

Role of Information and Communication Technology in the Women Empowerment

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Abstract

Women empowerment is an essential tool to bring about changes in their socio-economic condition. Through their empowerment women gain greater share of control over resources-material, human and intellectual such as knowledge, information, ideas and financial resources involving access to money and control over decision making in the home, community, society and nation. The world is in the midst of a knowledge revolution, complemented by opening up of entirely new vistas in communication technologies. Recent developments in the fields of information and communication technology are indeed revolutionary in nature.

Information has become the chief determinant of the progress of nations, communities and individual. There is potential for ICTs to eliminate gender inequality and to empower women in society. There is growing body of evidence on the benefits of ICT for women's empowerment, through increasing their access to health, nutrition, education and other human development opportunities, such as political participation.

Against this backdrop, an attempt is made in this paper to investigate women's empowerment through ICTs in rural areas and the role of the Government and the NGOs in promoting the IT sector for women's development. Besides this, the present study explores the barriers to the usage of ICTs by women and suggests strategies to improve their access to IT.

Keywords: Women empowerment, ICT application, NGO initiatives, Barriers and Strategies.

Introduction:

Women's empowerment is focused on increasing their power to take control over decisions that shape their lives, including in relation to access to resources, participation in decision-making and control over distribution of benefits. For women who can access and use them, ICT offer potential, especially in term of reducing poverty, improving governance, overcoming isolation, and providing a voice.

The world Summit on the Information Society (WSIS), held in 2003 in Geneva, saw ICTs as vital tools for women's empowerment: "We are committed to ensuring that the Information Society enables women's empowerment and their full participation on the basis of 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 to that end" (WSIS, 2013).

Information and Communication Technology (ICT):

The world is in the midst of a knowledge revolution, complemented by opening up of entirely

new vistas in communication technologies. Recent developments in the fields of information and communication technology are indeed revolutionary in nature. In fact, IT has become the chief determinant of the progress of nations, communities and individual.

The highlights of Indian IT Industries:

According to NASSCOM Industry Ranking Report, 2013:

- 1) IT industry has generated aggregate revenue of USD 3.9 billion in Fiscal Year 1998 (Embassy of India, 2007) to more than USD 100 billion in Fiscal Year 2012.
- 2) IT has rapidly become one of the most economically significant industries in India in terms of share of total exports (approximately 25% for FY 2012) and export revenue (USD 69.1 billion and growing by more than 16%).
- 3) Its contribution to GDP is estimated to have grown from 1.2% in FY 1998 to 7.5% in FY 2012.
- 4) IT services alone account for more than half of the software and services exports in the industry, and is the fastest growing segment of the sector at 18% (NASSCOM, 2012).

It is considered crucial that the improvements in our society benefit all citizens. No single group should be ignored or favoured. The only way is “to make it better for all”. There is potential for ICTs to eliminate gender inequality and to empower women in society.

Review of literature:

Sunil Agarwal (2003) has underlined the role of appropriate technology to develop women entrepreneurs by building local capacity to improve quality of work life. The author firmly believes that understanding behind the processes/products will inculcate a scientific temper among women, which will improve their production efficiency and reduce their drudgery in their day-to-day work. Further, the author has stated that there is need to use science and technology to ease the workload of women inside and outside the house. Furthermore, he recognised the role of knowledge and experience of women in sustainable development. These would facilitate them to function as equal partners in development.

Chowdhury (2006) in his article “Empowering Rural Women through Science and Technology” has pointed out that to develop women oriented technologies for empowerment, the women specific jobs and their perspectives have to be identified. The author presents the following principles for developing technologies for rural women: (a) to reduce the drudgery in the life of women; (b) to provide employment opportunities to women; (c) to improve sanitation and environmental conditions; (d) to improve the health and nutritional status of women; and (e) to protect women from hazards. The author argues that there is an urgent need to recognize women as the technology makers and as technology users. The main contention is to liberate science and technology from its elite structure and reintegrate rural women in a more equitable development process.

Mary Cherian (2006) has critically examined the global policy and process initiatives of NGOs, the Government and the Corporate Houses in empowering women through ICT. The study is based on the case studies of women in countries like India, Bangladesh, Guyana, Africa, Zimbabwe, Uganda who gained tremendously by increased accessibility to internet connectivity. The author has suggested

some strategies to overcome barriers to use and assess to ICT for women with special reference to India which includes: (a) taking issue of women empowerment through ICT as a priority issue, (b) necessity of a rights-based approach to ICT policy, (c) Adopting of ICT policy which fit to the needs of women i.e. ICTs should be made more “women friendly”, (d) Addressing language options in the centre of policy decisions, and (e) providing of incentives for the enrollment of girls in ICT programs.

