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Technology, Women's Empowerment, and Social Transformation

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Abstract

This article deals with technological accessibility, its effects on women, and the reflection on women's empowerment. Women need technology for the same reason as men. It supports women without bias. Global efforts have been made to empower women through income-generating activities saving their time and labor spent in the household economy. Technology supports women to empower them in many respects by saving their time and labor as well as shaping their ability and the infrastructure of their work. The main objective of this article is to access the role of technology in empowering women; find out the relationship between women and technology and find out the social transformation that led through technology. This article has applied textual review-based analysis as a methodology. This article claims that technology and women are indispensable parts and powerful tools and techniques for empowering women. The conclusion is a positive vibrant relationship between technology and women's empowerment which is drawn from empirics. The outcome is carried out through empirical evidence from different countries' experiences and issues. The development of women's friendly technology has led to miraculous changes in women's lives which could contribute to saving their time and labor and thinking a minute for themselves and about the world. Innovation in technology is contributing to women's empowerment and social transformation.

Keywords: discrimination, empowerment, subordination, social life, transformation.

Introduction

"There is no chance for the welfare of the world unless the condition of women is improved. It is not possible for a bird to fly on one wing." - Swami Vivekananda

Technology is the mechanism, method, tool, and system, scientific and systematic knowledge that supports working promptly, comfortably, and effectively. Not only are science laboratories but also social studies technology holds a special place and rich opportunity to articulate assumptions relating to computerization and social transformation (Kiling, 1992). With the use of technology, human being could gain their objective more comfortably than in the past. It could contribute not only to the technical field but also to social science studies signifies more value. No one can deny the significance of technology in their way of life. Our life is radically replaced by contemporary technology, and each development relates to a complex set of social, economic, political, and ecological concerns (Higgs, 2010).

Women are the lead house manager of the family but are far from the opportunities and very close to the informal economy. Women empowerment is attached to economic activities. Nepalese women are economically active; most of them are employed in agriculture and even unpaid family workers (Acharya, 2007). Women captured more than 50% of the territory of the world's population.

History demonstrates that out of all deprived groups in the world, women suffered the most, and the attention was not focused on empowerment (Mandal, 2013). Women are discriminated against all over the world (Harari, 2015). The intensity of discrimination and exploitation varies from society to society. Empowering women is essential for an equitable society. It represents the ability to handle responsibilities and supports them to acquire an equal opportunity with men.

Women play a significant role in the economic, political, and social development of the country. Empowering women helps to utilize their hidden power with them which could contribute to the good family, community, and the state. Poor economic conditions of women cause low bargaining power which should be strengthened. Cherry (1999) examined empowerment in the absence of a clear definition, especially one that could cross-disciplinary lines. Empowerment theory explores the relationship between individuals within a specific social, organizational, educational, and political environment. Women are assumed to be better mothers, workers, and citizens; everyone is the winner (Cornwall & Anyidoho, 2010). To improve the condition of women, they should be empowered; various dimensions are used which support the progress and prosperity of themselves and the society as a whole.

Empowerment is a process that could be possible by challenging the ideology that justifies social inequality. The empowerment concept originated in about the 1970s with the development discourse and the debate on education in Latin America by Paulo Freire. by changing the prevailing pattern of access and by transforming institutions and structures that reinforces and sustain existing power structure (Batliwala, 2007). Empowerment is a managerial technique based on providing skill, resources, authority, and motivation to make them competent and satisfied for accountability and outcome (Babu, n.d). Power is the ability to make choices that entails transformation. Discussion of women's empowerment is context driven rather than theory-driven. It is an expansion of civil, and political aspects of one's life relating to a multilevel construct (Beteille, 1999).

At present, Empowerment and women empowerment is being synonyms globally. Technology and women are being an indispensable part of our society. The technology could contribute to women's empowerment, creating an equitable society, awareness of women, and contribute to social transformation. Constructing women's capacity could be done in various ways, among which technology is the most powerful stepping stone and door to opportunity.

Theoretical framework

The article is supported by different theories of empowerment to reach self-defined goals; psychological and modernization theories. Empowering women is multidimensional work relating to economic, social, political, social, and psychological. Empowering women psychologically includes the belief of women that are able to act on a personal and social level to better their situation (Mosedale, 2005). Empowering framework depends upon the sense of self-satisfaction, pleasure, and happiness depending upon psychological theories. The modernization process is a historical process of transformation of society from traditional agriculture to modernization (Weber, nd). Modernization

is a process of becoming fully developed through different economic stages (Rostov, 1960). On the basis of women's personal, social, psychological, and modernization theories framework, it works. The article focuses on the issue of constructing women's capacity through technological perspectives which could contribute to women's empowerment and social transformation as a whole.

