ROLE OF ICT IN ACHIEVING COMPLETE GENDER EQUALITY IN INDIA

Garima Mishra[1] & Dr U. V. Kiran[2]

Research Scholar[1] & Assistant Professor[2]

Department of Human Development and Family Studies, School for Home Sciences.

Babasaheb Bhimrao Ambedker University, Lucknow.

Mobile no- 9532542558

mishragarima201289@gmail.com

ABSTRACT- The 21st century has brought with itself a new revolution in the global realm – the information society, which has changed the global macroeconomic landscape. The importance of technology cannot be denied as it has changed the way we live, the way we work, the way we make decisions and the way we correspond with each other. Advancements in Information Communication Technologies not only have the capability to improve the technological arena, but they also have the potential to bring about social and economic improvements. Across the globe, countries have recognized Information and Communication Technology (ICT) as an effective tool in catalyzing the economic activity in efficient governance, and in developing human resources. The role of ICT's to promote gender equality and parity in education can be achieved by targeting their efforts not only towards education itself, but also towards society's cultural and institutional framework. For example, in many countries, parents do not expect their daughters to have careers outside the home. Consequently, girl-children are forced to leave school after completing only a basic or elementary education. In addition, if the benefits of schooling for boys far outweigh those for girls, economically disadvantaged parents will typically choose to send only the boys to school. The differences in the health, education and standards of behavior between the men and women of India, all contribute to the impairment of women's ability to improve their economic situation. The continued perception that women are not of value hinders women's ability to fully participate in the economy. Majority of women in India are doing tasks that are not recognized by Indian society as meaningful and work much longer hours than men, but much of their work is nurturing, and therefore not recognized as important. Even when women are contributing in family income, culturally their work is thought of as connected to their position as nurturer and therefore is not recognized as productive. The inequalities that exist among region, social class and gender prevent the growth of the Indian economy from improving the lives of many Indian people. Nowhere is inequality more evident than in the lives of Indian women, and likewise, there is no sector more affected by the lack of improvement in social issues. Hence, the use of ICTs to improve gender equality in education and employment may initiate a continuous cycle of positive reinforcing feedback effects between gender equality in employment and economic development, leading to further improvements in both.

Key words: economic development, e-commerce, gender equality, ICT

I.   INTRODUCTION

A century and more after the industrial revolution, we are in the throes of another major shift in human civilization – the information revolution that has given birth to the "information society".

The "information society" is among the most discussed phenomena in recent times. New information and communication technologies (ICTs), especially the Internet, have been seen as ushering in a new age. It is also true that the information age is not all rosy – the benefits of this new age have not touched all of humanity, and all its outcomes are not necessarily positive **(Gurumurthy, 2004).**

It has become widely understood that promoting gender equality is an essential component of an effective economic and human development strategy. "There is now a shared understanding within the development community that development policies and actions that fail to take gender inequality into account and fail to address disparities between males and females will have limited effectiveness and serious cost implications **(World Bank 2003).** Gender equality refers to the view that men and women should receive equal treatment and should not be discriminated against based on gender unless there is a sound biological reason for different treatment **(Universal Declaration of Human Rights).**

Gender equality is, first and foremost, a human right. Women are entitled to live in dignity and in freedom from want and from fear. Empowering women is also an indispensable tool for advancing development and reducing poverty. Empowered women contribute to the health and productivity of whole families and communities and to improved prospects for the next generation. The importance of gender equality is underscored by its inclusion as one of the eight Millennium Development Goals. Gender equality is acknowledged as being a key to achieving the other seven goals. Information and communication technologies in recent years have been recognized as an effective tool for promoting economic growth and sustainable development **(UNPF, 2015).**

Women need encouragement and support from the family members, government, society, male counterparts etc., with the right assistance from varied groups; they can join the main stream of national economy and thereby contribute to the economic development **(Mishra et al., 2014)**.

