ICTs and Adult Education for Empowerment of Rural Women in Africa

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Abstract
Rural women contribute so much to development yet they suffer invisibility, they have low educational and income levels and limited access to infrastructural development. There is tremendous potential in using ICTs and adult education for the empowerment of rural women in sub-Saharan Africa and other developing societies. ICT use has come to stay and the issue now is how to harness it for basic adult learning in developing countries in Africa. Socio-economic characteristics and cost could be a determining factor for adopting an ICT protocol for adult education among rural women.

To support women to make the best of modern information for their personal development, their willingness to pay for the use of an ICT facility based on their socio-economic characteristics needs to be assessed. There is also the issue of women being technology unfriendly. This calls for making information technology women friendly in the light of adult educational methodologies.

Introduction
The majority of the poor live in rural areas. 70% are women. In spite of their tremendous contribution to development, rural women in Africa continue to suffer invisibility, poor health, low levels of formal education and income and limited access to infrastructural development. They also dominate in small-scale agriculture. Reports indicate that rural women have been key actors in solving major issues on the development agenda, including the need to manage the environment in a sustainable manner, control the exploding rate of population and urbanization, ensure food security, provide human needs with regard to health, promote education and literacy and eliminate poverty. Globally, women produce more than half the food that is grown and are primarily responsible for preparing, storing and processing food. In rural areas the total work day is 20% longer as compared to urban areas. Women in rural areas spend an average of 20% more time than men working (ILO, 2003). The feminization of agriculture has placed a considerable burden on women's capacity to produce, provide and prepare food in the face of already considerable social, economic and cultural constraints. Civil strife, rural-urban migration of men in search of employment and the growing number of mortalities attributed to HIV/AIDS have also led to an increase in female-headed households in the developing world. Despite their essential role in achieving global food security, household, community and societal development, the contributions of rural women are often underestimated and overlooked in development strategies - they remain the *invisible* partners in development. They also enjoy the least of the contributions they make to society. Hence they remain the poorest in the society that they contribute so much to.

From the 1970s to date, there have been interaction and knowledge building to move the focus on women and rural development from the margins to the centre stage. Meanwhile mainstreaming women's issues in development strategies continues to be hindered by limited capacity and commitment within development agencies and national governments . The empowerment of rural women through the exchange of knowledge and information is crucial for enhancing rural living conditions and achieving development goals.

There exist extensive and diverse studies as well as literature on the potential role of Information and Communication Technologies (ICTs) in poverty alleviation, most specifically on rural adult education in Africa and other developing areas. Considering the infrastructural and other developmental challenges of rural communities and their women, it becomes crucial to explore innovative ways of using ICTs for enhancing their capabilities. Through a literature and internet-based search, this write-up explores ICTs and adult education for women's empowerment.

ICTs and Adult Education for Rural Women's Empowerment
The objective to utilize ICT to bridge the gender gap ties very well with the long-standing society objective to promote adult education. Adult education implies any educational activity that targets or reaches out to the adult population. It

may be formal, informal or non-formal. Education programmes range from basic literacy (reading and writing) and numeracy to higher tertiary education or specialist and professional courses. The nature or content of the programme depends on the educational level and needs of the target adult population. Adult education observes principles that perceive the adult learner as having some experience and knowledge which could contribute tremendously to the teaching-learning process. Hence the principle of andragogy, (the art and science of helping adults learn) as promoted by Malcolm Knowles (1980) remains the guiding principle. In this principle, an interactive and participatory approach to adult learning is emphasized. The teacher's role is more of a facilitator.

Education that targets adults is packaged and transmitted in several modes. This may be either face-to-face or by distance. Technology-mediated learning has been predominantly used in reaching out to the adult population in any given situation. A comprehensive definition of adult education suggested by the United Nations Educational Scientific and Cultural Organization (UNESCO) about thirty years ago supports the need for widespread use of ICT in adult education. The 1976 International Conference of Adult Education (ICAE) advocated innovative teaching methods such as remote teaching programmes, including correspondence courses, radio and television to encourage the broadest possible participation in locally based adult education. The conference was especially mindful of the special needs of women given the high incidence of illiteracy among this group. In earlier conferences (1960 and 1972), UNESCO had emphasized the use of science and technology (film, radio and television) in adult education, and the need for adult learners at the grass-root level to participate in the planning, management and conduct of their own affairs. The conference also raised the issue of public versus private participation in rural adult education. While the conference seemed to suggest an emphasis on the public role, recent economic and political realities seem to suggest a shift towards more private and commercial participation in the process as a way to sustainability (Conference Report, 1976).

