

## **Supporting Rural Women's use of Information and Communication Technologies for Sustainable Economic Development in Ethiope-East Local Government Area of Delta State, Nigeria**

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### **Abstract**

*The concept of gender equality is a common concern all over the World. The same has now acquired new dimensions with the advent of Information and Communication Technology (ICT). This study revealed that ICTs can empower rural women economically by reducing trade distortions, eliminate poverty, empower weaker segments, increased productivity, get information about market prices, etc. It is however, possible only if a nation follows sound ICT strategies and policies. The study concluded that ICTs are used for rural women economic empowerment, and recommended provision of more ICTs, and training in the use of ICTs for rural women's economic empowerment.*

**Keywords:** Equitable access, autonomy, gender digital divide.

### **Introduction**

Information and Communication Technologies comprise a complex and heterogeneous set of goods, applications and services used to produce, process, distribute and transform information (Dalal, 2006). Traditional technologies continue to be important for large numbers of people around the world, particularly in rural areas. However, new technologies have a vast potential for empowerment which needs to be fully exploited. Over the past decade, there has been a growing understanding that these technologies can be powerful instruments for advancing economic and social development through the creation of new types of economic activity, employment opportunities, improvements in health-care delivery and other services, and the enhancement of networking, participation and advocacy within society.

In 1995, the United Nations Commission on Science and Technology Working Group (UNCSTD) recognized the growing influence of ICTs in development and the importance of women's participation in discussions regarding its integration globally. To that end, they established a Gender Working Group to address the significant gender issues from access to control. The United Nations Division for the Advancement of Women (DAW), the International Telecommunication Union (ITU) and the UN ICT Task Force Secretariat released a report in 2002 that focused on ICTs as a tool to advance and empower women. When the World Summit on the Information Society (WSIS) was established, a Gender Caucus was created to ensure

women had a seat at the table and a voice in the room. The Commission on the Status of Women, during its 47th session in 2003, developed Agreed Conclusions that built upon the DAW report and urged WSIS leaders to integrate gender perspectives in every aspect of the Summit” (UNCSTGWG, 1995). The first WSIS summit held in Geneva debated the issue of gender. In their final Declaration of Principles, the body stated that:

*We affirm that development of ICTs provides enormous opportunities for women, who should be an integral part of, and key actors, in the Information Society. We are committed to ensuring that the Information Society enables women's empowerment and their full participation on the basis on equality in all spheres of society and in all decision-making processes. To this end, we should mainstream a gender equality perspective and use ICTs as a tool....”(UNCSTGWG, 1995 ).*

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. If, however, the gender dimensions of ICT—in terms of access and use, capacity-building opportunities, employment and potential for empowerment—are explicitly identified and addressed, ICT can be a powerful catalyst for political and social empowerment of women, and the promotion of gender equality (<http://ics.leeds.ac.uk/papers/ks/exhibits/78/w2000-09.05-ict-e.pdf>). In the past few years, the global community has seen the “gender issue” come onto the agenda. Despite economic and socio-cultural barriers to women's use of Information and Communication Technology (ICT), when women are able to use them productively, they can substantially improve their lives and increase their income. They have proved useful in: health care delivery; distance education; enhancing rural productivity through access to market information and access to finance; promoting empowerment and participation in national and international policy processes; improving service delivery by governments; improving environmental monitoring and response systems; and facilitating environmental activism. In general, women make up a small percentage of internet and computer users. This is changing in some countries – generally those which have greater levels of development and gender equality. ICTs are potentially an important knowledge resource for women, but a focus on access is insufficient. We need also to consider what kind of information is being accessed? Who produced it? Who can use it? What is it used for? In sum, we need to view women not as passive recipients of information, but active knowledge and technology developers.

According to the World Bank (2004) the main key services fail poor people – in access, quantity and quality. This necessitates a set of development targets known as Millennium Development Goals (MDG). These call for halving of the global poverty and broad improvements in human development by 2015. The Millennium Declaration adopted by UN in 2000 underscored the urgency of ensuring that the benefits of new technologies, especially Information and Communication Technologies (ICTs) are made available to all. One resource that liberates people from poverty and empowers them is knowledge. It is also now well understood that any attempt to improve the quality of life of people in developing countries would be incomplete without progress towards the empowerment of women.