The important characteristics of ICTs that have enabled it to be an effective tool for economic development also make them an effective mean through which gender equality can be improved and promoted. There are several ways in which an established ICT infrastructure or access to ICTs can make people aware about gender equality. The concept of e-commerce emerged as trading in products or services using computer networks, such as the Internet. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and

automated data collection systems. Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle, although it may also use other technologies such as e-mail **(Wikipedia, 2014).** Thus**,** ICT and e-commerce offer substantial possibilities to improve the lives of women and their families in developing countries. Gender equality aims to enhance women's participation in the digital economy and can increase national capacity and achieve greater economic independence and development.

ICTs allow an increased flow of information and knowledge, increased availability and use of ICTs allow increased exposure to the customs, norms and practices of other cultures and societies. This in turn tends to increase awareness of issues surrounding gender inequality. As such, ICTs can be an invaluable tool in positively changing people's attitude, including women themselves, towards women by disseminating educational programs on gender equity. In addition, increased pressure from an informed constituency that are sensitive to gender inequality issues can also induce policymakers to include gender as an important component of their social and economic policies **(Chen, 2004).**

ICTs are playing a very crucial role in promoting the gender equality across the globe. The role of new information and communication technologies (ICT) and e-commerce in driving the global economy is widely recognized, as ICTs and the Internet reach many people and have a wide geographical coverage and are efficient in terms of time and cost. ICTs facilitate access to markets, commercial information, new processing technologies and knowledge. In the developing world, the use of ICT and e-commerce seems to be particularly attractive to women owning small enterprises. These female entrepreneurs are now able to use ICT to identify new business opportunities or communicate with potential clients **(Teltscher, 2002).**

II. FORMS OF GENDER INEQUALITY

Gender inequality refers to health, education, economic and political inequalities between men and women in India. Gender inequalities, and its social causes, impact India's sex ratio, women's health over their lifetime, their educational attainment, and economic conditions. Gender inequality in India is a multifaceted issue that concerns men and women alike. Some argue that some gender equality measures, place men at a disadvantage. However, when India's population is examined as a whole, women are at a disadvantage in several important ways. **(Wikipedia, 2014)**

A. Economic Inequalities

➢ **Labor participation and wages:** Over 50% of Indian labor is employed in agriculture and wage inequality is prevalent between men and women in our country, which is also referred to as "gender gap in earnings. The largest wage gap was in manual ploughing operations in 2009, where men were paid ₹ 103 per day, while women were paid Rs. 55, a wage gap ratio of 1.87. For sowing, the wage gap ratio reduced to 1.38 and for weeding 1.18. For other agriculture operations such as winnowing, threshing and transplanting, the male to female wage ratio varied from 1.16 to 1.28. For sweeping, the 2009 wages were statistically same for men and women in all states of India **(Wikipedia, 2014).**

➢ **Access to credit:** Government has made many laws that are supportive of lending to women and microcredit programs targeted to women are prolific, women often get difficulty in getting loan due to low level of property ownership.

B. Education inequalities

➢ **Schooling:** In the present scenario, there are very few places where women are denied a formal right to education. However, as is already established, formal equality is inadequate to ensure and guarantee equality of rights between men and women. Even when the state provides girls with access to education, gender discrimination can be reinforced by practices such as a curriculum which is inconsistent with the principles of gender equality, by arrangements which limit the benefits girls can obtain from the educational opportunities offered, and by unsafe or unfriendly environment which discourage girls" participation. True equality in education requires the development of specific and effective guarantee to ensure that female students are provided with access to the same curricula and other educational and scholarship opportunities as male students **(Ranganath et al. 2011).**

➢ **Literacy:** In India, literacy rate of female has always been lower than male literacy rate. If we look at the census 2011, we find the literacy rate of females is 65.46% as compared to males (82.14%). Compared to boys, far fewer girls are enrolled in the schools, and many of them drop out. Although this gap has been reduced significantly, problems still remain in the quality of education for girls where boys in the same family will be sent to higher quality private schools and girls sent to the government schools in the village **(Wikipedia, 2014)**.

C. Occupational inequalities:

There are few sectors where women are being denied of getting equal opportunity. In the military services, women are being neglected in some aspects. In the armed forces permanent commission could not be granted to female officers since they have neither been trained for command nor have they been given the responsibility so far. As far as property rights of women are concerned, women have equal rights under the law to own property and receive equal inheritance rights, but in practice, women are at a disadvantage.

