

# The Role of Women's Empowerment in Advancing Sustainable Development: A Bibliometric Analysis of Contributions to the SDG Agenda

Anuradha Yadav<sup>1</sup>, Anisha Mishra<sup>2</sup>, Sarvesh Kumar Yadav<sup>3</sup>

<sup>1,2,3</sup> Banaras Hindu University, Varanasi

## Abstract:

Women's empowerment is central to achieving the United Nations Sustainable Development Goals (SDGs), particularly SDG 5 (gender equality), while also influencing a broader range of goals including poverty alleviation, education, health, economic growth, and environmental sustainability. This study presents a bibliometric review to assess how women's empowerment contributes to the attainment of SDGs across various domains. Using **VOSviewer** software, a bibliometric analysis was conducted on literature published between **2012 and 2024**, sourced from the **Scopus** database. A total of **79 peer-reviewed, open-access research articles** in English were selected from an initial pool of 369 studies, based on defined inclusion and exclusion criteria. The review examines publication trends over time, most cited authors and articles, journal and country-wise distribution, citation networks, and keyword co-occurrence. The findings indicate that **2024** recorded the highest number of publications, with **India** leading in research output. The journal **Sustainability** contributed the most documents, and **Kathryn M. Yount** emerged as the most influential author. Keyword analysis revealed **10 clusters**, from which **three core thematic areas** were identified, with "*women empowerment*" and "*SDG*" being the most frequently occurring keywords. The study highlights women's empowerment as a catalyst for progress in key SDG areas such as poverty reduction (SDG 1), quality education (SDG 4), health and well-being (SDG 3), and climate action (SDG 13). While education, financial inclusion, and policy support act as key enablers, gender-based discrimination and socio-cultural barriers hinder progress. This review underscores the need for integrated, gender-focused strategies in advancing sustainable development.

## Keywords:

Women empowerment, Sustainable Development Goals, bibliometric analysis, gender equality, education.

## 1. Introduction

The 2030 Agenda for Sustainable Development, adopted by United Nations member states in 2015, outlines 17 Sustainable Development Goals (SDGs) as a universal call to action to address pressing global challenges, including poverty, inequality, climate change, and environmental degradation (United Nations, 2015). The most important goals are gender equality and women's empowerment, which are central human rights and vital drivers of sustainable development. SDG 5, which clearly aims to "achieve gender equality and empower all women and girls," underscores the transformative potential of women as catalysts for progress across all SDGs (UN Women, 2018). Despite growing acknowledgment of this interconnectedness, systemic barriers—such as discriminatory laws, limited access to education and healthcare, and economic marginalization—continue to hinder women's full participation in sustainable development initiatives (World Bank, 2020). This paper conducts a systematic bibliometric review to map the evolving scholarly discourse on women's roles in

advancing the SDGs, identifying research trends, gaps, and opportunities for leveraging gender inclusivity as a cross-cutting strategy for sustainable transformation.

### **Sustainable Development and the Imperative of Gender Equality**

Sustainable development, defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Commission, 1987), requires holistic approaches that integrate social, economic, and environmental dimensions. The SDGs reflect this integration, with gender equality positioned as both a standalone goal (SDG 5) and a prerequisite for achieving other goals, including SDG 1 (no poverty), SDG 3 (good health), SDG 4 (quality education), and SDG 13 (climate action) (Nilsson et al., 2016). Women’s empowerment enhances community resilience, fosters economic growth, and improves health and educational outcomes, creating a multiplier effect that accelerates progress toward multiple SDGs (Duflo, 2012; Kabeer, 2005). For instance, increasing women’s access to education correlates with reduced child mortality and improved family nutrition (UNESCO, 2014), while their participation in labor markets boosts GDP and reduces poverty rates (OECD, 2018).

However, structural inequities persist. Globally, women earn 23% less than men, perform three times more unpaid care work, and occupy only 25% of parliamentary seats (UN Women, 2021). Such disparities undermine the potential of half the world’s population to contribute to sustainability efforts. Addressing these gaps requires dismantling entrenched patriarchal norms and implementing policies that promote equal access to resources, decision-making, and opportunities (Sen & Mukherjee, 2014).

### **Women’s Empowerment as a Cross-Cutting Catalyst**

The concept of women’s empowerment encompasses economic independence, political agency, educational attainment, and bodily autonomy (Malhotra et al., 2002). Empirical studies demonstrate that empowering women generates cascading benefits for sustainable development. For example, women’s leadership in environmental governance is associated with stricter climate policies and better resource management (Agarwal, 2010). Similarly, female entrepreneurs are more likely to invest in community welfare, aligning business practices with SDG targets (Brush et al., 2019). In agriculture, which employs over 60% of women in sub-Saharan Africa, gender-responsive interventions improve food security (SDG 2) and adaptive capacity to climate change (FAO, 2011).

Despite this evidence, scholarly attention to women’s roles in the SDG framework remains fragmented. Research often focuses on isolated goals or regional contexts, neglecting the systemic interplay between gender equality and broader sustainability outcomes (Leal Filho et al., 2019). A bibliometric analysis offers a structured approach to synthesizing this dispersed knowledge, revealing thematic clusters, influential works, and collaboration networks that can inform future research and policy (Zupic & Čater, 2015).

### **The Need for a Bibliometric Review**

Bibliometrics, the quantitative analysis of publication patterns, provides insights into the evolution of research fields, citation impact, and emerging trends (Pritchard, 1969). Prior reviews on gender and sustainability have largely employed qualitative methods, limiting their ability to map large-scale scholarly outputs (Köhler et al., 2019). This study addresses this gap by systematically analyzing peer-reviewed literature from 2017 to 2024, sourced

from databases like Scopus and Web of Science. By employing tools such as VOSviewer and CiteSpace, the review identifies key contributors, institutions, and thematic shifts, offering a comprehensive overview of how women's empowerment is conceptualized within the SDG discourse.

