INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) AND WOMEN EMPOWERMENT

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INTRODUCTION

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.

Information and Communication Technologies [ICTs] are a diverse set of technological tools and resources to create, disseminate, store, bring value-addition and manage information. The ICT sector consists of segments as diverse as telecommunications, television and radio broadcasting, computer hardware, software and services and electronic media, for example, the internet and electronic mail.

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ICTs are emerging as a powerful tool for gender empowerment in a developing country like India. There has been a rapid growth in the ICT sector since the late 1980s and the use of ICT has dramatically expanded since the 1990s. According to the World Bank, tele density in India had reached 3.8% of the population by 2001. The number of internet accounts is growing at a rate of 50% per annum. According to the 2004 report by the Cisco Learning Institute women comprise only 23% of India's internet users. This gender digital divide in India is characterized by low levels of access to technologies. Poverty, lack of computer literacy and language barriers are among the factors impeding access to ICT infrastructure, especially in developing countries.

With the shift towards a 'knowledge society', the role of interactive communication technologies (ICTs) such as email and the Internet in sustainable community and economic development is becoming increasingly important. The effective use of ICTs in community development projects has been argued to have many potentially empowering benefits and effects, such as greater inclusion, cooperation, participation and wellbeing.

STRATEGIES FOR ENHANCING RURAL WOMEN'S EMPOWERMENT

To enhancing rural women's empowerment in that use ICTs. Factors that could hinder the effectiveness of these strategies are also noted

- Incorporating participatory forms of evaluation into activities to enable an ongoing assessment of whether they are meeting the diverse needs of participants, and to make changes that improve activities and processes.
- Encouraging participants to assume joint ownership of projects and activities such as online groups. However, a sense of ownership can result in certain groups of participants dominating activities such as online groups, thus excluding other groups of women.
- Using a range of participation processes, such as those found successful in the Rural Women and ICTs project that can be effective in facilitating social, technological, political and psychological empowerment..
- Encouraging the active participation of women from diverse backgrounds and interests. This can facilitate enhanced understandings of 'other' women and can result in broadening participants' knowledge and perspectives and the development of more creative ideas and strategies for personal and community development.

- Using various communication technologies in ways that meet a diversity of women's needs. This could include audio and videoconferences and the establishment of online groups..
- Using communication and interaction strategies such as workshops, seminars, online groups, audio and videoconferences that enables the active participation of collaborating researchers and government and industry partners.
- Conducting a range of all-women activities that are facilitated in a relaxed, friendly, and inclusive, less hierarchical and non-patronizing manner that is sensitive to differences among participants.
- Obtaining good quality equipment and technical support to undertake workshops
 that include live Internet demonstrations and training sessions, and being prepared
 for technical problems with Internet connections that can occur in some rural areas.

KNOWLEDGE NETWORKING AND EMPOWERMENT:

Empowerment of women in the context of knowledge societies entails building up the abilities and skills of women to gain insight into the issues affecting them and also building up their capacity to voice their concerns. It entails developing the capacities of women to overcome social and institutional barriers and strengthening their participation in the economic and political processes so as to produce an overall improvement in their quality of life.

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.

ACCESS TO INFORMATION:

Access is the central issue necessary for women's empowerment. Women have traditionally been excluded from the external information sphere, both deliberately and because of factors working to their disadvantage such as lack of freedom of movement or low levels of education. ICT opens up a direct window for women to the outside world. Information flows to them without any distortion or censoring. This leads to broadening of perspectives,

greater understanding of their current situation and the causes of poverty and the initiation of interactive processes for information exchange.

According to a UNESCO report on "Gender Issues in the Information Society", the capability of women to effectively use information obtained through ICT is clearly dependent on many social factors, including literacy and education, geographic location, mobility and social class.

In developing countries like India, more than 90% of women work in the informal sector and also in rural areas. These women engage in economic activities such as handicrafts and sewing or rolling cigarettes, weaving of baskets and fabrics, working in cities as vendors — working without any contracts or benefits. These are the women who need and deserve poverty alleviation programmes 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.