D. Health and survival inequalities:

On health and survival measures, International standards consider the birth sex ratio implied sex-selective abortion, and gender inequality between life expectancy of women and relative number of years that women live compared to men in good health by taking into account the years lost to violence, disease, malnutrition or other relevant factors. On the other hand, mental health has been reported as an important factor influencing an individual behavior. Women who work outside the home are required to make many socio-familial adjustments that may contribute more stress and anxiety. The problem of stress in women, particularly working women, is

an important aspect due to the social and emotional changes **(Mishra et al., 2014)**.

E. Political inequalities:

This measure of gender inequality considers the gap between men and women in political decision making at the highest levels. India passed 73rd and 74th Constitutional Amendments in 1993, which provides for 33 per cent quota for women's representation in the local self-government institutions, but practically the percentage of women encouraged to occupy prominent places is very meager and very often women in political positions are over-ruled by men (husband or father) in decision making.

Causes of Gender Inequality
The causes of gender inequality is quite complex but there are many cultural factors which are responsible for gender inequality. Some of them are listed below:

- Patriarchal society
- Son preference
- Discrimination against girls
- Dowry
- Marriage laws
- Lack of awareness
- Low educational Status
- Poverty
- Insufficient advancement facilities
  (Source: Wikipedia,2014)

III.   GLOBAL RANKING ON VARIOUS GENDER INEQUALITY INDICES

Indicator	India's Global Rank (year)	Source
GII:	**132/148 (2012)**	**United Nations Development Program (UNDP)**
GGI:	**101/136 (2013)**	**World Economic Forum (WEF)**
SIGI	**56/86 (2012)**	**Organization for Economic Co-operation And Development(OECD)**

Source:
http://en.wikipedia.org/wiki/Gender_inequality_in_India
Women's Access to ICTs
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 **(Ramilo et al. 2005)**.

"Technology is an attitude of mind, not an assemblage of artefacts. ... For this reason, it is difficult for us to understand the problems of technology transfer in the Third World" (Stamp 1989:1.)

"Information technology has become a potent force in transforming social and economic and political life globally" (Hafkin and Taggart, 2002).

IV.   ICT AND WOMEN EMPOWERMENT

ICT has made a tremendous impact in imparting knowledge on modern technology and its uses. NGOs, SHGs working in the field, governmental agencies and other private agencies have also extended their help to promote ICT among the women. ICT empower women in various areas like social, educational, psychological, political, technological and economical and well as few degree of disempowerment due to some internal and external reasons **(Beena et al.2012)**.

Empowerment of women in the context of knowledge societies is understood as building the ability and skills of women to gain insight into actions and issues in the external environment, which influence them. If the women will be empowered, it will build their capacity to get involved and voice their concerns in these external processes, make informed decisions, participate in the economic and political processes, and bring about an overall improvement in their quality of life *(**Nath, 2001**).*

Empowerment is a multi-dimensional social process that helps people gain control over their own lives. Women empowerment generally refers to the process by which women enhances their capacity 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. Women's empowerment has five components: women's sense of self-worth; their right to have and to determine choices; their right to have access to opportunities and resources; their right to have the power to control their own lives, both within and outside the home; and their ability to influence the direction of social change to create a more just social and economic order, nationally and internationally **(UNPOPIN, 2010, Morshedi et al., 2012).**
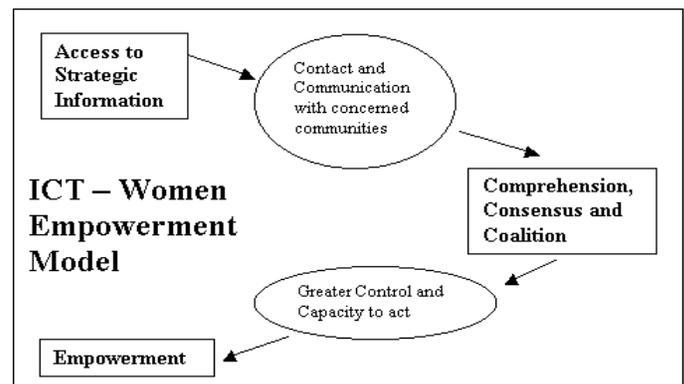
Fig.1 Source: Nath V. (2001). Empowerment and Governance through ICT: Women's Perspective. Information Technology in developing country. Vol. 11. No. 1. London School of Economics.

