

Women Entrepreneurship and Sustainable Innovation in South Asian Economies: A SWOT Analysis

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Abstract

Sustainable innovation strives to demonstrate the equilibrium among three distinct elements: the economy, equality, and environment. In developing the future economy, sustainability is a crucial subject to consider. Women's entrepreneurship possesses the utmost significance to the economy and globalized world. Women's entrepreneurship is becoming an ongoing debate for concerned governmental policymakers. Because it boosts competition, modernizes the economy, and generates employment opportunities. As women entrepreneurship and sustainable innovation are combined, this study has a highly fascinating topic to examine how women entrepreneurship can foster sustainable innovation in South Asian economies. Accordingly, this study notes that women entrepreneurs bring fresh perspectives, ideas, and tactics to the company, which could have a big impact on whether or not they embrace and implement eco-friendly practices. Their unique backgrounds and expertise could help develop creative solutions to environmental and social problems. As a result, it has been acknowledged that women's entrepreneurial spirit plays a significant role in producing long-term innovation.

Keywords: Women Entrepreneurship, Sustainable Innovation, SWOT Analysis, South Asia.

Introduction

Sustainable innovation is needed to slow down biodiversity loss since sustainable development has long been a top concern, and the present pace of economic growth is unsustainable and negatively impacts the environment (Sztumski, 2024). Innovative green ideas are methods and technologies that advance sustainable development and improve well-being (Gibbs, 2024). They are crucial for striking an economically advantageous balance between ecological sustainability and economic prosperity (Batra, 2023). South Asia serves as an ideal-typical scenario of such an inefficient investment in the atmosphere, where innovation triggers such as India keep growing, and within-company obstacles like an absence of monetary and human resources pose obstacles for companies in the area (Wenten, 2016). Pakistan supports previous efforts with traditional innovative research (Malik et al., 2021). In Bangladesh, business factors like scale and foreign ownership, rather than people or capital, foster inventiveness more (Mahin, 2023). Moreover, it is shown that individual samples of medium-sized companies and those who do not export are less inclined to suffer such restraints. The World Bank invests significantly in South Asia's technological and skilled worker initiatives, including existing loan agreements totaling \$6.4

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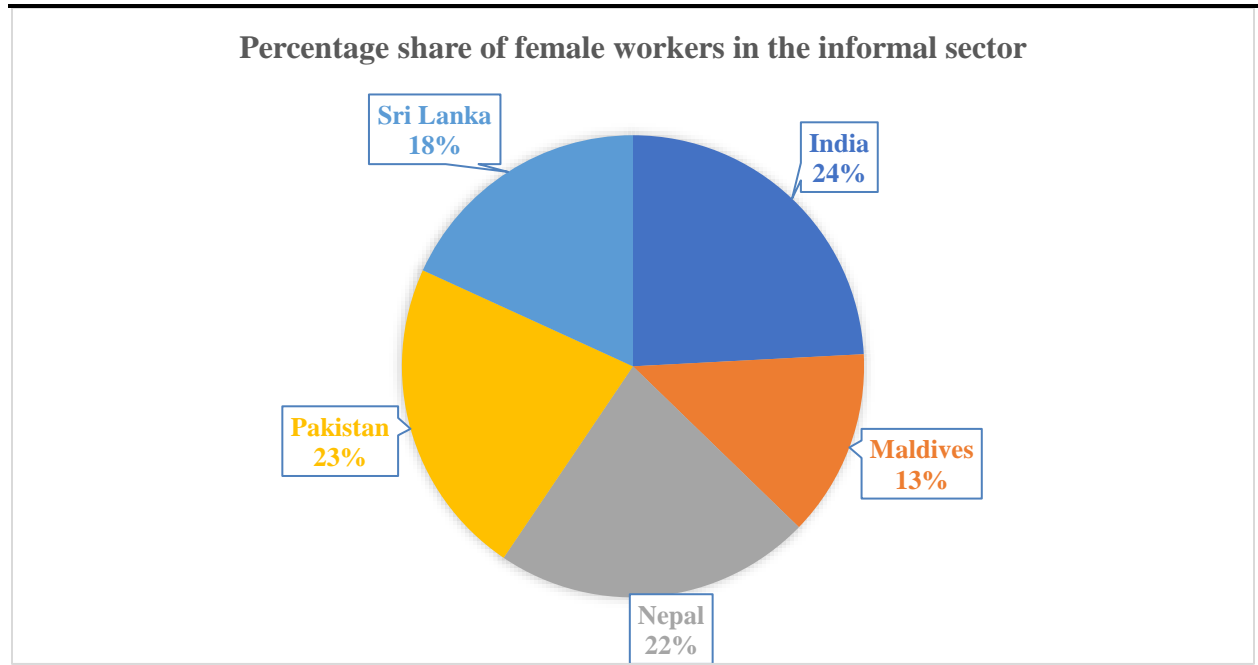


billion for technological elements (World Bank, 2021). In the past several decades, the research on women's entrepreneurship has grown significantly, receiving widespread scholarly acceptance (Cardella et al., 2020). Most importantly, this leads to greater awareness of each indicator that underlies why women find it hard to pursue an entrepreneurial career (Naguib, 2024).

Females' entrepreneurship is linked with independence and significantly impacts economic growth; long-term success necessitates inventiveness and effective dissemination (Nair, 2020). Restrictions such as weaker entrepreneurial skills, an absence of cash, and so on frequently stifle female entrepreneurial creativity (Ahi & Marlow, 2012). Despite early predictions, institutional and societal variables significantly support inventiveness in women-led enterprises (Chávez-Rivera et al., 2024). This creativity is fostered by developing tight and regular relationships with others, also by the age of women entrepreneurs (Byrne et al., 2019). The contribution of women's entrepreneurial activities to global economic development is vastly increasing, and the relationship between their entrepreneurial attributes and business performance is broadly questioned empirically (Dean et al., 2019). Women entrepreneurs are essential for economic diversity; they develop a sustainable economy and encourage environmentally friendly innovation (Maziriri et al., 2019). Supervisory diversity based on gender increases business and ecological invention; female entrepreneurs promote sustainable development and seek creative ideas (Ma et al., 2022). Women's entrepreneurship has widely been accepted as a key indicator of social growth and economic development in South Asian economies (Tambunan, 2009). In South Asia, barely one female out of every four females is employed. It shows that countless women in South Asian economies do not receive an opportunity to realize their abilities and follow a profession or employment beyond the house, make money to care that supports them and their families, and contribute to their economies and societies (World Bank, 2024a). Growth in entrepreneurial activity is presently a significant problem for Asian emerging nations' economic growth (Hoskisson et al., 2000). Many nations' financial backwardness is attributed to insufficient entrepreneurial activity, insufficient money, highly qualified individuals, and outdated technologies (Saxena, 2012). Women in South Asian nations, particularly Bangladesh, Pakistan, Sri Lanka, Nepal, and India, confront considerable challenges in starting and growing enterprises (Sinha, 2005). Fundamental societal and gender norms remain a significant hurdle for female entrepreneurs in South Asian nations (Younis et al., 2018). Women confront hurdles in their enterprising inclination, which include gender prejudices and a shortage of social support (Brindley, 2005).