### **Gaps and Contributions**

Existing literature highlights women's contributions to specific SDGs but often overlooks intersectional factors, such as race, class, and geography, that shape their experiences (Crenshaw, 1989). For instance, rural women in low-income countries face distinct barriers compared to urban women in developed economies (Mohanty, 2003). Additionally, while SDG 5 is frequently studied, fewer publications explore its synergies with goals like SDG 7 (affordable energy) or SDG 9 (industry innovation) (Breuer et al., 2019). This review fills these gaps by examining how intersectionality and cross-goal linkages are addressed in the literature, providing policymakers with evidence-based strategies to optimize gender-inclusive SDG implementation.

### **Paper Structure**

Following this introduction, the paper outlines its methodology, detailing search strategies, inclusion criteria, and analytical tools. Results are presented through bibliometric visualizations and thematic analyses, followed by a discussion of implications for research, policy, and practice. The conclusion underscores the urgency of prioritizing women's empowerment to achieve the 2030 Agenda.

## **2. Research methodology**

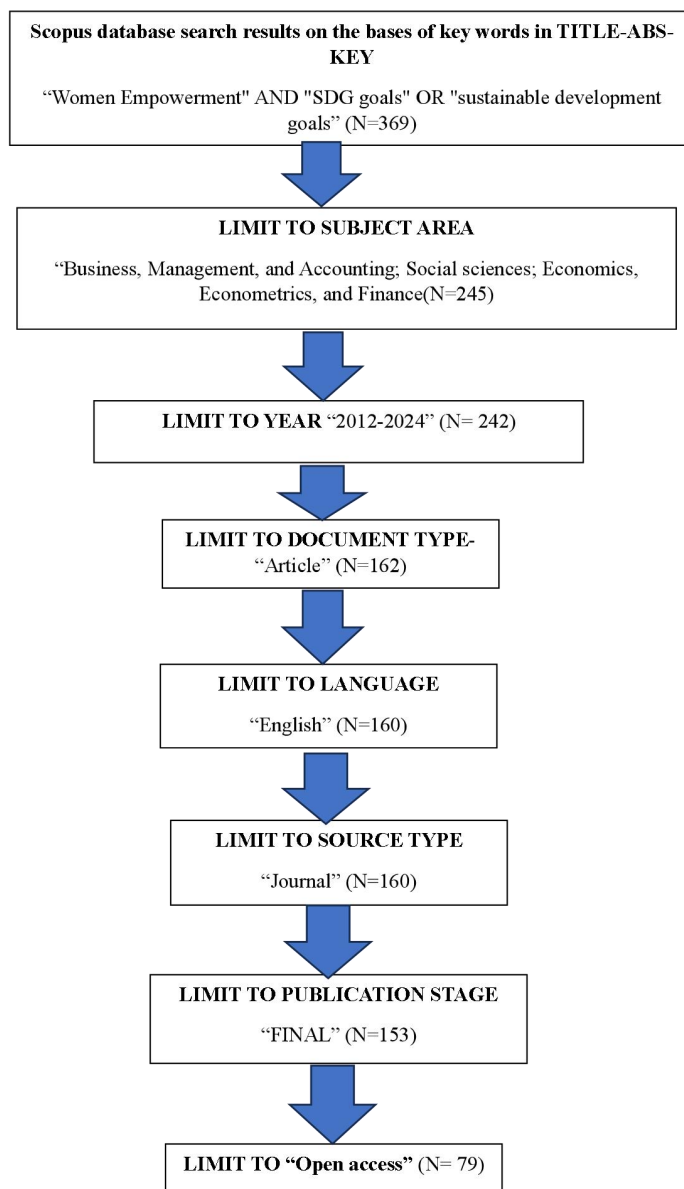
By synthesizing key insights, it offers a holistic overview of WE and SDG while identifying potential directions for future scholarly exploration (Rashmi & Kataria, 2022). This method employs bibliographic mapping to identify key scholarly works, influential authors, leading countries, and major research themes within the field of study (Rashmi & Kataria, 2022). This analytical approach offers a thorough retrospective examination, allowing for deep insights into the most frequently cited publications, leading contributor nations, pivotal keywords, and research clusters formed around shared thematic areas (Contreras-Barraza et al., 2021). Additionally, it facilitates a structured thematic analysis of these clusters by assessing keyword co-occurrence patterns, thereby unveiling the underlying intellectual structure of the field (Hasan et al., 2017; A. Khan et al., 2022; Kirby, 2023; Kumar & Mishra, 2022). By leveraging multiple bibliometric techniques, researchers can integrate diverse analytical outputs to uncover prevailing research trends, pinpoint existing gaps, and outline future research trajectories in the field (Donthu et al., 2021; Khurshid & Islam, 2024; Rashmi & Kataria, 2022). To facilitate this process, VOSviewer software has been utilized to construct, visualize, and interpret bibliometric networks, enabling a comprehensive exploration of scholarly connections and thematic developments (M. A. Khan, 2022; van Eck & Waltman, 2010).

### **2.1 Eligibility criteria**

All studies related to women empowerment (WE) and sustainable development goals (SDG) were taken into consideration for eligibility. The inclusion and exclusion criteria are mentioned in **Figure 1**.