V.   GENDER, ICT AND DEVELOPMENT
The role of new information and communication technologies (ICT) and e-commerce in driving the global

economy is widely recognized: ICT and the Internet reach many people, have a wide geographical coverage and are efficient in terms of time and cost. They facilitate access to markets, commercial information, new processing technologies and knowledge. In the developing world, the use of ICT and e-commerce seems to be particularly attractive to women owning small enterprises. These female entrepreneurs are now able to use ICT to identify new business opportunities or communicate with potential clients. ICT and e-commerce offer substantial possibilities to improve the lives of women and their families in developing countries. Gender equality is having the objective to enhance the women's participation in the digital economy and thus increase national capacity and achieve greater economic development and growth **(Ranganath et al.2011).**

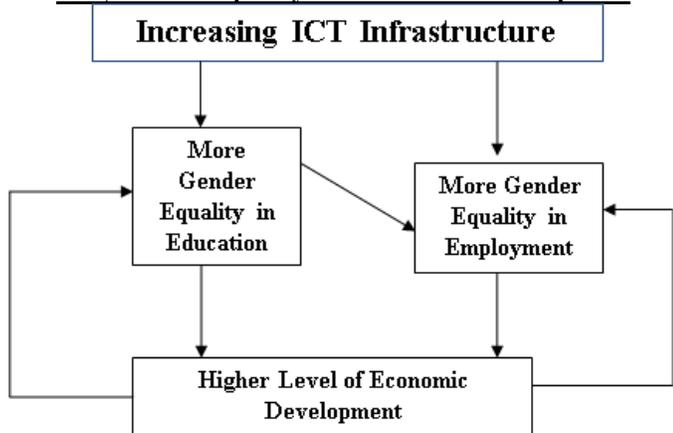**ICT, Gender Equality and Economic Development**

Fig. 2 Gender Equality and Economic Development: The Role for ICTs (H. C. Chen,2004)

VI. IMPROVING GENDER EQUALITY WITH ICT

The characteristics of ICTs and its overall benefits for economic development makes it a key component through which gender equality can be improved. Looking more specifically, ICTs can influence the public opinions in a positive way about gender equality. Especially in a country like India, this can be a good strategy by inducing policymakers to include gender as an important component to their social and economic policies. ICT can be a powerful tool for gender equality as it encourages girls and women to pursue technical career and make them aware about entrepreneurship education. Thus women can raise their economical, social and education status.

Statistically looking into the World Bank, the number of Internet users is accounted to grow at a rate of 50% per annum with teledensity reaching up to 3.8% of the population by 2008. The IT and ITES sector is projected to grow 18% in the next five years to become an industry of Rs 4.58 Lakh Crores by 2011, according to an IDC release . Overall there is significant growth and strength in the IT sector of India. But the problem is spreading this growth of ICTs across women also. The main problem is the digital divide that exists in India. According to the 2004 report by the Cisco Learning Institute for women, only 23% of Indian women are Internet users. This gender digital divide in India is characterized by low-level access of technologies. Some of the factors

restricting access to ICT infrastructure are poverty, lack of computer literacy and language barriers in these areas **(Redkar et al. 1994).**

Majority of the Indian women are still tradition bound and are in a disadvantageous position. Inequality in women's access to ICT and participation in all communications systems, especially the media, and their insufficient mobilization to promote women's contribution to society. The lack of gender sensitivity in the media is evidenced by the failure to eliminate the gender-based stereotyping that can be found in public and private local, national and international media organizations. The continued projection of negative and degrading images of women in media communication electronic, print, visual and audio - must be changed. Print and electronic media in most countries do not provide a balanced picture of women's diverse lives and contributions to society in a changing world. **(VAPS, GOI)**