South Asian economies have an elevated share of female participation in the labor force (Aziz et al., 2022). For instance, females contribute a considerable share of precarious employment (Mukhopadhyay, 2023). Over fifty percent of all employed women in South Asia have jobs in the informal sector, frequently characterized by inadequate salaries, inadequate levels of social security, and lack of legal acknowledgement (World Bank, 2023). The percentage share of South Asian economies' female employment in the informal sector is visually illustrated in Figure 1. For instance, Maldives showed the lowest percentage share of female workers (13%) working in the informal sector compared to other South Asian countries. India exhibited the greatest percentage share, 24%. In addition, Sri Lanka, Nepal, and Pakistan represented the 18%, 22%, and 23%, respectively. South Asian economies struggle with increased urbanization, loss of biodiversity, and social and economic challenges (Pandey & Asif, 2022). Thus, the importance of women's entrepreneurship in supporting long-term business models becomes increasingly crucial (Mahajan & Bandyopadhyay, 2021).

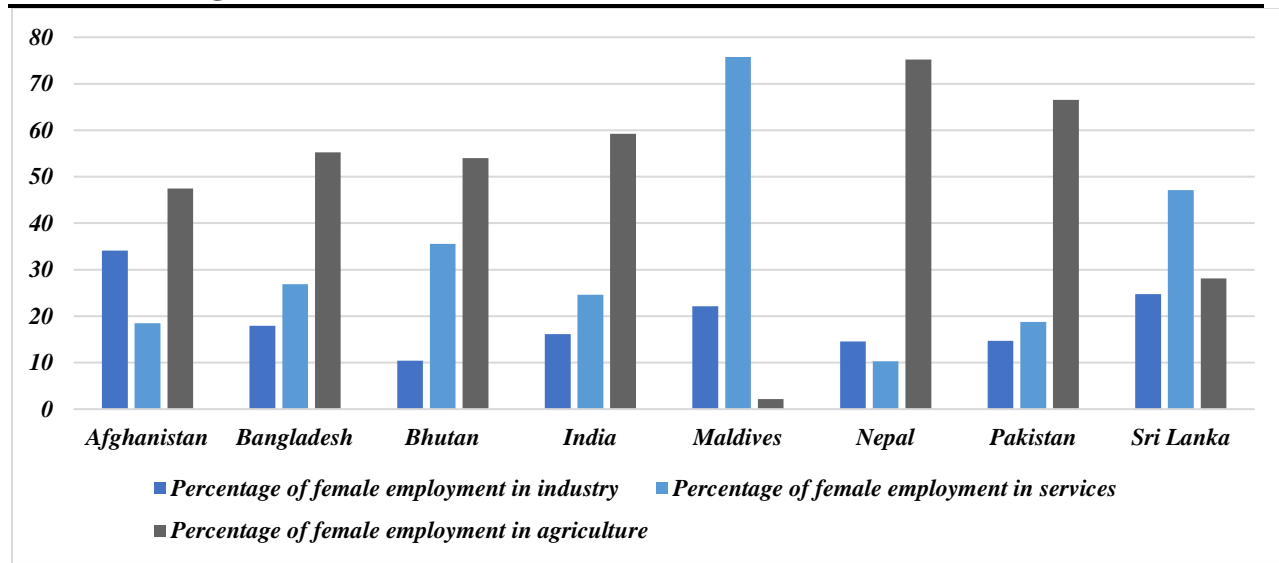
Figure 1: Percentage share of South Asian economies' female employment in the informal sector



Hence, women entrepreneurs in underdeveloped nations face financial obstacles, resulting in worse business performance than their male colleagues (Azmat, 2013). Females have greater involvement in the informal economy than males (Williams & Gashi, 2022). In addition, women entrepreneurs are thought to effectively empower women for economic gains that result in long-term commercial endeavors. Statistics imply that women hold fewer acres and run lesser-sized companies (Asian Development Bank, 2013). For instance, 85% of female entrepreneurs hold small-scale enterprises, but Lao PDR research found that women controlled 63% of SMEs, whereas SMEs held by males preferred to be more prominent in Indonesia. Moreover, women account for over fifty percent of Asia's populace, and the United Nations predicts that if women reach all of their financial possibilities, the Asia-Pacific economy could produce a further \$89 billion each year. Females contribute significantly to creative economic growth and company growth throughout Asia and the Pacific (Tatli et al., 2013).

Consequently, this study seeks to determine the explosive association of South Asian economies' women entrepreneurship with sustainable innovation. Moreover, this study explores how women-led businesses and the difficulties and opportunities women face. Women entrepreneurs are making tremendous progress in numerous industries, including farming, clothing manufacturing, services, technology, and the informal sector in South Asian economies (Sinha, 2005). The percentage share of female employment in industry, services, and agriculture in South Asian economies is presented in figure 2. Overcoming significant socioeconomic and cultural challenges, these entrepreneurs foster sustainable company strategies that stimulate economic development while advocating environmentally friendly practices and social equality (Emon & Nipa, 2024).

Figure 2: Percentage share of South Asian economies' female employment in industry, services, and agriculture



Accordingly, to address how sustainable innovation could be gained by female contribution in the business sectors. Developing efficient strategies that promote an equitable, profitable, and long-term entrepreneurial ecosystem is necessary (Stam & Van de Ven, 2021). Although South Asian economies seek to fulfil their developmental goals, the present research could be helpful for business owners, developmental organizations, and decision-makers. In addition, this study could benefit policymakers in realizing the maximum capabilities of women-led firms for long-term prosperity in South Asian economies.

The rest of the paper is structured as follows: the following section reviews the previous literature. The methodology and discussion are presented in section 3. At last, section 4 concludes the overall study and gives some suitable policy suggestions.

