

Research article

Research trends around economic empowerment for women in rural areas: proposed gaps and research agenda

Tendencias de investigación sobre el empoderamiento económico de las mujeres rurales: brechas identificadas y agenda de investigación propuesta

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Abstract

Introduction: The economic empowerment of rural women is essential for achieving gender equality and sustainable development in agricultural economies, as it enables them to make economic decisions through participation in productive activities that improve their well-being and that of their families. **Methodology:** This study applied a bibliometric analysis following the PRISMA 2020 protocol to identify academic trends on this topic through systematic screening and evaluation of relevant scientific publications. **Results:** The analysis revealed that this is an emerging area of research, with around 80% of the publications produced between 1999 and 2024, and notable peaks in 2019, 2023, and 2024. Vlassoff and

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Hordofa were the most cited authors, and India was the most active country in terms of research output. Thematic evolution moved from general approaches to more specific focuses such as women-oriented initiatives and job profiles, with Sustainable Development and Self-Confidence as emerging keywords. **Discussion:** These trends suggest growing academic recognition of the role of rural women in economic development, although the literature still lacks detailed analyses of access to financial resources and long-term sustainability of empowerment programs. **Conclusions:** The study highlights the need for more diverse and context-sensitive research to guide inclusive and sustainable policy-making that supports rural women's economic empowerment.

Keywords: Economic empowerment; rural women; bibliometrics; research trends; PRISMA 2020; gender equality; self-confidence; patriarchy.

Resumen

Introducción: El empoderamiento económico de las mujeres rurales es fundamental para alcanzar la igualdad de género y el desarrollo sostenible en las economías agrícolas, al permitirles tomar decisiones económicas mediante su participación en actividades productivas que mejoran su bienestar y el de sus familias. **Metodología:** Este estudio utilizó un análisis bibliométrico bajo el protocolo PRISMA 2020, con el propósito de identificar tendencias académicas sobre el tema mediante una revisión sistemática de publicaciones científicas pertinentes. **Resultados:** Se encontró que este es un campo emergente, con cerca del 80 % de las publicaciones generadas entre 1999 y 2024, destacándose los años 2019, 2023 y 2024 como los de mayor productividad. Vlassoff y Hordofa fueron los autores más citados, e India lideró la producción académica. La evolución temática avanzó desde enfoques generales hacia otros más específicos, como las iniciativas orientadas a mujeres y los perfiles laborales, emergiendo palabras clave como desarrollo sostenible y autoconfianza. **Discusión:** Las tendencias observadas reflejan un creciente interés académico por el papel de las mujeres rurales en el desarrollo económico, aunque aún persisten vacíos relacionados con el acceso a recursos financieros y la sostenibilidad de las iniciativas. **Conclusiones:** Se requiere mayor investigación contextualizada para orientar políticas inclusivas y sostenibles que promuevan el empoderamiento económico femenino rural.

Palabras clave: Empoderamiento económico; mujeres rurales; bibliometría; tendencias de investigación; PRISMA 2020; igualdad de género; autoconfianza, patriarcado.

1. Introduction

The economic empowerment of rural women is crucial for achieving gender equality and fostering sustainable agricultural development. When women are empowered, they actively engage in productive work and make economic decisions, profoundly enhancing their own and their families' well-being. However, they frequently encounter structural, social, and economic barriers that severely restrict their access to vital resources (Hordofa & Badore, 2024).

Microcredit initiatives and engagement in agricultural and entrepreneurial activities are powerful drivers of empowerment. Access to microcredit enables rural women to launch independent businesses, generate income, and enhance their economic autonomy within households and communities, fostering local economic growth (Mukthar et al., 2022). Government programs supporting the agricultural sector also play a crucial role.

For instance, Brazil's Food Acquisition Program (PAA) has significantly empowered women in family farming by providing a secure market and stable income through direct agricultural product purchases.

Such programs boost the sustainability of agricultural activities and solidify women's pivotal contributions to production (Rui & Medeiros Hespanhol, 2024).

Beyond financial gains, the economic empowerment of women profoundly impacts household food security. Research in Pakistan shows that economically empowered women are less vulnerable to food insecurity, as their income and decisions directly contribute to household well-being and stability. This demonstrates a multiplier effect, benefiting not only women but also their families and communities (Ishfaq et al., 2022). Furthermore, empowerment is linked to a reduction in gender-based violence and increased social participation. Studies in sub-Saharan Africa highlight a correlation between women's empowerment and decreased spousal violence, enhancing their quality of life and contributions to the rural economy (Anik et al., 2023).

Rural women are crucial to sustainable development and poverty alleviation, often responsible for family subsistence and food security despite facing numerous constraints (Zegeye et al., 2021). Their ability to organize collectively in associations and cooperatives, as seen in rural Colombia, improves working conditions, expands market access, and secures better product pricing. This collective action also strengthens social capital and facilitates access to financial and technological resources, stimulating local economic development (Suárez et al., 2018).

Additionally, the dynamics of family economy in rural environments frequently place women at the core of informal productive activities, reinforcing their role as agents of resilience in vulnerable households (Kumar, 2025). These contributions are not only economic but also social and cultural, reinforcing the fabric of rural communities and underscoring the multidimensional impact of women's empowerment (Vela Meléndez et al., 2025).

Globally, many governmental and non-governmental empowerment efforts fall short due to implementation and monitoring challenges, as evidenced in Nigeria (Olufemi, 2024). This highlights the critical need for more effective, locally tailored public policies supported by robust evaluation mechanisms. Additionally, financial education combined with financial inclusion programs (e.g., in Sri Lanka) is fundamental, equipping women with better resource management skills and enabling greater participation in the rural economy.

These initiatives provide essential resources for productive activities and an improved quality of life (Kumari & Ferdous Azam, 2019). Recent studies also emphasize the growing relevance of digital tools in enhancing economic empowerment, especially when integrated with gender-sensitive financial education strategies (Ateş, Bayram & Bayram, 2025). Likewise, bibliometric analyses suggest that improving financial literacy is not only a practical necessity but also a strategic component for long-term empowerment and inclusive rural development (Çalışkan, 2025).

Despite extensive research into the economic empowerment of rural women, significant literature gaps persist, impeding a comprehensive understanding. These include a lack of in-depth analysis on effective access to financial resources and the sustainability of empowerment initiatives across diverse geographical contexts. For example, in Latin America, while the importance of women's economic autonomy in rural settings is increasingly recognized, knowledge remains scarce regarding the factors that facilitate their comprehensive empowerment (Villafuerte-Pezo et al., 2022).