Roman Kumar and Rajesh Kochher (2011) have illustrated the effective usage of technology for small-scale industries, which are promoted by women under self-employment scheme. The authors have found that the IT based micro-enterprises by the self-help groups of poor women have helped the demystification of the common man that a few elite ones in the society are the only beneficiaries of the powerful IT. They have begun to consider IT as a tool for attaining knowledge and development by everyone. Further, the author opines that the strategy to encourage the participation of the poor women in the digital revolution is expected to reduce the gap in digital and gender divide. The authors have concluded that the economic empowerment of women via IT enables them to challenge discrimination and overcome gender barriers.

Padmini Chattu (2013) have highlighted that the role of Mobile Technology in the field of women empowerment. The authors have stated that not only for communication, women are also using the mobile for different ways: to be safe in times of difficulty, as a media connector with current updates in day to day and as an e-learning device to become literate. Further, the authors have recommended that IT can be applied in the empowerment of rural women through imparting virtual classroom education, providing training on Internet and email services, developing a web based information system about the SHG and they can be popularized in papers, magazines and internet, which acts as a motivational factor. Furthermore, the study has recognized that the scaling of women-centered mobile programs and applications can only be achieved with improved financial, commercial, and marketing incentives and of course, cooperation.

Arivanandan (2013) has analyzed the socio-economic inclusions of rural women through the two kinds of information and communication technologies i.e. cell phones and internet in rural areas. For the empirical study, the author has selected 60 women, aged between 15 and 30 years from Trichirappalli District of Tamil Nadu. The author has found that the accessibility of cell phones is creating decision-making capacity and economic liberalization to women in the study area. Further, most women now search for jobs by using cell phones and personal contacts. This ability to get jobs means that rural women are earning money, which can go towards the cost of their marriage and that of their siblings.

As a contrast, the study revealed that accessibility to the internet by rural people did not reach the expected level because of lack of infrastructure facilities, erratic electric power supply and internet connectivity, low levels of education and the economic condition of the people.

Objectives of study:

- 1) To investigate women's empowerment through ICTs in rural areas.
- 2) To identify the barriers of usage of ICTs by women.
- 3) To examine the role of the Government and the NGOs in promoting the IT sector for women's development.
- 4) To suggest strategies to overcome barriers and offer some practical suggestions for policy makers to improve women's access to ICT.

Research methodology:

Data used in this study is secondary in nature and is collected from various sources such as journals, periodicals, articles, books, reports, websites etc.

Application of Information Technology in women empowerment of rural areas:

There is a growing body of evidence on the benefits of ICT for women's empowerment, through increasing their access to health, nutrition, education and other human development opportunities, such as political participation. Women's sustainable livelihoods can be enhanced through expanded access of women producers and traders to markets, and to education, training and employment

opportunities. By using one of the most important democratizing aspects of the Internet-the creation of secure online spaces that are protected from harassment-women are enjoying freedom of expression and privacy of communication to oppose gender discrimination and to promote women's human rights (Chat Ramilo 2005).

Access to information:

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.

Empowerment through employment:

According to Data Quest's Best Employer Survey 2012, the percentage of women employed in the IT industry in India has actually decreased from 26% in 2010 to 22% in 2012 (Sharma, 2012) even though the number of jobs created in this sector continues to increase annually. Again, these statistics most likely point to a larger number of males available for employment than females and therefore a larger proportion of men being employed, but they also show that the number of women employed in the IT sector is not significantly increasing.

Considering, then, how important the IT industry may be for the employment of young female professionals and if it is not now, it will be soon, the responsibility to create nondiscriminatory and comfortable workplace environments should fall heavily on the largest and most economically significant companies in the software sector, as they have the opportunity to set precedents not only for the rest of the industry but for Indian employers as a whole.

However, ICT has played an important role in changing the concept of work and workplace. New areas of employment such as teleworking, i.e. working from a distance, are becoming feasible with new technology. As a result, a high proportion of jobs outsourced by big firms are going to women, 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.

Empowerment through Internet and E-commerce:

The internet can offer great assistance to women entrepreneurs. It offers databases, put together by women's groups, from which women can find relevant links, connections, resources and information and develop partnerships, not just for their services, but also for financing, mentoring and business coaching. It can even mitigate the effect of lack of access to capital. Support groups can be formed through electronic bulletin boards. Thus, the internet itself can help to organize and build solidarity with and between people working from home offices. It can break down isolation, aid job related concerted action, or just increase information, opportunities and interaction.