Literature Review

Recent perspectives in the literature on sustainable development study the procedure of increasing women's entrepreneurship helps sustainable business models (Thomas, 2024). This study is based on social feminist theory, which states that female perspectives and attitudes, determined by their social positions, vary from male and might result in distinct strategies for business (Felski, 1989; Jackson, 1998). The participation of women in businesses benefits the national economy (Nodirovna & Nazirjon 2024). Additionally, women possess tremendous abilities, especially imaginative and inventive thinking, abilities to lead, a social consciousness, and an excellent capacity to discover chances (Agarwal et al., 2023).

The economy grows as women are given the same opportunities as men (Nodirovna & Nazirjon o'g'li, 2024). However, women face difficulties like a lack of monetary independence, skill resources, educational opportunities, and equilibrium among career and household duties in the South Asian country, India (Archana et al., 2022). Regardless of the societal challenges, women stood out and received praise for their various fields' accomplishments (Dwibedi, 2015). Moreover, Machado et al. (2023) empirically evaluated how innovation and internationalization in businesses are influenced by female entrepreneurship in Europe and Central Asia. The researchers found that social and cultural constraints influence whether female enterprises want to

expand internationally. Additionally, the findings demonstrate the relationship between internationalization and innovation. In Ecuador, Chávez-Rivera et al. (2024) confirmed that Social and institutional aspects of women-owned enterprises encourage innovation. In addition to the female entrepreneur's age, intimate and regular interactions with others foster this innovation. Naheed et al. (2024) explored how female entrepreneurship in 23 Asian nations from 2008 to 2022 enhanced green innovation. By employing the GMM approach, this study concluded that male entrepreneurship was negative while female entrepreneurship was positively associated with green innovation. Moreover, education is held to foster women's entrepreneurship and green innovation. This is evidenced by the likelihood that more educated females will employ environmentally friendly innovations locally.

Dohse et al. (2019) evaluated the male managers or female owners who introduced improved innovation. To fulfil this aim, the researchers took data from more than 100 nations through surveys at the firm level. The outcomes demonstrated that female owners were more likely than female managers to bring improvements. Furthermore, organizations with strong research and development capabilities and bigger and grown-up enterprises offered advances. In addition, a shadowy industry and financial limitations accelerated innovation, but economic stability led to lethargy in invention beginnings (Abid et al., 2021). Azeem et al. (2022) proved that the collaboration of female senior management and female owners fosters creativity. This, consequently, increases a firm's value-added production performance. Thus, the researchers suggest that efforts in female-to-female mentorship can help emerging nations eliminate societal and cultural hurdles to female engagement in enterprise and foster creativity. Through a systematic review of the literature of forty-eight studies, Mari et al. (2024) analyzed how female entrepreneurship and hurdles related to innovation affect each other.

Males in OECD nations devoted 2 hours and 27 minutes per day to unpaid labor, whereas women devoted 4 hours and 39 minutes (OECD, 2024). This considerable gap in household and childcare obligations might negatively influence females' career goals and business ventures. Lins and Lutz (2016) explore the differences between men and women in terms of entrepreneurship skills and accessibility to business financing. The researchers believe that freshly founded female-run businesses with much research and development activity receive lesser venture capital funding than men's businesses with comparable qualities. In addition, women are under-represented in technologically advanced and creative endeavors. This suggests that female-owned businesses are less likely to expand via exports Alves et al., (2017). In a study of Chinese female entrepreneurs, Huang et al. (2022) found that innovation had a significant function in boosting business efficiency and identifying industry possibilities, contributing to long-term success. Khalid et al. (2021) demonstrated that women significantly influenced the start-up strategy's entrepreneurial behaviors and a robust intermediary influence on company training.

After reviewing the previous literature, evidence suggests that women are capable, and these skills are essential to enhancing sustainability and accomplishing higher prosperity for the community (Thomas, 2024). These skills include innovative and imaginative thinking, leadership potential, social consciousness, and an innate capacity to recognize opportunities. This study explores how sustainable innovation can be attained through women entrepreneurship in South Asian economies. The primary purpose of the current work is to bolster the case for encouraging women to pursue entrepreneurship. While it is widely known that women entrepreneurs spur GDP growth, other strategies—particularly those about sustainability—also require consideration.

Methodology

SWOT Analysis and discussion

This study seeks women's entrepreneurship for sustainable innovation in South Asian economies. South Asian economies are Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka. SWOT analysis lists women entrepreneurship's strengths, weaknesses, opportunities, and threats in South Asian economies utilized in this study. SWOT approach is a technique for conducting strategic assessments, developed at the start of the 1950s, which merges the strengths and weaknesses of a business internally and opportunities and threats of the businesses externally (Puyt et al., 2023). SWOT approach has been frequently adopted by academics in the business field for entrepreneurship study for evaluating entrepreneurial potential (Helms et al., 2011), business development strategies (Sonia et al., 2020), business opportunities (Inrawan et al., 2022; Indrayani 2024); entrepreneurial marketing analysis (Hanafi et al., 2024); improving sustainable entrepreneurship (Amalia & Hendayana, 2024), entrepreneurship goals (Antoniadou & Kanellopoulou, 2024).

This study gathered information from previous literature reviews, reports, and online interviews with limited participants who (women) have been doing business for at least 5 years. The interviewed participants do business in different industries. For instance, teaching, information and technology (IT), health care, e-commerce in fashion and retail accessories, and cosmetology. Open-ended questions have been asked during interviews. Participants may discuss their viewpoints easily using this method. The questions asked in the interview are:

1. What are your thoughts on South Asian economies' strengths in women entrepreneurship?
2. What are your thoughts on South Asian economies' weaknesses in women entrepreneurship?
3. What are your thoughts on South Asian economies' opportunities for women entrepreneurship?
4. What are your thoughts on South Asian economies' threats to women entrepreneurship?

Utilizing the SWOT structure by assessing the detailed literature, reports, and interviews, the results highlight the possibilities of women entrepreneurship's strengths. This study also identifies women entrepreneurship's limitations and hazards that South Asian economies face in the years ahead. This will help to create a specific plan for managing and eliminating potential risks. According to Panda (2018), women's entrepreneurship confronts several hurdles, such as inadequate facilities, conflict between work and family life, limited access to financing, and gender parity in emerging nations. In developing economies, women entrepreneurship confronts numerous hurdles when establishing and operating businesses (Corrêa et al., 2024). Moin (2024) empirically evaluated the opportunities and hurdles in women entrepreneurship in Bangladesh, India, and Pakistan. The researcher found that women entrepreneurs faced several hurdles, including the accessibility of resources, financial constraints, and social customs in the aforementioned developing nations. In Sri Lanka, financial accessibility of finance, social capital, and human resources foster women's entrepreneurship (Upulwehera et al., 2024). Informal women entrepreneurship has been positively influenced by schooling, family roles, educational policies, cultural norms, and business perceptions while negatively influenced by financial accessibility and non-economic assistance in Bangladesh (Sobhan & Hassan, 2024).