## 2.2 Search criteria limits

Utilizing the **Scopus** database, relevant scholarly works for this study were systematically retrieved on **January 25, 2025**, based on predefined search parameters. This database was chosen for its extensive repository of peer-reviewed journals across diverse research domains, including social sciences, ensuring a comprehensive and high-quality knowledge base (Rashmi & Kataria, 2022). In the first stage, 369 studies were identified in the SCOPUS database via the initial search process. The keywords used were “Women Empowerment” AND “SDG goals” OR “sustainable development goals”. We then de-limited the search results by combining inclusion and exclusion criteria (see **Figure 1: Search Criteria Limit**), which yielded 79 documents. These 79 documents were used for the bibliometric analysis.



**Figure 1: Search Criteria Limit**

### 3. Analysis and results

This section begins with a descriptive analysis of the selected research articles, the sample statistics, theoretical foundation, keyword analysis, citation and bibliographic analysis.

#### 3.1 Descriptive analysis

To find out the continuing patterns of the publication in the selected research area, we carried out a descriptive investigation of 79 papers. The first research question was answered by analyzing the publication trends based on years, countries, journals, and authors.

##### 3.1.1 Publication pattern-in terms of years.

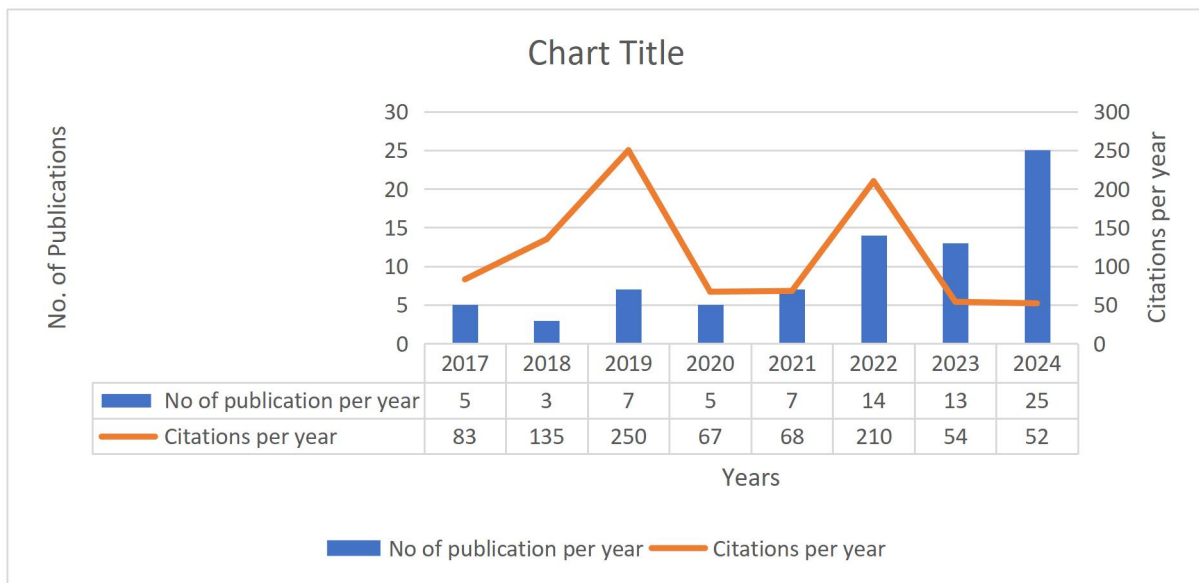
The data provided illustrates the historical progression of research on this topic, reflecting a consistent increase in the number of publications and accompanying citation trends from 2017 to 2024. This trend underscores the growing interest of researchers in addressing the intersection of women empowerment and sustainability, areas identified as underexplored in earlier literature (Adeleye et al., 2024; Aman et al., 2024; Juwita et al., 2024; Ngango, 2022).

In recent years, significant attention has been directed toward advancing the understanding of Sustainable Development Goals (SDGs) and their linkage with women's empowerment. The year-wise publication and citation analysis reveals notable trends in the field.

From 2017 to 2024, there has been a steady rise in research outputs, as depicted in **Figure 2**. The number of publications rose sharply in 2024, reaching a peak of 25, which is double the count of publications in 2023 (13 publications). Research momentum began to accelerate significantly in 2022, where the publication count doubled compared to 2021. The data highlights a gradual evolution, with the most substantial growth occurring between 2022 and 2024.

In terms of citations, 2019 stands out as the most impactful year, with 250 citations, despite a moderate number of 7 publications, indicating the high relevance and quality of research in that year. Similarly, 2022 achieved 210 citations, demonstrating the growing influence of recent publications. However, the years 2023 and 2024, despite showing high publication counts, recorded relatively lower citation numbers (54 and 52, respectively), reflecting the time lag often associated with the citation of newly published works.

This analysis confirms the increasing scholarly focus on this critical topic, with a remarkable surge in both publication volume and intellectual influence over recent years.



**Figure 2: Publication Pattern**

### 3.1.2 Country-wise publication trend

**Table 1** highlights the contribution of the top 8 countries in research on this topic. Among the 45 countries analyzed, India (21 documents), the United States (17 documents), and Australia (8 documents) emerge as the leading contributors. The Philippines, Saudi Arabia, South Africa, and the United Kingdom follow, each contributing 5 publications. Malaysia, with 4 documents, also shows a modest presence in this research domain.

Our review identifies India and the United States as the most active contributors, producing pioneering studies that focus heavily on Sustainable Development Goals (SDGs) and women's empowerment. This emphasis suggests that these countries are at the forefront of addressing these critical global challenges, likely driven by their socio-economic priorities and policy frameworks. Countries with fewer than 3 publications have not been included in this analysis, as their contributions remain minimal in the broader context of this field. From this data, it can be concluded that while there is a growing global interest in this area, the majority of impactful research originates from a select few nations, particularly India and the United States. This trend indicates that researchers in these countries are prioritizing the exploration of SDGs and their interconnections with women's empowerment, potentially leading the way for other nations to follow suit.

