

The Transforming Role of Women in Economic Development

Snehal Anand Pathak

Prin. K.P. Mangalvedhekar Institute of Mgt. Career development & Research, Solapur

Abstract:

Women are the backbone to the socio-economic development. Women's participation in economic activities has emerged as a critical driver of inclusive and sustainable development in modern economies. Over the past few decades, the role of women has transformed significantly from traditional domestic responsibilities to active engagement in education, entrepreneurship, employment, and leadership positions. This transformation has contributed substantially to productivity, innovation, and socio-economic growth across nations. Women's involvement in sectors such as agriculture, services, manufacturing, and digital enterprises has not only enhanced household income but also strengthened national economic resilience. Despite these advancements, women continue to face structural barriers including wage inequality, limited access to financial resources, gender discrimination, and socio-cultural constraints that hinder their full economic potential. Policies promoting gender equality, skill development, financial inclusion, and entrepreneurship support systems are therefore essential to empower women economically. Strengthening women's participation in economic development ultimately leads to balanced growth, poverty reduction, and sustainable social progress in both developed and developing economies.

Keywords: *Women's Economic Role, Gender Equality, Economic Development, Women Empowerment, Labour Participation*

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1. Introduction

India is a country with “unity in diversity.” The economic development is closely linked to the effective utilization of human resources, and women constitute nearly half of the world's population. Women's contribution to economic activities has historically been undervalued and underrepresented in formal economic systems. For centuries, women played a vital role in sustaining household and community economies through agriculture, food production, caregiving, handicrafts, and informal trade. These contributions, though essential, were largely unpaid and excluded from national income accounting, leading to the misconception that women were economically inactive (Alemu et al., 2022). In the modern economy, women's participation is increasingly recognized as a key driver of growth and development. The empirical evidence suggests that values play a crucial role in shaping the life, careers of women (Gaikwad, 2014). All of these contribute towards improving women's access to employment, financial resources, and entrepreneurial opportunities significantly enhances economic productivity and national income (Kumalo & Tadesse, 2025). Research further indicates that higher female labour force participation improves productivity, strengthens household income, reduces poverty, and contributes to long-term economic stability (Verick, 2018). Women's economic empowerment also generates broader social benefits, including improved health, education, and well-being of families and communities (OECD, 2019). Consequently, gender-inclusive economic policies are now considered fundamental for achieving sustainable and equitable development outcomes across countries.

When women are educated and skilled, they are empowered leading to gender equality (Gaikwad, 2016). This study examines the transforming role of women in economic development by analyzing their historical contributions, current participation, and emerging challenges. The transformation of women's economic roles is closely associated with changes in education, labour markets,

technological advancement, and social policies. Increasing educational attainment and access to skill development programs have enabled women to participate more actively in sectors such as services, manufacturing, entrepreneurship, and digital economies (Kabeer, 2012). At the same time, global development institutions emphasize that empowering women economically leads to stronger economic resilience and improved development indicators at the national level (World Bank, 2022). Understanding the evolving role of women therefore becomes essential for designing effective economic policies. The future of economic development is closely tied to the extent to which women are integrated into decision-making and leadership positions within governments, organizations, and markets. Inclusive governance ensures that economic policies reflect the needs and perspectives of diverse social groups, including women, thereby promoting balanced development (Duflo, 2012). Investments in women's education, skill development, healthcare, and social protection are increasingly recognized as strategic economic investments rather than merely social welfare initiatives. Strengthening institutional support systems and challenging persistent gender inequalities will be crucial for enabling women to fully realize their economic potential and for fostering sustainable and inclusive economic growth.

2. Background of Study

The role of women in economic development has evolved significantly with changes in social structures, education systems, and labour market dynamics. Historically, women's economic contributions were largely confined to informal and unpaid sectors such as household production, subsistence agriculture, and family enterprises. Over time, increased access to education, technological advancement, and globalization have expanded women's opportunities to participate in formal employment and entrepreneurial activities. Studies indicate that improving gender equality in labour markets can substantially increase national productivity and economic growth by utilizing untapped human capital (Cuberes & Teignier, 2016). Moreover, women's participation in economic activities contributes to poverty reduction, improved household welfare, and stronger community development outcomes. Governments and international organizations have therefore emphasized gender-inclusive policies, financial inclusion, and skill development initiatives to enhance women's economic empowerment (Klasen & Lamanna, 2009). In developing economies particularly, the integration of women into productive sectors has been recognized as a crucial factor for sustainable development. Despite these advancements, structural barriers such as wage inequality, limited access to credit, and socio-cultural constraints continue to affect women's economic participation. Understanding the historical background and policy evolution surrounding women's economic roles is therefore essential for designing effective development strategies. Strengthening institutional support and promoting gender-equitable opportunities can significantly enhance women's contribution to economic growth and national development