South Asian economies confront gender parity, inadequate entrepreneurial activities and managerial skills, and extreme capital deficits that affect women's entrepreneurship (Agrawal et al., 2023). Moreover, religious constraints greatly influence women's motivation to go to work in South Asian nations (Aziz et al., 2022). According to Hossain et al. (2021), 20% of women entrepreneurs have been failures, 65% have been efficiently working, and 15% have been highly effective women entrepreneurs in South Asian economies. Motivation has been a most substantial

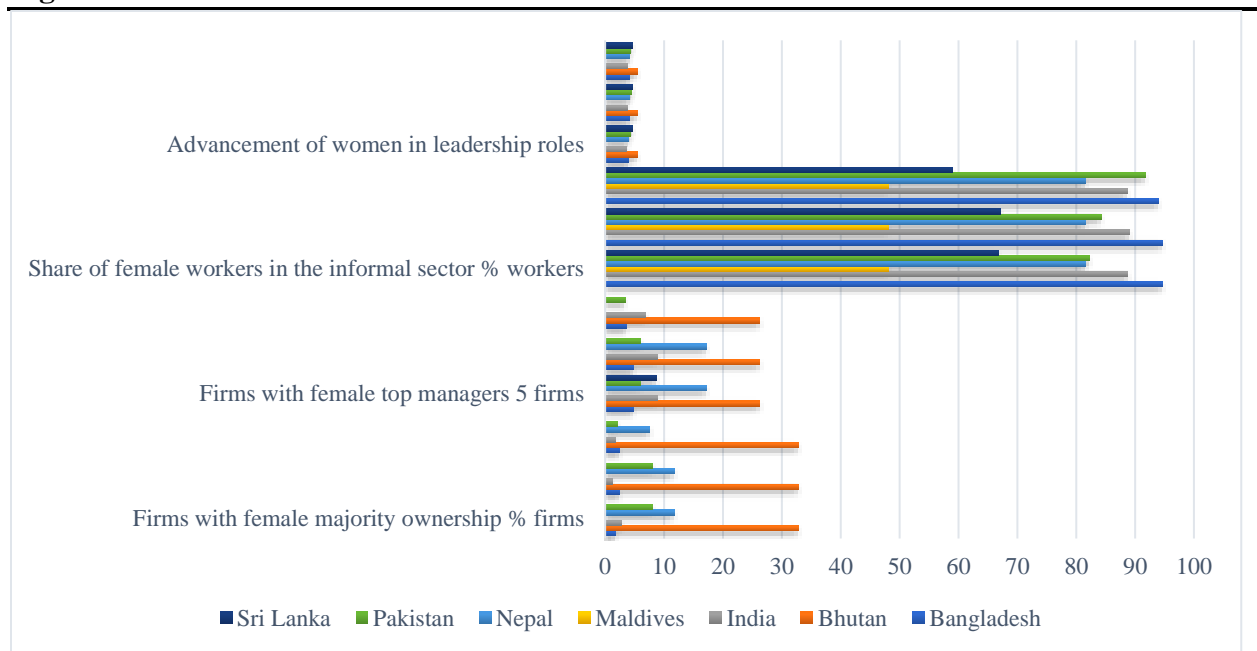
indicator of women's entrepreneurship in South Asian nations, i.e., Pakistan (Qureshi et al., 2021). Moreover, the researchers found limited accessibility to the marketplace and business expertise, monetary constraints, gender inequalities, and disappointment from household members faced by South Asian economies in Pakistan that affect women's entrepreneurship, as shown in Table 1. The contribution of women in the labor force has been 22%, whereas men have been 77% in South Asian nations (World Bank, 2023).

Table 1: Global Gender Gap

Country	Firms with female majority ownership % firms			Firms with female top managers 5 firms			Share of workers in the informal sector % workers			Advancement of women in leadership roles		
	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Afghanistan	0.50	0.50	-	4.7	4.7	-	-	86.4	-	-	-	-
Bangladesh	1.7	2.5	2.5	4.8	4.8	3.6	94.7	94.7	93.95	4.02	4.12	4.19
Bhutan	32.8	32.8	32.8	26.3	26.3	26.3	-	-	-	5.54	5.54	5.54
India	2.8	1.18	1.8	8.9	8.9	6.8	88.8	89.1	88.76	3.55	3.74	3.79
Maldives	-	-	-	-	-	-	48.1	48.1	48.15	-	-	-
Nepal	11.7	11.7	7.6	17.2	17.2	-	81.6	81.6	81.56	3.95	4.11	4.12
Pakistan	8.0	8.0	2.1	6.0	6.0	3.4	82.2	84.3	91.71	4.33	4.47	4.36
Sri Lanka	-	-	-	8.8	-	-	66.8	67.2	58.96	4.62	4.71	4.68

Correspondingly, the female employment rate has improved in the industrial and service sectors but fell in the agricultural industry during the 1991 to 2022 period in South Asian economies. For instance, the female employment rate in industry was 9.306%, 6.504%, 2.754%, 10.101%, 46.413%, 4.931%, 14.516%, and 23.015% in Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, respectively in 1991 (World Bank, 2024b).