In 1990s and 2000s, Information Technology sector has become the largest private sector employing women in India. Due to its employee-friendly/gender neutral human resource policies with emphasis on equality of opportunity and meritocracy, policy like flexi-time and place, Tele-working, internet have attracted many a women to get into technical and managerial positions provided good avenues of employability of women candidates. Consequently, enhanced female participation in public domain has emancipated them from male constriction and raised them to equality claims **(Bhattacharyya et al. 2013).**

ICTs have immense potential and scope to create new employment opportunities for rural women and make them economically empowered. While ICTs can play an important role in empowering rural women, women's access and use of ICTs and empowerment clearly depends on the vision and operational agenda of the organization applying the ICTs **(Sulaiman et al. 2011).**

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 **(Ramilo et.al. 2005).**

VII. POLICY FRAMEWORK FOR GENDER EQUALITY THROUGH ICT

To promote gender equality and overcome the obstacles in the usages of ICT by women, certain strategies should be considered:

➢ **Government's Effort:** Government should focus on ICT infrastructure development and ensure a deep diffusion quality of ICT facilities in the society, especially in educational institutions. ICTs are powerful tool as it bridges the gap of Gender Digital Divide. Appropriate policy frameworks to be established at the national, state and district level to address the issue of gender equality and gender mainstreaming along with proper research work on the issues of ICT and gender empowerment.

➢ **Increasing Educational Opportunities for Females:** ICTs are able to provide innovative ways

for women to obtain and update their skills so as to enable them to participate fully and on a more equal bias in the economy. Female education is especially important in societies where gender biases that dictate solely domestic roles for women. Lack of schooling in such cases tends to perpetuate gender disparities. (**H. C. Chen, 2004)**

➤ **Ensuring a gender perspective in ICT-based projects**: In the country like India, substantial disparities in access, use and regulation of ICTs exist across societies and regions. So ensuring an ICT based project would be an effective tool for addressing these disparities with a separate gender perspective and not as a single approach for both men and women together.

➤ **Distance Learning Program:** There are many girls and women who face barriers to leave home for education. In such conditions distance learning programs are very helpful and the content of the syllabus should address the gender issues faced by women.

➤ **Ensuring adequate and sustainable technology transfer:** It is important that adequate transfer of know how should accompany technology transfer. Moreover, for sufficient demand generation for a sustainable working model, active participation is required from both men and women.

➤ **Print and Electronic media:** Print and Electronic media have highest intensity of diffusion in India, should initiate mass awareness programs regarding the female education, gender equality and gender empowerment. A more educated society would be more liberal towards female education and gender equality.

➤ **Designing technologies appropriate to women's needs:** For women to adopt ICTs in the developing counties, the technology should be made suitable to the given social and cultural contexts of the society. It is very important to understand women's experiences with ICT and the kind of technology women want and how they want to use it.

➤ **Ensuring gender-sensitive ICTs policy and regulation:** Adequate and appropriate policies need to be formulated at the national level for overcoming the persistent barriers to women's access to and use of ICTs as well as making sure that ICTs benefit women equally as men.

➤ **Researches on gender equality and ICT:** Researches on ICT and gender equality issue at regional, national and global levels and documentation of good practices also contributes to deepening the understanding of practitioners and policy makers about the interplay of these technologies with gender equality and the empowerment of women.

➤ **E-Learning in and for improving e-Government:** ICT-enabled education has great potential for increasing educational opportunities for women at all levels, in both formal and non-formal educational environments. It can provide flexible access arrangements and study times and encourage interaction and networking with peers and teachers. It can also improve the outreach towards women in rural areas and in the workplace while contributing to lifelong learning**. (UN, Economic &Social Council 2010)**

VIII.   CONCLUSION

Expectations are very high when it comes to the role of ICTs for achieving complete gender equality. however, on a cautious note, it needs to be realized that ICT by itself cannot be an answer and elixir to all the problems related to gender inequality but it does bring new information resources and can open new communication channel for the communities where gender gap exist. Introduction of ICTs in these areas will open new avenues for bridging the gender gap and promoting gender equality. Thus ICTs can offer substantial possibilities to improve the lives of women and their families in developing countries. Gender equality aims to enhance women's participation in the digital economy and can increase national capacity and achieve greater economic independence and development.