These gaps also reflect broader deficiencies in the integration of technological, financial, and institutional innovations tailored to rural realities, suggesting the need for intersectional and interdisciplinary research approaches that address both structural barriers and context-specific opportunities (Ateş, Bayram & Bayram, 2025; Vela Meléndez et al., 2025).

Another critical research gap concerns the impact of public policies on access to credit and other productive resources. In Brazil, despite supportive policies like the National Program for Strengthening Family Farming (PRONAF), many rural women still face structural barriers to actual empowerment. This suggests a disconnect between policy design and practical outcomes (Luz Carvelli & Parente, 2024). These gaps highlight the need for a comprehensive literature review to identify advancements, constraints, and potential improvements in economic empowerment policies for rural women.

This research aims to explore trends in the economic empowerment of rural women by addressing the following questions:

- What are the years with the most interest in this topic?
- What is the growth pattern of scientific articles on this topic?
- What are the main research references?
- What is the thematic evolution derived from scientific production?
- What are the main thematic clusters?
- What are the growing and emerging keywords?
- What topics are pivotal for designing a future research agenda?

This study is structured into six sections: an abstract, an introduction defining the topic and research gaps, a methodology section, results from the bibliometric analysis, a discussion of findings and limitations, and a concluding reflection

2. Methodology

This research employed an exploratory bibliometric approach to analyze secondary sources on the economic empowerment of rural women, adhering to the PRISMA-2020 Declaration for transparency and methodological rigor (Page et al., 2021).

2.1. *Eligibility criterion*

Inclusion criteria focused on article titles and keywords, requiring the terms “economic empowerment”, “women”, and “rural”, or their synonyms, to ensure comprehensive coverage.

The exclusion process involved three phases: removing records with indexing errors, excluding full-text inaccessible documents (though this was not relevant for this metadata-based bibliometric analysis), and finally, eliminating articles not pertinent to the topic or specifically focused on rural women.

2.2. Source of information

The Scopus database was selected for its global relevance, interdisciplinary coverage, and emphasis on high-quality journals. Its robust indexing and diverse geographic coverage ensure reliable and representative results for global bibliometric studies (Asubiaro et al., 2024). Search strategy: A tailored search equation was developed for Scopus:

TITLE-ABS-KEY ("economic empowerment" OR "financial empowerment" OR "economic independence" OR "economic autonomy") AND TITLE-ABS-KEY ("rural women" OR "women in rural areas" OR "female farmers" OR "women farmers" OR "rural female entrepreneurs" OR "rural female workers" OR "women in agriculture" OR "women in rural communities" OR "women in remote areas")

2.3. Data management

Microsoft Excel® managed bibliographic records for extraction, storage, and organization. The open-source software VOSviewer® was used to create bibliometric network visualization maps to examine co-occurrences and relationships between keywords. Both tools generated graphs of bibliometric indicators.

2.4. Selection and data collection process

Following PRISMA 2020, an internally developed Excel-based automated classifier, used independently by each researcher, facilitated study selection. This collaborative approach minimized exclusion errors and classification inaccuracies. All authors also participated as independent reviewers in the data collection process, with a collective confirmation step to ensure absolute convergence and data reliability.

2.5. Data elements and bias assessment

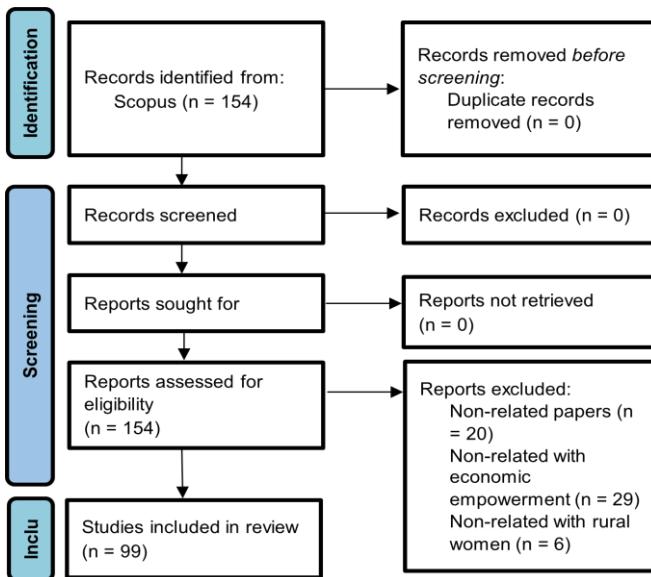
Articles were reviewed for explicit relevance to the economic empowerment of rural women; non-relevant texts were excluded. The risk of bias was assessed collaboratively by all authors using an automated Excel tool, ensuring independent review and systematic identification of potential biases.

2.6. Measures of effect and synthesis methods

Given the secondary source analysis, metrics included the number of publications, citations, and keyword temporality, systematized with Excel. Thematic association nodes were visualized using VOSviewer®. Study eligibility was determined by tabulating and comparing characteristics against inclusion criteria. Bibliometric indicators of quantity, quality, and structure (Durieux & Gevenois, 2010) were applied to all eligible documents.

Reporting Bias and Certainty Assessment: Potential reporting bias is acknowledged due to synonym selection in the search strategy and exclusion criteria that might omit valuable information. The certainty assessment of the evidence was general, based on the independent application of criteria and indicator definitions.

Methodological biases and study limitations are addressed during the discussion to ensure scientific rigor.

Figure 1.
PRISMA flowchart


Source: Prepared by the authors from Scopus.

Figure 1 outlines the meticulous process for selecting records for our bibliometric analysis. We began by identifying publications on economic empowerment in rural women within the Scopus database using a specific search equation. This initial step was followed by three crucial exclusion phases: removing records with indexing errors, discarding unavailable documents, and eliminating any content irrelevant to our analysis's purpose. Ultimately, this rigorous process yielded 99 articles that met all established criteria, forming the foundation for our analysis of academic production in this vital field.