Private researchers have also examined the relationship between ICT and adult education. In defining ICT for development, Holmes (2004) adopted the Association for Progressive Communications definition of ICT as:

> *"Technologies and tools that people use to share, distribute, gather information, and to communicate with one another, one on one, or in groups, through the use of computers and interconnected computer networks. They are mediums that utilize both telecommunication and computer technologies to transmit information." (Holmes, 2004: 24)*

Holmes (2004) makes several important observations. For example, the author emphasizes that ICTs are tools that facilitate sharing information and foster communication. Also ICTs include both new and traditional information and communication technologies. There is often an emphasis on new technologies like personal computers, the Internet, World Wide Web, mobile phones, satellite and wireless technologies. However an African ICT tool kit for development also encompasses traditional media like telephone, radio, television, print media (for example: newsletters, cartoons and graphic posters) and community communication initiatives (for example: listening groups and community theatre).

The donor literature has also attempted to identify critical factors influencing ICT use in adult education in rural areas. A typical example is the observation in the *Agenda for the Future* of the International Council of Adult Education. The paper states that the critical importance of adult education in economic development has been recognized in several important documents. Examples of such documents are the Universal Declaration of Human Rights in 1948, the Declaration of the International Conference on Adult Education in Hamburg in 1997, and the World Forum on Education for All in Dakar in 2000 (ICAE, 2003). These declarations and documents emphasize the international consensus that has been reached on the right to education and the right to learn throughout life for women and men. The central role of adult education in support of creative and democratic citizenship is also highlighted. The Hamburg Declaration focused specifically on the importance of participation of both sexes in the very existence of mankind. Informed and effective participation of men and women in every sphere of life is needed if humanity is to survive and meet the challenges of

the future. The strategy paper specifically points out the potential to enable creative and democratic citizenship, giving a voice to people living in poverty, as well as tools for improving their lives through the application of ICTs in adult education.

ICAE followed up the 1997 Conference on Adult Education in Hamburg, with a study, *'Agenda for the Future – Six Years Later'*. On the issue of gender and development, the study pointed to several gaps in the effort to extend literacy to rural women. There was still a very high disparity in the literacy rate between men and women. Several countries do not have programs focusing on women. Women's participation in making decisions about important issues such as active citizenship, re-productive health and sexual health was also found to be limited. The report called for the empowerment of women to participate in decision making on these important issues.

The nations of the world reaffirmed their commitment to the use of technology in adult education when in January 2002 the United Nations General Assembly proclaimed the years 2003-2012 to be the UN Literacy Decade. The final U.N. resolution (56/116) reaffirmed the Dakar Framework for Action in which the commitment was made to achieve a 50% improvement in adult literacy by 2015, especially for women. Equitable access to basic and continuing education for all adults was also recommended. The International Action Plan for implementing Resolution 56/166 states that literacy for all is at the heart of basic education for all and that creating literate environments and societies is essential for achieving goals of eradicating poverty, reducing child mortality, curbing population growth, achieving gender equality and ensuring sustainable development, peace and democracy. It is noteworthy that policy makers around the world recognize the need for adult education not as an end in itself but rather as a means for making true improvements in the lives of people and for the realization of a peaceful and democratic world.

The Food and Agricultural Organization (FAO) has echoed the above sentiments. In his opening address, FAO representative to the Republic of South Africa, remarked that in the rural areas, where most of the world's poor live, women are major producers in the rural economy. ICTs can be used as tools to empower rural women with the technological information and skills necessary for sustainable food security and livelihood. New information and communication technologies hold a unique opportunity for women in the developing world to speak out, be more visible and less isolated. It will also support their increased political, social and economic participation at every level. He added that FAO takes a multi-technology approach to ICTs application. This approach promotes the role of traditional and modern communication technologies by linking up rural radios with multi-purpose development centres and promoting distance education for rural populations, especially women. FAO also uses modern information technology to establish database management for food security and promote agriculture education and extension work (FAO, 2002). Some cases of FAO's community radio and IT based interactive learning is discussed below:

1. FAO works with the World Association of Community Broadcasters (AMARC) and the Developing Countries Farm Radio Network (DCFRN), to organise rural radio programmes that focus on helping to establish community radio stations. The stations are connected to the Internet, and training broadcasters to source information online.

