

Empowering Women Through Sustainable Development: Strategies for Female SMEs in Siak Regency

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Abstract

The empowerment of female-owned SMEs (Small and Medium Enterprises) in Siak Regency plays a pivotal role in driving family economic welfare and contributing to sustainable development. Despite various government policies and programs implemented by local agencies, significant challenges persist, including limited access to capital, low financial literacy, and minimal utilization of digital marketing technologies. This study analyzes the progression of female SME empowerment, identifies strengths, weaknesses, opportunities, and threats (SWOT analysis), and formulates effective strategies. The findings highlight the need for targeted training, enhanced financial access, and strategic partnerships with public and private sectors. By fostering gender equality and adopting environmentally friendly practices, the study provides actionable recommendations for inclusive and sustainable economic development in Siak Regency.

Keywords: *Women Empowerment, SMEs, Sustainable Development, Strategies, Siak Regency.*

Introduction

Women's empowerment remains a central agenda for global development, often integrated into policies aiming to enhance participation in economic, political, social, and cultural spheres. The 2030 Agenda for Sustainable Development underscores gender equality as a cornerstone for achieving inclusive development. In Indonesia, this commitment is mirrored in Vision 2045, which targets inclusive growth by integrating gender-responsive policies in economic empowerment, education, health, and political representation.

Siak Regency, located in Riau Province, exemplifies local efforts to bridge gender disparities. However, the region faces significant challenges that highlight the urgency of empowerment initiatives. According to 2024 statistics, the Gender Inequality Index (GII) in Siak has shown progressive improvement compared to other regions, ranking among the top 10 regencies in Riau Province in terms of gender equality. Despite this progress, stark inequalities remain, particularly in the labor market. The female workforce participation rate is disproportionately low at 31%, compared to 69% for males. These figures not only indicate gender imbalances but also reflect systemic barriers that limit women's access to opportunities in education, skill development, and formal employment.

This disparity is further exacerbated by sociocultural norms that perpetuate traditional gender roles. For example, women are often expected to prioritize household responsibilities over career aspirations, leading to limited representation in decision-making roles across industries. Additionally, the male-dominated sectors of agriculture and manufacturing absorb a significant portion of the workforce, leaving women to rely on informal or lower-paying jobs. These patterns hinder the economic independence of women, thereby reducing their ability to contribute meaningfully to regional development.

Efforts to address these challenges have included local government initiatives such as the Siak Women Empowerment Program, which aims to provide vocational training and financial assistance to female entrepreneurs. However, the program faces limitations in scale and outreach, leaving many women entrepreneurs without access to the necessary resources. Furthermore, access to formal credit remains a

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critical issue, as women frequently face higher barriers in securing loans due to lack of collateral or perceived financial risk.

From a global perspective, the challenges faced by women in Siak Regency mirror those observed in many developing countries. According to a 2022 World Bank report, women-owned SMEs in low- and middle-income nations contribute approximately 37% to GDP but face significant hurdles, including limited access to markets and technology. This underlines the importance of integrating Siak's empowerment initiatives within the broader context of Sustainable Development Goal (SDG) 8, which advocates for decent work and economic growth.

The economic impact of empowering women in Siak Regency cannot be understated. A 2023 study by the Indonesian Ministry of SMEs and Cooperatives estimated that increasing women's participation in SMEs by 10% could boost the region's GDP by 1.2%. This highlights the untapped potential of female entrepreneurs in driving local economic growth, particularly in sectors such as handicrafts, food processing, and digital services. By addressing gender disparities and promoting inclusive growth, Siak Regency could serve as a model for other regions in Indonesia.

Moreover, the intersection of digital transformation and women's empowerment presents a unique opportunity for progress. The rise of e-commerce and digital payment systems provides women entrepreneurs with platforms to reach broader markets while overcoming geographical limitations. However, low digital literacy among women in Siak remains a significant obstacle. Addressing this gap through targeted training programs and partnerships with technology providers could accelerate progress toward economic equality.