Figure 3: Source: Author's construction



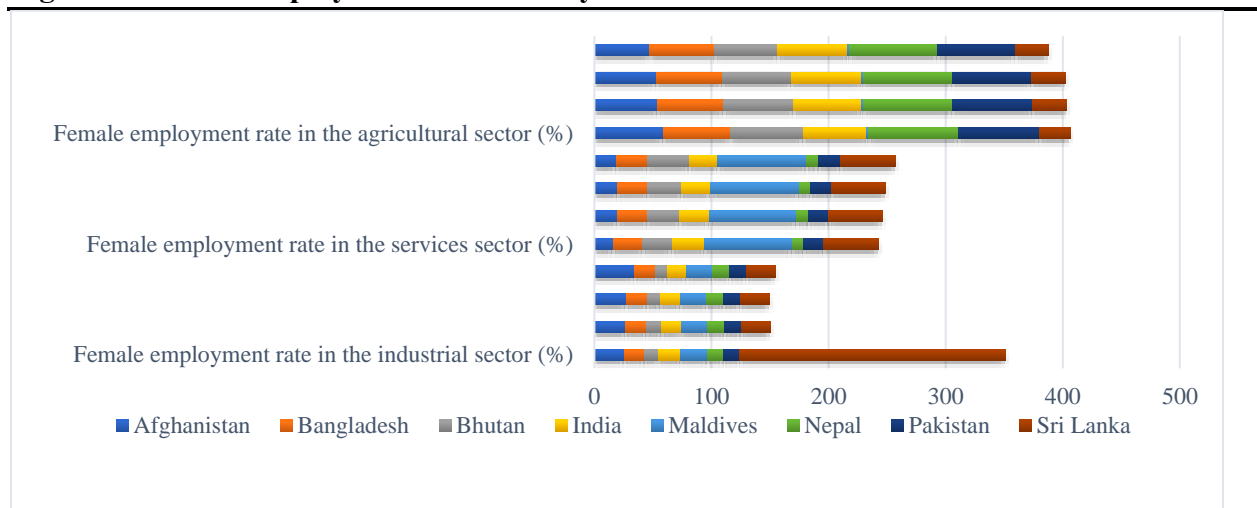
In 2022, female employment rate in industry was 34.102%, 17.910%, 10.412%, 16.144%, 22.102%, 14.525%, 14.700%, 24.771% in Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, respectively. Female employment in the industrial sector fell in the Maldives, and there is prolonged growth in Sri Lanka.

Table 2: Female Employment rate

Country	Female employment rate in the industrial sector (%)				Female employment rate in the services sector (%)				Female employment rate in the agricultural industry (%)			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
Afghanistan	25.297	26.435	27.103	34.102	15.888	19.748	19.697	18.449	58.816	53.816	53.200	47.449
Bangladesh	17.674	17.722	17.816	17.910	25.176	25.593	25.883	26.854	57.150	56.686	56.301	55.236
Bhutan	12.081	13.360	11.942	10.412	25.549	27.322	29.006	35.575	62.370	59.317	59.052	54.013
India	18.559	16.580	16.257	16.144	27.588	25.399	24.414	24.617	53.853	58.021	59.328	59.239
Maldives	22.865	22.651	22.496	22.102	74.808	74.963	75.761	75.762	2.328	2.386	2.343	2.138
Nepal	13.848	14.264	14.253	14.525	9.836	9.832	9.912	10.286	76.316	75.904	75.836	75.189
Pakistan	13.869	14.240	14.577	14.700	16.926	17.493	17.807	18.737	69.206	68.267	67.616	66.563
Sri Lanka	226.712	25.090	24.913	24.771	47.068	45.801	45.994	47.109	26.220	29.109	29.093	28.120

In the services sector, the female employment rate was 4.563% to 18.449%, 16.690% to 26.854%, 14.948% to 35.575%, 12.148% to 24.617%, 45.765% to 75.762%, 6.307% to 10.286%, 17.255% to 18.737%, and 31.560% to 47.109% in Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, respectively. Nepal showed slow growth of female employment in the services sector. In the agricultural industry, the female employment rate was 86.131% to 47.449% in Afghanistan, 76.806% to 55.236% in Bangladesh, 82.297% to 54.013% in Bhutan, 77.751% to 59.239% in India, 7.814% to 2.138% in Maldives, 88.762% to 75.189% in Nepal, 68.228% to 66.563% in Pakistan, and 45.425% to 28.120% in Sri Lanka as shown in table 2 and figure 4.

Figure 4: Female employment rate countrywide detail



Women entrepreneurs in South Asian economies face financial obstacles, resulting in worse company efficiency than their male colleagues. Women face societal hurdles such as early wedlock, male authority, and poor academic achievement. Husbands are often overworked to assist with household tasks. Promoting women's financial independence is crucial for boosting economic

diversity and prosperity. The researchers argued that empowering women can promote social growth. The present research assists academics and policymakers in dealing with entrepreneurship-fostering initiatives for female entrepreneurs using the minimalist start-up methodology. Furthermore, this leads to a thorough knowledge of how women explore, develop, and execute entrepreneurial concepts. Moreover, this research contends that supervision and guidance are essential for cutting-edge business operations.

Table 3: SWOT Analysis

The information gathered through interviews is summarized in the following table.

Strengths	Weaknesses
Bring more innovative ideas.	Trouble in approaching more giant marketplaces because of numerous constraints.
Resolving enormous financial and social barriers	Poor accessibility to formal education opportunities
Improve the quality of products.	Gender inequality, particularly in remote areas
Opportunities	Threats
Progressive changes in social views toward achieving gender parity	Insufficient availability of trained workers, facilities, as well as technology
Technological development through e-commerce	High competition from domestic as well as foreign firms
Rising supportive projects focused on strengthening women	Volatile financial and governmental conditions

The academic work on women's entrepreneurship and sustainable innovation remains embryonic due to the subject's novelty. However, women's concern for the globe's future drives the focus on sustainable innovation in every initiative undertaken. This study gathered information about female employment in South Asian economies by utilizing the SWOT analysis. For instance, the data was collected from previous literature, reports, and online interviews. Nonetheless, this study observes that women entrepreneurs offer the business novel ideas, views, and strategies, which may significantly affect their acceptance and execution of environmentally friendly procedures. Their distinct knowledge and experiences may contribute to innovative responses to ecological and societal issues. Consequently, the entrepreneurial spirit of women has been recognized as a critical generator of long-term innovation, as shown in Table 3.

Conclusion

The present research offers a groundbreaking addition to women's entrepreneurship by filling a critical vacuum in leadership studies, notably in comprehending the crucial nexus of entrepreneurial spirit, creative thinking, and ethnicity concerns. This article not only improves the awareness of that junction but also sets the door for possibilities for further study. More specifically, the present investigation makes multiple discoveries and has affected subsequent studies on women's entrepreneurship. The findings provide illuminating perspectives on the limits of current studies, identifying topics for future exploration. This study extends to the current literature on women's entrepreneurship in several ways. Firstly, the key contribution of this study is that female entrepreneurs might possess more capabilities for sustainable business ventures. Thus, policymakers of South Asian economies ought to encourage this feature in defining the next decade that relies upon green power. Secondly, women outperform in managerial duties in

fostering ecologically friendly innovations. Thus, it is suggested that novel policies and initiatives must be implemented to motivate women to pursue careers as entrepreneurs and promote environmentally friendly endeavors. Thirdly, women's education serves a significant part in boosting sustainable innovation. Therefore, authorities must prioritize women's academic achievement, recognizing its vital part in improving female business performance in all organizations. According to the findings of this study, numerous women entrepreneurs are enthusiastically busy in mentoring, social development, and diverse organizations, which helps to drive long-term business practices and sustainable innovation. Hence, women's participation in policy formulation and campaigning contributes to establishing an entrepreneurial environment that fosters sustainable innovation.