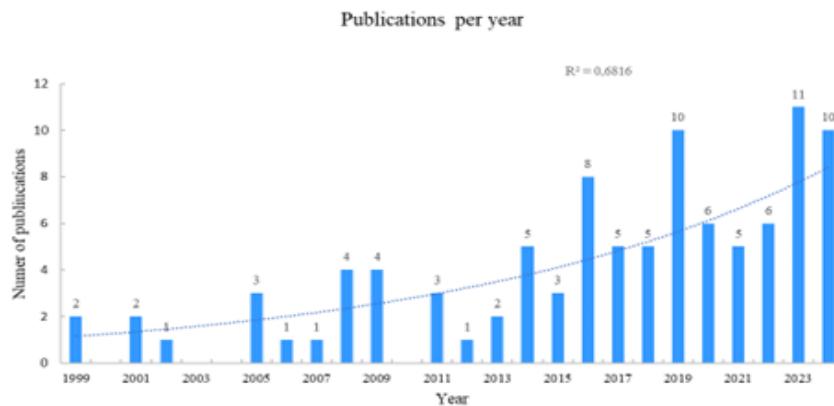
3. Results

This section presents the main findings from our analysis of scientific production on the economic empowerment of rural women. It covers trends in published articles, the evolution of key themes, connections between concepts via keyword networks, and identifies influential authors, journals, and emerging/declining terms that can guide future research.

3.1. Publication Growth Trends

Figure 2 illustrates publication trends between 1999 and 2024. While a single article on rural women in China appeared in 1979, and two publications on microfinance for rural women were identified by 1999, the overall academic output was initially discontinuous. However, a significant shift occurred from 2011 to 2024, a period marked by continuous academic production, accounting for 80 of the 99 analyzed datasets (81% of total production).

This indicates a discernible upward trend in academic interest and research development over the past 15 years, with notable surges in 2019, 2023, and 2024. These findings suggest that the topic of economic empowerment of rural women is still in its early stages, with relatively recent research output, making it a promising and relevant area for future studies and for fostering knowledge adoption within rural communities.

Figure 2.
Publications per year

Source: Prepared by the authors from Scopus

3.2. Influential Authors and Journals

Figure 3 reveals that the field is still nascent, with most authors contributing only one or two articles. Among authors with a single publication, Vlassoff C., Hordofa D.F., and Badore M.A. stand out for their high citation rates, indicating significant impact. In contrast, while authors with up to two publications generally show lower impact, Isfaq S. is a notable exception.

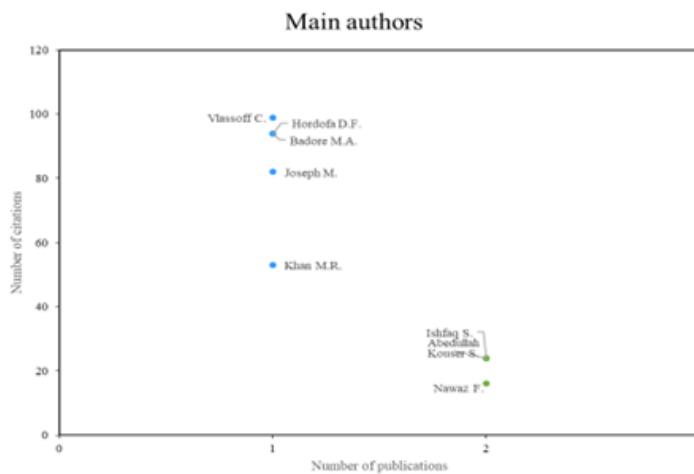
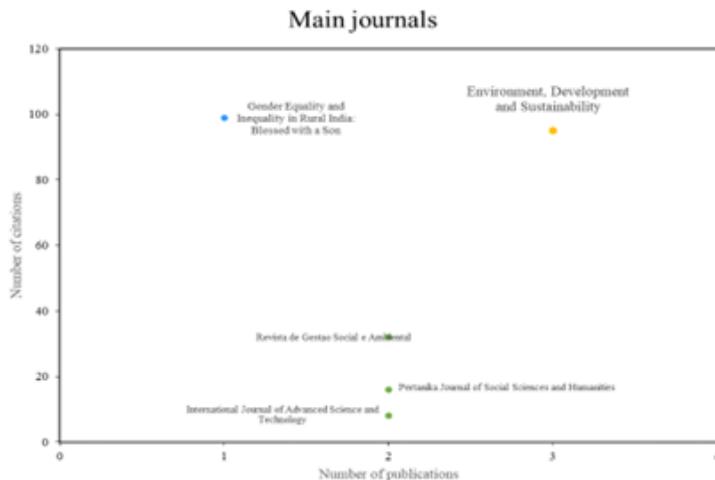
Figure 3.
Main authors

Source: Own elaboration based on Scopus.

Figure 4.
Main journals


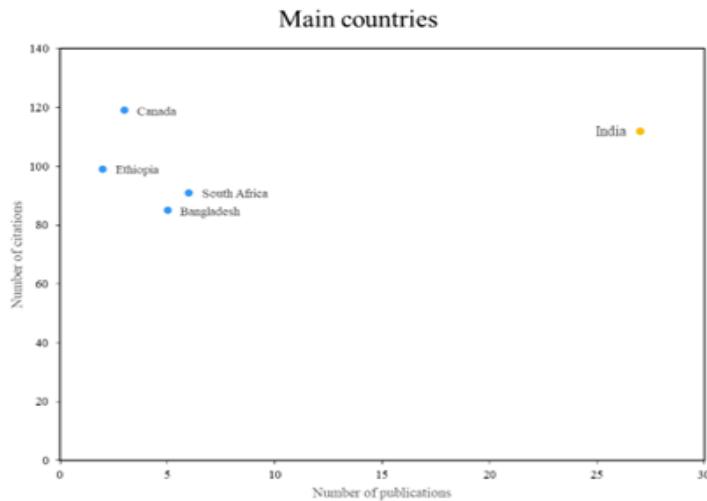
Source: Own elaboration based on Scopus.

The analysis of key journals (Figure 4) identified three distinct groups:

- High Productivity and Impact: Journals like Environment, Development and Sustainability have made substantial contributions to the field.
- Low Productivity, High Impact: This group includes journals such as Gender Equality and Inequality in Rural India, demonstrating significant influence despite fewer publications.
- High Productivity, Modest Impact: Journals like Revista de Gestão Social e Ambiental show high publication volume but comparatively lower citation impact.

3.3. *Leading Countries in Research*

Figure 5 summarizes the countries of affiliation for journals with the highest academic output. India emerges as a prominent leader, exhibiting both high productivity and impact in research on rural women's economic empowerment. A second group, including Canada, Ethiopia, and South Africa, shows significant research impact despite lower publication volumes, indicating their notable contributions to the field.