Women empowerment means investing in women rights and legal backing, with moral and financial support to enable women function effectively. The empowerment of women involves assessment of women needs and designing programs to address those needs. The aim is to help women gain more control of their lives (Garba, 1999). According to Onibokun, Kumuyi and Akinsete (1995) empowerment of women means self reliance for women for autonomous decision making in all areas of the society and the economy. It is intended to enable women have authority and create enabling environment to fully participate in decision making, policy formulation, design of development plans, and their implementation.

ICTs are especially important to poor women because it can provide increased access to resources, the absence of which defines poverty. Hence, it should be viewed as a tool to facilitate access to a variety of development resources rather than as a competing interest. Hafkin and Taggart (2001) are of the opinion that in the context of communication, transporting and other constraints of the developing world, ICTs may be even more important for women in developing countries than it is for women in the developed world who have access to abundance of alternatives. There is therefore the need for greater concentration on the use of ICTs rural women gender empowerment in Nigeria generally and Ethiopia East local government area particularly. For instance, to ensure that globalization becomes a positive force for the entire world's people and to promote gender equality and empowerment of women as effective ways to combat poverty, hunger and disease and to stimulate development that is truly sustainable, and to ensure that the benefits of new technologies, information and communications technologies should be made available to all. According to Huyer (1997), the importance of ICTs to transmit and disseminate information for development in Nigeria is well recognized. Yet, International Development Research Centre (IDRC) noted that "most of the positive effects of the information revolution have bypassed women". There is little research done on women's information needs and access to appropriate information in developing countries. While this is changing, the "information highway" is still predominantly male-oriented, and often a forum for gender discrimination, intimidation and even harassment. The profound gender implications of ICTs for both men and women in employment, education, training and other productive and personal development areas of life mean that women need encouragement and support to take their place in the information revolution. For example, the concentration of women in clerical ICTs work does not translate further up the ICTs hierarchies. Women in Nigeria are engaging in formal and informal entrepreneurial activities on a large scale, e.g. Mrs. Cicilia Ibru is the chief executive of the Oceanic Bank in Nigeria, Mrs. Ndi Okereke Onyuike is the Director of Stock exchange to mention but few. There is no doubt that women are the main economic force in developing countries. As economies become more and more information-driven the issues of women's access to introduce and disseminate it will be increasingly important to Nigerian women in generally and Ethiopia East rural women in particular.

To orient ICT projects so that they address these areas, ICT project planning and implementation for social development and gender equality must take place in a context which consists of five main components:

- (a) Creating an enabling environment which supports and encourages strategies to promote women's equal access to and opportunity to benefit from ICT projects, as well as creating a regulation and policy environment which supports women's use of ICTs;

- (b) Developing content which speaks to women's concerns and reflects their local knowledge, and which is of value for their daily lives, business enterprises, and family responsibilities;
- (c) Supporting increased representation of women and girls in scientific and technical education, and using ICTs to promote their increased participation in education at all levels;
- (d) Promoting increased employment in the IT sector for women and the use of ICTs for women's SMEs.
- (e) Implementing e-governance strategies which are accessible to women; and promoting women's lobbying and advocacy activities ([http://www.science.oas.org/gender/IDRC%2004%2011%2030%20%20Huyer%20Position%20Paper%20\(2\).doc](http://www.science.oas.org/gender/IDRC%2004%2011%2030%20%20Huyer%20Position%20Paper%20(2).doc) as cited by Dala, 2006).

### Literature Review

Using new ICTs as knowledge and networking tools provides important economic and development opportunities for women. Gothoskar (2000) noted that knowledge networking catalyses the process of women's empowerment by opening up avenues for women to freely articulate and share their experiences, concerns and knowledge, creating the possibility of their further enrichment. By the use of ICT women can broaden the scope of their activities and address issues previously beyond their capacity. There is a growing body of evidence on the use of ICT to empower women all over the world. For example, the African Women's Network of the Association for Progressive Communications (APC) has conducted training workshops to support electronic networking among women's groups. The Multimedia Caravan project in Senegal provided rural women with the opportunity to develop their own ideas on how ICT can be used to meet their development needs and goals. In Kenya, women and men weavers were trained in using the internet to learn new weaving techniques and access more realistic prices for their products. In Uganda, the Uganda Media Women's Association established a radio programme – Mama FM – where women can actively participate and learn about development issues such as, among others, human rights, children, governance, nutrition, health. The UNDP telecenter project in Ukraine applies ICTs to agriculture and farm management to support women farmers, who identified lack of information and networking tools as the major obstacles to their becoming successful entrepreneurs in a new market economy (UNDP, 2001). In Gujarat, India women dairy producers use the Dairy Information System Kiosk (DISK), which manages a database of all milk cattle, provides veterinary services, and other practical information about the dairy sector (Gaio, 1995). This information helps women dairy producers maximize productivity and earnings.