**Table 1: Country wise publication**

	Countries	Documents
1	INDIA	21
2	UNITED STATES	17
3	AUSTRALIA	8
4	PHILIPPINES	5
5	SAUDI ARABIA	5
6	SOUTH AFRICA	5
7	UNITED KINGDOM	5
8	MALAYSIA	4

### 3.1.3 Journal-wise publication trend

Of the 79 research articles selected for this study, 65 scientific journals contributed to the publication of these works. Between 2017 and 2024, the journal *Sustainability (Switzerland)* accounted for 16.46% of the total research publications, making it the most significant contributor (see **Table 2**). Only four journals published at least two documents: *Sustainability (Switzerland)* (13 articles), *World Development* (3 articles), *Journal of Rural Studies* (2 articles), and *Sustainable Development* (2 articles). The remaining 61 journals each published only one document and are therefore not included in **Table 2**. The publishing activity reveals that a limited number of journals are currently covering topics related to women empowerment and Sustainable Development Goals (SDGs), highlighting the need for increased focus on this area across diverse academic platforms. The interdisciplinary nature emphasizes the importance of integrating insights from various fields to develop a more comprehensive understanding of the intersection between women empowerment and SDGs. This analysis indicates that while the topic is gaining traction, it remains underexplored across many academic journals, suggesting a significant opportunity for future research contributions in this domain.

**Table 2: Journal wise publication trend**

Journal	Documents	Documents percentage
Sustainability (Switzerland)	13	16.46%
World Development	3	3.80%
Journal Of Rural Studies	2	2.53%
Sustainable Development	2	2.53%

### 3.1.4 Author influence analysis

Author influence analysis, also known as publishing activity by authors, was conducted to identify the most impactful contributors in the field of women empowerment (WE) and Sustainable Development Goals (SDGs). Using VOS Viewer, the dataset revealed that 272 authors have contributed to this research area, signifying that many authors have made only a small number of contributions to the field. Among these, Kathryn M. Yount emerged as the most prolific and influential author, with three publications that have collectively received 235 citations, the highest citation count among all contributors. Other notable authors include Amy Webb Girard, Regine Haardörfer, and Stephanie Spaid Miedema, each with two publications and 192 citations, underscoring their significant impact. Authors such as Caitlin Leahy and Juliet Willetts also stand out, contributing two documents each with 48 citations.

**Table 3** presents the top 15 productive and influential authors in this field. The data reveals that despite the large number of contributors, high-impact authors are relatively few, highlighting an opportunity for further in-depth contributions by researchers to advance the field. This analysis indicates that while a growing number of authors are exploring the intersection of WE and SDGs, the contributions remain scattered. The findings emphasize the need for more concentrated and impactful research efforts to strengthen the body of knowledge in this domain and to address its interdisciplinary implications comprehensively.

**Table 3: Author Influence Analysis**

Authors	Documents	Citations
Kathryn M. Yount	3	235
Jawaher Binsuwadan	3	12
Amy Webb Girard	2	192
Regine Haardörfer	2	192
Stephanie Spaid Miedema	2	192
Caitlin Leahy	2	48
Juliet Willetts	2	48
Hind Alofaysan	2	12
Jihen Bousrih	2	12
Manal Elhaj	2	12
Fatma Mabrouk	2	12
Garrett S. Brogan	2	6
Kim E. Dooley	2	6
Rebecca Jones	1	77

### 3.2 Citation analysis

Research question 3 was addressed through citation analysis which reveals the relative significance and reputation of an article based on the frequency of that specific article being cited by other articles (Ding et al., 2001). Citation analysis is a method of determining the number of citations an article gains from other articles (Kataria et al., 2021). The added value of analyzing the number of citations is to establish intellectual linkages i.e. uncover patterns of scientific collaboration, map scholarly discipline landscapes, measure the impact of research outcomes and track knowledge transfer across domains (Baker et al., 2020; Ding et al., 2001).

#### 3.2.1 Publication citation analysis

**Table 4** presents the top 15 most highly cited research papers on the topic of women empowerment (WE) and Sustainable Development Goals (SDGs), along with their total citation counts and citation impact per year. The citation trends, as detailed in **Table 4**, provide valuable insights into the influence and relevance of key articles within this field.

The most highly cited paper in the dataset is *"Women's empowerment in East Africa: Development of a cross-country comparable measure"* (2018), published in *World Development*, with a total of 115 citations. This article has been widely cited, reflecting its significant contribution to advancing research and providing a robust framework for future studies. Similarly, the paper *"Women's empowerment and child nutrition: The role of intrinsic agency"* (2019) in *SSM - Population Health* has garnered 77 citations, showcasing its impact on connecting women's empowerment with critical social outcomes such as child nutrition. Other notable works include *"Women Entrepreneurship and Sustainable Development: Bibliometric Analysis and Emerging Research Trends"* (2022), published in *Sustainability (Switzerland)*, with 59 citations, and *"Impact of Sustainable Development Goals on Economic Growth in Saudi Arabia: Role of Education and Training"* (2022), which has 54 citations. These articles underscore the growing emphasis on linking women's empowerment with entrepreneurship, education, and economic growth within the SDG framework.



The highly cited papers span a variety of disciplines and themes, including gender equality, water and sanitation, tourism, and agricultural practices. This diversity indicates the interdisciplinary nature of research in this domain and its applicability to real-world challenges. The prominence of these works demonstrates their role in shaping the academic discourse and supporting researchers in addressing the complex relationship between WE and SDGs. Overall, the analysis reveals that while some papers have achieved significant academic influence, there remains substantial scope for further research contributions to enrich the field and broaden its impact.