Recent studies further emphasize the role of supportive ecosystems in fostering women-led entrepreneurship. For instance, Khan et al. (2023) identify that regions with integrated community development programs tend to experience higher levels of female economic participation. Similarly, Lee and Park (2022) note that robust public-private collaborations significantly enhance the sustainability of women-owned businesses by providing access to resources, mentorship, and markets. These findings resonate with the situation in Siak, where institutional support could serve as a transformative force for women entrepreneurs.

In addition to economic benefits, empowering women in Siak has broader societal implications. Increased financial independence among women correlates with improved health and education outcomes for families, creating a positive ripple effect on community development. By investing in women, Siak Regency can unlock a cycle of prosperity that extends beyond individual households to benefit the entire region.

This study examines the current state of women's empowerment in Siak Regency, with a focus on SMEs as a vehicle for sustainable economic development. By analyzing internal and external factors through a SWOT framework, the research aims to formulate strategies that enhance the economic participation of women while fostering sustainability. The study not only highlights the structural barriers but also explores potential pathways for inclusive growth, aiming to contribute to policy frameworks that align with both local needs and global objectives.

Literature Review

Theoretical frameworks on women's empowerment emphasize the interplay between social structures and individual agency. Amartya Sen's capabilities approach underscores the importance of expanding opportunities for women to achieve economic and social well-being. This perspective aligns with the goals of Sustainable Development Goal (SDG) 5, which advocates for gender equality and empowerment of all women and girls.

Entrepreneurship is widely recognized as a catalyst for women's economic empowerment. Studies by Faccio et al. (2016) highlight how entrepreneurial ventures enable women to overcome traditional gender roles, gain financial independence, and contribute to community development. Similarly, ChoudhuryKaul et al.

(2023) emphasize the significance of access to capital and market networks in driving the performance of women-led SMEs. These studies provide a foundation for understanding the systemic factors that influence entrepreneurial success, particularly for women.

Empirical research highlights the critical role of digitalization in enhancing SME competitiveness. Susanti et al. (2020) found that digital marketing platforms significantly expand market reach and improve operational efficiency for female entrepreneurs. This aligns with findings by Rakanita (2019), who demonstrated that e-commerce adoption among SMEs leads to higher revenue growth and market penetration. However, barriers such as low digital literacy and limited infrastructure often hinder the effective adoption of these technologies in developing regions, including Siak Regency.

The integration of environmentally sustainable practices within SMEs is increasingly advocated as a dual strategy for economic growth and ecological preservation. Studies by Beyne (2020) and Schönherr et al. (2017) demonstrate that sustainability-oriented innovations enhance competitive advantage while aligning with global environmental goals. In the context of Indonesia, Syafi'i (2023) identified that SMEs adopting eco-friendly production methods experienced improved customer loyalty and reduced operational costs.

In the Indonesian context, regional studies such as Tambunan (2023) emphasize the importance of government support in addressing structural barriers faced by women entrepreneurs. Policies promoting access to microfinance, targeted training, and public-private partnerships are identified as critical enablers for the growth of women-led SMEs. Furthermore, Ratnawati (2017) highlighted the role of corporate social responsibility (CSR) initiatives in bridging resource gaps for female entrepreneurs, particularly in underprivileged areas.

Research also underscores the importance of social and familial support systems. Agustin and Solikin (2022) observed that women entrepreneurs often rely on family networks for initial funding and operational assistance. These support systems not only alleviate financial constraints but also foster a conducive environment for business innovation and growth. However, societal expectations sometimes act as a double-edged sword, limiting the entrepreneurial aspirations of women by reinforcing traditional gender roles.