EMPOWERMENT THROUGH EMPLOYMENT:

ICT has played an important role in changing the concept of work and workplace. New areas of employment such as teleporting, i.e. working from a distance, are becoming feasible with new technology. The question needs to be asked whether women are getting more opportunities. Undoubtedly, internationally outsourced jobs such as medical transcription and software services have opened up tremendous work opportunities for women in developing countries like India, China and the Philippines. With an expected 500 percent increase in India's ICT services and back-office work, involving jobs for four million people and accounting for seven percent of GDP by 2008, women's employment in this sector is expected to grow. ICT offers women flexibility in time and space and can be of particular value to women who face social isolation in developing countries. As a result of the technologies, a high proportion of jobs outsourced by big firms are going to women. They can, therefore, work from outside the office –often from their own homes and at any time, thereby raising their incomes to become more financially independent and empowered.

TECHNOLOGICAL EMPOWERMENT

The various meanings that the interviewees in the study gave to empowerment, and other indicators of the empowering effects of the project could be readily coded in Friedmann's

categories of social, political and psychological empowerment. However, my analysis identified an important fourth form of empowerment that was labelled 'technological empowerment'. Like social empowerment, this form of empowerment also requires access to information, knowledge, skills and resources.

Feminists such as Arnold and Faulkner (1985) and Wajcman (1991) argue that an important factor in women's empowerment is the development of knowledge and skills that enhance their technical competence and expertise. As Wajcman (1991: 165) points out: 'technical competence is certainly not the only source of male power, but it is an important one, especially in relation to women'. Given the technological focus of the Rural Women and ICTs project, several of the meanings of empowerment provided by the interviewees referred to confidence and competence in using technologies, and the benefits to women from using new ICTs. It can be argued that, with the increasing use of the Internet to access government information and to lobby and organise campaigns on important social, economic and environmental issues, technological empowerment is an important new prerequisite to political empowerment.

A NEW MODEL OF RURAL WOMEN'S EMPOWERMENT

Drawing on Friedmann's framework and the meanings and indicators of empowerment identified in the analysis, Figure 1 presents the model of rural women's empowerment that was developed. This illustrates the interrelationships between the four forms of empowerment that were identified, and summarises the key features of each form of empowerment. Although these four forms of empowerment are discussed separately in this paper, there are clearly many interrelationships and overlaps between them.

THE KEY FORMS AND FEATURES OF RURAL WOMEN'S EMPOWERMENT

The forms of empowerment experienced

The needs analysis and assessment indicated that a significant proportion of the interviewees and others who provided feedback experienced various forms and degrees of empowerment as a result of their participation in the project and the use of ICTs in the project. The major types of empowerment that participants reported experiencing, or were indicated by the data analysis, are now summarized.

Social empowerment

Many of the participants experienced the following forms of social empowerment:

- Gaining access to new and useful knowledge, information and awareness about a range
 of issues, topics and activities of interest to women. This new information and
 knowledge often provided mental stimulation and broadened participants' thinking.
- Developing new skills, abilities, confidence and competence, including those required to participate in the various group communication and interaction processes used in the project.
- Obtaining the friendship and support of other women in rural and urban areas who have commonalities with each other and differences from each other.
- Participating in various activities with other women and people in positions of influence where you can openly discuss issues, share concerns and experiences, and reflect on issues affecting you.
- Networking with or making contact with others involved in the participants' areas of interest such as rural community development, teleworking, and writing.

Technological empowerment

Taking part in the project also provided many participants with varying degrees of the following forms of technological empowerment:

- New knowledge, awareness and understanding about new ICTs and their potential benefits and impacts.
- The development of new skills, experience and greater confidence and competence in using new communication technologies.
- Advice and support in using email and the Internet, provided in ways that often met the participants' needs very well.

Other outcomes of this technological empowerment included:

- Discussing with a friend the possibility of developing a joint teleworking venture through combining their computer and writing skills.
- Encouraging other rural women to get online or assisting them with getting online.
- Organizing computer and Internet workshops for others in their local community.
- Talking to local organizations and rural women's groups about teleworking and the Internet.