3. Statement of the Problem

The progress in education, employment, and legal rights, women continue to face economic inequalities across the world. Historically, women's economic contributions were confined to unpaid and informal activities, resulting in limited recognition and economic independence (Chaudhary & Verick, 2014). Although modernization and policy reforms have expanded women's participation in the formal economy, gender disparities persist in employment opportunities, wages, leadership roles, and access to resources such as finance, property, and technology. In many developing economies, women remain concentrated in informal and low-paying jobs while also bearing a disproportionate burden of unpaid domestic and care work.

4. Objectives of the Study

- To examine the historical role of women in economic activities and development
- To analyse the transformation of women's participation in the economy from traditional to modern times
- To study the present status of women in economic development across different sectors

- To identify key challenges and barriers faced by women in achieving economic equality
- To highlight the importance of women's economic participation for sustainable and inclusive growth
- To suggest policy measures and strategies to strengthen women's role in economic development

5. Research Questions

- What was the traditional role of women in economic activities in earlier societies?
- How has women's participation in the economy changed over time?
- What are the major contributions of women to modern economic development?
- What challenges continue to limit women's economic empowerment?
- How can policies and institutional frameworks support greater economic inclusion of women?

6. Review of Literature

Studies on rural economies demonstrate that women play a central role in farming, livestock management, and household-based industries, which sustain family livelihoods and rural development (FAO, 2011). Despite their substantial contribution, the lack of institutional recognition and policy support historically limited women's visibility within national economic frameworks.

The role of women in economic development has been widely examined by economists, sociologists, and development scholars. Existing literature highlights the historical marginalization of women's economic contributions while recognizing women as significant contributors to economic growth in contemporary economies. Early development research indicated that women's productive work in agriculture, food processing, and rural enterprises formed a crucial part of subsistence economies, particularly in developing countries (Boserup, 1970). However, such contributions were often overlooked in formal economic accounting because they were largely unpaid or categorized within household activities.

Feminist economists later challenged traditional economic theories by highlighting the importance of unpaid care work and domestic labour in sustaining economic systems. Scholars argued that excluding unpaid household work from national income calculations leads to an incomplete measurement of productivity and economic welfare (Folbre, 2006). Contemporary research further emphasizes that gender equality in education and employment significantly enhances women's economic participation and independence. Increasing access to education and professional opportunities has enabled women to enter diverse sectors such as healthcare, education, information technology, and service industries, thereby strengthening national economies (Kabeer, 2012). Development studies also highlight that women's empowerment contributes to improved social indicators such as health, education, and community welfare, demonstrating that gender equality is closely linked with sustainable development outcomes.

The recent literature also emphasizes the growing role of women entrepreneurs in promoting economic development and innovation. Women-owned enterprises contribute significantly to employment generation, poverty alleviation, and the expansion of micro, small, and medium enterprises (MSMEs) across developing economies (Minniti & Naudé, 2010). These enterprises often create local employment opportunities and enhance economic resilience in communities. Several studies indicate that women entrepreneurs continue to face structural barriers such as limited access to financial resources, restricted market opportunities, and socio-cultural constraints (Brush, de Bruin, & Welter, 2009). Addressing these challenges through inclusive financial policies, entrepreneurship training, and institutional support systems is therefore essential to strengthen women's participation in economic development and to achieve sustainable economic growth.