Figure 5.
Main countries

Source: Prepared by the authors from Scopus

3.4. Thematic Evolution

Figure 6 illustrates the evolution of themes in literature from 1979 to 2024. The year 1979 marks the emergence of early concepts like "Long Way," signaling the beginning of discussions on this topic. In contrast, recent years have seen a proliferation of contemporary themes, including "women-oriented initiatives," "job profile," "sustainable development," and "gender equality," reflecting current research trends and a more nuanced understanding of rural women's empowerment.

Figure 6.
Thematic evolution

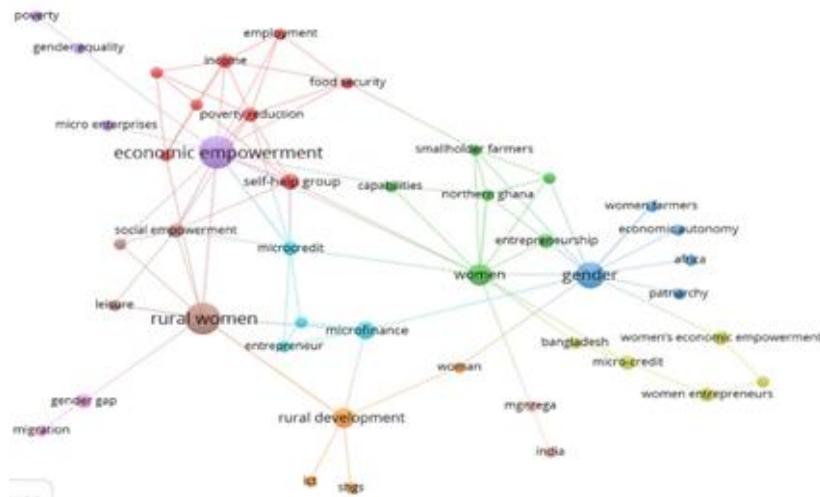
Source: Own elaboration based on Scopus.

3.5. Keyword Co-occurrence and Thematic Clusters

Our analysis of the keyword co-occurrence network identified nine distinct thematic clusters, illustrating conceptual affinities within the field (Figure 7).

Figure 7

Keyword co-occurrence network



Source: Own elaboration based on Scopus.

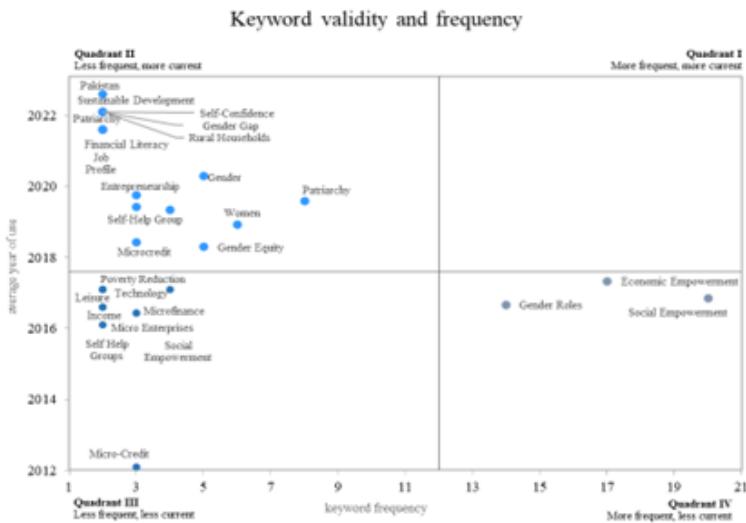
The blue cluster prominently features terms like Gender, Patriarchy, Economic Autonomy, and Women Farmers. This indicates a strong focus on gender relations and the pursuit of economic independence for rural women.

The green cluster groups terms such as women, entrepreneurship, capabilities, and smallholder farmers. This highlights a clear interest in entrepreneurial activities and strengthening the capacities of women involved in small-scale agriculture.

Additional thematic clusters in light blue, red, orange, pink, brown, and yellow further reflect various conceptual connections relevant to understanding the economic empowerment of rural women.

3.6. Keyword Frequency and Validity (Cartesian Plane Analysis)

We utilized a Cartesian plane to visualize keyword usage, plotting frequency on the X-axis and validity on the Y-axis (Figure 8). This revealed four distinct quadrants.

Figure 8.
Validity and frequency of keywords


Source: Prepared by the authors from Scopus.

Quadrant 4 (Decreasing Concepts): This quadrant contains keywords showing reduced usage in recent literature, indicating a decline in their academic relevance. Terms like "Economic Empowerment," "Gender Roles," and "Social Empowerment" fall into this category, suggesting a shift in research focus away from these previously central concepts.

Quadrant 2 (Emerging Concepts): This quadrant highlights keywords that, despite being less frequent, demonstrate high validity, marking them as emerging areas of interest. These include terms such as "Sustainable Development," "Self-Confidence," "Gender Gap," "Rural Households," "Microcredit," and "Patriarchy." Their presence here signifies growing importance in current research on rural women's economic empowerment.

Quadrant 1 (Established and Expanding Concepts): While not explicitly detailed with specific terminology in this analysis, this quadrant typically encompasses concepts that are both frequently used and highly valid, representing well-established and growing areas within the field.

4. Discussion

This section presents and analyzes the research findings, outlining practical implications, study limitations, keyword classifications, and identifying key research gaps. It also proposes a future research agenda focused on the economic empowerment of rural women to benefit affected communities and enrich scholarship.

4.1. Analysis of Scientific Literature Growth

Scientific production on the economic empowerment of rural women shows a notable surge in 2019, 2023, and 2024 (Figure 2).

2019: An empirical study highlighted how microcredit-based financial assistance positively impacted rural Palestinian women's economic circumstances, increasing income and social standing.

This underscores financing's role as a catalyst, necessitating programs tailored to women's unique needs (Safi & Altarawneh, 2018).

2023: Kuma and Godana's study on Wolaita, Ethiopia, identified barriers like limited financial resource access and low participation in formal economic activities. Their findings suggest policies should prioritize training and financial services to foster empowerment (Kuma & Godana, 2023).

2024: Research by Desai et al. (Desai et al., 2024) explored the roles of financial literacy and entrepreneurial orientation in empowering rural women entrepreneurs. It emphasized financial education's critical role in business success, showing how it enables women to start and manage businesses, thus contributing to their economic empowerment. The link between education and economic empowerment remains a growing area of interest.