**Table 4: Publication Citation Analysis**

<b>Title</b>	<b>Year</b>	<b>Source title</b>	<b>Cited by</b>	<b>Citations impact per year</b>
Women's empowerment in East Africa: Development of a cross-country comparable measure	2018	World Development	115	19.16667
Women's empowerment and child nutrition: The role of intrinsic agency	2019	SSM - Population Health	77	12.83333
Women Entrepreneurship and Sustainable Development: Bibliometric Analysis and Emerging Research Trends	2022	Sustainability (Switzerland)	59	9.833333
Impact of Sustainable Development Goals on Economic Growth in Saudi Arabia: Role of Education and Training	2022	Sustainability (Switzerland)	54	9
Gender Equality and Women's Empowerment: Feminist Mobilization for the SDGs	2019	Global Policy	45	6.666667
Measurement properties of the project-level Women's Empowerment in Agriculture Index	2019	World Development	43	5.333333
Fostering green entrepreneurship and women's empowerment through education and banks' investments in tourism: Evidence from Serbia	2019	Sustainability (Switzerland)	40	5.333333
Transforming gender relations through water, sanitation, and hygiene programming and monitoring in Vietnam	2017	Gender and Development	32	5.333333
Off-farm employment increases women's empowerment: Evidence from rice farms in the Philippines	2019	Journal of Rural Studies	32	5
Neonatal mortality in East Africa and West Africa: A geographic analysis of district-level demographic and health survey data	2017	Geospatial Health	32	7.5

The gendered effects of statecraft on women in tourism: Economic sanctions, women's disempowerment and sustainability?	2022	Journal of Sustainable Tourism	30	7.166667
Sustainable development and women's leadership: A participatory exploration of capabilities in Colombian Caribbean fisher communities	2020	Journal of Cleaner Production	25	4.166667
EMPOWERING WOMEN THROUGH COMMUNITY-BASED TOURISM IN THE WESTERN CAPE, SOUTH AFRICA	2021	Tourism Review International	18	3
The water, sanitation and hygiene gender equality measure (WASH-GEM): Conceptual foundations and domains of change	2022	Women's Studies International Forum	16	2.666667
Comparative study on maternal healthcare services utilisation in selected Empowered Action Group states of India	2021	Health and Social Care in the Community	15	2.5

### 3.2.2 Journal citation analysis.

**Table 5** provides a detailed analysis of the top 15 journals contributing to research on women empowerment (WE) and Sustainable Development Goals (SDGs), highlighting their total citations and average citations per article. This analysis underscores the scientific influence and domain-specific contributions of these journals within the research field. Among the journals, *Sustainability (Switzerland)* stands out with the highest total citations (224) from 13 published articles, achieving an average of 17.23 citations per article. Despite contributing fewer articles (3), *World Development* has the highest average citations per article (54.33), indicating its strong impact and the relevance of its contributions to this field. Similarly, *SSM - Population Health* features prominently with 77 citations for a single article, making it the journal with the highest citation per year for a single publication. The analysis reveals that while a few journals have made substantial contributions, many influential papers are spread across a wide range of journals with lower publication counts. This reflects the interdisciplinary nature of the research, spanning domains such as public health, policy, tourism, and sustainability. In conclusion, the journal citation analysis demonstrates the robustness and growing influence of research in this domain. It also highlights the need for further exploration and publication in high-impact journals to amplify the visibility and relevance of studies on WE and SDGs across various academic disciplines.

**Table 5: Journal Citation Analysis**

Journal	Documents	Citations	Citations per year
Sustainability (Switzerland)	13	224	17.23
World Development	3	163	54.33
Ssm - Population Health	1	77	77
Global Policy	1	45	45
Journal Of Rural Studies	2	37	18.50
Gender And Development	1	32	32

Geospatial Health	1	32	32
Journal Of Sustainable Tourism	1	30	30
Journal Of Cleaner Production	1	25	25
Tourism Review International	1	18	18
Women's Studies International Forum	1	16	16
Health And Social Care In The Community	1	15	15
Kajian Malaysia	1	13	13
Ecological Economics	1	12	12
Ecological Questions	1	12	12

### 3.2.2 Country citation analysis

**Table 6** represents the list of the top 10 countries' total citations along with the documents per country, demonstrating the contribution of the countries in specific research domains. The analysis provides insights into the research impact and contribution of different nations in the field. The United States leads in citation impact, demonstrating a high level of influence in academic research. Despite having fewer publications than India, its significantly higher citation count suggests the prominence and quality of research output. India, on the other hand, has the highest number of publications but a lower citation count compared to the United States, indicating a growing research contribution, though citation impact per paper is relatively lower. Australia exhibits a strong citation-to-publication ratio, suggesting that its research output is widely recognized and influential within the academic community. This analysis underscores the varying levels of research influence and academic reach across different nations.

**Table 6: Country Citation Analysis**

	<b>Countries</b>	<b>Documents</b>	<b>Citations</b>
1	UNITED STATES	17	380
2	INDIA	21	176
3	AUSTRALIA	8	150
4	SAUDI ARABIA	5	67
5	SOUTH AFRICA	5	58
6	PHILIPPINES	5	55
7	UNITED KINGDOM	5	54
8	FINLAND	3	44
9	RUSSIAN FEDERATION	1	40
10	SERBIA	1	40

### 3.2.4 Keyword analysis.

The rationale for using keyword analysis is that it effectively represents the keywords used by authors to demonstrate an article's content (Baker et al., 2020). It serves as a unique indicator of the co-occurrence of authors' keywords, representing research themes while highlighting research trends in the field under study (Ding et al., 2001). Additionally, it reflects the authors' self-assessment of key concepts and related terms.