Objectives

The objective of his paper is to access the role of technology in empowering women, and to find out the relationship between technology and women. And to access the social transformation reflections in women through technology.

Research Questions:

How does technology enable women's empowerment process?

Is there any relationship between technology, women empowerment, and social transformation?

Methodology

This Article stands within the process of how technology enables to empower women, attempting to find out the impact of technology in women's operations, basically in household operations showing the outcome. Relevant literature is consulted for analysis purposes. Secondary sources of data are used from different literature for conceptual and empirical purposes. It is based on the thick description. It has adopted qualitative methods to analyze and interpret data and bunch back to a conclusion. Women captured more than 50 percent of the total population (CBS, 2011). Empowering women supports faking an equitable society. It supports them to be aware and think minutes for knowing the world and themselves. It is beneficial to gain equal standards between men and women.

Technology

Technology represents things, actions, processes, methods, and systems. Symbolically it is used as an epithet (Kline, 1985). It is developed through systematic and scientific knowledge. It does not happen in a particular location but in a specific type of environment (Dias, 1999). Human beings are developing different types of technologies to address their needs and to increase efficiency, effectiveness, comfort, and quality of work life. No person could escape from the use of technology, it is constantly evolving and serving the requirement of a human being. The potential impact of technology is capable of striving for the economy and society as a whole (Rotolo et. al, 2015). Social media has now become wide and far in scope with the power to reach a huge audience and create an impact. It has contributed to the movement for women's emancipation marginalization position of women in society (Narayan, & Ahamad, 2016).

Technologies could be classified and described in many ways that various countries to countries. Knowingly or unknowingly each human beings are being the passion about using it. Technologies are closely attached to their day-to-day operations.

Use of technology and women empowerment

Women are an integral part of society; they play diverse roles. Economic growth and development of the country are only possible through women's participation. Women empowerment is a multidimensional process that enables women to realize their full identity and power in all spheres which is equally beneficial to men. An empowered woman is a good friend, partner, advisor, and well-

wisher to the spouse. However, the status of women is very low in developing countries; women's decision-making power has a great impact.

Edwards (2014) highlighted the support of television as a means of refiguring the life of women. It leads to new ways of shaping their lives. Women could escape from disappointment through different ways as such reading, writing, listening, and watching television and they became aware and transformed themselves socially whereas Shirazi (2012) focused on the significance of the internet in Iranian women. They used it not only to disseminate information but also worked as a means of voicing oppressed and marginalized groups. The information and communication revolution has opened new opportunities for social and economic growth. It supports minimizing the gap between urban-rural, and rich-poor, within countries and helps to build up women's capacity in productive activities, family, and social transformation (Rahaman & Naoroze, 2007). They further noted that the annual income, age, and family size did not show any significant impact on women's empowerment, but the participation holds a remarkable role in the context of Bangladesh aquaculture which was succeeded through a large-scale technology demonstration project.

After 1995, India applied technology in a unique regard to the participation of women in the workforce, E-governance, and gender diversity. It has revealed that there is an increase in the percentage (28% to 32%) of women internet users during 2004- 2005. Different business organizations in Tamil -Nadu practiced e-commerce websites that supported fostering independence, self-respect, honor, and self-actualization and increased risk-taking ability. It has been considered significant in the economic growth of India and reflected a new era of women's empowerment (Tiwari, 2012).

In Africa, it has focused on the accessibility of information and communication technology to empower and aware women. It has saved time and energy for its sustainability and control. Energy saved is a greatly significant to contribute to public life (Barrett, 1994). Information and communication technology are key drivers for rural development. The expansion of technology ensures economic growth and rural women empowerment in South Africa. Focused on the development of information and communication technology policy serves the need of rural women for their empowerment (Tiwari, 2012).

In Tanzania, the agriculture and development sector revived with mechanization, with a new emphasis on equity and sustainability. It has focused on gender sensitivity training and established group models for machine operation based on agreed regulations (Fischer, 2018).

Choosing cooking fuel and use of biogas technology supported saving women's time and creating support in the resource and agency profile of women and their empowerment. Male-dominated societies often tend to neglect the choice of appropriate cooking fuel technology. Traditional technologies harm women and their health hygiene (Grundman, 2020).

In the African context, women were spending more time in the preparation of grain. The use of technology has supported them to save time and they contributed their saved time to village life. They contribute to developing their level of awareness, leadership ability, and recognition. When given the opportunity and resources, women have proven to be active partners in development-efficient, dynamic, and open to innovation. It has made women's work easier and less threatening. However, as technology changes, women in fisheries need to decide whether their businesses need new technology or not (Suwanrangsi, 2003).