Political empowerment

As well as social and technological empowerment, several participants also experienced the following forms of political empowerment:

- Having a voice and being listened to by the researchers and people in decision-making positions in government and industry.
- Participating in formulating ideas and recommendations for better telecommunications and Internet services and support, and influencing other government policies and decisions that affect rural women and rural communities.
- Changing urban and town-based people's beliefs and stereotypes about farming women.
- Networking or meeting with people in government and industry and other women to lobby or discuss issues affecting rural women and rural communities, and to organize various actions.

An important form of political and social empowerment which several interviewees experienced was taking individual and collective action to improve telecommunication services and Internet access or to promote the benefits of the Internet for rural communities. These actions included:

- Conducting regular meetings of women involved in the project in Mt Isa to discuss community-based initiatives.
- Applying for major government funding to implement various rural community development projects that involved the use of new ICTs. Making speeches and presentations at conferences and seminars about rural access to ICTs, and the benefits of ICTs for rural community development.

Psychological empowerment

- An increase in self-confidence and self-esteem. Seven rural interviewees mentioned that they or others had developed more confidence to express their opinions or views.
- Greater motivation, inspiration, enthusiasm and interest to develop new skills and knowledge, to keep pushing for better services for rural people, and to learn more about or gain access to computers and the Internet. Some participants also gained more enthusiasm about the use of ICTs for rural community development.
- Feeling much less isolated from others (particularly other supportive women) and, as a result, experiencing greater wellbeing, happiness and enjoyment of life.

• Feelings of belonging related to participation in the online groups in particular.

STRATEGIES FOR WOMEN ECONOMIC EMPOWERMENT THROUGH ICT USE.

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 cybercafés. Telecenters can be part of existing institutions such as health centers, schools and community centers. The growth of cybercafés and kiosks has been rapid in India, especially in the southern states where literacy is high. A survey in eight Indian cities has showed that non-working women access the net 63% from cybercafés and 32% from home. A knowledge center project of the M. S. Swaminathan Research Foundation in India has connected four villages in Pondicherry with practical local information in Tamil. This has proved useful in improving agricultural practices and marketing and access to medical facilities.

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.

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.

CONCLUSION

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 once their businesses grow and they feel more comfortable with using technology

Technological empowerment was identified as a significant new under-theorised form of empowerment that requires more research. The results of this study suggest that enhancing rural women's technological empowerment is urgently required. As well as for personal and social purposes, effective access to and use of ICTs is becoming increasingly important to rural women's leadership and participation in community and economic development activities.

REFERENCES

- [1] Curtin, Dennis P., Foley, K., Sen, K., Morin, C. 1999. Information Technology—The Breaking Wave. New Delhi: Tata McGraw-Hill Publishing Company Ltd.
- [2] Rice, Ronald E., & Associates. 1984. The New Media--Communication, Research and Technology. Beverly Hills, London: Sage Publications.
- [3] Kailay, Junu Rani Das. 2001. Creating opportunities for women in developing countries using ICT. Asia Pacific Regional Workshop on Equal Access of Women in ICT, Seoul, R. O. Korea, October.
- [4] Kasabe, Nanda. 2003. ICT Empowers Lives in Rural India, June 05. Web site of Department of Education, Ministry of Human Resource Development, Government of India
- [5] Harnessing Local Knowledge via Interactive Media. 2003. Policy Makers Workshop, M. S. Swami Nathan Research Foundation, Chennai 600 113, India, October.

- [6] Banerjee, N. and S. Mitter, 1998, "Women Making a Meaningful Choice: Technology and the New Economic Order", Economic and Political Weekly, Dec 19, 33, 51, 3247– 3256.
- [7] Gothoskar, S, 2000, "Teleworking and Gender", Economic and Political Weekly, 35, 26, 2293–2298.
- [8] Uma Devi, S., 2002, "Globalization, Information Technology and Asian Indian Women in US", Economic and Political Weekly, Oct. 26, 37, 43, 4421–4428.
- [9] UNDP [2001], Human Development Report, "Making New Technologies Work for Human Development", Oxford University Press.
- [10] Nath, Vikas, 2001, "Empowerment and Governance through Information and Communication Technologies: Women's Perspective",
- [11] Nadamoto, Satoko, "Gender and Information and Communication Technologies [ICTs]:A Comparative Analysis of Three Cases in India", Journal of Asian Women's Studies, Vol 14 [12] Dec. 2005, 137–154.