We identified the most commonly used keywords from our dataset of 79 research articles using the VOSviewer application. A total of 87 keywords were identified, each with a minimum occurrence of two. **Figure 3** illustrates the visual representation of the authors' keyword co-occurrence networks. From the **Figure 3** and the corresponding **Table 7**, we observe that **"Women Empowerment"** is the most frequently used keyword, appearing 42 times with a link strength of 68. **"Sustainable Development Goal"** is the second most frequent keyword, appearing 39 times with 69 total links. **"Empowerment"** appeared 35 times and had the highest number of links (79) with other keywords.

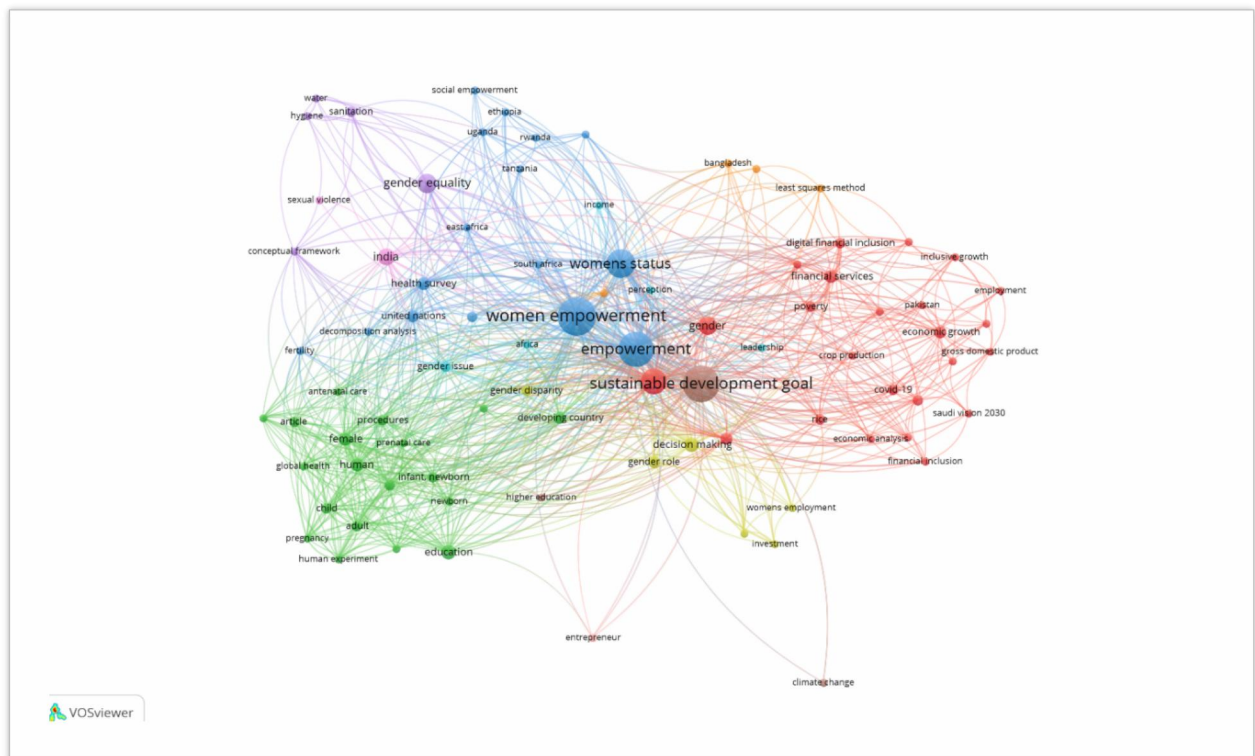
This analysis indicates that, over the past eight years, women empowerment has been a central focus for many management academics and practitioners. It remains a significant social issue, prompting a substantial body of academic research. We have listed the top 15 most frequently occurring keywords. Additionally, our analysis retrieved 10 clusters from VOSviewer, based on which we identified 10 themes. These themes are shown in **Figure 4: Clusters based on keywords**. Furthermore, we extracted three major themes (shown in **Figure 5: Major three themes**) that encompass all 10 clusters.

In **Figure 4**, the first cluster focuses on economic and social development, with an emphasis on sustainability, poverty reduction, and inclusive growth. the second cluster revolves around healthcare, particularly maternal and child health, in developing regions. This highlights the focus on improving health outcomes for women and children in resource-limited settings. Furthermore, the third cluster is centred on women's empowerment, gender equity, and social development and focuses on improving women's roles and rights. The fourth cluster focuses on gender roles, disparities, and their impact on decision-making and employment. It emphasizes understanding and addressing gender-based inequalities in various contexts. The fifth cluster links gender equality with access to basic needs like sanitation, hygiene, and water. This cluster primarily focuses on addressing gender disparities in access to essential resources. The sixth cluster explores broader gender issues, particularly in the context of leadership and income disparities. This cluster suggests a focus on understanding and addressing gender-based challenges in professional and economic settings. Moreover, the seventh cluster focuses on food security and rural development, addressing hunger and improving livelihoods in rural areas. The eighth cluster is positioned on the Sustainable Development Goals, with a focus on climate change and higher education. This suggests a broad focus on achieving global development targets. The ninth cluster focuses on gender-based violence, particularly in the context of India, suggesting a focus on addressing and understanding this critical issue. Finally, the tenth cluster is focused on entrepreneurship, though it has only one keyword. If more data were available, this theme could be expanded to include related concepts like innovation, small businesses, or economic development.

