



Empowerment of Women in Rural Areas of Asia: Affirming Sustainable Solutions vis-à-vis Technology

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ABSTRACT

In the aftermath of the pandemic, rural Asia is experiencing a rapid transition as large-scale investments are being made to increase productivity, technological advances are being implemented, and sustainable tools and methods are being applied. Transitions of this nature will benefit the rural economy while helping reduce poverty. Even though the rural sector in Asia significantly influences women's lives, they are hindered by economic and social barriers that prevent them from playing a more prominent role in society. It is difficult for women to access education and resources, and gender-based discrimination hinders the advancement of women. The economic opportunities available to women in rural areas are limited, and their labor is often undervalued or unpaid. This has a detrimental effect on the economic and social development of the region. It has become increasingly apparent in recent years that rural women must be empowered. A direct link between economic empowerment and sustainability is only sometimes the case. It is still difficult for rural women to realize their rights and attain sustainability due to systemic barriers and patriarchal social norms. This paper aims to provide strategies for closing gaps in the current approach to empowering women by examining persistent barriers and suggesting key measures to eliminate existing inequalities by sustainability.

Keywords: *Gender and technology, Women Empowerment, Rural Technology, Sustainable Development*

1. INTRODUCTION

With women's economic empowerment now at the forefront, this approach is the most effective means of addressing gender gaps in the rural sectors by sustainability initiatives. Through the integration of women empowerment into rural product value chains, sustainable strategies facilitate women's access to the labor market and the growth of their businesses. A woman's empowerment is a multidimensional and contextual concept that originates internally, varies in meaning, and reflects how she sees herself as empowered [1]. Accordingly, women's economic empowerment in the rural sector will produce results that promote sustainability. Women's empowerment is more likely in the rural sector than in most other sectors. Despite this, many women in rural communities face barriers that prevent them from earning a living and providing for their families. Aside from facing restrictions relating to their gender, they are also faced with financial difficulties.

Rural women are diverse, and their experience working and living in rural areas differs depending on their age, marital status, socioeconomic class, ethnicity, religion, and location. Women's empowerment is one of the most important issues that need to be addressed to promote gender equality in rural areas and to foster sustainable development. Much research and documentation by international agencies point to the fact that in almost all countries, significant socio-economic development can be majorly credited to development and can be attributed to the contribution of women who play a vital role in the process [2]. Given the current scenario, empowering the rural populace and women is of significant importance [3].

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The study of rural women empowerment requires a thorough understanding of the current situation of rural women. In rural areas, women's status is shaky, uncertain, and unstable [4]. Women's empowerment in Rural Areas involves providing women with the tools, resources, and opportunities they need to become active agents of change in their own lives and their communities in rural areas and active agents of change in rural communities as a whole. Women in rural areas should be empowered through information communication technology (ICT) to contribute to their family income [5].

When it comes to women's empowerment in rural areas, it is about the ability of women to make decisions that have a more significant impact on their lives because of the different social issues they face. Rural women are already part of society, whether rural or urban, rich or poor, literate or empowered. The deterrents and determinants of rural women belong to society as scattered stars, which are widely recognized within the community [6]. Women's lives are influenced by many factors that encompass personal, social, economic, and political aspects. There is no magic formula for empowering women; instead, it has to be achieved by removing the systemic barriers that limit the choices and opportunities available to women. Specifically, in rural areas, this means addressing issues of violence against women, unequal access to education and healthcare, and a lack of representation in political and economic decision-making processes, as well as gender-based violence.

In addition to the many benefits women can receive from empowering themselves, many other benefits can be realized. Human rights are at stake in this case. The importance of addressing gender inequalities does not simply arise from the fact that they limit women's potential. Addressing the deprivations of women's health, education, employment opportunities, and political participation is integrally linked to removing a wide range of inequalities for women, their families, and their children [7]. It is imperative that women, who account for half of the world's population, receive the same opportunities to reach their full potential as their male counterparts and to live free from discrimination to be able to fulfill their potential. The denial of these rights to women not only harms them as individuals but also impedes the progress of society as a whole.

Economic development has profound implications resulting from empowering women in rural areas. In addition to being an intrinsic human rights goal, women's empowerment has implications for women's health and children's well-being [8]. A significant amount of women's income is reinvested back into their families and communities in rural communities, contributing to improved health, education, and well-being for future generations. The participation of women in the labor force also contributes to the growth and diversification of the economy.

Women who are empowered are crucial in challenging and changing harmful traditions and norms in the social sphere. Empowering women is a key objective of many development programs, both domestic and international, to promote economic development; this should be the primary goal [9]. As role models for the next generation, they demonstrate that gender roles do not have to be rigid. Collective action is another aspect of social empowerment. Women can be a powerful force for social change when they are organized, advocating for rights, services, and legal protections that benefit all members of society.

Women's empowerment is essential to democratic governance and social justice from a political perspective. The influence and impact of women's socioeconomic status on the ecosystem have received little attention [10]. A more inclusive and representative decision-making process is achieved when women actively participate in politics. As a result, it ensures that women's voices are heard and that their perspectives and specific needs are considered in policy formulation.