7. Discussion and Analysis

Table1 - Statistics on Women and Economic Development

Dimension	Indicative Statistic	Interpretation aligned with the text	Source of data
Share of global population	~49–50%	Women represent nearly half of global human resources	United Nations (UN) – Derived from population censuses and national demographic surveys compiled by UN DESA
Contribution to unpaid work	~70–76% of total unpaid care work	Reflects women’s dominant role in household and caregiving activities	ILO Time-Use Surveys – Collected through national time-use and labour force surveys
Inclusion in national income accounts (historically)	<30% of women’s economic activity recorded	Large share of women’s work excluded from GDP	UN & ILO – Based on System of National Accounts and gender-disaggregated labour statistics
Female labour force participation (global average)	~48–50%	Shows progress but persistent gender gap in workforce participation	ILOSTAT Database – Aggregated from national labour force surveys
Contribution to agricultural labour (developing economies)	~40–60%	Highlights women’s role in agriculture and food production	FAO & World Bank – Agricultural censuses and rural employment surveys
Gender wage gap	~20% lower earnings than men	Indicates income inequality despite workforce participation	OECD & UN Women – Based on earnings surveys and administrative wage data
Representation in leadership positions	~25–33%	Underrepresentation in decision-making roles	World Economic Forum – Enterprise surveys and national corporate data
Share of women in informal employment	~60% (developing economies)	Reflects vulnerability and lack of social protection	ILO – Informal sector modules in labour force surveys
Impact of increased female workforce participation	+1–2% potential GDP growth	Supports link between gender inclusion and economic growth	World Bank & IMF estimates – Macroeconomic modelling and cross-country analysis
Women-owned enterprises using digital	~30–35% and increasing	Shows role of digitalization in women’s economic empowerment	World Bank & UNDP – Enterprise surveys and digital economy assessments

platforms			
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Table 2: Summary of Key Literature on Women and Economic Development

Author(s)	Title	Year of Publication	Focus Area	Key Findings
UN Women [1]	<i>Progress of the World's Women</i>	2020	Women and work	Identified persistent gender gaps in labour force participation, wages, and leadership roles.
ILO [2]	<i>Global Employment Trends for Women</i>	2018	Women's employment patterns	Highlighted challenges such as informal employment, wage inequality, and lack of social protection.
OECD [3]	<i>Gender Equality in Education,</i>	2017	Women entrepreneurship and skills	Found that improving women's access to education and finance
	<i>Employment and Entrepreneurship</i>			boosts productivity and innovation.
McKinsey Global Institute [4]	<i>The Power of Parity</i>	2015	Women's economic potential	Estimated that advancing gender equality could add trillions of dollars to global GDP.
Goldin, C. [5]	<i>A Grand Gender Convergence</i>	2014	Gender wage gap and labour markets	Explained long-term trends in women's labour participation and narrowing gender gaps with education and policy support.
World Bank [6]	<i>World Development Report: Gender Equality and Development</i>	2012	Gender equality and economic growth	Demonstrated that gender equality in education and employment contributes positively to economic development.
Klasen & Lamanna [7]	<i>The Impact of Gender Inequality on Economic Growth</i>	2009	Gender inequality and growth	Concluded that gender gaps in education and employment negatively affect economic growth.

Naila Kabeer [8]	<i>Gender Equality and Women's Empowerment</i>	2005	Women's empowerment and labour participation	Argued that access to resources, agency, and opportunities enhances women's economic and social status.
Amartya Sen [9]	<i>Development as Freedom</i>	1999	Gender, capabilities, and development	Emphasized women's empowerment as essential for expanding economic freedom and improving development outcomes.
Ester Boserup [10]	<i>Women's Role in Economic Development</i>	1970	Women in agriculture and development	Highlighted women's significant contribution to agricultural production and showed how modernization often marginalized women's economic roles.