ICTs can assist women's economic activities in a variety of ways. Traders and other entrepreneur also could benefit from marketing information and the opportunity to disseminate information about their business. Marcelle (2000) observed that ICTs-enabled communication businesses offer great potential for women entrepreneurs, following the model of Grameen phone in Bangladesh, teleboutiques in Senegal and Morocco, and phone shops in Ghana. Given high demand and low capital and skill requirements, these businesses are within the reach of many women in developing countries where an enabling environment exists.

Outside the academic sphere, to some extent, the women's environment have also broken through this male dominated sector and have initiated a number of gender sensitive projects that empowered women in various sectors such as the economic sector. A good example is the ACACIA initiative in Africa. In Uganda, the Council for Economic Empowerment of Women in Africa (CEEWA), The International Women Tribune Centre (IWTC), and IDRC, are developing a package of learning materials using ITCs focused on small business activities for rural women in Uganda (Banerjee and Mitter, 1998). The core purpose of this project is to respond to the present gap in accessing relevant information on the Internet, by availing the targeted groups with information that relate to their needs.

Effective access to and use of ICTs can improve women's leadership and participation in community and economic development activities. However, rural women are at the lowest level of the digital divide. According to findings of the ITU, limited infrastructure, affordability and education are the main barriers for rural women in Africa. Time geographical location of facilities and social and cultural norms constitute additional constraints (Holmes, 2004). The improvement of access for rural women and their participation in the use of ICTs will be limited if access to infrastructure, such as roads and transport, education, training, and economic resources including financing is not increased.

Division for the Advancement of Women (2002) outlined the following as ways in which ICTs contribute to women's economic empowerment.

1. An increased ability for women to work from home;
2. Improved employment opportunities for women in the ballooning IT sector;
3. Increased ability of informal sector women to shift to the formal sector;
4. Improved global market access for craftswomen through e-commerce;
5. Transformation of traditional gender roles;
6. Improved access of women, especially rural women, to distance learning and distance work programs;
7. Improved ability for the sharing of experiences among women's organizations concerned with the economic well being of women in the informal sector; and
8. Increased ability to avoid gender bias by having a gender-opaque medium.

Women 2000 and Beyond (2005) also indicated that ICT can provide new opportunities for women's economic empowerment by:

1. Creating business and employment opportunities for women as owners and managers of ICT-accessed projects, as well as employees of new business ventures;
2. Creating an environment, including training, where women feel comfortable participating in community development activities and advocating for their needs and priorities;
3. Developing ICT-based tools that address women's specific needs are run by women (for example, literacy program, business courses, ICT training, access to market and trading information services and e-commerce imitative); and
4. Offering economic opportunities in salaried employment and entrepreneurship, as well as in the ICTs sector itself and in jobs enabled by ITCs.

Jain (2006) noted that ICT can deliver potentially useful information, such as market prices for women in small and micro-enterprises. For example, use of cellular telephones illustrates how technology can be used to benefit women's lives, by saving travelling time between the market and suppliers, by allowing women to call for product prices and by facilitating the constant juggling of paid and unpaid family activities. However, use of ICT will be limited in impact wherever women have limited or no access to roads or transport, credit and other development inputs. ICTs require that users have some skills and one should not assume that providing the facilities means that everyone in the community will immediately embrace the technology. Two important aspects need to be mentioned. First, as Eva Rathgeber clearly stated, "the key issue is that the technologies should be adapted to suit women rather than that women should be asked to adapt to technology." And secondly, ICT training is of utmost importance if women are to use the technology of their choice. Gaining the required skills further empowers women to use ICT in order to increase their employment choices and contribute to community development. Therefore, the provision of ICT facilities should be complemented with additional services and training.