In the Nepalese context, with the liberalization and privatization policy of the government, the internet was introduced in 1994 with the venture of RONAST and Mercantile Office System/MOS. It has positioned the importance of information technology in the hearts minds and of people. Later, professionally World link started its business in 1995 and linked rural to urban, rich to poor, society with society, and country to the world. The most interesting fact is that we can rarely find people without mobile phones and the internet, even if they are in a poverty trap. People within the poverty trap also entertain themselves with mobile and television rather than spending for their health, education, and well-being (Dufllo, 2011). Knowledge about information is helping people to know about the new technology introduced in different sectors.

Effective communication has the potential to enhance and protect the quality of life and fragile environment and create a knowledge-based society. The development of mass media is a potential agent in women's empowerment. It supports to influence on social, political, and economic dimensions of women and they become capable to encounter the constraints in their way of development (Parajuli, 2019).

Technology, women's empowerment and social transformation

Even technology has extended its role not only in household activities but also in many respects. In Bangladesh, technology has facilitated women in their business and has supported them to minimize threats to perform work in a much easier manner. It has revealed that technology has supported women in various respects, minimizing the gap between rich and poor, rural-urban. Access to technology has led to miracle development to enhance the capacity of women in productive activities. The use of technology has shown significant value in the reduction of women's workload. If the women's infrastructure of their work is shaped by themselves, they can assert control over their work and status (Twagira, 2020). She further added that women in Africa found some new technologies useful for their purposes and demonstrated a general level of savvy. Their concern was not only saving labour but also shaping the infrastructure of their work.

With the development of information technology, Indian women have broken through the traditional household and socially oppressed lifestyle. It has supported awareness about the benefit and the use of technology. In the case of Iran, it has supported women to be aware of rights, opportunities and law, it has supported mobilizing them properly. Even in the agriculture sector information technology has supported women in doing their work in an easier and faster manner.

The information and communication technology revolution has opened both opportunities and challenges to the empowerment of Indian women. It can shape and enhance a wide range of developmental applications in agriculture, industry, and the social sector influencing all sections of society. The need to enhance opportunities for women to enable them to take active participation in major activities as a whole (Suresh, 2011). Information technology has played a significant role in empowering women through self-help groups. Information technology has enabled women to get services in a new trend. Information technology, E-learning, E-commerce has awareness of knowledge of women about the political, economic, and social situation of the whole world (Brad, 2014).

Results

Technology has enabled women's empowerment process through the development of tools and methods for performing various roles in an efficient and effective manner. This has accelerated

the process of empowerment through communication, better learning, and the use of machines & equipment for a better way of living. This eventually has become a driving force for the transformation of the individual, family, household, and society as a whole. Technologies relating to information, home appliances & machines, agricultural equipment, vehicles, etc. seem to have directly enhanced the living standard of women leading to empowerment. It has enabled women to encounter constraints if any in their way of development.

Discussion

Technology has supported women in many respects. It has supported us to know the world as a whole. It is considered an integral aspect of women's empowerment. The use of technology in households has reduced workload. Women spent most of their time in household operations. Modern houses have facilitated machines and equipment. It is a very interesting fact that the use of machines and equipment in a household manner enables women to stop for a minute and think about the whole world. No one could deny the significance of modern technology in empowering women. Technologies are an indispensable part of everyday life. It is the 21st century gift to women to reduce unvalued workloads.

The trend of using firewood cooking is reducing with the innovation of new technology. People are using biogas, electricity, and gas stove in place of firewood cooking (NLSS, 2011). We are being abysmal to use new technology in our routine operation. We are habitual in using gas stoves, solar energy, induction, microwave, refrigerator, grinder, juicers, washing machines, and dish washers in our daily practices. It is a part and partial of household operations. Innovation and the use of machines are directly reducing the workload of women and support for their empowerment. Technological empowerment is possible with the innovation of the latest technology which could perform in an efficient and effective operation.

The use of home appliances has supported saving time, labor, and cost. Surplus time, labor, and costs are utilized by women for their social life. It provides opportunities for the development of knowledge, leadership capacity, and awareness. The next sector where women spend their valuable time is agriculture. Modern farmers have a huge range of equipment options; tractors, harvesters, plows, harrows, fertilizer spreaders, seeders, and many more are used. With the innovation of the internet, people are abysmal in knowing the use of technology in their related fields. The degrading scenario of women has improved through the means of technology. Today's women are lucky to be helped by technology and are habitual to use new technology in their field.

Conclusion

The twenty-first century is the age of information technology with continual technological enhancement. The introduction of the internet has brought a revolution in the economic, social, political, and technological spheres mostly opening the grounds for women to be aware, especially of their rights and opportunities. The development of technology in the household, agriculture, social life, and other sectors has helped women with reduced workload resulting in the saving of time, labor, and cost that can be utilized for the development of leadership quality and performing societal affairs. Technology has eased the life of women, especially in developing countries enabling them to explore their potential. However, females are less vocalized in technology-related decisions even today. Access to technology increases awareness and bargaining power among the discriminated. It cements global inequality and creates forums giving light on the black box.