Women's empowerment requires the concerted efforts of all sectors of society. Education gives women the knowledge and skills they need to participate fully in economic, social, and political activities. Their education is the key to women's empowerment, prosperity, development, and welfare. It is well known that women are discriminated against from the womb to the tomb [11]. The availability of healthcare services, including reproductive health services, allows women to make informed choices about their bodies and their lives. Economic policies that promote gender equality, support for women entrepreneurs, and measures to increase women's participation in the workforce are also vital.

Women's empowerment in rural areas should be viewed as a goal and a means of addressing global challenges. A just, equitable, and sustainable world is cultivated when women are empowered, contributing to the health and productivity of entire communities and nations. Women's empowerment is essential to achieving gender equality, and we must take action to eliminate barriers that prevent women from reaching their full potential as we strive for gender equality. Individuals, communities, and governments around the globe must commit to the journey of empowerment, but the rewards are immeasurable, promising a brighter future for all.

2. METHODS

This study adopts a narrative review to examine women's empowerment in rural Asia. Unlike a systematic review, no specific guidelines are established for narrative reviews [12]. Narrative reviews are intended to identify and summarize previously published literature and usually seek new or emerging knowledge areas [12].

3. TECHNOLOGY, SUSTAINABLE SOLUTIONS AND WOMEN EMPOWERMENT

Depending on the country, technology may be part of a poverty reduction program, contribute to keeping the family budget in good shape, and assist women in their productive endeavors [5]. In recent decades, sustainability has evolved from organizational to societal and, more recently, to individual sustainability. Individuals play a crucial role in all aspects of social and economic development, as they are society's core and basic components; therefore, enhancing individual sustainability is important. Information and communication technologies have increasingly become powerful tools for empowering women [13]. The concept of empowering women is complex and relative, implying a scale of power with a progressive move from one end of the scale to the other. Individual sustainability results from fulfillment, not forced organizational goals, which ensures the company's sustainability. The advancement of technology, the use of clean energy, and the empowerment of women contribute to improving the long-term quality of the environment [14]. Environmental and urbanization policies can fail to meet the needs of human beings, such as the prevalence of informal settlements with poor infrastructure and sanitation. This adversely impacts their well-being and welfare, fostering gender inequality and contributing to global problems [15].

Advances in technology can potentially transform rural areas in Asia, particularly in the context of women's empowerment. Improving our conceptual clarity regarding women's empowerment cannot be overstated. There is also the issue of women's empowerment about their employment status [16]. We explore how integrating gender and technology can advance social and economic development. Technology can be aligned to meet women's needs and aspirations in these areas to achieve sustainable development more effectively.

Technology and gender provide unique opportunities for empowering women. A crucial component of empowering rural women regarding technology is that it will help them reduce their work stress, drudgery, and productivity [17]. Through technology, women can overcome traditional barriers and become more involved in the economic, social, and political spheres. The gender divide has been deemed one of the most significant

inequalities that the digital revolution has amplified, and it cuts across all social and economic groups in a significant way [18]. In the modern era, women can access information, connect with their support networks, and use e-commerce platforms to start and grow their businesses using mobile technology and internet access. Besides promoting individual autonomy, these tools also contribute to the economic stability of communities at large. Figure 1 shows how technology and women’s empowerment synergize in rural development.

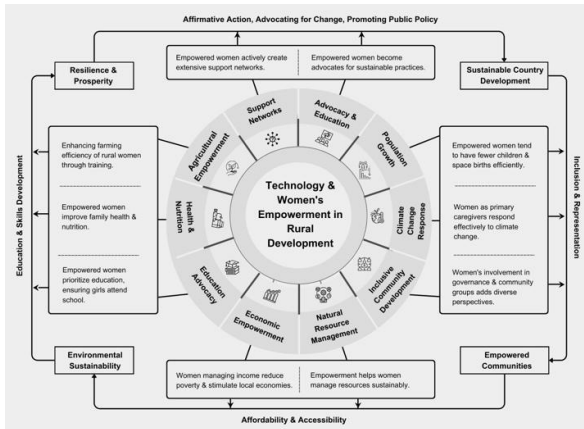


Figure 1. A Framework for Technology & Women’s Empowerment in Rural Development
Source: Author’s generating (2024)

Technology can impact and lead in ensuring women's voices reach the correct stakeholders. Women can share their stories and ideas through social media platforms and communication technologies and mobilize for collective action by using these technologies. The empowerment of women and the development of the economy are closely related: development alone can have a major impact on the reduction of inequality between men and women; on the other hand, empowering women may positively impact the development of the economy [19]. The voice of women, which can be amplified, can undoubtedly increase the overall support for rights, seat at the table, and make amendments to the policies that support women's empowerment. This will include possible programs via technology and outreach programs catering to the needs of the hour, which promote economic upliftment. Women, especially in rural Asia, certainly have many challenges that need to be overcome when using technology entirely, so it's important that we objectively address these particular challenges. When we dive deep into these challenges, we find the lack of appropriate infrastructure, such as inadequate internet connectivity, and the lack of digital literacy or programs that are gender sensitive based on fundamental gender differences. There is a significant need for policy revamping and support that emphasizes infrastructure expansion and the creation of ecosystems conducive to women's participation in the digital world. This will encourage women to participate and take an active part in it. An overall focus on gender sensitization can help significantly shift women's empowerment when technology is integrated into rural development strategies with a gender-sensitive approach. The general application of technology strategically supports women's empowerment and empowers entire communities to achieve sustainable growth and development when applied correctly. Figure 2 portrays the support from the supply chain in optimizing technology.