In developing countries like Nigeria, more than 75% of women work in the informal sector and also in rural areas. These women engage in economic activities such as handicrafts and sewing or weaving of baskets and fabrics, working without any contracts or benefits. These are the women who need and deserve poverty alleviation programs more than any other. IT will expose these women to telecommunication services, media and broadcast services that will create markets for their products and services. The challenge will be to reach these women and provide them with ICT tools that they feel can make a difference in their income generation potential. For example, Nadamoto (2005) noted that the well-known Self-Employed Women's Association (SEWA) in India has done extensive work to assist women in the informal sector and has established an ICT program aiming to increase efficiency of rural micro enterprise activities. Also in Nigeria, Ahmed (2006) noted that in the past women were only considered for household and were left outside the mainstream of development. In today's Nigeria, the scenario has not changed much. But with the advent of ICTs, this conservative outlook about women is diminishing gradually. As a result we find more women are employed in various knowledge based industries such as computer-aided designing, graphic designing, composing, etc. with this growing number of women employment the job environment is becoming more convenient and friendly for women. This changed scenario indicates a positive attitude towards women employment.

### **Problems Associated with the use of ICT for Women's Economic Empowerment**

While the potential of ICT for stimulating economic growth, socioeconomic development and effective governance is well recognized, the benefits of ICT have been unevenly distributed within and between countries. The term "digital divide" refers to the differences in resources and capabilities to access and effectively utilize ICT for development that exist within and between countries, regions, sectors and socio-economic groups. The digital divide is often characterized by low levels of access to technologies. Poverty, illiteracy, lack of computer literacy and language barriers are among the factors impeding access to ICT infrastructure, especially in developing countries (Dalal, 2006). He noted that another hindrance pertains to ICT is lack of its access to women.

Jain (2006) indicated the following as challenges of ICT use for women's economic empowerment. They include:

1. Women face enormous challenges to use ICT for their own economic empowerment. Using and benefitting from ICT requires education, training, affordable access to the technology, information relevant to the user and a great amount of support [to create an enabling environment]. Access to affordable services and availability of infrastructure is without doubt a major requirement if ICTs are to be used for women's economic empowerment. Availability of electricity, transport and security may also influence the use of ICT.
2. Radio and television, as the widest form of communication, provide one way of solving information dissemination. In addition to being used as effective ICT for development, radio and television could be considered and used as a means of educating the population on the benefits of ICT for development. Radio and Television programmes can be developed to educate women on various development issues, including the various uses of ICT, thus increasing awareness and knowledge of ICT's uses. When possible, such programmes should be developed and conducted by women and their content should reflect a gender perspective. Unfortunately, majority of the rural women do not own or have access to radio and television.
3. Even when infrastructure is available, affordable access is a concern in most developing countries. Universal access policies aim at developing solutions that provide community access at affordable prices. Expansion of public telephone and ICT access points are examples of these solutions. Telecenters, however, do not guarantee affordable access because most telecenters are run as business ventures that need to be sustained and therefore charge for services according to their costs. The government should therefore establish telecentres for women and they should be at affordable cost and access. Understanding the challenges allows us to address the problems better and devise strategies that consider the complex dimension of women's lives. One of the strategies adopted to increase access of remote areas and marginalized groups to ICT is the development of public access centers, such as public phones, telecenters, libraries, information centers or cybercafes. Telecenters can be part of existing institutions such as health centers, schools and community centers. The growth of cybercafes and kiosks has been rapid in India,
4. Lack of local and community-related content in local languages continues to be a major barrier in women's use of ICT for economic empowerment. To make ICT more useful and meaningful, particularly for rural and poor women, relevant information and tools need to be provided to address women's needs and demands. Multimedia can be developed to provide information both in spoken and written language. The challenge is to develop content that is relevant and useful to communities in their own language. Content in local language is extremely important if ICT are to make a difference in women's lives. It is therefore, extremely important to develop content that addresses local/regional/national needs, to provide information relevant to local/regional/national issues and disseminate that information in appropriate language. The question is "How ICT can adjust to the needs of women rather than women having to adjust to the ICT sector?" In order to respond to this question, gender and ICT advocates and practitioners must engage in gender-aware participatory methods to assess the needs of women and