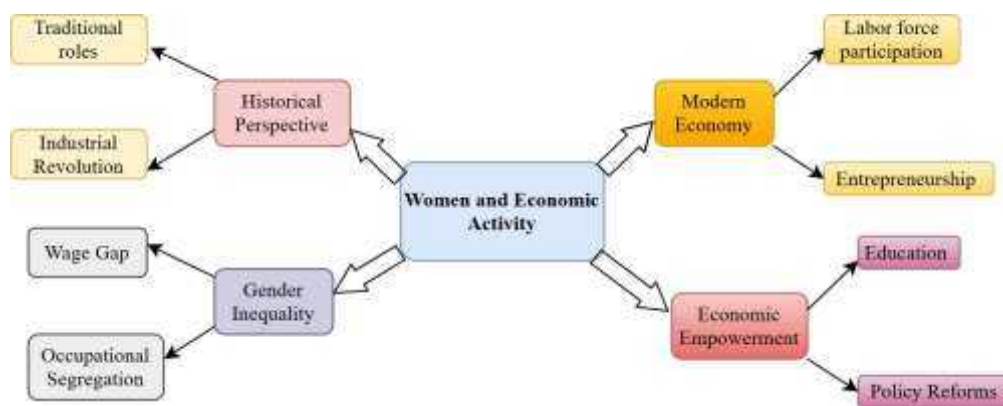


Figure 1 Women and Economics Activity: Comprehensive Review

8. Findings of Study

- a) Women's economic rights correlate with 1.29-3% higher growth rates globally, strongest in full-rights scenarios. Gender equality adds 10-17% to long-term GDP per capita via industry-level reallocation. Empowerment dimensions like mobility ($\beta=0.413$) and decision-making drive social innovation and household outcomes. Female participation rises with education and care services, unaffected long-term by COVID- 19.
- b) Women's participation in economic development has significantly increased across sectors, particularly in services, entrepreneurship, and the digital economy. The study finds that improved access to education, skill development programs, and digital platforms has enabled women to enter non-traditional occupations and contribute to household as well as national income. This shift reflects a gradual transition from subsistence roles to active economic agents, thereby strengthening inclusive growth.
- c) Another key finding highlights that financial inclusion and policy support mechanisms, such as self-help groups, microfinance, and government schemes, have played a crucial role in empowering women economically. These initiatives have enhanced women's access to credit,

savings, and entrepreneurial opportunities, leading to increased financial independence and decision-making power within households and communities.

- d) However, the study also reveals persistent structural and socio-cultural barriers that limit the full economic potential of women. Issues such as gender wage gaps, limited access to leadership roles, unpaid care responsibilities, and societal norms continue to restrict women's participation and advancement in the workforce. Addressing these challenges through gender-sensitive policies and institutional reforms remains essential for achieving sustainable and equitable



economic development.

Figure 2: Women's Economic Rights and Growth

9. Proposed Policy-Oriented Framework for Enhancing Women's Contribution to Economic Development

Women's economic participation has evolved from largely unrecognized and informal roles in traditional societies to increasingly visible and productive involvement in modern economies. Historically, women contributed significantly through agriculture, household production, handicrafts, caregiving, and community-based activities, which formed the backbone of local and family economies. These roles ensured food security, social cohesion, and intergenerational skill transfer. However, despite their significant contributions, women's work often remained undervalued due to gender biases in labour markets and economic measurement systems (Duflo, 2012). Contemporary development policies increasingly recognize that empowering women economically leads to higher productivity, improved household welfare, and more inclusive economic growth (Kabeer, 2012). As a result, governments and international organizations have begun integrating gender equality into economic policy frameworks, emphasizing education, employment opportunities, entrepreneurship development, and financial inclusion as key drivers of women's economic empowerment. Access to finance and entrepreneurship support represents another critical policy area for enhancing women's economic participation (OECD, 2019). Women entrepreneurs often face systemic constraints such as limited access to credit, collateral, business networks, and market information, which restrict the growth and sustainability of women-led enterprises, particularly in micro, small, and medium-sized sectors (Brush, de Bruin, & Welter, 2009; Minniti & Naudé, 2010). Targeted policy interventions including gender-responsive credit schemes, financial inclusion initiatives, mentorship and incubation programs, and digital marketing support can significantly enhance women's entrepreneurial capacity (World Bank, 2022). Supporting women-led enterprises not only promotes economic independence but also contributes to job creation, innovation, and local economic development (UN Women, 2020; Global Entrepreneurship Monitor, 2021). Strengthening institutional mechanisms, improving digital access, and promoting gender-sensitive policy frameworks will therefore be essential for maximizing women's contribution to sustainable economic development in the future.

10. India-Specific Policy Initiatives Supporting Women's Economic Development

The several policy initiatives have been implemented to strengthen women's participation in economic development through improvements in education, skill development, and financial inclusion (Klasen

& Pieters, 2015). Programs such as *Beti Bachao Beti Padhao* have helped improve girls' enrolment and retention in schools, particularly in socio-economically disadvantaged regions, thereby strengthening the future supply of skilled female workers (Ministry of Women and Child Development, 2020). Similarly, the Skill India Mission and Pradhan Mantri Kaushal Vikas Yojana (PMKVY) have enhanced women's access to vocational training in sectors such as healthcare, tailoring, digital services, and electronics assembly (Mehrotra & Parida, 2019). Employment-supportive policies such as the Maternity Benefit (Amendment) Act, 2017 have enabled working women to balance professional responsibilities and childcare through extended paid leave and workplace facilities. Entrepreneurship programs like Stand-Up India and Make in India have further promoted women-led enterprises by improving access to credit and market opportunities (NITI Aayog, 2021). Financial inclusion initiatives such as Pradhan Mantri Jan Dhan Yojana (PMJDY) have enabled millions of women to open bank accounts and access direct benefit transfers (Sarma & Pais, 2011). Community-based programs including the National Rural Livelihood Mission (NRLM) and the Self-Help Group-Bank Linkage Programme have empowered rural women to participate in income-generating activities such as dairy farming, handicrafts, and micro-enterprises. Public employment programs like MGNREGA have also significantly increased women's participation in wage labour through equal wages and flexible working conditions (Afridi, Dinkelman, & Mahajan, 2017). Welfare initiatives such as Integrated Child Development Services (ICDS) reduce unpaid care burdens by providing child nutrition and early care services. Together, these policy measures demonstrate how integrated social, financial, and employment interventions can strengthen women's economic empowerment and contribute to inclusive economic development in India.