4.2. Analysis of research references

Figure 3 highlights Vlassoff, C., Hordofa, D. F., and Badore, M. A. as the most influential contributors.

Vlassoff, C. is a leading figure in gender and empowerment, especially in rural India. His work provides a comprehensive perspective on gender inequality's impact on women's empowerment, emphasizing integrating gender equality and sustainable development (Vlassoff, 2013).

Hordofa, D. F., and Badore, M. A. evaluated the influence of social, demographic, and economic variables on rural women's economic empowerment in Ethiopian agriculture. Their empirical evidence on barriers and empowering strategies significantly increased their influence in the field (Hordofa & Badore, 2024).

Nawaz F. has contributed significantly to research on women's political and economic empowerment in Bangladesh. Her work on rural women's political representation and microfinance addresses barriers to decision-making, establishing her as an influential author (Nawaz, 2014).

4.3. The journals in Figure 4 significantly contribute to this field

Environment, Development and Sustainability is notable for its focus on the intersection of sustainable development and women's empowerment in rural settings. It has disseminated research showing how initiatives, like cultivating non-timber forest products in Ghana, directly impact women's quality of life (Ahenkan & Boon, 2011).

Blessed with a Son serves as a foundational text in Indian gender studies, comprehensively examining rural gender inequalities and emphasizing equity in economic development. It provides a theoretical and empirical basis for future research on gender inequality and rural development (Vlassoff, 2013).

The Journal of Social and Environmental Management demonstrates high output in women's economic empowerment in agriculture. A recent study evaluated Brazil's Food Acquisition Program (PAA), highlighting its role in strengthening women's position in agriculture and contributing to their empowerment (Rui & Medeiros Hespanhol, 2024).

As shown in Figure 5, India is a pivotal nation in scientific production, exhibiting high productivity and impact. Numerous studies from India address gender and property rights, particularly inheritance and land rights. Research here illuminates obstacles women face in accessing economic resources, underscoring the vital need for reforms for their economic empowerment (Kelkar, 2014).

Canada, despite lower production, contributes significantly by exploring women's empowerment through technology transfer. This approach highlights the importance of international collaboration and knowledge dissemination for advancing gender equity (Santhi et al., 2005).

Ethiopia and South Africa are key case studies. Research on Ethiopia examines the impact of social, demographic, and economic factors on rural women's empowerment, providing empirical data for inclusive policies (Hordofa & Badore, 2024). In South Africa, the potential of Information and Communication Technologies (ICTs) to empower rural women by transforming their access to information and resources is emphasized (Joseph, 2011). Both nations highlight the need for context-specific approaches considering local dynamics.

4.4. Analysis of thematic evolution

Research on the economic empowerment of rural women has seen a notable evolution in its thematic focus. In its nascent stages, the concept of "Long Way" was significant, reflecting the inherent difficulties and challenges rural women faced in achieving autonomy and recognition within existing socio-economic structures. Early studies, particularly in China, laid the groundwork for understanding the structural barriers to women's economic advancement and gender disparities in rural economic development (Croll, 1979).

In recent years, there has been a notable shift in the thematic focus. In 2024, the most researched concept was that of women-oriented initiatives. This concept emphasizes the importance of implementing and strengthening targeted initiatives for women to facilitate their economic empowerment. The limited impact of some governmental and non-governmental policies underscores the need for improved monitoring and efficacy of these programs, particularly in rural contexts, recognizing their crucial role in sustainable development (Olufemi, 2024).

In 2023, Studies on "Job Profile" gained significance by analyzing the disparities in labor opportunities between rural and urban women. Rural women often face greater obstacles in accessing formal and remunerated employment, which constrains their economic empowerment. This research is vital for identifying these discrepancies and proposing policies to address them (Biswas & Banu, 2023).

In 2022, the concept of sustainable development gained prominence in studies on rural women's empowerment. The socioeconomic impact of women's self-help groups was explored, with a particular focus on their role in the sustainable development of rural communities. This highlighted the intrinsic link between the economic empowerment of rural women and sustainable practices that promote social equity and environmental conservation (Vijayamalleeswari & Mugunthan, 2022).

Finally, in 2021, "Gender Equality" was identified as a key concept for addressing the autonomy of rural women. A study on women in Chivatá, Boyacá, Colombia, emphasized that gender equality is not only a fundamental right but also essential for improving rural women's economic opportunities and encouraging their active participation in local economic development (Hernández, 2021).

4.5. Analysis of thematic clusters

Our bibliometric analysis of the keyword co-occurrence network identified distinct thematic clusters reflecting conceptual affinities within the economic empowerment of rural women.

The blue cluster includes terms like gender, patriarchy, economic autonomy, and women farmers. This cluster highlights the strong connection between rural women's economic autonomy and the gender-based barriers they face. It reflects a focus on financial inclusion challenges posed by patriarchal structures (Manta, 2019) and explores the relationship between economic autonomy and overcoming gender inequalities in rural settings (Villafuerte-Pezo et al., 2022). It also examines the impact of agricultural programs, such as Brazil's Food Procurement Programme, on empowering women in family farming and advancing their economic autonomy (Rui & Medeiros Hespanhol, 2024).

The green cluster comprises terms such as Women, Entrepreneurship, Capabilities, and Smallholder Farmers. This cluster emphasizes the growing relevance of female entrepreneurship and the productive capacities of smallholder women farmers in rural areas. Research has highlighted factors driving women farmers' participation in commercial crop production in Ghana, underscoring the importance of access to resources and capabilities for improved economic performance (Zakaria, 2017). Additionally, studies have examined horticulture's role in empowering rural women and enhancing their livelihoods (Raman & Dubey, 2014) and investigated the impact of empowerment policies on the agricultural productive capacities of rural women in Nigeria, showing how these policies boost both production and economic independence (Adeleke & Akinbile, 2019).

4.6. Analysis of Keyword Frequency and Conceptual Validity

The Cartesian plane analysis reveals a shift in the relevance of concepts related to economic empowerment in rural women.

Concepts with Diminished Relevance (Quadrant 4): Terms like economic empowerment, gender roles, and social empowerment, once central to research, have ceded ground to newer dynamics.