REFERENCES

[1] Beena, Mathur M, (2012) Role of ICT education for women empowerment. IJER. v3i3, 164 – 172

[2] Bhattacharyya A, Ghosh B,(2013) Gender inclusivity in Information Communication Technology: Some policy indications. *International Journal of Humanities and Social Science Invention*, Volume 2 Issue 6

[3] Derek H. C. Chen, (2004) Gender equality and economic development: The role of information and communication technologies. World Bank Policy Research Working Paper 3285,

[4] Economic and Social Council, 2010 Information and communications technology and gender equality: new opportunities and challenges for public administration to implement the internationally agreed development goals, including the Millennium Development Goals.U.N.

[5] Gurumrthy A, (2004) Gender and ICTs. Institute of Development Studies September 2004

[6] Hafkin N, N Taggart, (2002) Gender; Information Technology, and Developing Countries: An Analytical Study on LearnLink, USAID

[7] http://en.wikipedia.org/wiki/E-commerce October (2014)

[8] http://en.wikipedia.org/wiki/Gender_equality(October2014) http://www.unfpa.org/gender/empowerment2.htm(October 2014)

[9] http://en.wikipedia.org/wiki/Gender_inequality_in_India(October 2014)

[10] http://en.wikipedia.org/wiki/User:Weetie2/sandbox (October 2014)

[11] http://web.lb.unfpa.org/gender/index.htm (October 2014)

[12] http://www.unfpa.org/gender/ (October 2014)

[13] Mishra G, Kiran U V (2014) Impact of marital status on mental health of working women. Journal of Medical Science and Clinical Research Vol.2.Issue10

[14] Mishra G, Kiran U V (2014) Rural women entrepreneurs: concerns and importance. International Journal of Science and Research, Vol.3, Issue9

[15] Morshedi L, Lashgarara F, Kazemi H, 2012 To determine the challenges and requirements Application of ICT in

empowering of Rural Women in Iran. Wulfenia Journal. Vol 19, No. 9

[16] Nath V, (2001) Empowerment and Governance through ICT: Women's Perspective. Information Technology in developing country. Vol. 11, No. 1, London School of Economics

[17] Qqisarani A, Ahmed A, (2014) Exploring new pathways to gender equality in education: Does ICT matter? S3H Working Paper Series. NUST School of Social Sciences and Humanities National University of Sciences and Technology Sector H-12, Islamabad, Pakistan

[18] Ramilo C, Hafkin N, Jorge S, (2005), Gender equality and empowerment of women through ICT. Women 2000 and beyond, Division for the Advancement of Women, Department of Economic and Social Affairs UN

[19] Ranganath N, Rao K, Srinivas N, (2011) Gender equality in education. International Journal of Multidisciplinary Research, Vol.1, Issue 6

[20] Redkar S, Kumar S, 1994 Role of ICT in gender equality in India. Final T4ID Project, http://www.andrew.cmu.edu/course/94-

812/public/ICT_and_Gender_Equality.pdf accessed on october.2014.

[21] Stamp P, (1989) Technology Gender and Power in Africa. Canada, International Development Research Centre

[22] Teltscher S, 2002 Gender, ICT and Development. UNCTAD Electronic Commerce and Development, World Civil Society Forum

[23] United Nations Population Information Network (UNPOPIN) (2010), "Guidelines on Women Empowerment. Available at http://www.un.org/popin/unfpa/taskforce/guide/iatfwemp.gdl.html

[24] V R, Kalaivani N, Mittal N, Ramasundaram P, (2011) ICT and empowerment of Indian rural women. Centre for research on innovation and science policy

[25] Voluntary Association For People Service, Enhancing Women Empowerment through Information and Communication Technology. *Department of Women & ChildDevelopment*. Ministry of HRD. GOI. Available at http://wcd.nic.in/research/ict-reporttn.pdf

[26] Women's Empowerment",http://www.un.org/popin/unfpa/taskforce/guide/iatfwemp.gdl.html (October 2014)