2. A dedicated web portal within FAO's World Agricultural Information Center (WAICENT) also provides specialized content including a warning service on food security to AMARC's news agency "Simbani Africa". Simbani, means "Talk" in ChiChewa a language spoken in Malawi, Zambia and Mozambique. The Simbani programme was launched in October 2003 as a news service that focuses on human rights and democracy, gender and development, environment, HIV/AIDS and food security (FAO, 2003).

3. Another community-based effort is the Rural Outreach Programme (ROP) in Uganda. The Uganda Media Women's Association through its Rural Outreach Programme uses a variety of information and communication strategies and tools to raise women's awareness about their rights. Women journalists visit a number of rural districts four times a year to conduct participatory workshops on issues ranging from reproductive rights,

constitutional rights to political and economic rights. Issues raised are often adapted into dramas that are staged within the communities for a fee. Between visits, communities organize radio listening clubs to discuss programmes developed for rural populations. During field visits that last four or five days, women journalists record participants' experiences which are aired on Radio Uganda or published in local newspapers (Wagner and Kozima, 2003).

These programmes are predominantly radio-based. Meanwhile, rapid decline in the prices of ICT facilities could lead to the use of fairly sophisticated approaches in rural settings. Development workers in Africa could explore these opportunities. For instance, the use of the computer to create virtual classrooms at a distance is quite new and has not yet taken hold in most developing countries. Despite its newness, the practice has become quite common in industrialized countries. Relying extensively on the Internet and Web, virtual learning can either supplement an existing face-to-face class or entirely replace the face-to-face experience, with learners never meeting their facilitators or other co-learners. Some virtual experiences eliminate the teacher's role altogether or significantly reduce it. Virtual learning is beginning to be used in developing countries as well. One effort is the African Virtual University (AVU) at the post-secondary level. Organized under World Bank auspices in 1997, AVU has established 31 learning centres. Using a combination of online materials, online chat, video broadcasts, CD-ROMs and DVDs, the AVU has delivered over 3,000 hours of instructional programs to over 23,000 students.

An even more challenging advancement is the possible use of speech recognition to address the cognitive needs of literacy learners, particularly those related to reading comprehension. The user speaks a word or phrase into a microphone hooked to a soundboard in the computer and the computer matches the sound to a model sound pattern in its memory. After five minutes training, the software, which is available in several foreign languages, can create text documents from dictation at up to 160 words per minute. With the available second language tutorial software such as *Learn to Speak* series, learners read to a text word or respond to a question with a simple spoken response. The technology helps learners to build relatively simple speaking skills.

Text-to-speech is also another technology with commercial applications like *Coolspeaking* which can read text from emails, webpages, or typed text. *Keystone Screen Speaker* is a screen reader program that allows the user to highlight text and have it read back to him/her, word by word, or sentence by sentence, or paragraph by paragraph. This allows learners with limited literacy skills to use screen text to support their learning if the difficulty level of the text goes beyond their decoding skills (Wagner & Kozima, 2003).

On another level altogether, *LeapFrog* has produced 'talking books' based on a stylus and battery–powered computer chip that provides text-to-speech capability to early readers. There is a success story of its use by women of Afghanistan. LeapFrog Enterprises Inc. (NYSE: LF), a leading developer of innovative technology-based educational products, partnered with the US Department of Health and Human Services (HHS) to create a unique in-depth, multi-sensory health education program for thousands of Afghan women. The program heralds LeapFrog's entry into the adult education market and expands its growing global presence in education. The Afghan Family Health Book teaches basic family healthcare information using LeapFrog's cost-effective, portable, interactive paper-based platform for adults with a range of literacy levels. A team of HHS healthcare professionals, Women's Affairs and LeapFrog's content development team developed the content in the country's major languages - Dari and Pashto. The beneficiaries are Afghan women, 80 percent of whom are illiterate. They learn to read using the device. This multi-sensory design provides the user with an interactive, hands-on approach to learning healthy living practices for Afghan families and basic women's health information. They learn about personal health subjects including diet, childhood immunization, pregnancy, breastfeeding, sanitation, water boiling, treating injuries and burns, and disease prevention. Using adult educational methodologies, the information is conveyed in a story like format that allows the user to interact with conversations that are portrayed in the book through pictures and audio. George Raine (2004). Given the low cost and low maintenance needed by *LeapFrog* tools, this technology may have a considerable merit for Low Developed Countries.

