

Mobilizing MSMEs Toward a Sustainable Economy: The Role of Community Service from the Perspectives of Green Economy and Entrepreneurial Innovation

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Abstract

The transformation toward a sustainable economy requires the active involvement of MSMEs as key actors in local economic development. However, limitations in internal capacity, low levels of environmental literacy, and a lack of entrepreneurial innovation remain major challenges in encouraging MSMEs to adopt sustainability principles. This study aims to expand and enrich scientific references related to community service and its role in mobilizing MSMEs toward a sustainable economy through the perspectives of the green economy and entrepreneurial innovation. The research method employed is a literature review with a qualitative approach and descriptive analysis. Data were obtained from Google Scholar and selected credible websites published between 2019 and 2026. From an initial identification of 50 articles, a rigorous selection process resulted in 32 relevant articles for analysis. The findings indicate that community service plays a strategic role as an instrument of empowerment, knowledge transfer, and innovation catalyst that encourages MSMEs to adopt environmentally friendly practices and sustainable business models. This study emphasizes that the integration of community service with green economy principles and entrepreneurial innovation can strengthen MSME competitiveness while supporting the achievement of sustainable development goals.

Keywords: Community Service, MSMEs, Green Economy, Entrepreneurial Innovation, Sustainable Economy

Menggerakkan UMKM Menuju Ekonomi Berkelanjutan: Peran Pengabdian Masyarakat dalam Perspektif Green Economy dan Inovasi Kewirausahaan

Abstrak

Transformasi menuju ekonomi berkelanjutan menuntut keterlibatan aktif UMKM sebagai aktor utama pembangunan ekonomi lokal. Namun, keterbatasan kapasitas internal, rendahnya literasi lingkungan, serta minimnya inovasi kewirausahaan masih menjadi tantangan utama dalam mendorong UMKM mengadopsi prinsip keberlanjutan. Penelitian ini bertujuan untuk menambah dan memperkaya referensi ilmiah terkait pengabdian kepada masyarakat dalam perannya menggerakkan UMKM menuju ekonomi berkelanjutan melalui perspektif green economy dan inovasi kewirausahaan. Metode penelitian yang digunakan adalah tinjauan pustaka dengan pendekatan kualitatif dan analisis deskriptif. Data diperoleh dari Google Scholar dan website kredibel tertentu yang terbit pada periode 2019–2026. Dari 50 artikel yang teridentifikasi pada tahap awal, dilakukan seleksi ketat sehingga diperoleh 32 artikel yang relevan untuk dianalisis. Hasil kajian menunjukkan bahwa pengabdian masyarakat berperan strategis sebagai instrumen pemberdayaan, transfer pengetahuan, dan katalis inovasi yang mendorong UMKM mengadopsi praktik ramah lingkungan dan model bisnis berkelanjutan. Penelitian ini menegaskan bahwa integrasi pengabdian masyarakat dengan prinsip green economy dan inovasi kewirausahaan mampu memperkuat daya saing UMKM sekaligus mendukung pencapaian pembangunan berkelanjutan.

Kata kunci: Pengabdian kepada Masyarakat, UMKM, Green Economy, Inovasi Kewirausahaan, Ekonomi Berkelanjutan

INTRODUCTION

The transformation toward a sustainable economy has become a global agenda that requires the involvement of all development actors, including the Micro, Small, and Medium Enterprise (MSME) sector. MSMEs play a strategic role in the national economy due to their contribution to job creation, poverty reduction, and local economic growth (Supriatna et al., 2023). Nevertheless, most MSMEs still face limitations in adopting sustainability principles, particularly those related to resource efficiency, environmental management, and eco-friendly innovation. This condition indicates a gap between the economic potential of MSMEs and the demands of sustainable development. Therefore, a systematic approach is required to encourage the transformation of MSMEs in line with green economy principles without neglecting economic and social business sustainability.

The concept of the green economy emphasizes a balance between economic growth, environmental preservation, and social justice through efficient and low-emission resource use. In the MSME context, the implementation of a green economy involves changes in production patterns, consumption behavior, and business management. The literature shows that MSMEs often struggle to internalize green economy principles due to limited capital, knowledge, and access to innovation (Suwadi & Yenni, 2025). This condition positions MSMEs as a vulnerable group that risks being left behind in the sustainability agenda. Educational and mentoring-based external interventions are therefore crucial to accelerating the adoption of green economic practices at the small and medium enterprise level.