- Economic Empowerment: While foundational for financial inclusion and entrepreneurship in rural women (e.g., microenterprises in India; (Xavier et al., 2008)), the focus has expanded beyond mere financial access to include comprehensive training and sustainable entrepreneurship.
- Gender Roles: Previously paramount in understanding intergenerational challenges (e.g., Rwanda; (Niyonkuru & Barrett, 2021)), the emphasis has shifted towards a more structural analysis of gender barriers, integrating equal opportunities and rights.
- Social Empowerment: Once prominent in community integration and networking initiatives (e.g., rural arts and crafts projects; (Malema & Naidoo, 2017)), this approach has been largely replaced by initiatives that blend both economic and social empowerment within a sustainable development framework, emphasizing resource access and community leadership.
- Emerging Concepts (Quadrant 2): Keywords such as sustainable development, self-confidence, and gender gap are increasingly salient, reflecting a move towards more comprehensive approaches for lasting and equitable empowerment.

- Sustainable Development: This concept has become pivotal, particularly with self-help group movements guiding sustainable development and equipping rural women to improve their economic and social standing. This approach addresses immediate needs while promoting equitable participation in long-term community development, ensuring sustainable empowerment (Aggarwal & Shamsi, 2022).
- Self-Confidence: Growing recognition places self-confidence as a key element in individual empowerment. Strengthening self-confidence through self-help groups significantly impacts women's autonomous decision-making and quality of life. This psychological dimension empowers rural women not only with economic skills but also to overcome traditional social barriers (Paramasivam, 2022).
- Gender Gap: Reducing the gender gap is now a research priority. Despite increased participation of rural women in agricultural entrepreneurship in the Slovak Republic, disparities in resource access and opportunities persist. Future analysis of these disparities is crucial for formulating policies that promote gender equality in access, decision-making, and leadership within rural communities (Kapsdorferová et al., 2021).

4.7. Classification of keywords on Economic empowerment in rural women according to their function

Table 1 provides a comprehensive classification of the primary emerging and growing keywords related to the economic empowerment of rural women. These keywords are categorized by their function within the field, which helps identify their relevance in recent literature, along with their unique characteristics and practical applications within each functional category.

Table 1.

Classification of keywords according to their function. Prepared by the authors from Scopus

Keyword	Associated Tools	Applications	Characteristics
Sustainable Development	Education, Training, Natural Resources	Sustainable projects, Poverty reduction, Agriculture	Long-term, Sustainable, Holistic
Self-Confidence	Support Groups, Training, Social Networks	Fostering autonomy, Social inclusion, Leadership	Personal autonomy, Active participation, Inclusive
Gender Gap	Disparity analysis, Awareness raising, Equity programs	Inclusive policies, Reducing disparities, Equal opportunities	Barrier reduction, Inclusive approach, Systematic
Rural Households	Access to services, Community management, Rural policies	Income improvement, Access to services, Family sustainability	Economic sustainability, Social inclusion, Equitable access
Microcredit	Small loans, Financial services, Cooperatives	Accessible financing, Entrepreneurship, Local development	Affordable, Inclusive, Local
Patriarchy	Power analysis, Gender equality, Awareness raising	Gender equity, Social justice, Collective empowerment	Cultural challenge, Awareness, Structural transformation

Source: Prepared by the authors from Scopus.

4.8. Theoretical implications

The theoretical implications derived from this study facilitate an understanding of the evolution of the field and highlight areas for future research. The increasing publication frequency, particularly over the last two decades, reflects growing academic interest in the economic empowerment of rural women, likely driven by global discussions on gender and rural development, and international policies on poverty reduction and sustainable development. This underscores the need for continued investigation into these initiatives' specific impact on rural women.

Bibliometric analysis identified common theories used in this field, including social capital theory, gender empowerment, and agency theory. This indicates a research focus on community resources, social networks, personal autonomy, and economic opportunities for rural women. However, a significant gap remains in integrating economic theories with sustainable rural development approaches, presenting a key area for future research.

Thematic evolution and keyword co-occurrence reveal a shift from early studies on rural poverty and microcredit to broader topics like sustainability, digital inclusion, and social entrepreneurship. This signifies a move towards a more comprehensive understanding of rural women's economic empowerment, encompassing financial access, involvement in sustainable value chains, and innovation. Nevertheless, the low co-occurrence of terms related to gender equity in political decision-making suggests a need for more theoretical attention to how local and regional power structures influence women's empowerment.

Emerging keywords such as "agricultural technologies," "inclusive finance," and "women's cooperatives" point to a theoretical expansion examining technology and finance's impact on rural women's economic development. Identified research gaps include the absence of comparative regional studies and longitudinal research assessing long-term intervention impacts. These gaps emphasize the need for interdisciplinary research that connects technological advancements, institutional frameworks, and cultural factors for a more robust understanding of rural women's economic empowerment in diverse contexts.

4.9. Practical implications

The practical implications derived from this bibliometric analysis offer significant insights for public policies and rural development programs. The shift from general approaches to specific, women-oriented initiatives (e.g., "Women-Oriented Initiatives" and "Job Profile") highlights the need for policies and projects that acknowledge the unique characteristics of women's work in rural settings. This shift suggests interventions should prioritize capacity development, economic inclusion, and job creation, while also addressing structural inequalities related to gender equity and sustainable development.

The conceptual link between terms like gender, patriarchy, economic autonomy, and women farmers emphasizes the necessity of addressing social and cultural barriers to women's economic empowerment in rural areas. Practically, this means development programs must not only provide financial resources but also create more equitable environments that promote women's economic autonomy within patriarchal structures. Forming and strengthening women farmers' cooperatives can empower women to control their income and participate in community decision-making.

Examining emerging and declining keywords provides avenues for refining existing interventions. While "economic empowerment" and "gender roles" are declining, terms like "sustainable development," "self-confidence," "gender gap," and "microcredit" are emerging. This indicates that practical initiatives should align with these growing concepts. Specifically, focusing on sustainable development and self-confidence means empowering rural women to adopt sustainable agricultural practices, leverage new financial opportunities (like microcredit), and boost their self-esteem, leading to greater economic independence.

The continued relevance of "Patriarchy" and "Gender Gap" signifies persistent obstacles to gender equality in rural areas. Policymakers must prioritize closing the gender gap and promoting changes in social and cultural norms that perpetuate women's subordination. Initiatives incorporating women into microfinance programs and deploying sustainable technologies must be complemented by measures addressing unequal power dynamics to ensure rural women genuinely benefit.

Beyond these, the bibliometric analysis offers practical insights into technological inclusion, capacity building, and market access. Emerging keywords like "microcredit" and "sustainable development" suggest that agricultural technologies and innovative financial instruments are crucial for economic empowerment. Practically, initiatives targeting rural women should facilitate access to technologies that boost agricultural productivity and develop inclusive financial infrastructures for microcredit access, fostering rural enterprises and sustainable economic activities.