Considering this wide range of technological advancement with its cost and technical implications, choice of a sustainable ICT infrastructure could be a real issue for decision–makers in African. Several factors will have to be taken into considering before choosing an ICT media for adult learning among rural women of Africa.

Choice of Media

Considering the profile of rural households and the limited level of infrastructural developments, choice of media for adult learning among rural women depends on several factors such as socio-economic characteristics of rural female households. There are studies that attempt to measure the relationship between the socio-economic characteristics of households and its effect on choice of media. Abbey-Mensah's (2001) study entitled, *'Rural Broadcasting In Ghana'* exemplifies such studies. The author concluded that radio is the most useful and efficient medium available to the Ghanaian rural population, considering its power source and affordability. The author recommended radio broadcasting as one of the vehicles through which national aspirations could be pursued. This recommendation was based on the distribution of ICT infrastructure in Ghana. Use of radio is relatively widespread in Ghana with about 219 radio receivers to 1000 people versus 13 TV receivers for the same population. Also, there are over 3 million (3,078,000) radio sets with an estimated audience of 8.2 million compared to 199,000 television sets with estimated viewers of 4 million in Ghana.

The study by Westoff and Bankole (1997), *'Impact Data - Accessing Mass Media on Reproductive Behaviour - Africa'* drew a conclusion similar to that of Abbey-Mensah (2001) that radio is an effective tool for rural adult education. The authors conducted demographic and health surveys, in Burkina Faso; Ghana; Kenya; Morocco; Madagascar; Namibia and Zambia to study the impact of mass media on people's reproductive health decisions. Controlling for the effects of such variables as household income, socio-economic status, age, gender, and geographic location, the authors found that "there is a persistent and frequently strong association between exposure to the mass media and reproductive behaviour change in Africa" Specifically, the authors found a consistent positive relationship between radio exposure and reproductive behaviour. Similar conclusions were arrived at in the case of women where availability of information from radio was found to be positively related to use of preventive methods in family planning.

The findings from Westoff and Bankole's study reinforce the need to focus on the use of the radio in rural adult education in Africa. For example, rural women in Ghana who were regularly exposed to radio, television and print media desired a mean number of children of 3.9, compared with 4.2 for women having regular exposure to two of those media, 4.6 for one of the media, and 5.3 for no exposure to any media. In Namibia: 61% of married women regularly exposed to radio, TV and print media were using contraception; compared with 25% exposed to two of those media, 20% exposed to one of the media and 12 per cent exposed to no media. In Zambia, 15% of married women with no formal education but who were regularly exposed to radio and TV were using contraception compared with 9% exposed to one of those media and 7% exposed to no media. In Burkina Faso, all women regularly exposed to radio, television and print media desired a mean number of children of 3.7; compared with 4.2 for women having regular exposure to two of those media, 5.7 for one of the media, and 6.3 for no exposure to any media. Similarly, in Kenya, 53% of rural married women regularly exposed to radio, TV and print media were using contraception; compared with 42% exposed to two of those media, 33% exposed to one of the media and 22% exposed to no media. In Madagascar, women with no formal education but who were regularly exposed to radio or television desired a mean number of children of 5.4; compared to 6.5 for women regularly exposed to one of those media, and 7.5 for no exposure to either radio or television. In Namibia, 61% of married women regularly exposed to radio, TV and print media were using contraception; compared with 25% exposed to two of those media, 20% exposed to one of the media and 12% exposed to no media. These patterns and similar results have been reported in studies by Cragg, Andrusyszyn, Humbert (1999); and Sibanda (2001).

The study by Sibanda (2001), '*Improving Access to Rural Radio by 'Hard-to-Reach' Women Audiences'* utilized a large sample of 3000 households from four countries to examine radio ownership. The results from the study revealed that 67.8% of women owned radio sets compared

to 28.9% who did not. The majority of respondents (84.4%) stated they listened to radio, compared to a minority of 8.9% who did not, and 6.7% who listened to the radio occasionally. The study also found that radio listening does not depend on ownership. Even though about 68% indicated ownership, 93.4% of the women listened to radio, compared to 1.7% who did not, with 4.9% who listened occasionally. Of those who did not own radio sets, 69.2% listened to radio, 19.2% did not, and 11.6% sometimes listened. This gives an indication that a higher percentage of women listen to radio. This implies that a distributed learning program for rural women using radio could be viable and patronized. Furthermore, there is an opportunity to explore community radio options since listening is not tied to ownership.