Policy Recommendations

There are a couple of implications for policies that might assist in boosting female business ownership and fostering innovation. Thus, to maximize the innovative potential of women entrepreneurs, policymakers need to address the challenges they face and create an enabling environment. For instance, endeavors should be conducted to promote recognition of the value of female business ownership and its influence on inventiveness. Moreover, regulations should be executed that promote harmony between work and life, including time off for parenting and hourly wages, to encourage more women to pursue opportunities for entrepreneurship. Promote prohibitions on prejudice rules to ensure women have similar chances in the business environment. Hence, apprenticeships that teach women the abilities required to create new ideas, especially knowledge of technology, handling finances, and managerial behavior should be offered. In addition, business schooling should be incorporated into the academic program on every scale, with a particular emphasis on inspiring females to pursue business professions. Consequently, organize social meetings and places wherein female entrepreneurs can exchange their experiences, assets, and achievements.

Furthermore, establish and promote mentoring initiatives that link female entrepreneurs to seasoned entrepreneurs and creative thinkers, which helped to foster sustainable innovation. Incorporate nearby populations in project creation and execution to guarantee empathy and attention to the particular demands of females in diverse locations. Create resources for periodically monitoring and evaluating the effects of initiatives and laws that empower women entrepreneurs. Conduct initiatives to increase consciousness about women entrepreneurship's achievements and overcome preconceptions restricting their abilities. Hence, it could benefit the appropriate ministries in South Asian economies to take suitable steps to offer mentoring initiatives that join women entrepreneurs with more advanced knowledge of fundamental studies and boost involvement in essential scientific studies. This study is limited to South Asian economies, and future research can be expanded by incorporating other countries such as developing 8 (D8) countries, ASEAN countries, and BRICS countries.

References

- Abid, S. K., Sulaiman, N., Chan, S. W., Nazir, U., Abid, M., Han, H., & Vega-Muñoz, A. (2021). Toward an integrated disaster management approach: how artificial intelligence can boost disaster management. *Sustainability*, 13(22), 12560.
- Agrawal, R., Bakhshi, P., Chandani, A., Birau, R., & Mendon, S. (2023). Challenges faced by women entrepreneurs in South Asian countries using interpretive structural modeling. *Cogent Business & Management*, 10(2), 2244755. <https://doi.org/10.1080/23311975.2023.2244755>

- Alves, M. F. R., Galina, S. V. R., Macini, N., Cagica Carvalho, L., & Costa, T. (2017). Internationalization and innovation in nascent companies: does gender matter? *Journal of Small Business and Enterprise Development*, 24(4), 887-905. <https://doi.org/10.1108/JSBED-01-2017-0020>
- Amalia, D. N., & Hendayana, Y. (2024). Application of SWOT in Improving Sustainable Entrepreneurship (K'S Eco Bag Case Study). *Dinasti International Journal of Management Science*, 5(5), 1091-1099. <https://doi.org/10.38035/dijms.v5i5.2795>
- Antoniadou, M., & Kanellopoulou, A. (2024). Educational Approach: Application of SWOT Analysis for Assessing Entrepreneurial Goals in Senior Dental Students. *European Journal of Investigation in Health, Psychology and Education*, 14(3), 753-766. <https://doi.org/10.3390/ejihpe14030049>
- Archana, M. S., Vijaya Kumar, M. N., & MS, S. (2022). Women entrepreneurship and innovation in higher education: Opportunities and challenges in India-A review. *Journal of Engineering Education Transformations*, 35(3), 202349-2473. https://journaleet.in/download-article.php?Article_Unique_Id=JPR1695&Full_Text_Pdf_Download=True
- Asian Development Bank, (2013). Women in Business and Commerce in Asia: 12 Things to Know. Available at. <https://www.adb.org/features/empowering-enterprising-women-asia>
- Azeem, M. M., Sheridan, A., & Adapa, S. (2022). Women to women: Enabling innovation and firm performance in developing countries. *Emerging Markets Review*, 51, 100879. <https://doi.org/10.1016/j.ememar.2021.100879>
- Aziz, F., Sheikh, S. M., & Shah, I. H. (2022). Financial inclusion for women empowerment in South Asian countries. *Journal of Financial Regulation and Compliance*, 30(4), 489-502. <https://doi.org/10.1108/JFRC-11-2021-0092>
- Azmat, F. (2013). Opportunities or obstacles? Understanding the challenges faced by migrant women entrepreneurs. *International journal of gender and entrepreneurship*, 5(2), 198-215. <https://doi.org/10.1108/17566261311328855>
- Barrachina Fernández, M., García-Centeno, M. D. C., & Calderón Patier, C. (2021). Women sustainable entrepreneurship: Review and research agenda. *Sustainability*, 13(21), 12047. <https://doi.org/10.3390/su132112047>
- Batra, G. (2023). Renewable energy economics: achieving harmony between environmental protection and economic goals. *Social Science Chronicle*, 2(2), 1-32. <https://doi.org/10.56106/ssc.2023.009>
- Brindley, C. (2005). Barriers to women achieving their entrepreneurial potential: Women and risk. *International Journal of Entrepreneurial Behavior & Research*, 11(2), 144-161. <https://doi.org/10.1108/13552550510590554>
- Byrne, J., Fattoum, S., & Diaz Garcia, M. C. (2019). Role models and women entrepreneurs: The entrepreneurial superwoman has her say. *Journal of Small Business Management*, 57(1), 154-184. <https://doi.org/10.1111/jsbm.12426>
- Cardella, G. M., Hernández-Sánchez, B. R., & Sánchez-García, J. C. (2020). Women entrepreneurship: A systematic review to outline the boundaries of scientific literature. *Frontiers in Psychology*, 11, 1557. <https://doi.org/10.3389/fpsyg.2020.01557>
- Chávez-Rivera, M. E., Ruíz-Jiménez, J. M., & Fuentes-Fuentes, M. D. M. (2024). The effects of context and characteristics of women entrepreneurs on innovation performance. *BRQ Business Research Quarterly*, 27(1), 73-90. <https://doi.org/10.1177/23409444231220951>
- Corrêa, V. S., Lima, R. M. D., Brito, F. R. D. S., Machado, M. C., & Nassif, V. M. J. (2024). Female entrepreneurship in emerging and developing countries: A systematic review of practical and policy implications and suggestions for new studies. *Journal of Entrepreneurship in Emerging Economies*, 16(2), 366-395. <https://doi.org/10.1108/JEEE-04-2022-0115>
- Dean, H., Larsen, G., Ford, J., & Akram, M. (2019). Female entrepreneurship and the metanarrative of economic growth: A critical review of underlying assumptions. *International Journal of Management Reviews*, 21(1), 24-49. <https://doi.org/10.1111/ijmr.12173>