From an educational standpoint, "self-confidence" underscores the importance of comprehensive training that includes technical skills and personal development to enhance rural women's economic involvement. Training programs should go beyond productive skills to foster confidence and self-efficacy, including components of personal empowerment, leadership, and negotiation, enabling rural women to actively participate in their communities and secure better working conditions and resources.

Regarding the community and social dimension, the persistent use of terms like "Patriarchy" and "Gender Gap" highlights the need for efforts to transform social norms alongside economic empowerment advancements. Community initiatives engaging both men and women are crucial for cultural transformation towards gender equity. Awareness programs involving community and family leaders can reduce resistance to women's economic independence, fostering more effective integration into local economies.

In public policy, the declining trend of "Gender Roles" indicates progress in recognizing women's economic empowerment, but also a need for greater legislative intervention to address the lingering influence of normative and structural gender roles. Public policies must focus on creating regulatory frameworks that advance gender equity in the workplace and resource access, while also establishing monitoring mechanisms to ensure effective implementation, especially in rural areas where gender and economic disparities are most pronounced. Including rural women in local and regional decision-making is essential to ensure policies reflect their needs and realities.

4.10. Limitations

One primary limitation is the exclusive reliance on the Scopus database. This may have excluded relevant research indexed in other databases (e.g., Web of Science, Google Scholar), potentially narrowing the scope, especially for studies from developing countries where scientific output might not be fully represented in Scopus.

While the PRISMA-2020 methodology ensures rigorous article selection, recent studies or those not yet indexed might have been excluded, affecting the results' contemporary relevance. Another limitation concerns the analytical tools, Microsoft Excel® and VOSviewer®. While effective for data processing and visualization, they have limitations in qualitative analysis depth. The bibliometric approach is primarily quantitative and structural, potentially omitting crucial nuances regarding research quality, such as contextual relevance or applicability in diverse rural settings. Future research would benefit from complementary qualitative analysis methods for a more in-depth examination of the actual impact of economic interventions on rural women.

4.11. Research gaps

Table 2 presents an analysis of the principal research gaps identified in bibliometrics, which require attention in future studies. These gaps are classified into the following categories: thematic, geographic, interdisciplinary, and temporal.

Table 2.

Research gaps

Category	Gaps identified	Justification	Questions for future researchers
Thematic gaps	1. Impact of digital technologies and microcredits on rural women.	Although microcredit is an emerging word, more research is needed on the specific effects of financial technologies on rural women.	How do digital microcredit platforms affect the economic empowerment of rural women in different regions?
	2. Relationship between economic empowerment and community quality of life.	The connection between individual empowerment and social change in the rural community has not been sufficiently explored.	What impact does the economic empowerment of rural women have on the quality of life and social cohesion of their communities?
Geographic gaps	1. There is a lack of studies on the empowerment of rural women in sub-Saharan Africa.	Regions with high poverty and gender inequality, such as sub-Saharan Africa, lack sufficient coverage in studies on economic empowerment.	What factors limit or promote the economic empowerment of rural women in sub-Saharan Africa?
	2. Lack of studies in Central Asia.	The socioeconomic conditions of Central Asia represent a unique context not sufficiently addressed in the literature.	How do the specific cultural and economic contexts of Central Asia influence the economic empowerment of rural women?
Interdisciplinary gaps	1. Poor integration of behavioral economics and psychology in empowerment studies.	Studies have focused on the economic perspective, without considering how rural women make financial decisions based on psychological factors.	How can behavioral economics and psychological approaches improve our understanding of rural women's economic empowerment?
	2. Limited integration of sustainability and economic empowerment studies.	The connection between sustainable development and economic opportunities for rural women remains an underexplored area.	How can sustainable development initiatives foster the economic empowerment of rural women?
Time gaps	1. Lack of longitudinal studies on economic empowerment.	Most research is cross-sectional, limiting understanding of the long-term effects of empowerment.	What are the long-term effects of rural women's economic empowerment in terms of financial and social sustainability?
	2. Scarcity of studies that analyze specific historical contexts.	There is a lack of research that considers how recent political and economic changes have affected the empowerment of rural women.	How have political and economic changes in the last two decades influenced the empowerment of rural women?

Source: Prepared by the authors from Scopus

This table highlights the main areas that future researchers must address to close the existing gaps in research on economic empowerment in rural women.

4.12. Research trends and future work

Studying gender is crucial for understanding the economic empowerment of rural women, as it reveals structural inequalities hindering their access to resources, opportunities, and decision-making. Despite persistent gender inequality, future research should explore the long-term impact of public policies promoting gender equality from a rural perspective. An intersectional approach is vital, examining how gender dynamics interact with education, technology, and financial services. Future studies could assess financial or digital training programs tailored for rural women to develop more inclusive strategies for closing the economic gender gap.

Entrepreneurship is a powerful tool for rural women's economic autonomy, enabling income generation and proactive community roles. However, limited access to funding, business training, and support networks remains significant barriers. While current research focuses on small businesses and local economies, future studies should investigate how business incubation programs and access to broader markets can enhance the sustainability of women-led enterprises. A deeper dive into rural female entrepreneurship requires analyzing the local ecosystem's unique attributes, including the influence of digital technology and e-commerce on global market integration, and resilience to challenges like climate change.

Rural households are fundamental to communities, and women's economic participation directly impacts family well-being. Currently, rural women often face a dual burden of paid work and domestic responsibilities, limiting their time and capacity. Future studies could analyze the potential of family conciliation policies, such as community daycare or state support, to alleviate this burden and enhance economic empowerment. Examining the impact of access to essential services like health and education on women's economic prospects within rural households would also be beneficial. Comprehensive policies addressing these needs could create a more equitable environment for women's economic development, with further research exploring policy adoption and its effect on household resource distribution.

