role of ICTs in their day-to-day lives. Radio, TV and mobile phones are the most popular ICTs used by the women for their development. Internet and computer were used mainly by the women who were already working in Cheru Resmi or SRMERC only.

Table I provided the guiding questions for CDA based on Habermas's four validity claims. The four validity claims of empowerment through ICTs based on this research are explained in the table.

Truth: the relevance of ICTs to marginalized coastal women
There is clear evidence from interview data that ICTs and training provided by SRMERC benefited mainly the younger marginalized girls in the coastal area of Valiathura, India. This is also evident in Plates 3-5. Although marginalized women were aware of the centre in the locality, ICTs such as computer and internet could

Duration	No. of students
2006-2007	16 students (three students were employed)
2007-2008	12 Students (three students were employed)
2008-2009	6 Students (one student was employed)
2009-2010	12 Students (five students were employed)
2010-2011	8 Students (recently completed)

Table IV.
CITC details

	Reflections provided by the local literate coastal women on the benefits of ICTs
Reflection 1	TV provides information about the outside world. Mobile phone enables exchange of information through communication. Radio provides opportunities to gain more knowledge
Reflection 2	ICTs give happiness to their life. Cell phones allow us to communicate with other people. We can know worldly information through ICTs
Reflection 3	Cell phone, Radio, TV, etc. plays a major role in their lives. Cell phones enable communication with friends and exchange information with family members who work far away from their homes. It allows them to know more about the foreign countries. TV provides information about different regions of the country, weather report, information on living things and disasters and accidents. Radio builds their knowledge
Reflection 4	ICTs have huge potential. Live broadcast via TV enables us to know about accidents/ disasters. Cell phones enable communication with friends
Reflection 5	ICTs are of great use in our day to day life. Anything under the sky can be made familiar through computers and Internet. ICTs are medium of communication, education, enjoyment and self-development
Reflection 6	I use SMS facility of the mobile phone. Our teacher calls us via mobile phone and requests us to attend classes. TV and radio provides information on disasters, accidents and weather
Reflection 7	When my husband goes for fishing to the sea, he calls me on his mobile phone if he is running late. We watch news on TV. I can exchange information with the handicapped persons via mobile phones. I can know what is happening in the family via mobile phone
Reflection 8	The medium of information such as TV and radio provides information on natural disasters such as tsunami, earthquake and other world information

Table V.
ICT for development survey: additional notes written by the marginalized women of Valiathura

empower only very few older women. The benefits of ICTs such as radio, mobile phone and TV and their use and role in marginalized women's development are also evident from the survey questionnaire as well as their written reflections. Education is the key to empower the girls in the locality. ICT was the tool used to enhance teaching and educational activities provided by SRMERC.

Inherited distortions: most coastal women in Valiathura have not fully exploited ICTs such as internet, e-mail and computer for appropriate functional purposes. They could have used ICTs to enhance skills and generate income or market products. The ICT resource centre was there in the locality for many years. For example, there is scope to market fish and market their embroidery through the use of ICTs such as internet and mobile phone. This need is evident from the reflections by women provided in the surveys and discussions with the local women. There were some obstacles associated with access to any type of ICTs such as there were very few computers to use in the ICT centre for the large number of marginalized women who utilize the centre.

Legitimacy: marginalized women's dominant interest, assumptions
The local fishing women and other marginalized women wrote as well as discussed about their interests and potential of ICTs. The ICT training centre information reveals the younger women and girls were more privileged to use ICTs for their development. The volunteers who helped to offer smart classes were privileged to get funds to further their education and empower themselves.

It is assumed ICTs can empower marginalized women of coastal India. Women members or staff of the CRC had the privilege to use computer, internet or e-mail. The marginalized women's dominant interests were to use ICTs such as radio, TV printed publication and mobile phone for their development. It is assumed computers and the internet were not available in the area like other ICTs.

Sincerity
This refers to the ethical discourse. Many women may have not used digital ICTs such as internet and e-mail due to traditional values that prohibit them and probably due to unavailability and high costs to purchase digital ICTs taking into account the fact that majority of the women under study earned less than 200 Indian rupees per day.

Clarity
It is still not clear whether the ICT interventions to improve the lives of marginalized older women are realistic. ICTs such as internet, e-mail, video camera and computer could have been used by the organizations under study for women's developmental programmes in more appropriate ways. There is lots of jargon such as women's income generation activities. It is not clear whether women have used ICTs to better their financial position or market their fish and the clothes they stitched.

Conclusion
ICTs have played an important role in women's development in peri-urban coastal areas of Valiathura in India. ICTs have the potential to educate women, exchange information and empower marginalized fisher women in India. The researcher agrees with Kabeer (1999) in defining empowerment as the process through which the marginalized women in India, can access and control (ICT) resources as well as their ability to use these resources to bring more opportunities to attain new social outcome. The paper clarifies that ICTs such as phone, printed publications, radio, TV and mobile phone have provided women in Valiathura the power to enhance skills, opportunities for education and to improve their lives.

This study presents Habermasian-based approach to study and address women's developmental goals through the use of ICTs. There is some distortion on the Habermasian level of discourse: ICT4WD. The focus of the discussion is not ICT alone, but other income generation activities by marginalized women and development of the community in general. ICTs such as computer, e-mail and internet should be used as a more productive tool in income generation activities by the marginalized coastal women of coastal India.

The paper provides meaningful discussion on the use of critical theory as desirable to study ICT for women's development. There is scope for future research to extend similar CDA to study other marginalized women, for example, the tribal women or the indigenous women of India. Extension of such a CDA in a different context and society, for example, to study the rural African women's use of ICTs and making comparison of the findings with Asian context would also pave the way for new research.

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