Rural women in developing countries may be able to sell their products directly without going through intermediaries. One of the most powerful applications of ICT is electronic commerce. E-commerce refers not just to selling of products and services online but also to the promotion of a new class of ICT-savvy women entrepreneurs in both rural and urban areas. E-commerce initiatives can link producers and traders directly to markets at national, regional and even global levels, allowing them to restructure their economic activities and by pass intermediaries and the male-dominated and exploitative market structure.

Barriers to use and access of ICT's for women:

- 1) Lack of clear National Policy for promoting ICT for women's development.
- 2) Poor ICT infrastructure, inefficient telephone services, lack of electricity in many remote, far-flung areas, and frequent power cuts.
- 3) Lack of or limited computer skills on various areas including hardware and software installation and maintenance, internet and non-internet based skills such as telnet, FTP, mailing etc.
- 4) Little awareness of the full range of opportunities offered by ICT other than access to information.
- 5) Limited online information in languages other than English.

6) Women's time is at a premium. The barrier to ICT use includes the issues of information overload and the time consumed in searching for useful and practical information.

7) Social and cultural barriers.

Role of Government and NGO sector:

Keeping in view the plight of rural women, who are more unaware of new technologies than their urban counterparts, government is providing special packages for them, who are involved in home based or small-scale activities related to handloom, handicraft, sericulture, etc. From identification of projects to the marketing of products, these packages are helping women entrepreneurs largely.

Government of India is in the process of establishing Community Information Centres (CIC) at all block levels, which are designed as the prime movers of ICT in the most economically backward and geographically difficult terrains. CICs are supposed to provide multipurpose information on health, education, social welfare and small-scale industry, etc. This might prove to be a "shot in the arm" for the rural women that can boost their economic and social status.

SITA (Studies in Information Technology Applications) is a women empowering project that aim to educate low-income women in Information Technology, and trying to change the deeply rooted discriminating attitudes towards women. The project has been successful to that extent it has trained 500 women.

The Self Employed Women's Association (SEWA) has been organizing women in the informal sector in India since 1972. It was one of the first organizations globally to realized the potential of using IT for the productive growth of the informal sector (Kinkini Dasgupta Misra, 2004). SEWA has effectively used ICTs to improve the efficiency and reach of its operations. The SEWA Trade Facilitation Centre (STFC) showcase members' products online, facilitates business-to-consumer sales, builds business-to-business links and empowers members to ride the ICT wave. The STFC experience of training rural and urban women in using ICT to gain increased access to markets can offer lessons to women's cooperatives elsewhere in the region. STFC has also introduced a bar-coding

access to markets can offer lessons to women's cooperatives elsewhere in the region. STFC has also much needed market research, superior management of inventory levels, greater standardization and thus a more optimal utilization of time and resources throughout the organization thereby helping it to accomplish its fundamental objectives of providing greater livelihood security to its members.

Kudumbasree is a poverty eradication project of the Government of Kerala, being implemented in the state through the local bodies since 1998. The project gives importance to women and children from Below Poverty Line (BPL) families and is being implemented through neighborhood groups, which are formed by 15 to 40 members. Kudumbasree encouraged and trained the poor educated women from the neighborhood groups to form enterprise groups to set up micro-enterprises based on ICT applications. Each group was motivated to set up micro-enterprises for data entry, data processing, and IT education. The most important and positive factor-favouring women's entry into IT industry has been the support from Kudumbasree officials in the form of financial, technical and managerial help. The major help came in the form of training in both hardware and software. This gender focused, interventionist ICT initiative involving significant state intervention brought about positive changes to livelihood outcomes and empowerment of economically poor women.

Under the rural e-Seva centers, initiated by the Government of Andhra Pradesh in West Godavari District, web-enabled rural kiosks were established to provide a large number of citizen services. Initially the project started in all 46 mandal headquarters in the district, with the first women's e-Seva center opening in June 2012. Out of the 46 bigger e-Seva Centers at mandal headquarters, 20 are managed by women. Women from SHGs took loan to set up this initiative and all these centers are running profitably.

Strategies to improve women's access to ICT:

1) 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.

2) There is need to use a rights-based approach to ICT policy development, where everyone has the right to affordable access to ICTs. Only then, can we work toward securing universal access to ICTs and consequently promote and facilitate the use of ICTs for women's empowerment.