**Table 7: Keyword Analysis**

Keywords	Occurrences
Women Empowerment	42
Sustainable Development Goal	39
Empowerment	35
Women Status	23
Sustainability	19
Gender Equality	11

Gender	10
India	8
Education	6
Decision Making	6
Financial Services	5
Female	5
Human	5
Health Survey	5
Economic Growth	4



**Figure 3: Keyword Co-occurrence**

**Figure 4: Clusters based on keywords**

Cluster 1: Sustainable Development and Economic Growth	Cluster 2: Maternal and Child Health in Developing Countries	Cluster 3: Women's Empowerment and Gender Equity	Cluster 4: Gender Roles and Decision-Making	Cluster 5: Gender Equality and Basic Needs	Cluster 6: Gender Issues and Leadership	Cluster 7: Food Security and Rural Development	Cluster 8: Sustainable Development Goals (SDGs)	Cluster 9: Gender-Based Violence in India	Cluster 10: Entrepreneurship
Sustainability	Education	Women Empowerment	Decision Making	Gender Equality	Gender Issue	Food Security	Sustainable Development Goal	India	Entrepreneur
Gender	Female	Empowerment	Gender Role	Sanitation	Income	Rural Population	Climate Change	Sexual Violence	
Financial Services	Human	Women's Status	Gender Disparity	Hygiene	Leadership		Higher Education		
Economic Growth	Developing Country	Equity	Investment	Water					
Governance	Child	Social Empowerment	Women's Employment						
Digital Financial Inclusion	Infant								
Poverty									
Policy-Making									

**Figure 5: Major three themes**



Figure 5 presents the three broad themes. The first theme majorly focuses on the Sustainable Development Goals. This theme emphasizes the role of inclusive economic growth, financial inclusion, rural development, and entrepreneurship in empowering women. By addressing poverty, promoting governance, and fostering sustainable practices, it prepares women with resources and opportunities to participate actively in economic activities. It also highlights the importance of climate action and sustainability in creating long-term resilience for women and communities. Furthermore, the second theme basically focuses on social and gender equality, addressing issues such as gender disparity, violence, and inequities in leadership and decision-making. It promotes women's empowerment through equitable access to resources,

leadership opportunities, and social justice, ensuring their active participation in societal development. This theme emphasizes breaking systemic barriers and fostering an inclusive environment for women. Lastly, the third theme highlights the importance of maternal and child health, education, and public health in empowering women. By improving access to quality healthcare, education, and sanitation, it enhances women's ability to make informed decisions and lead healthier, more productive lives. This theme underscores the critical role of health and education in achieving long-term empowerment and well-being for women and their communities.

#### 4. Conclusion

This bibliometric analysis, leveraging the SCOPUS database, underscores the evolving scholarly focus on the intersection of women's empowerment and the Sustainable Development Goals (SDGs). By examining 79 open-access studies (2017–2024), key trends and gaps were identified. Notably, the years 2022 (14 papers) and 2024 (25 papers) emerged as the most productive periods, though citation peaks occurred earlier (2019: 250 citations; 2022: 210 citations), with a notable decline in citations in 2024 (52 citations) despite higher document output. Geographically, India led with 21 publications, reflecting its prioritization of women's empowerment in SDG-related research, followed by the USA (17 papers). The *Sustainability* journal dominated contributions (16.46%), while Kathryn M. Yount stood out as the most influential author (3 papers, 235 citations). The most cited work, published in *World Development* (2018), highlighted cross-country measures of women's empowerment in East Africa.

Keyword analysis revealed predominant focus areas like “Women Empowerment” and “Sustainable Development Goals,” with underutilized terms such as “entrepreneur,” “inclusive growth,” and “policy making” signaling opportunities for novel research. The study also demonstrated women's empowerment as a catalyst for multiple SDGs, including poverty reduction (SDG 1), health (SDG 3), education (SDG 4), gender equality (SDG 5), and climate action (SDG 13). However, the limited exploration of connections between empowerment and underrepresented SDGs (e.g., clean water, hunger) calls for deeper interdisciplinary inquiry.

As the SDG framework gains global traction, this review emphasizes the need for expanded research linking women's empowerment to broader socio-economic, environmental, and policy dimensions. Future studies should address thematic and regional imbalances while integrating emerging keywords to advance holistic, actionable insights for sustainable development.

#### References:

1. Adeleye, O. R., Olivo, M. L. O., & Farkas, T. (2024). A Bibliometric Analysis of Women's Empowerment Studies Post Sustainable Development Goal Adoption Periods (2015–2022). *Sustainability* Aman, R., Elo, M., Ahokangas, P., & Zhang, X. (2024). Empowering migrant women's entrepreneurship: stakeholder perspectives from the entrepreneurial ecosystem. *International Journal of Entrepreneurial Behaviour and Research*, 30(7), 1698–1724. <https://doi.org/10.1108/IJEBR-04-2023-0425>
2. Agarwal, B. (2010). *Gender and green governance: The political economy of women's presence within and beyond community forestry*. Oxford University Press.