- develop a clear understanding of how ICT can best be used as a tool for women's economic empowerment so that we can develop creative solutions that promote and facilitate the use of ICT. Using the example of women in the informal sector, it is important to allow women to choose the technology they feel most comfortable with, such as a cellular telephone to call for market prices, even if it may not be the most efficient solution.
5. To ensure that women take full advantage of these it is important to make the venue comfortable and safe. In many cases, the location of and arrangements around public access centers are decided without keeping the constraints on women in mind, such as inappropriate opening times [including evenings], security issues and lack of transport. Women's multiple roles and responsibilities may also limit the time available to use such facilities. Experience also shows that women are more comfortable in women-only training environments. Training programmes should be offered free of charge or, in fact, be considered a 'job', in that participants are paid a certain salary as an incentive to participate and increase their education and qualification level. It should be noted that it is only when training is free that women will participate since they cannot leave their activities such as farming and other meaner jobs at the detriment of their families. It is important to view ICT as a tool to meet women's development needs and accordingly all forms of ICT should be considered to determine which are more appropriate in a particular setting and for the a particular programme. It is our responsibility to make technology work for the people and in many cases, this requires a gradual transition in ICT usage. For example, women in the informal sector may decide that cellular phones are all that they need to improve their business, but may become more interested in the use of internet for business purposes **n**ce their businesses grow and they feel more comfortable with using technology.

### Methodology

Descriptive survey was employed for the study. Ten (10) villages were randomly selected from the fifty-nine (59) villages in Ethiopie East local government area. Furthermore, three hundred (300) women were randomly selected as sample size from the ten (10) villages. Questionnaire and observation were the instruments for data collection. The data were analyzed using descriptive statistics such as percentages and frequencies.

### Findings and Discussion

*Table I.* Age distribution of the respondents

Age brackets	Frequency	Percentage (%)
20-30	112	37.33
31-40	82	27.33
41-50	62	20.67
51-65	44	14.67
Total	300	100

Table I shows that majority i.e. 112 (37.33%) of the respondents are within the age bracket of 20-30 years. This implies that majority of the respondents are within the age bracket of 20-30 years. It could be deduced from this study that women in Ethiopia East Local Government Area are within the age bracket of 20-30 years of age.

*Table II.* Educational qualification of the respondents

Educational qualification	Frequency	Percentage (%)
No formal education	56	18.67
Primary school certificate	68	22.67
WAEC/TCII	76	25.33
NCE/Diploma	42	14
B.Sc and above	58	19.33
Total	300	100

Table II above shows that majority 76(25.33%) of the respondents holds WAEC/TCII certificate. It could be deduced from this analysis that majority of the rural women in Ethiopia East Local Government Area are educated.

*Table III.* Occupation/employment status of the respondents

Employment status	Frequency	Percentage (%)
Self employed	171	57
Employed by government/other organizations/individuals	69	23
Unemployed	60	20
Total	300	100

Table III shows the distribution of respondents by employment status. 171(57%) are self employed, 69(23%) are employed by government/other organizations/individuals, while 60(20%) are unemployed. From this analysis, it could be deduced that rural women in Ethiopia East Local Government Area are self employed.

Table IV shows that the radio, television, mobile phone and computer are available for use by the respondents. Although, there is little or minor evidence of the availability of other ICTs such as telephone (Landline), Internet and E-mail. This implies that ICTs are available for use by majority of rural women in the local government area. It could be deduced from the analysis that ICTs are available for the empowerment of rural women in Ethiopia East Local Government Area.

This finding of this study corroborates that of Women 2000 and Beyond (2005) which reported that experience has shown that reaching women in developing countries particularly in rural areas is facilitated by using multiple forms of media and communication technologies, i.e. ensuring that new technologies, such as computers and the Internet are combined with technologies that reach many women such as radio, television, and printed media.

Table IV. Availability of ICTs

ICTs available	Agree		Disagree		Undecided		Total	
	No	%	No	%	No	%	No	%
Radio	271	90.33	21	7	8	2.67	300	100
Computers	119	39.67	172	57.33	9	3	300	100
Mobile phone	242	80.67	56	18.67	2	0.67	300	100
Telephone line (landline)	85	28.33	175	58.33	40	13.33	300	100
Television	258	86	37	12.33	5	1.67	300	100
Fax	26	8.67	197	65.67	77	25.67	300	100
Scanner	53	17.67	192	64	55	18.33	300	100
CD-ROM	65	21.67	180	60	55	18.33	300	100
Internet	69	23	180	60	51	17	300	100
E-mail	74	24.67	181	60.33	45	15	300	100

Table V. Sources through which rural women in use/access ICTs

Sources	Agree		Disagree		Undecided		Total	
	No	%	No	%	No	%	No	%
At home	250	83.33	42	14	8	2.67	300	100
Cyber cafe	116	38.67	173	57.67	11	3.67	300	100
Community information centre / telecentre	88	29.33	177	59	35	11.67	300	100
Phone centres	218	72.67	66	22	16	5.33	300	100
Friends/relatives	217	72.33	47	15.67	36	12	300	100

In the table above, 250(83.33%) of the respondents showed that most of the respondents have ICTs in their homes, 218(72.67%) of the respondents use ICTs in phone centre, closely followed by this is friends/relatives which yielded 217(72.33%). The number of respondents that use/access ICTs in cyber café are 116 representing 38.67% and least is 88(29.33%) representing those that use/access the ICT facilities in the community information centre. This implies that a majority of the respondents use/access the ICTs at home and phone centre.