3) Personal ownership of ICT is not feasible in the foreseeable future for the vast majority of women in developing countries. Hence, the question of where and how they can gain access to ICT becomes important. This is an area where intermediary organisations can help bridge the 'last mile' of connectivity. They can ensure that email accounts, bulletin boards, search engines, mailing lists, and other useful functions serve as communication, networking and collaboration channels among women's groups, and between women and the external sphere. In order to facilitate access for women from other classes and sectors, these intermediary organizations need to be strategically located in local institutions to libraries, women's studies departments and institutes, community centers etc.

4) The potential of ICT for women in developing countries is highly dependent upon their levels of technical skill and education and is the principal requirement for accessing knowledge from the global pool. Government and NGOs need to impart technical education on the use of ICT as a part of both formal and informal education system and to initiate distance learning and vocational courses. It needs to be realized that information and communication technology by itself cannot answer all the problems facing women's development, but it does bring new information resources and can open new communication channels for marginalized communities.

- 5) Promote the enrollment of girls in ICT programs by providing incentives such as scholarships and awareness raising activities.
- 6) Language access must be addressed as a serious barrier to gender equity on the international ICT policy level. Language options have to be taken as a political issue, an issue that must be in the policy decisions.
- 7) ICT policy must rest on the understanding that technology must be adopted to fit the needs of women. The key issue is that the technologies should be adapted to suit women rather than that women should be asked to adapt to suit the technologies. Most policymakers are proceeding on the second premise. If they can be encouraged to think and act in terms of the first premise then we will ensure that ICTs become more “women friendly” in terms of cost, access, applicability in different fields, etc.
- 8) Last but not the least, when policies and programs are in place to improve access, paucity of funds should not be a hindrance to establishing ICT access points or even implementing telecenter-type programs. As UN studies have indicated, though the costs of using ICTs for development may be high, not using them at all may prove to be costlier.

Conclusion:

The gamut areas in which ICT can put a greater control in the hands of women is wide and continuously expanding, from managing water distribution at the village-level to standing for local elections and having access to lifelong learning opportunities. ICT have the potential to reach those Women who hitherto have been not been reached by any other media, thereby empowering them to participate in economic progress and make informed decision on issues that affect them.

References:

- 1) Arivanandan, M. (2013), “Socio-Economic Empowerment of Rural Women through ICTs”, *International Journal of Rural Studies*, Vol. 20 No. 2, October, pp. 1-7.
- 2) Chat, Ramilo, Nancy Hafkin, and Sonia Jorge. (2005), “Gender equality and empowerment of women through ICT”, *Women 2000 and Beyond*, September.
- 3) Chowdhury, S. (2006), “Empowering Rural Women Through Science and Technology”, in *Gender Inequality and Women’s Empowerment*, Rathindra,

NathPramanik, and Ashim, Kumar Adhikary, Delhi: Abhijeet Publications, pp. 103-107.

- 4) Embassy of India. (2007), “India’s Information Technology Industry”, (online) Retrieved from http://www.indianembassy.org/indiainfo/india_it.htm.
- 5) Kinkini, DasguptaMisra. (2004), “Information & Communication Technology for Women’s Empowerment in India”, *Information Technology in Developing Countries-A Newsletter of the IFIP Working Group 9.4 and Center for Electronic Governance*, Indian Institute of Management, Ahmedabad, Vol. 14, No. 2, August.
- 6) Mary, Cherian. (2006), “Information and Communication Technology for Women Empowerment”, *Women’s Empowerment-Politics and Politics*, M. R. Biju, New Delhi: Mittal Publications, pp. 167-183.
- 7) NASSCOM. (2012), “Indian IT-BPO Industry (online)”, Retrieved from <http://www.nasscom.in/indian-itbpo-industry>.
- 8) Padmini, Chattu, Salamuddeen, SK., JanardhanUmmadi, and Suresh Babu, S. (2013). “Empowering Rural Women Through Mobile Technology”, *International Journal of Computer Science and Technology*, Vol. 4, Issue Spl-4, October-December, pp. 275-276.
- 9) Raman, Kumar, and Rajesh Kochher. (2011), “Information Technology Empowers by Women”, *International Journal for Science and Emerging Technologies with Latest Trends*, Vol. 1, No. 1, pp. 1-5.
- 10) Sunil, Agarwal. (2003), “Technology Model for Women’s Empowerment: Reaching the Unreached”, *Kurukshetra*, Vol. 51, No. 7, pp. 18-28.
- 11) World Summit on the Information Society. (2003), “Declaration of Principles: Building the Information Society: a Global Challenge in the New Millennium.” Document WSIS-03/GENEVA/DOC/4-E. Available on <http://www.itu.int/wsis/docs/geneva/official/dop.html>.