Community service is viewed as one of the strategic instruments to bridge this gap. Through community service activities, universities and related institutions can transfer knowledge, technology, and sustainability values to MSME actors in a contextual and practical manner. Community service functions as an empowerment process that encourages behavioral change and capacity building among business actors. From a sustainable development perspective, community service plays a vital role in building environmental awareness, improving business efficiency, and strengthening MSME competitiveness based on environmentally friendly and innovative practices (Ghanistyana & Khaeriah, 2025).

In addition to the green economy perspective, entrepreneurial innovation is a key element in promoting MSME sustainability. Entrepreneurial innovation refers to the ability of business actors to develop new products, processes, and business models that are adaptive to environmental and market changes. The sustainable entrepreneurship literature emphasizes that innovation should not be oriented solely toward economic profit, but also toward the creation of social and environmental value (Rustya & Siswoyo, 2023). However, many MSMEs still operate traditionally with low levels of innovation. In this context, community service acts as a catalyst that stimulates entrepreneurial innovation through training, mentoring, and collaboration tailored to the local needs of MSMEs.

The relationship between community service, the green economy, and entrepreneurial innovation can be understood through an empowerment framework. MSME

empowerment requires the enhancement of individual and institutional capacities to enable independent and sustainable strategic decision-making. Previous studies indicate that effective community service programs can improve environmental knowledge, managerial skills, and the innovative orientation of MSME actors (Arianto et al., 2024; Fitriyani et al., 2025). Community service contributes to the structural transformation of MSMEs toward more sustainable and highly competitive business practices in the long term.

From a theoretical perspective, the green economy and entrepreneurial innovation approaches complement each other in explaining the dynamics of MSME transformation. The green economy provides a normative framework regarding the direction of sustainable development (Parlindungan et al., 2025), while entrepreneurial innovation explains the mechanisms of adaptation and value creation within business contexts (Fitriani & Susyanti, 2025). Community service functions as an implementative medium that connects theory with practice in the field. The literature suggests that the successful adoption of green practices by MSMEs is strongly influenced by social learning processes and continuous mentoring, which are central components of academically based community service activities (Anggita et al., 2025).

Although numerous studies have examined MSMEs, the green economy, and entrepreneurial innovation separately, research that integrates these three dimensions within the context of community service remains relatively limited. Most existing studies emphasize policy or technological aspects, while the social and educational dimensions of community service have not been explored in depth. This limitation opens opportunities for research that examines community service as a strategic instrument in mobilizing MSMEs toward a sustainable economy. Such an integrative approach is essential to understanding how interactions among academic actors, MSME practitioners, and local communities can generate sustainable change.

Based on the foregoing discussion, this study positions community service as a driving force for MSME transformation toward a sustainable economy through the perspectives of the green economy and entrepreneurial innovation. This literature review serves as a conceptual foundation for understanding the role of community service in enhancing MSME capacity holistically, encompassing economic, social, and environmental dimensions. By integrating these three perspectives, this study is expected to provide both theoretical and practical contributions to the development of more effective, adaptive, and sustainability-oriented community service models for MSMEs in the future.

Community Service

Community service refers to academic activities aimed at transferring knowledge, technology, and social values to society through participatory approaches (Purba et al., 2026). In this study, community service is understood as a strategic instrument for enhancing MSME capacity, encouraging changes in business behavior, and strengthening the adoption of sustainable economic practices. Furthermore, community service functions as an interactive space between academic knowledge and the socio-economic

realities of MSMEs, thereby enabling continuous reciprocal learning processes that support sustainable transformation.

Micro, Small, and Medium Enterprises (MSMEs)

Micro, Small, and Medium Enterprises (MSMEs) are productive business units that play a significant role in job creation and economic growth (Ausat et al., 2022). MSMEs constitute the primary focus of this study due to their strategic position as well as their vulnerability in facing the demands of transformation toward a sustainable economy. This vulnerability arises from limitations in capital, technology, and market access, which often hinder MSMEs' ability to adopt environmentally friendly practices. Strengthening MSME capacity through community service is therefore crucial to ensuring that the transition toward sustainability proceeds in an inclusive and equitable manner.