- Dohse, D., Goel, R. K., & Nelson, M. A. (2019). Female owners versus female managers: Who is better at introducing innovations? *The Journal of Technology Transfer*, 44, 520-539. <https://doi.org/10.1007/s10961-018-9679-z>
- Dwibedi, L. (2015). Women entrepreneurship and innovations: A critical analysis. *Academic Voices: A Multidisciplinary Journal*, 5, 16-21. <https://doi.org/10.3126/av.v5i0.15846>
- Emon, M. H., & Nipa, M. N. (2024). Exploring the Gender Dimension in Entrepreneurship Development: A Systematic Literature Review in the Context of Bangladesh. *Westcliff International Journal of Applied Research*, 8(1), 34-49. <https://doi.org/10.47670/wuwijar202481mhemnn>
- Felski, R. (1989). Feminist theory and social change. *Theory, Culture & Society*, 6(2), 219-240. <https://doi.org/10.1177/026327689006002003>
- Gibbs, D. (2024). Green growth. In *Research Handbook on the Green Economy* (pp. 34-50). Edward Elgar Publishing. <https://doi.org/10.4337/9781789904833.00011>
- Hanafi, A., Safriyanto, D., Whardana, G. P., Ramdani, R. A., & Wiyatno, T. N. (2024). Entrepreneurial Marketing Analysis using Swot Analysis Method (Case Study of MSMEs Warung Tegal Embu â€ "Kedungwaringin District, Bekasi Regency). *International Journal of Research and Innovation in Social Science*, 8(5), 800-811. <https://dx.doi.org/10.47772/IJRISS.2024.805059>
- Helms, M. M., Rodríguez, M. A., de los Ríos, L., & Hargrave, W. (2011). Entrepreneurial potential in Argentina: a SWOT analysis. *Competitiveness review: An international business journal*, 21(3), 269-287. <https://doi.org/10.1108/10595421111134859>
- Hoskisson, R. E., Eden, L., Lau, C. M., & Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, 43(3), 249-267. <https://doi.org/10.5465/1556394>
- Hossain, S. M., Akbar, A., Tehseen, S., Poulouva, P., Haider, S. A., Sheraz, F., & Yasmin, F. (2021). Evaluation of entrepreneurs' success: a special reference to women entrepreneurs in Bangladesh. *Academy of Entrepreneurship Journal*, 27, 1-13.
- Huang, Y., Li, P., Wang, J., & Li, K. (2022). Innovativeness and entrepreneurial performance of female entrepreneurs. *Journal of Innovation & Knowledge*, 7(4), 100257. <https://doi.org/10.1016/j.jik.2022.100257>
- Indrayani, I. (2024). SWOT Analysis of Business Opportunities in Msmes in Balikpapan City. *International Journal of Business, Law, and Education*, 5(2), 1672-1680. <https://doi.org/10.56442/ijble.v5i2.709>
- Inrawan, A., Silitonga, H. P., Sianipar, R. T., Lie, D., & Sudirman, A. (2022). SWOT Analysis as a Basis for Tracking Business Opportunities in the City of Pematangsiantar. *KnE Social Sciences*, 441-455. <https://doi.org/10.18502/kss.v7i10.11383>
- Jackson, S. (1998). *Feminist social theory* (pp. 12-33). na. <https://doi.org/10.1515/9781474469500-002>
- Khalid, R., Raza, M., Sawangchai, A., Allauca-Castillo, W. J., & Huerta-Soto, R. M. (2021). Women entrepreneurial innovative behavior: The role of lean start-up and business coaching. *Studies of Applied Economics*, 39(8). <https://doi.org/10.25115/eea.v39i8.5132>
- Lins, E., & Lutz, E. (2016). Bridging the gender funding gap: do female entrepreneurs have equal access to venture capital? *International Journal of Entrepreneurship and Small Business*, 27(2-3), 347-365. <https://doi.org/10.1504/IJESB.2016.073993>
- Ma, Z., Shu, G., Wang, Q., & Wang, L. (2022). Sustainable governance and green innovation: A perspective from gender diversity in China's listed companies. *Sustainability*, 14(11), 6403. <https://doi.org/10.3390/su14116403>
- Machado, D., Braga, V., Correia, A., Braga, A., & Silva, C. (2023). How female entrepreneurship may boost business innovation and internationalization. *Global Business and Organizational Excellence*, 42(5), 91-110. <https://doi.org/10.1002/joe.22220>
- Mahajan, R., & Bandyopadhyay, K. R. (2021). Women entrepreneurship and sustainable development: select case studies from the sustainable energy sector. *Journal of Enterprising Communities: People and Places in the Global Economy*, 15(1), 42-75. <https://doi.org/10.1108/JEC-11-2020-0184>