References

- Acharya, M. (2007). Socio-Economic Transformation Under Globalization: The Case of Nepalese Women: Meena Acharya. In *Global Empowerment of Women* (pp. 68-87). Routledge.
- Barrett, H. R., & Browne, A. W. (1994). Women's time, labour-saving devices and rural development in Africa. *Community Development Journal*, 29(3), 203-214.
- Batliwala, S. (2007). Taking the power out of empowerment—an experiential account. *Development in practice*, 17(4-5), 557-565.
- Beteille, A. (1999). Citizenship, state and civil society. *Economic and political weekly*, 2588-2591.
- Blog.digitatenepal.com/history-of-internet-in-nepal
- Cherry, J. A., & Snelgrove, W. M. (1999). *Continuous-time delta-sigma modulators for high-speed A/D conversion: theory, practice and fundamental performance limits* (Vol. 521). Springer Science & Business Media.
- Cornwall, A., & Anyidoho, N. A. (2010). Introduction: Women's empowerment: Contentions and contestations. *Development*, 53(2), 144-149.
- Duflo, E., & Banerjee, A. (2011). *Poor economics* (Vol. 619). PublicAffairs.
- Endeley, J. B. (2001). Conceptualising Women's Empowerment in Societies in Cameroon: How Does Money Fit In? *Gender and Development*, 9(1), 34-41. Retrieved from <https://www.jstor.org/stable/4030667>
- Fischer, G., Wittich, S., Malima, G., Sikumba, G., Lukuyu, B., Ngunga, D., & Rugalabam, J. (2018). Gender and mechanization: Exploring the sustainability of mechanized forage chopping in Tanzania. *Journal of Rural Studies*, 64, 112-122.
- Harari, Y. N. (2015). Sapiens: A brief history of humankind. *Publish in agreement with The Deborah Harris Agency and the Grayhawk Agency*.
- Higgs, E., Light, A., & Strong, D. (Eds.). (2010). *Technology and the good life*. University of Chicago Press.
- Kling, R. (1992). Audiences, narratives, and human values in social studies of technology. *Science, Technology, & Human Values*, 17(3), 349-365.
- Mandal, K. C. (2013, May). Concept and Types of Women Empowerment. In *International Forum of Teaching & Studies* (Vol. 9, No. 2).
- Narayana, A., & Ahamad, T. (2016). Role of media in accelerating women empowerment. *International Journal of Advanced Education and Research*, 1(1), 16-19.
- Nimbalkar, S. K., & Berad, R. R. (2014). Role of Information Technology for Promoting Women Empowerment especially concernin Members of Self Help Groups in Ahmednagar District. *IBMRD's Journal of Management & Research*, 3(1), 281-292.
- NLS survey 2011
- Parajuli, P. (2019). *Role of Mass Media for Promoting Women Empowerment in Nepal* (Doctoral dissertation).
- Pradhan, K. (1999). The Internet in Nepal: A survey report. *The International Information & Library Review*, 31(1), 41-47
- Rahman, M. H., & Naoroze, K. (2007). Women empowerment through participation in aquaculture: Experience of a large-scale technology demonstration project in Bangladesh.

- Schunder, T. (2020). *Household-Level Adoption of Modern Sources of Energy for Electrification and Cooking in South Asia* (Doctoral dissertation, faculty of the Graduate School of the University at Buffalo, The State University of New York).
- Shirazi, F. (2012). Information and communication technology and women empowerment in Iran. *Telematics and Informatics*, 29(1), 45-55.
- Suresh, S., Sabanayagam, C., & Shankar, A. (2011). Socioeconomic status, self-rated health, and mortality in a multiethnic sample of US adults. *Journal of epidemiology*, 1107050244-1107050244.
- Suwanrangi, S. (2003). Technological changes and their implications for women in fisheries. *Fish Inspection and Quality Control Division, Department of Fisheries, Bangkok, Thailand*, 35-41.
- Tiwari, R. (2012). Role of Information Technology in Women Empowerment. *International Journal of Multidisciplinary Management Studies*, 2(1).
- Twagira, L. A. (2020). Introduction: Africanizing the history of technology. *Technology and Culture*, 61(2), S1-S19.
- Twagira, L. A. (2020). Machines That Cook or Women Who Cook? Lessons from Mali on Technology, Labor, and Women's Things. *Technology and culture*, 61(2), S77-S103.
- Zimmerman, M. A. (2000). Empowerment theory. In *Handbook of community psychology* (pp. 43-63). Springer, Boston, MA.