With increasing use of computers in learning, several studies have attempted to examine the factors influencing computer use in learning. The issue of convenience and reliability has also been examined. While computer-based learning relies on the use of electricity and other power resources that might not be available in rural areas, the literature is briefly reviewed here to indicate the general acceptance of computer-based resources in the learning process and to find ways of making it accessible to rural women. In their paper, *'Experience with Technology and Preferences for Distance Education Delivery Methods in a Nurse Practitioner*' Cragg, Andrusyszyn and Humbert (1999) examined students' preferences for various information delivery methods, learning preference, learning style, distance delivery method, learning outcome, and experience with technology. The study was based on a sample of 125 female students in a Primary Health Care Nurse Practitioner Program (PHCNPP) of Ontario Ministry of Health by distance learning. Using simple correlation analysis, the authors found that students were more comfortable with the use of print (86%), followed by Internet hot-links (81%), CD-ROM-based multimedia (77%), videotaped materials (66%), computer conferencing (62%), audiotape lectures (38%), and audio-teleconferencing (38%). They explained further that an overall significant difference was found between these information delivery approaches. The authors found that student's preferences for distributed learning delivery methods were influenced by the user's comfort with the technology and its reliability. This implies that in choosing a media, the issue of convenience and reliability cannot be underestimated given the pressure on women's time and the multiple roles they play in the household. Considering the level of advancement in computer-mediated learning and the potential it presents, there could be gradual introduction of such facilities to help bridge the gender and rural-urban divides in the shortest possible time. Though the choice of radio has been found to be pre-dominant in rural communities and among women, new information technology possesses some unique features that make learning women-friendly.

The Cost Factor in Choice of Media

The cost of ICTs and its impact on their use for adult education is one of the crucial and determining factors for media choice. Perraton (2000) provides some data on cost of some adult basic education projects from several countries. She explains that studies have revealed that radio offers a moderate cost for distance programmes for adults in health and agriculture. Radio has a large audience and moderate cost of production and delivery leading to a lower cost per learner. According to Haddad & Jurich (2002) as quoted by Wagner et al 2003, to make realistic cost estimates one needs to take into account the equation: TC = FC+VC (N) where, TC is the Total Cost, N is the Number of learners served; FC are the Fixed Costs such as minimum infrastructure (e.g. Internet basics); and VC are the variable costs or 'recurrent costs' such as training related to the numbers of participants, learners, teachers, etc. What may be generally emphasized is that cost-effectiveness can be influenced greatly and positively by the extent of reach of a given ICT solution, especially if fixed costs can be controlled. Interactive Radio Instruction (IRI) has one of the lowest rates of unit costs, between 1-3 dollars per learner as the denominator in many countries goes into the hundreds of thousands of individual learners.

Several important policy issues arise based on the information from the studies on cost. Initial costs are significantly beyond households' ability to pay. Governments and donor agencies could support the initial installation cost. The question is the sustainability of these ICT systems even if most African governments were to make the initial investment outlay. The concern for sustainability has led to inquiry about rural households' willingness to pay for ICT services. For instance, a survey under a Grameen Bank telephone project in rural Bangladesh revealed that 54% of member phone users indicated that they were

willing to spend between 100 to 300 Taka ($2 to $6 USD) for a three minute phone call involving a financial matter with a family member overseas. About 27% said they were willing to spend between 300 to 600 Taka ($6 to $12.25 USD) for this kind of call. Given an average reported monthly income of 5,000 Taka ($102 USD) for respondents' households, these figures represent significant proportions of monthly household income ranging from 2% to 12% (Quadir, 2000). Once the need and the willingness are there, it gives the assurance that rural women will be willing to pay for the use of an ICT facility. The use of cellular phones has recently increased tremendously in rural communities. There is a strong desire among rural women to keep in touch with family members who have travelled outside their communities.