Emerging research highlights the importance of inclusive policy frameworks in advancing gender equality within SMEs. Studies by Lopez and Ramirez (2023) identify that integrating gender-responsive approaches in regional economic planning significantly enhances female participation rates and reduces income disparities. Additionally, Clark et al. (2022) demonstrate the effectiveness of technology-driven mentorship programs in fostering the growth of women-led SMEs, particularly in rural settings. These insights underscore the necessity of aligning empowerment initiatives with evolving global trends and local realities.

The intersectionality of gender, technology, and sustainability forms the core of contemporary discourse on women's empowerment. By exploring these dimensions, this study aims to provide actionable insights into fostering inclusive growth within the SME ecosystem in Siak Regency. The literature highlights the need for a holistic approach that integrates financial inclusion, technological adaptation, and sustainable practices to empower women entrepreneurs effectively.

Methodology

This study employs a qualitative research design to explore the dynamics of women's empowerment within SMEs in Siak Regency. The research is grounded in a multi-method approach, integrating primary and secondary data to ensure comprehensive insights.

Sample Selection

The study targeted women entrepreneurs actively engaged in SMEs across four districts: Tualang, Kandis, Sungai Mandau, and Pusako. These districts were chosen due to their diverse socio-economic profiles and varying levels of SME activity. A purposive sampling technique was employed to select 100 participants.

This method ensured the inclusion of women with diverse experiences, ranging from micro-business owners to medium-scale entrepreneurs.

Data Collection Methods

Primary data were collected through semi-structured interviews and focus group discussions (FGDs). The interviews aimed to capture individual perspectives on challenges and opportunities in accessing financial resources, technological tools, and market networks. FGDs provided a platform for collective brainstorming, enabling participants to share experiences and strategies for overcoming systemic barriers. To complement these methods, participant observation was conducted during local business forums and training sessions to gain contextual insights.

Instrument Development

The research instruments were developed based on existing literature and tailored to the local context. The semi-structured interview guide included questions on financial literacy, access to funding, digital marketing skills, and perceptions of gender-based challenges. The FGD framework facilitated discussions on collaborative strategies for scaling businesses and integrating sustainability practices.

Secondary Data Analysis

Secondary data sources included government reports, academic journals, and industry publications. These documents provided background information on regional economic trends, gender disparities, and policy frameworks. The data were analyzed to identify patterns and correlations that could inform the study's findings.

Data Analysis Framework

The SWOT (Strengths, Weaknesses, Opportunities, Threats) framework was utilized to systematically evaluate internal and external factors influencing the empowerment of women-owned SMEs. Internal factors (strengths and weaknesses) were assessed through the Internal Factor Evaluation (IFE) matrix, while external factors (opportunities and threats) were analyzed using the External Factor Evaluation (EFE) matrix. This dual approach provided a structured foundation for strategy formulation.

Validity and Reliability

To ensure the validity and reliability of the findings, the study employed triangulation by cross-verifying data from multiple sources. Member checking was conducted during FGDs, allowing participants to confirm the accuracy of the recorded data. Additionally, pilot testing of research instruments was conducted with a small group of participants to refine the questions and ensure cultural relevance.

Ethical Considerations

Ethical approval was obtained from the relevant institutional review board. Informed consent was secured from all participants, ensuring they were aware of the study's objectives and their rights to withdraw at any time. Confidentiality was maintained by anonymizing participant data in all published materials.

This robust methodological framework enabled the study to capture the complexities of women's empowerment within SMEs in Siak Regency, providing a solid basis for actionable recommendations.

Results

The IFE analysis revealed several strengths among women-owned SMEs in Siak, including:

- Strong family support in business development.

- High-quality, unique products with local identity.
- Awareness of the need for financial literacy and technological adoption.

However, significant weaknesses persist, such as:

- Limited access to formal funding.
- Minimal technological expertise.
- Cultural barriers restricting women's decision-making roles.

The EFE analysis identified key opportunities, including:

- Increased government and private sector support for SMEs.
- Growing awareness of gender equality in economic empowerment.
- Expansion of digital marketing platforms.