11. Achievements of Women and Their Transformative Role in Economic Development

Women's achievements across social, economic, and institutional spheres have significantly transformed the structure and functioning of modern economies. Historically confined to unpaid household and caregiving roles, women have gradually emerged as central economic actors whose contributions extend far beyond domestic boundaries. Today, women constitute nearly **49% global population** and play a decisive role in shaping labour markets, entrepreneurship, governance, and human capital development. This transition from invisible contributors to recognized economic agents marks a fundamental shift in the development paradigm (Drèze & Khera, 2017). One of the most significant achievements of women lies in their growing participation in the workforce. Globally, women account for approximately **45–50 percent of the total labour force**, contributing substantially to sectors such as agriculture, education, healthcare, manufacturing, and services. In developing economies, women produce nearly **50 percent of food output**, ensuring food security and rural livelihoods (Deininger & Liu, 2013). Increased female labour force participation has been associated with higher household incomes, poverty reduction, and improved living standards, demonstrating that women's economic engagement directly strengthens national economies.

Table 3: Impact of Women on Economic Development – India and Global Perspective

Dimension	India	Rest of the World (Global Average)	Impact on Economy
Share of Population	~48%	~49–50%	Large potential human capital base
Female Labour Force Participation	~20–25%	~45–50%	Lower participation limits GDP gains in India
Contribution to Agriculture	~70% of agricultural work	~40–45% globally	Stronger role in food security in India
Women-Owned Enterprises	~15 million enterprises	~30–35% of global businesses	Job creation and MSME growth
Share in Informal Employment	~80% of working	~60% (developing)	Higher vulnerability and lower productivity

	women	regions)	
Unpaid Care Work Burden	~75% borne by women	~70–76% globally	Reduces time for paid employment
Financial Inclusion	>55% of Jan Dhan accounts	~65% women globally have bank access	Growing financial empowerment
Leadership Representation	~15–18% (corporate sector)	~25–30% globally	Limits policy and corporate influence in India
Political Representation (Local/National)	~46% at Panchayat level	~26% in national parliaments	Strong grassroots governance impact
Estimated GDP Gain if Gender Gap Reduced	+27% potential GDP	+20–25% GDP (global estimate)	High economic upside of inclusion

12. Conclusion

This study highlights the transforming role of women in economic development by examining their journey from largely unrecognized contributors in traditional societies to active participants in the modern economy. Historically, women’s economic activities were concentrated in unpaid and informal sectors, resulting in limited visibility and recognition. Improvements in education, legal frameworks, and policy interventions have enabled women to enter formal employment, entrepreneurship, and professional fields. The review of literature and policy analysis clearly demonstrates that women’s participation in economic activities enhances productivity, strengthens human capital, and supports inclusive and sustainable economic growth.

References:

- Afridi, F., Dinkelman, T., & Mahajan, K. (2017). Why are fewer married women joining the workforce in India? A decomposition analysis over two decades. *Economic Development and Cultural Change*, 65(4), 733–772. <https://doi.org/10.1086/691786>
- Alemu, A., Woltamo, T., & Abuto, A. (2022). Determinants of women participation in income generating activities: Evidence from Ethiopia. *Journal of Innovation and Entrepreneurship*, 11, Article 66. <https://doi.org/10.1186/s13731-022-00260-1>
- Boserup, E. (1970). *Woman’s role in economic development*. George Allen & Unwin.
- Brush, C. G., de Bruin, A., & Welter, F. (2009). A gender-aware framework for women’s entrepreneurship. *International Journal of Gender and Entrepreneurship*, 1(1), 8–24. <https://doi.org/10.1108/17566260910942318>
- Chaudhary, R., & Verick, S. (2014). *Female labour force participation in India and beyond*. ILO Asia-Pacific Working Paper Series. <https://www.ilo.org>
- Cuberes, D., & Teignier, M. (2016). Aggregate effects of gender gaps in the labor market: A quantitative estimate. *Journal of Human Capital*, 10(1), 1–32. <https://doi.org/10.1086/683847>
- Deininger, K., & Liu, Y. (2013). Economic and social impacts of an innovative self-help group model in India. *World Development*, 43, 149–163. <https://doi.org/10.1016/j.worlddev.2012.09.019>
- Drèze, J., & Khera, R. (2017). Recent social security initiatives in India. *World Development*, 98, 555–572. <https://doi.org/10.1016/j.worlddev.2017.05.018>
- Duflo, E. (2012). Women empowerment and economic development. *Journal of Economic Literature*, 50(4), 1051–1079. <https://doi.org/10.1257/jel.50.4.1051>
- FAO. (2011). *The state of food and agriculture 2010–2011: Women in agriculture – Closing the gender gap for development*. Food and Agriculture Organization of the United Nations. <https://www.fao.org/3/i2050e/i2050e.pdf>