The concern over sustainability of ICT use in rural areas raises a second policy issue concerning the choice of ICT infrastructure to adopt in a given location. Given that there are several ICT protocols (personal radio, community radio, telephone, television, etc), what factors could influence a household's choice of protocol? The literature suggests that cost is probably the driving factor. The idea of the 'community radio' for example, seems targeted directly to reducing the cost of delivering information to rural households. Major international development agencies have spearheaded community radio efforts. For example, the FAO Rural Radio and Simbani have developed content and training partnerships that use rural radio to raise awareness about issues critical to rural development. Rumble (1997) and other authors such as Curran, (1989) and Perraton (2000) emphasize cost effectiveness as the primary concern in distributed learning. The objective in designing a distributed learning program in rural areas is to try to capture economies of scale in the choice of technology.

Rumble discusses several other studies by Jamison, Klees, and Wells (1978), UNESCO (1977; 1980), Perraton (1982; 83), Wagner, etc. al. (1982) and points to the difficulty in drawing firm conclusions based on the studies. Part of the problem is the disagreement over the methodology to use in estimating costs. Even if some reasonable measure of cost could be obtained, there is still the issue of households' ability and willingness to pay for the information. This issue has been part of the structural reform and market-led policies initiated in several African countries in the early 1980s. Researchers have addressed the broader question of households' willingness to pay for public services through the imposition of user charges (Thobani 1983; Tan et. al. and Mingat 1984 for education; Jimenez 1987 for health services; Boadu 1993 for rural water supply). Assessing the willingness of rural women to pay for the use of ICT facilities that seek to empower rural women through adult educational programmes could be a way of overcoming the problem of cost. Aside the issue of cost, there are other challenges that could affect the use of ICTs for empowerment of rural women.

Challenges of ICT Use for Women's Empowerment

Much as ICTs have the potentials for empowering rural women, there appears to be some challenges that need to be considered. For instance, Holmes (2004) admits that the digital divide persists and rural women are in the very deepest part of that divide. She adds that recognizing the challenges in accessing ICT in developing countries, ICTs become another site for exclusion rather than tools for empowerment.

Similarly, in her discussion on *Barriers to Harness ICTs for the Advancement of Rural Women,* Revathi Balakrishnan (2002) acknowledges that information communication technology also brings with it urban-rural and gender divide in access to opportunities. Thus while women in urban areas are more likely to take advantage of ICTs, women in rural areas continue to have little or no access to such opportunities.

Nath (2001); Revathi Balakrishnan (2002); and Holmes (2004) have therefore discussed some of the key constraints and factors inhibiting women's ability to harness the full potential of ICT. The authors raised the following issues, some of which have already come up in the discussions:

a. Policy environment to support rural ICT programme particularly those directed to rural women;
b. Inadequate physical and service infrastructure to support connectivity and the capacity building for ICT based interventions in rural locations;
c. Economic affordability of IT hardware and soft ware among the rural population;
d. Relevance of language and appropriateness of content, particularly for rural women and

e. Gender specific constraints to access, adopt and apply ICT based information systems.

In a study by the Association of American University Women (AAUW) it was found that the following should be considered to enhance women's '***fluency***' with information technology:

1. Redefine information literacy to include lifelong application of relevant concepts, skills, and problem-solving abilities.

2. Change the public face of computing to make the public face of women in computing correspond to the reality rather than the stereotype.

3. Rethink educational software which often shows significant gender bias for women and girls to recognize themselves in the culture of computing

4. Support efforts that give women and girls a boost into the pipeline by creating programs that encourage them to see themselves capable of careers in technology.

In addition, Noeleen Heyzer, the Executive Director of UNIFEM in Holmes (2004) describes the redress of digital divide issues for women as the interconnection of the "4 C's: Content, Connection, Capability and Control: Connection, or access, to ICTs via telecommunications infrastructure. This is the gateway for rural women.

Conclusion

This study on the use of ICTs and adult education for empowerment of rural women in Africa reveals that ICT use has come to stay and the issue now is how to harness it for basic adult learning in developing countries. There are several studies and lessons that show how much has been achieved with technology to improve the lot of rural women. The cost implications in the choice of media could be challenging. This calls for alternative ways to support rural women to sustain the use of ICT facilities. Assessing their willingness to pay for the use of an ICT facility based on their socio-economic characteristics could be a strategy to commit rural women to support the sustenance of ICT facilities. Women have also been described to be *technology unfriendly*. A way to go about this is to make modern information technology *women friendly* in the light of adult educational methodologies which emphasize interaction and participation. This will enable rural women to fully utilise and make the best of emerging technology for their personal development. This is a way forward for rural women.

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