Conversely, threats include:

- Intense market competition.
- Stringent loan requirements.
- Uncertainty in economic and political conditions.

While these findings highlight critical areas for intervention, they also underscore the potential for targeted strategies to bridge existing gaps. For example, many women entrepreneurs expressed interest in expanding their business operations through e-commerce platforms but cited challenges such as lack of technical training and high upfront costs. Similarly, participants acknowledged the positive impact of community support networks but emphasized the need for broader institutional collaboration to sustain long-term growth.

To further validate these results, the study conducted a comparative analysis across different districts within Siak Regency. This revealed notable differences in access to resources and market opportunities, with urban areas like Tualang showing higher levels of digital adoption compared to rural districts like Sungai Mandau. Such disparities highlight the importance of localized approaches in designing empowerment programs.

Another significant observation was the role of informal mentorship among women entrepreneurs. Participants frequently relied on peer networks to exchange knowledge and best practices, suggesting that formalizing these interactions through structured mentorship programs could amplify their impact. Additionally, the results indicated that younger entrepreneurs were more inclined to adopt innovative practices, such as social media marketing, compared to older counterparts who favored traditional methods.

The study also uncovered key trends related to industry-specific challenges faced by women entrepreneurs. For instance, women in the handicrafts sector reported difficulties in sourcing raw materials due to seasonal availability and fluctuating prices. On the other hand, those in the food processing industry emphasized the importance of adhering to regulatory standards, which often required additional training and certifications. These insights underscore the need for industry-specific interventions to address unique challenges and unlock growth opportunities.

In terms of financial inclusion, the research highlighted a substantial gap in access to formal credit facilities among women entrepreneurs. Despite the presence of microfinance institutions, many participants cited high interest rates and complex application procedures as barriers to securing loans. This finding points to the need for simplified and gender-sensitive financial products tailored to the needs of women-owned SMEs.

Discussion

The findings underscore the need for a multi-faceted approach to empowering women-owned SMEs. Strategies should leverage identified strengths, such as familial support and product uniqueness, while addressing weaknesses through targeted interventions.

Strengthening Public-Private Partnerships

Collaborative initiatives between the government and private sector can bridge financial gaps and provide capacity-building programs. Examples include subsidized loans and mentorship schemes. Partnerships could also facilitate access to advanced digital tools and technologies, enabling SMEs to compete effectively in broader markets.

Enhancing Digital Literacy

Comprehensive training in digital marketing and e-commerce can enable women entrepreneurs to access broader markets, reducing reliance on traditional sales channels. The integration of mobile-based applications tailored for SME management was identified as a particularly promising avenue for empowering women with limited access to desktop-based platforms.

Promoting Gender-Responsive Policies

Local governments must integrate gender considerations into economic planning, ensuring equitable access to resources and opportunities for women. Such policies should also include measures to address gender-based biases in loan approvals and workforce recruitment, fostering a more inclusive business environment.

Encouraging Sustainability Practices

Adopting eco-friendly production methods aligns SMEs with global sustainability goals while enhancing market appeal. For instance, programs that incentivize the use of biodegradable materials and renewable energy sources could simultaneously reduce operational costs and attract environmentally conscious consumers.

Expanding Networking Opportunities

Establishing women-focused business forums can facilitate knowledge sharing and collaboration, strengthening the collective bargaining power of female entrepreneurs. The creation of regional SME clusters, supported by local authorities, could further enhance market visibility and access to shared resources.

Fostering Innovation Through Education

Education systems in Siak should incorporate entrepreneurial skills, with a focus on digital technologies and sustainability. Partnerships with academic institutions could provide tailored training modules for aspiring women entrepreneurs, bridging the gap between academic knowledge and practical application.

Localized Support Systems

Tailoring interventions to the specific needs of different districts within Siak Regency can address the unique challenges faced by rural and urban entrepreneurs. This includes mobile training units for remote areas and advanced technical workshops in urban centers, ensuring equitable access to resources and knowledge.