3. Baker, H. K., Kumar, S., & Pattnaik, D. (2020). Twenty-five years of Review of Financial Economics: A bibliometric overview. *Review of Financial Economics*, 38(1), 3–23. <https://doi.org/10.1002/rfe.1095>
4. Breuer, A., Janetschek, H., & Malerba, D. (2019). Translating SDG interdependencies into policy advice. *Sustainability*, 11(7), 2097. <https://doi.org/10.3390/su11072097>
5. Brush, C. G., Edelman, L. F., Manolova, T., & Welter, F. (2019). A gendered look at entrepreneurship ecosystems. *Small Business Economics*, 53(2), 393–408. <https://doi.org/10.1007/s11187-018-9992-9>
6. Contreras-Barraza, N., Espinosa-Cristia, J. F., Salazar-Sepulveda, G., Vega-Muñoz, A., & Ariza-Montes, A. (2021). A Scientometric Systematic Review of Entrepreneurial Wellbeing Knowledge Production. In *Frontiers in Psychology* (Vol. 12). Frontiers Media S.A. <https://doi.org/10.3389/fpsyg.2021.641465>
7. Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine. *University of Chicago Legal Forum*, 1989(1), 139–167.
8. Ding, Y., Chowdhury, G. G., & Foo, S. (2001). Bibliometric cartography of information retrieval research by using co-word analysis. *Information Processing & Management*, 37(6), 817–842. [https://doi.org/10.1016/S0306-4573\(00\)00051-0](https://doi.org/10.1016/S0306-4573(00)00051-0)
9. Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
10. 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>
11. FAO. (2011). The state of food and agriculture: Women in agriculture—Closing the gender gap for development. Food and Agriculture Organization.
12. Galletta, S., Mazzù, S., Naciti, V., & Paltrinieri, A. (2024). A PRISMA systematic review of greenwashing in the banking industry: A call for action. *Research in International Business and Finance*, 69. <https://doi.org/10.1016/j.ribaf.2024.102262>
13. Hasan, S. M., Khan, E. A., & Nabi, M. N. U. (2017). Entrepreneurial education at university level and entrepreneurship development. *Education and Training*, 59(7–8), 888–906. <https://doi.org/10.1108/ET-01-2016-0020>
14. Juwita, R., Rahayu, D., Rohmah, A. N., & Pawae, R. D. (2024). Unlocking Women’s Empowerment towards Digital Inclusivity in East Kalimantan through Digital Competence Evaluation. *Jurnal Ilmu Sosial Dan Ilmu Politik*, 27(3), 260–276. <https://doi.org/10.22146/jsp.78163>
15. Kabeer, N. (2005). Gender equality and women’s empowerment: A critical analysis of the third Millennium Development Goal. *Gender & Development*, 13(1), 13–24. <https://doi.org/10.1080/13552070512331332273>
16. Kataria, A., Kumar, S., & Pandey, N. (2021). Twenty-five years of Gender, Work and Organization: A bibliometric analysis. *Gender, Work & Organization*, 28(1), 85–118.
17. Khan, A., Goodell, J. W., Hassan, M. K., & Paltrinieri, A. (2022). A bibliometric review of finance bibliometric papers. *Finance Research Letters*, 47. <https://doi.org/10.1016/j.frl.2021.102520>
18. Khan, M. A. (2022). ESG disclosure and Firm performance: A bibliometric and meta analysis. In *Research in International Business and Finance* (Vol. 61). Elsevier Ltd. <https://doi.org/10.1016/j.ribaf.2022.101668>



19. Khurshid, R., & Islam, A. ul. (2024). ESG literature mapping: insights from bibliometric analysis. *International Journal of Disclosure and Governance*.  
<https://doi.org/10.1057/s41310-024-00244-5>
20. Kirby, A. (2023). Exploratory Bibliometrics: Using VOSviewer as a Preliminary Research Tool. *Publications*, 11(1). <https://doi.org/10.3390/publications11010010>
21. Kumar, A., & Mishra, S. (2022). Exploring Future Research Agenda for Rural Mother's Empowerment: A Study at the Intersection of Bibliometric and Systematic Literature Review. In *South Asian Journal of Business and Management Cases* (Vol. 11, Issue 3, pp. 254–275). SAGE Publications Ltd. <https://doi.org/10.1177/22779779221115804>
22. Leal Filho, W., et al. (2019). Gender and sustainable development: A global perspective. *Journal of Cleaner Production*, 214, 716–725.  
<https://doi.org/10.1016/j.jclepro.2018.12.281>
23. Malhotra, A., Schuler, S. R., & Boender, C. (2002). Measuring women's empowerment as a variable in international development. World Bank.
24. Mohanty, C. T. (2003). *Feminism without borders: Decolonizing theory, practicing solidarity*. Duke University Press.
25. Ngango, J. (2022). DOES WOMEN'S EMPOWERMENT IMPROVE YIELDS AND INCOME? EVIDENCE FROM RICE FARMERS IN RWANDA. *Asian Journal of Agriculture and Rural Development*, 12(3), 201–209.  
<https://doi.org/10.55493/5005.v12i3.4602>
26. Nilsson, M., Griggs, D., & Visbeck, M. (2016). Policy: Map the interactions between Sustainable Development Goals. *Nature*, 534(7607), 320–322.  
<https://doi.org/10.1038/534320a>
27. OECD. (2018). *Is the last mile the longest? Economic gains from gender equality in Nordic countries*. OECD Publishing.
28. Rashmi, K., & Kataria, A. (2022). Work–life balance: a systematic literature review and bibliometric analysis. *International Journal of Sociology and Social Policy*, 42(11–12), 1028–1065. <https://doi.org/10.1108/IJSSP-06-2021-0145>
29. Sen, G., & Mukherjee, A. (2014). No empowerment without rights, no rights without politics: Gender-equality, MDGs and the post-2015 development agenda. *Journal of Human Development and Capabilities*, 15(2-3), 188–202.  
<https://doi.org/10.1080/19452829.2014.884057>
30. UN Women. (2018). *Turning promises into action: Gender equality in the 2030 Agenda*. United Nations.
31. UN Women. (2021). *Progress on the Sustainable Development Goals: The gender snapshot 2021*. United Nations.
32. United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations.
33. van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538.  
<https://doi.org/10.1007/s11192-009-0146-3>
34. World Bank. (2020). *Women, business and the law 2020*. World Bank Group.
35. Zupic, I., & Čater, T. (2015). Bibliometric Methods in Management and Organization. *Organizational Research Methods*, 18(3), 429–472.  
<https://doi.org/10.1177/1094428114562629>