Green Economy

The green economy is an economic development concept that emphasizes resource efficiency, the reduction of environmental impacts, and the enhancement of social welfare (Sitepu & Hasibuan, 2025). In the context of this study, the green economy serves as a normative framework used to assess the extent to which MSMEs can be guided toward environmentally friendly business practices through community service. The implementation of green economy principles in MSMEs focuses not only on technical aspects of production but also encompasses shifts in entrepreneurs' mindsets toward sustainability as an integral component of business strategy.

Entrepreneurial Innovation

Entrepreneurial innovation refers to the ability of business actors to create or develop new products, processes, and business models that are adaptive to environmental and market changes (Sofyan & Defrizal, 2025). This study views entrepreneurial innovation as the primary mechanism that enables MSMEs to implement green economy principles in a sustainable manner. Innovation is understood as a continuous learning process that encourages MSMEs to become more adaptive, creative, and responsive to sustainability demands. In this regard, community service plays a catalytic role in accelerating innovation processes through mentoring and the strengthening of entrepreneurial capacity.

Sustainable Economy

A sustainable economy is an economic system that balances economic growth, environmental preservation, and social justice (Effendi et al., 2024). In this study, a sustainable economy represents the ultimate goal of integrating community service, the green economy, and entrepreneurial innovation in strengthening MSMEs. This concept emphasizes that the success of economic development is measured by the ability of the economic system to maintain resource sustainability and long-term social welfare. A sustainable economy thus serves as the primary evaluative framework for assessing the impact of community service on MSME transformation.

METHOD

This study employs a literature review method with a qualitative approach, aiming to expand and enrich scientific references related to community service, particularly regarding its role in encouraging MSMEs to move toward a sustainable economy through the perspectives of the green economy and entrepreneurial innovation. The qualitative approach was selected because it allows researchers to understand, interpret, and synthesize conceptual and empirical findings in depth, based on context, meaning, and patterns of thought emerging from the reviewed literature.

Data collection was conducted through a systematic search of scientific documents sourced from Google Scholar and several credible websites, including academic journal portals, university repositories, and official institutions relevant to issues of community service, MSMEs, and sustainable development. The literature search was limited to publications released between 2019 and 2026 to ensure the relevance and novelty of the review. The keywords used included community service, MSMEs, green economy, entrepreneurial innovation, and sustainable economy, in both Indonesian and English.

The literature selection process was carried out in a rigorous and staged manner to ensure the quality of the sources used. In the initial stage, 50 articles were identified as relevant based on their titles and abstracts. Subsequently, a further screening process was conducted by considering topic relevance, methodological clarity, contribution to the development of community service concepts, and the credibility of publication sources. Through this selection process, 32 articles were ultimately included in the final analysis as the most representative and relevant sources aligned with the research objectives.

Data analysis was conducted using qualitative descriptive analysis by grouping, comparing, and synthesizing the main findings of each selected article. The analytical focus was directed toward identifying the roles, approaches, and contributions of community service in strengthening MSMEs, as well as its interconnections with green economy principles and entrepreneurial innovation. The results of the analysis are presented in the form of systematic narrative descriptions to illustrate general patterns, research trends, and remaining research gaps. Accordingly, this study is expected to serve as an additional reference and to broaden the body of scientific literature on community service and its role in sustainable MSME development.