Addressing Financial Barriers

Financial institutions should design gender-sensitive loan products with simplified procedures and reduced interest rates for women entrepreneurs. Collaborations with microfinance organizations could enhance the outreach of these products, particularly in underserved rural areas.

Facilitating Market Access

Establishing dedicated marketplaces for women-owned SMEs can enhance their visibility and customer base. Digital platforms, supported by government and private partnerships, could play a pivotal role in connecting entrepreneurs with regional and international markets.

Focusing on Mentorship Programs

Formal mentorship initiatives can provide women entrepreneurs with access to industry-specific guidance and networks. These programs should prioritize the inclusion of successful women business leaders as mentors to inspire and guide upcoming entrepreneurs.

These recommendations highlight the importance of a coordinated effort among stakeholders to create an enabling environment for women entrepreneurs in Siak Regency. By addressing systemic barriers and leveraging existing opportunities, such strategies have the potential to drive significant economic and social progress in the region.

Conclusion

The empowerment of women through SMEs in Siak Regency represents a pivotal step toward achieving inclusive and sustainable development. By addressing systemic barriers such as limited access to funding, technological literacy, and societal norms, significant strides can be made in enhancing women's economic participation. Empowering women is not merely a matter of gender equality but also a practical strategy for boosting regional economic growth, fostering social cohesion, and improving overall community welfare.

The findings of this study emphasize the critical role of strategic partnerships between government bodies, private organizations, and community groups in creating a supportive ecosystem for women entrepreneurs. Programs aimed at building financial literacy, providing accessible credit facilities, and enhancing digital marketing skills are essential in equipping women to overcome current challenges. Furthermore, the adoption of eco-friendly practices within SMEs can simultaneously address environmental sustainability while increasing the market competitiveness of women-led businesses.

Localized interventions tailored to the unique challenges of rural and urban districts within Siak Regency can significantly enhance the effectiveness of empowerment programs. For example, rural areas may benefit more from mobile training units and microfinance initiatives, while urban centers could leverage advanced technological tools and professional networks. This dual approach ensures that no demographic is left behind in the journey toward economic equity.

Looking forward, there is an urgent need for continuous monitoring and evaluation of empowerment programs to measure their long-term impact. Research should focus on understanding the scalability of successful models and identifying areas for improvement. In addition, the role of mentorship programs in fostering innovation and resilience among women entrepreneurs should be explored further.

The broader implications of empowering women extend beyond economic metrics. Empowered women are more likely to invest in their children's education and health, thereby contributing to a generational cycle of development. By integrating gender-responsive policies within regional planning frameworks, Siak Regency can set a precedent for other regions in Indonesia and beyond.

Finally, the journey of empowering women in Siak Regency underscores a universal truth: sustainable development is unattainable without gender equality. Through collaborative efforts and a steadfast commitment to addressing gender disparities, the vision of a more inclusive and equitable society can become a reality.

Table 1. SWOT Analysis of Female-Owned SMEs in Siak Regency

Category	Description
Strengths	- Strong family support for women entrepreneurs
	- High-quality, locally unique products
	- Awareness of the importance of financial literacy and technology adoption
Weaknesses	- Limited access to formal financial institutions
	- Low technological expertise
	- Cultural barriers restricting decision-making roles
Opportunities	- Increasing government and private sector support for SMEs
	- Expansion of digital marketing platforms
	- Growing awareness of gender equality in economic empowerment
Threats	- High competition in the SME sector
	- Stringent loan requirements
	- Uncertainty in economic and political conditions

Table 2. Comparison of Empowerment Indicators Across Rural and Urban Areas

Indicator	Urban Areas (Tualang)	Rural Areas (Sungai Mandau)
Digital Literacy (%)	75	35
Access to Formal Credit (%)	60	25
Participation in Training (%)	80	45
Average SME Revenue (IDR/month)	15,000,000	7,500,000

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