Table VI. Women's use of ICTs for economic activities

Economic activities	Agree		Disagree		Undecided		Total	
	No	%	No	%	No	%	No	%
Increased productivity	209	69.67	76	25.33	15	5	300	100
Better/effective management of business	209	69.67	76	25.33	15	5	300	100
Get information about market prices	209	69.67	63	21	28	9.33	300	100
Access to loan/bank	153	51	77	25.67	70	23.33	300	100
Buying and selling of goods	207	69	76	25.33	17	5.67	300	100
Electronic transfer of money	148	49.33	128	42.67	24	8	300	100
Participation in cooperative activities	172	57.33	104	34.67	24	8	300	100
Participation in trade fair	146	48.33	113	37.67	41	13.67	300	100
Securing job opportunity.	154	51.33	122	40.67	24	8	300	100

Table VI indicates the various economic activities in which ICTs are used by women. The result shows that majority of the rural women make use of ICTs to increase productivity, effective management of businesses, buying and selling of goods and get information about market prices. From the analysis, it could be deduced that the rural women in Ethiopia East Local Government Area are empowered economically.

Table VII. Problems of ICT use by women

Problems of ICTs	Agree		Disagree		Undecided		Total	
	No	%	No	%	No	%	No	%
Absence of electricity/electricity interruption	247	82.33	41	13.67	12	4	300	100
Lack of some ICTs in my village / community	251	83.67	28	9.33	21	7	300	100
Lack of ICT skills	248	82.67	38	12.67	14	4.67	300	100
High cost of ICTs / I cannot afford the ICTs	264	88	14	4.67	22	7.33	300	100
High cost of access charges	253	84.33	14	4.67	33	11	300	100
Lack of awareness of some of the ICTs	256	85.33	18	6	26	8.67	300	100
Absence of telecentres/ information centres/cyber cafe / phone booths in my village	240	80	36	12	24	8	300	100
Illiteracy/ ICT illiteracy	271	90.33	28	9.33	1	0.33	300	100
No mobile phone network coverage in my village	103	34.33	179	59.67	8	6	300	100

From the table above, it could be inferred that absence of electricity/electricity interruption, lack of some ICTs in the village/community, lack of ICTs skills, high cost of ICTs, high cost of access charges, lack of awareness of some of the ICTs, absence of telecentre/information centre/cyber café/phone booths in the village, and illiteracy are the problems militating against women's use of ICTs in Ethiopia East Local Government Area. Also, majority of the respondents 179(59.67%) disagreed to the fact that "no mobile phone network/telecentre/telecommunication coverage" in Ethiopia East Local Government Area is a problem militating against the utilization of ICTs by women. The findings of this work agree with the explanation of Hafkin and Odame (2002) who noted that "although there is observable importance of ICTs in women's empowerment; it has not really taken its full weight in Nigeria as a result of problems militating against the proper utilization of information and communication technologies as tools for development". Also, the findings support those of Division for the Advancement of Women (2002) and Livingstone (2002) who found that there are multiple challenges to ICTs becoming a positive force for women's empowerment. They include expensive financial resources which is needed to make ICTs available and effective, the large percentage of women in developing countries work in the informal sectors, lack of awareness to women to the benefits of ICTs, poverty, illiteracy, epileptic power supply, limited resources resulting in poor infrastructure, lack of basic amenities, connection cost and computer illiteracy.

### Conclusion and Recommendations

Equitable access to ICT technology and the autonomy to receive and produce the information relevant to their concerns and perspectives are critical issues for women. They therefore need to be involved in decision-making regarding the development of new technology in order to participate fully in its growth and impact. Access and costs being some of the greatest barriers for ICT use, it is of the utmost importance to engage women and gender advocates in the policymaking process and dialogue. It is important to engender ICT policy to ensure that women, particularly rural and poor women, benefit from ICT. Gender must be considered from the start of project design. Only then can ICT policies and projects properly address the gender digital divide and further contribute to women's economic empowerment.

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