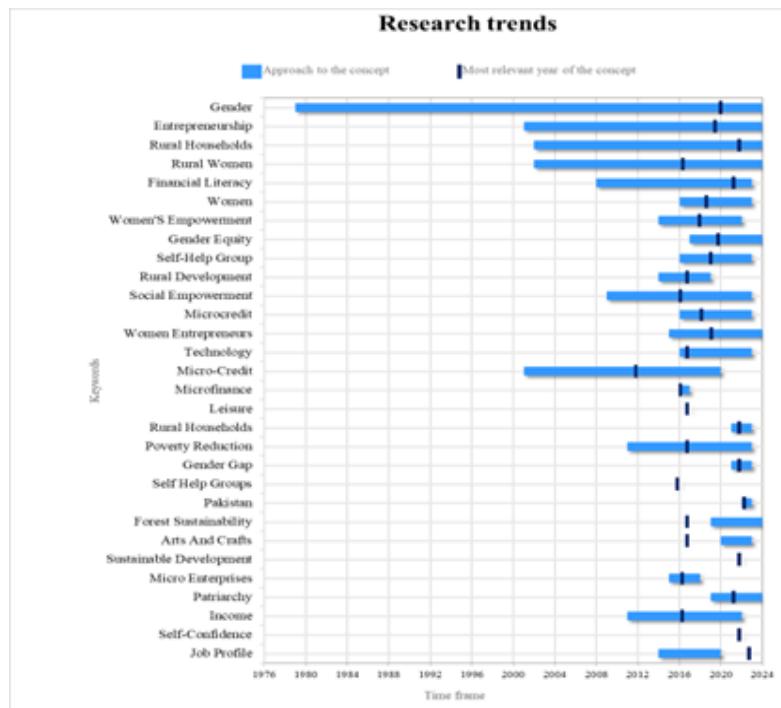
Gender equity is a critical area for addressing systemic barriers faced by rural women in accessing economic resources and development opportunities. Beyond equal rights, it involves creating conditions for active and equal participation in community economic life. Future research should assess the effectiveness of gender equity policies in rural areas, focusing on their impact on women's access to agricultural, financial, and technological resources. Expanding this research to analyze regional and cultural differences in policy implementation and identifying the most effective interventions, considering factors like land access, education, and community support, would also be valuable.

Women entrepreneurs in rural areas are pivotal in transforming local economies and fostering both economic and social development. Despite their importance, they face obstacles like limited access to credit, support networks, and business training, hindering their expansion. Future research should focus on creating rural business ecosystems that provide access to capital, appropriate technologies, and specific business networks for women, enabling them to compete in broader markets. Examining the potential of mentoring programs and tax incentive policies for rural women entrepreneurs could enhance long-term business viability, offering nuanced insights into effective interventions for growth in sectors like sustainable agriculture, crafts, or rural tourism.

Forest sustainability is an emerging concept integrating environmental management with economic empowerment, particularly where rural women are key to natural resource conservation and sustainable use. As traditional environmental custodians, rural women can lead forest sustainability initiatives that generate income through ecotourism, reforestation, and non-timber forest product management. Future research should explore women's role in forest conservation decision-making and how public policies can support their active participation. Further investigation into integrating women-led forest sustainability initiatives into global carbon and sustainable product markets could provide new income sources and reinforce their roles in climate change mitigation and economic empowerment.

Figure 9.

Research trends



Source: Prepared by the authors based on Scopus.

Financial literacy is fundamental for rural women's economic empowerment, enabling informed decisions about resources and finance. Financially literate women are more likely to establish sustainable businesses, yet literacy remains low in many rural areas. Future studies should assess the efficacy of specific financial training programs for rural women and their impact on local economic growth. Research could also explore integrating financial literacy with mobile technologies to enhance access to banking services and microcredit, revealing how rural women can leverage digital tools for better financial management and market access.

Using "women" as a central analytical category in studying economic empowerment in rural areas is driven by the need to understand their unique experiences and challenges regarding resources, opportunities, and decision-making. The current research agenda emphasizes inclusive policies facilitating women's economic involvement. However, there's significant scope for investigating how differences in age, marital status, and education shape rural women's economic opportunities.

Future studies could adopt a disaggregated approach to identify which groups benefit most from economic interventions. Examining how women's involvement in community organizations and rural cooperatives can enhance their influence on local economic decisions, and how to strengthen these structures and maximize the impact of gender policies, could yield novel strategies for advancing women's economic empowerment in rural areas.

The concept of women's empowerment remains central to the rural development agenda, particularly regarding access to productive resources, decision-making, and market participation. Despite progress, structural impediments persist. Future research should focus on how public policies and development programs can enhance women's inclusion in agriculture, trade, and technology, optimizing their income generation and well-being. Further investigation into digital tools for rural women's empowerment, providing market access, information, and support networks, could not only reduce gender gaps but also foster resilience to economic and climate shocks.

5. Conclusions

Research interest in the economic empowerment of rural women is rapidly growing. This bibliometric study reveals an exponential increase in scientific publications, particularly surging in 2019, 2023, and 2024.

The research focus has also evolved significantly. Initially, studies centered on broad concepts like "Long Way," but recent years show a clear shift towards more specific and actionable themes. These include "Women-Oriented Initiatives," "Job Profile," "Sustainable Development," and "Gender Equality," reflecting a more targeted and nuanced approach to understanding empowerment.

India stands out as the leading nation in this research domain. Our bibliometric analysis highlights India's substantial number of scientific publications and citations on the topic, underscoring its significant influence and contributions to the field.

The economic empowerment of rural women is a complex and multifaceted process demanding a comprehensive, integrated approach. Simply providing access to economic resources is insufficient; it's crucial to address the underlying social, cultural, and institutional barriers that hinder women's full economic participation. Future research and interventions must consider the intricate interplay of factors such as education, health, access to technology, participation in decision-making processes, and prevailing gender norms.

Empowering rural women directly contributes to sustainable development. When women gain greater control over economic resources and actively participate in the economy, it generates widespread benefits for their families, communities and society.

Crucially, financial education is a pivotal element in enhancing rural women's economic autonomy. This study emphasizes the vital need for rural women to possess strong financial literacy to effectively manage their resources and engage more actively in the economy.

Finally, future research on the economic empowerment of rural women must be more context sensitive. The realities of rural women vary significantly across regions, cultures, and socioeconomic conditions. Therefore, studies should account for these differences and avoid broad generalizations. Conducting local-level research is essential to gain a comprehensive understanding of the specific needs and challenges faced by women in diverse rural contexts.

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Data availability statement

The data availability statement for this study has been duly registered and archived in the Zenodo open data repository, a repository recognized for its commitment to the accessibility and preservation of scientific data. The data and materials supported by this study are publicly available and can be accessed at the following DOI: 10.5281/zenodo.14246198s.

Conflict of Interest

The authors declare no conflicts of interest.

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