- Mahin, S. (2023). Fostering innovation culture among the SME owners of Bangladesh. <http://hdl.handle.net/10361/22262>
- Malik, K., Bashir, T., & Ali, T. M. (2021). University-industry collaborations in Pakistan: current challenges and future opportunities. *foresight*, 23(4), 496-508. <https://doi.org/10.1108/FS-12-2020-0133>
- Mari, M., Poggesi, S., Abatecola, G., & Essers, C. (2024). Women entrepreneurs and innovation: Retrospect and prospect. *Journal of Innovation & Knowledge*, 9(3), 100519. <https://doi.org/10.1016/j.jik.2024.100519>
- Maziriri, E. T., Mapuranga, M., Maramura, T. C., & Nzewi, O. I. (2019). Navigating on the key drivers for a transition to a green economy: Evidence from women entrepreneurs in South Africa. *Entrepreneurship and Sustainability Issues*, 7(2), 1686-1703. [http://doi.org/10.9770/jesi.2019.7.2\(62\)](http://doi.org/10.9770/jesi.2019.7.2(62))
- Moin, S. (2024). "Analysis of the opportunities and challenges of women's entrepreneurship in developing countries: A quantitative study from Pakistan, India, and Bangladesh.
- Mukhopadhyay, U. (2023). Disparities in Female Labour Force Participation in South Asia and Latin America: A Review. *Review of Economics*, 74(3), 265-288. <https://doi.org/10.1515/roe-2022-0061>
- Naguib, R. (2024). Motivations and barriers to female entrepreneurship: Insights from Morocco. *Journal of African Business*, 25(1), 9-36. <https://doi.org/10.1080/15228916.2022.2053400>
- Naheed, Z., Hafsa Batool, D. M. A., Shoukat, A., & Malik, M. O. (2024). Impact of Women Entrepreneurship on Green Innovation; Evidence from Asian Region. *Remittances Review*, 9(2), 707-742. <https://doi.org/10.33282/rr.vx9i2.41>
- Nair, S. R. (2020). The link between women entrepreneurship, innovation and stakeholder engagement: A review. *Journal of Business Research*, 119, 283-290. <https://doi.org/10.1016/j.jbusres.2019.06.038>
- Nodirovna, M. S., & Nazirjon o'g'li, U. D. (2024). The Role of Women In Business Activity And Measures Taken In This Regard. *Journal Of Economy, Tourism and Service*, 3(3), 66-69. <https://jets.innovascience.uz/index.php/jets/article/view/209>
- OECD, (2024). Employment: Time spent in paid and unpaid work, by sex, Available at. https://stats.oecd.org/index.aspx?queryid=54757&wptouch_preview_theme=enabled
- Panda, S. (2018). Constraints faced by women entrepreneurs in developing countries: review and ranking. *Gender in Management: An International Journal*, 33(4), 315-331. <https://doi.org/10.1108/GM-01-2017-0003>
- Pandey, A., & Asif, M. (2022). Assessment of energy and environmental sustainability in South Asia in the perspective of the Sustainable Development Goals. *Renewable and Sustainable Energy Reviews*, 165, 112492. <https://doi.org/10.1016/j.rser.2022.112492>
- Puyt, R. W., Lie, F. B., & Wilderom, C. P. (2023). The origins of SWOT analysis. *Long Range Planning*, 56(3), 102304. <https://doi.org/10.1016/j.lrp.2023.102304>
- Qureshi, J. A. A., Memon, S. B., & Seaman, C. (2021). Women entrepreneurial leaders as harbingers of economic growth: evidences from an emerging market of South Asia. *3c Empresa: investigación y pensamiento crítico*, 10(3), 137-169.
- Ramya, U., Pushpa, A., & Ghosh, N. (2024). Women Entrepreneurship—A Way Towards Sustainability. In *The Framework for Resilient Industry: A Holistic Approach for Developing Economies* (pp. 281-299). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83753-734-120241020>
- Saxena, S. (2012). Problems faced by rural entrepreneurs and remedies to solve it. *Journal of Business and Management*, 3(1), 23-29. www.iosrjournals.org
- Sinha, S. (2005). Developing women entrepreneurs in South Asia: Issues, initiatives and experiences. <https://hdl.handle.net/20.500.12870/3557>
- Sobhan, N., & Hassan, A. (2024). The effect of institutional environment on entrepreneurship in emerging economies: female entrepreneurs in Bangladesh. *Journal of Entrepreneurship in Emerging Economies*, 16(1), 12-32. <https://doi.org/10.1108/JEEE-01-2023-0028>

- Sonia, D. R., Sanjaya, A., & Hutajulu, M. J. (2020). Business development strategies using SWOT analysis in the Cahaya Modern home industry. *J. Adm*, 7(1), 117-128. <http://ojs.unm.ac.id/index.php/administrare/index>
- Stam, E., & Van de Ven, A. (2021). Entrepreneurial ecosystem elements. *Small business economics*, 56(2), 809-832. <https://doi.org/10.1007/s11187-019-00270-6>
- Sztumski, R. (2024). On Naturally Unsustainable and Artificially Sustainable Development. *Problemy Ekorozwoju*, 19(2), 35-54. <https://orcid.org/0000-0002-6353-7206>
- Tambunan, T. (2009). Women entrepreneurship in Asian developing countries: Their development and main constraints. *Journal of Development and Agricultural Economics*, 1(2), 27-40. <http://www.academicjournals.org/JDAE>
- Tatli, A., Vassilopoulou, J., & Özbilgin, M. (2013). An unrequited affinity between talent shortages and untapped female potential: The relevance of gender quotas for talent management in high growth potential economies of the Asia Pacific region. *International Business Review*, 22(3), 539-553. <https://doi.org/10.1016/j.ibusrev.2012.07.005>
- Thomas, A. (2024). The Role of Women's Entrepreneurship in Achieving Sustainable Development Goals (SDGs): A Comprehensive Review. *Journal of Biotechnology & Bioinformatics Research. SRC/JBBR-202*. [doi.org/10.47363/JBBR/2024\(6\),174,2-11](https://doi.org/10.47363/JBBR/2024(6),174,2-11).
- Upulwehera, J. M. H. M., Senanayake, S. M. S. N., Gamage, S. K. N., Jayasundara, J. M. S. B., Ekanayake, E. M. S., Lalani, J. M. G., ... & Prasanna, R. P. I. R. (2024). Is Women Entrepreneurship a Key Driver for Business Performance of the SMEs in Asian Developing Nations? A Case Study of SMEs in the Agricultural Sector in Sri Lanka. *Journal of the Knowledge Economy*, 1-36. <https://doi.org/10.1007/s13132-024-01833-z>
- Wenten, J. F. (2016). *Reinventing the wheel: labor, development and global car production in post-1970s China and Mexico* (Doctoral dissertation, SOAS University of London). https://eprints.soas.ac.uk/23808/1/Wenten_4324.pdf
- Williams, C., & Gashi, A. (2022). Evaluating the wage differential between the formal and informal economy: a gender perspective. *Journal of Economic Studies*, 49(4), 735-750. <https://doi.org/10.1108/JES-01-2021-0019>
- World Bank, (2021). Empowering South Asia with converging technologies. Available at. <https://blogs.worldbank.org/en/endpovertyinsouthasia/empowering-south-asia-converging-technologies>
- World Bank, (2023). Equalizing Opportunities: Women in Regional Trade in South Asia. <https://www.worldbank.org/en/events/2023/04/27/equalizing-opportunities-women-in-regional-trade-and-entrepreneurship-in-south-asia>
- World Bank, (2024a). ClearHerPath: Meet women who are blazing a trail in South Asia's workforce. Available at. <https://www.worldbank.org/en/news/feature/2024/03/04/clearherpath-meet-women-who-are-blazing-a-trail-in-south-asia-s-workforce>
- World Bank, (2024b). ILO estimated modeled Available at. <https://databank.worldbank.org/source/world-development-indicators>