- Folbre, N. (2006). Measuring care: Gender, empowerment, and the care economy. *Journal of Human Development*, 7(2), 183–199. <https://doi.org/10.1080/14649880600768512>
- Gaikwad, S. R. (2014). The role of values in unforeseen circumstances of business. *IOSR Journal of Business and Management*. https://scholar.google.com/citations?view_op=view_citation&hl=en&user=KufjkiwAAAAJ&citation_for_view=KufjkiwAAAAJ:2osOgNQ5qMEC
- Gaikwad, S. R. (2016). To assess the present employability skills and impact of skill development initiatives on ‘GenNext’. *International Journal of Economics and Commerce*, 1(3). https://scholar.google.com/citations?view_op=view_citation&hl=en&user=KufjkiwAAAAJ&authuser=1&citation_for_view=KufjkiwAAAAJ:u-x6o8ySG0sC
- Global Entrepreneurship Monitor. (2021). *Global entrepreneurship monitor 2020/2021 women’s entrepreneurship report*. <https://www.gemconsortium.org>
- Kabeer, N. (2012). *Women’s economic empowerment and inclusive growth: Labour markets and enterprise development*. International Development Research Centre. <https://www.idrc.ca/en/book/womens-economic-empowerment-and-inclusive-growth>
- Klasen, S., & Pieters, J. (2015). What explains the stagnation of female labour force participation in urban India? *World Bank Economic Review*, 29(3), 449–478. <https://doi.org/10.1093/wber/lhv003>
- Klasen, S., & Lamanna, F. (2009). The impact of gender inequality in education and employment on economic growth: New evidence for a panel of countries. *Feminist Economics*, 15(3), 91–132. <https://doi.org/10.1080/13545700902893106>
- Kumalo, M. T., & Tadesse, A. (2025). Women’s participation in income generating activities and its effect on household dietary diversity in Wolaita, Southern Ethiopia. *Journal of Innovation and Entrepreneurship*, 14, Article 134. <https://doi.org/10.1186/s13731-025-00462-3>
- Mehrotra, S., & Parida, J. (2019). India’s skills challenge: Reforming vocational education and training to harness the demographic dividend. *Oxford Development Studies*, 47(2), 159–178. <https://doi.org/10.1080/13600818.2018.1539473>
- Ministry of Women and Child Development. (2020). *Beti Bachao Beti Padhao scheme guidelines*. Government of India. <https://wcd.nic.in>
- Minniti, M., & Naudé, W. (2010). What do we know about the patterns and determinants of female entrepreneurship across countries? *European Journal of Development Research*, 22(3), 277–293. <https://doi.org/10.1057/ejdr.2010.17>
- NITI Aayog. (2021). *Women entrepreneurship platform report*. Government of India. <https://www.niti.gov.in>
- OECD. (2019). *Enabling women’s economic empowerment: New approaches to unpaid care work in developing countries*. OECD Publishing. <https://www.oecd.org/development/gender-development/enabling-womens-economic-empowerment.htm>
- Sarma, M., & Pais, J. (2011). Financial inclusion and development. *Journal of International Development*, 23(5), 613–628. <https://doi.org/10.1002/jid.1698>
- UN Women. (2020). *Women’s entrepreneurship for sustainable development*. <https://www.unwomen.org>
- Verick, S. (2018). Female labour force participation and development. *IZA World of Labor*. <https://doi.org/10.15185/izawol.87>
- World Bank. (2022). *Women, business and the law 2022*. World Bank. <https://doi.org/10.1596/978-1-4648-1817-2>