Providing equitable and reasonable access to technology and creating an environment where technology solutions are developed with an overall comprehensive understanding of gender dynamics cannot be overstated to ensure equal access to technology. Technology can be used to empower women in rural Asia in several ways. Still, it's important to realize that what we are objectively aiming for is way more than simply providing them with gadgets, mobile apps, and internet access. As part of an integrated and comprehensive approach, women's needs, challenges, and opportunities should be considered to ensure the best possible outcome. This approach will likely lead to a more sustainable, inclusive, and equitable future for all, affirming the essential role of technology as one of the cornerstones of development efforts in the future.

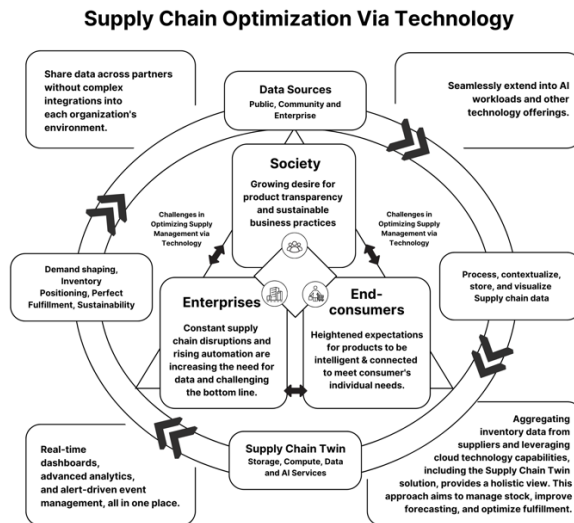


Figure 2. Supply Chain Optimization Via Technology
 Source: Author's generating (2024)

4. CONCLUSION

Technology brings us together in a fragmented world where the digital divide is persistent, and sustainability in sync with women's empowerment needs strategic alignment. The advantages are that this coming together can help progress toward gender equality and support. This would ultimately impact sustainable development in developing economies, specifically global development.

Women's empowerment can be further advanced through the use of technology. Women, particularly in developing regions, now have access to a wide range of information, education, and economic opportunities otherwise unavailable. Digital platforms can provide women with resources to start and scale businesses, access financial services, and gain access to global markets. Using technology in education, through e-learning platforms and digital resources, breaks down traditional barriers and promotes a more inclusive environment for

women in the educational field. It is, however, crucial that women and girls have equal access to technology and the necessary skills to leverage it, thereby addressing the gender digital divide that persists in many countries worldwide.

One of the conclusions that the authors want to make is that there's an imperative need for further research on this topic; however, given that technology is a vast ocean, further research can be compartmentalized by the different technology verticals. In developing nations, women are often associated with household chores or managing animals, fodder, and feed resources. By default, sustainability solutions align with a woman's role in a developing nation. To create a truly sustainable and fair and sustainable solution, women's salient perspectives, which they bring to the table and experiences, are crucial. The involvement of women in the decision-making process in climate change, for example, leads to more effective and sustainable climate action. Since sustainable practices directly impact their families' and communities' health and well-being, women often profoundly understand resource management.

A sustainable economic policy prioritizing women's participation can contribute to a robust and resilient economy. Societies can reduce poverty and achieve environmental goals by providing equal opportunities for women in green jobs and enterprises. By combining sustainable agriculture, renewable energy, and waste management, programs can promote women's skills and economic independence while advancing sustainable agriculture, renewable energy and waste management.

Women's empowerment must be considered and appropriately incorporated into technology and sustainability initiatives by revamping policies and practices. The need for the hour is a collaboration between the government, businesses, academia, and civil society to create an enabling environment that encourages and supports women's participation. Of course, there is always a need for society's approach to gender roles to evolve continuously so that women's contributions can be valued in all sectors of society.

The authors believe that the intersection of technology, innovative solutions, and women's empowerment extends beyond enabling women to leverage their potential to drive significant progress in all facets of development. A resilient future is achieved by ensuring that all segments of society are included in sustainable development. A key element of global development is empowering women with technology and ensuring their active participation in sustainability efforts. With an eye toward the future, it is clear that advancing gender equality within the technological and sustainable development framework is intrinsically linked to how effectively we can meet the challenges we face. Toward a sustainable, equitable, and technologically advanced future, we must develop inclusive strategies that harness women's unique strengths.

AUTHOR'S CONTRIBUTION

1. Cesyia Rizkika Parahiyanti: methodology, writing (review and editing), data collection
2. Siddhartha Paul Tiwari: conceptualization, data collection, data analysis, writing (original draft)

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