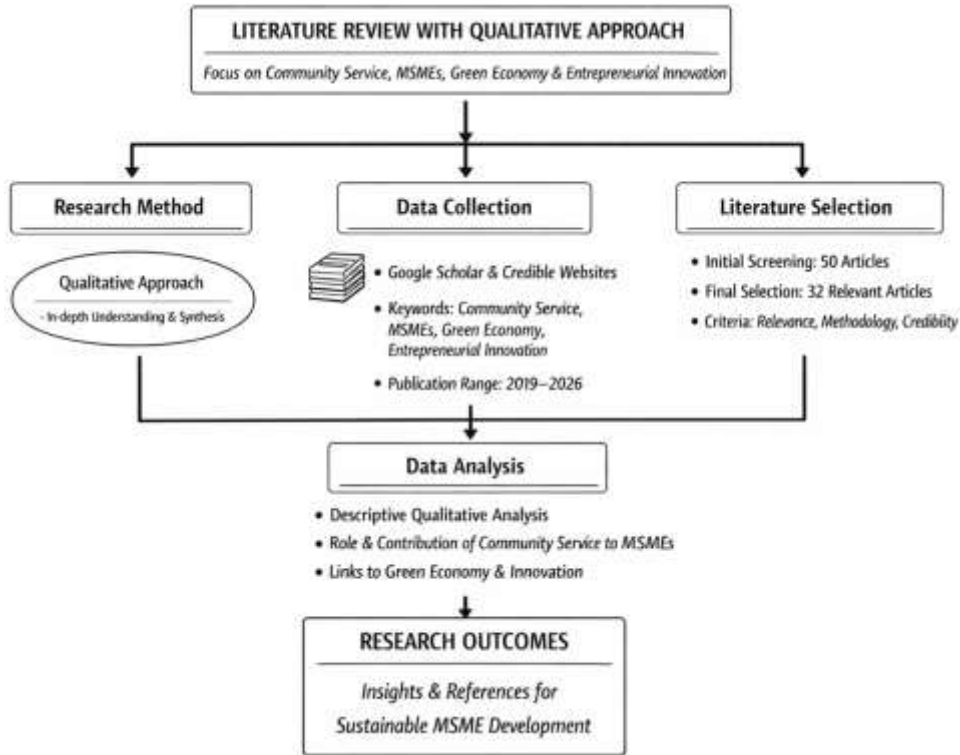


Figure 1. Research Methodology Flowchart

FINDING AND DISCUSSION

This discussion begins by emphasizing that the transformation of MSMEs toward a sustainable economy is a multidimensional process that simultaneously involves economic, social, and environmental aspects, and therefore cannot be separated from the role of supporting actors beyond the business owners themselves. From the perspective of sustainable development theory, MSMEs are positioned as agents of change with strategic potential to drive green economic growth at the local level through their flexible scale of operations and close proximity to communities. However, numerous studies indicate that this potential is often not optimally realized due to internal capacity constraints, such as limited managerial knowledge, restricted access to resources, and insufficient understanding of sustainability principles (Purnomo et al., 2025; Wijaya, 2023). These conditions create a gap between the demands of a sustainable economy and the operational realities of MSMEs in practice. Community service emerges as a strategic instrument to bridge this gap by positioning academics as facilitators of transformation, as outlined in the research background.

Theoretically, the green economy approach provides a normative framework that emphasizes efficient resource utilization, environmental impact reduction, and the creation of inclusive social value. This perspective shifts economic activities away from a sole focus on output growth and financial profit toward ecosystem sustainability and long-term societal well-being. In the context of MSMEs, the implementation of green economy principles frequently encounters structural barriers, including limited capital for investing in green technologies, low environmental literacy among entrepreneurs, and inadequate

access to environmentally friendly innovations and information (Dalu et al., 2025; Tri Rahayu et al., 2025). These obstacles often lead MSMEs to maintain conventional, less sustainable practices. Under such conditions, community service functions as an intervention mechanism that enables the internalization of green economy values through educational approaches, continuous mentoring, and hands-on practices tailored to local MSME contexts.

Beyond the green economy perspective, entrepreneurial innovation theory provides an essential foundation for understanding MSMEs' adaptive capacity in responding to increasingly complex business environments. This theory emphasizes that innovation extends beyond product development to include production processes, business model development, and adaptive and sustainable marketing strategies (Anjaska & Ahmadi, 2024). Previous research indicates that MSMEs with an innovative orientation are more likely to adopt environmentally friendly business practices and maintain competitiveness amid market changes (Hidayat, 2024). Nevertheless, MSME innovation capacity is often constrained by limited knowledge and weak networks. In this context, community service serves as a catalyst for innovation by fostering experiential learning, research-based knowledge transfer, and the strengthening of collaborative networks among MSMEs, academics, government institutions, and other stakeholders.

From an empowerment theory perspective, community service is understood as a systematic process aimed at enhancing the capacity of individuals and groups to control resources, make strategic decisions, and independently determine the direction of business development (Sandi, 2019; Setyawan et al., 2025). MSME empowerment encompasses the strengthening of critical awareness, self-confidence, and reflective capacity in managing business risks and opportunities. The literature demonstrates that community service programs designed through participatory and sustainable approaches tend to generate more significant impacts than top-down and short-term interventions (Ayu & Nginayah, 2024). This finding underscores the importance of conceptualizing community service as a long-term social process that positions MSMEs as active subjects rather than passive objects of development interventions.

Previous empirical studies consistently demonstrate a positive relationship between community service and improvements in MSME performance across economic, social, and environmental dimensions. Various studies report that MSME actors who actively participate in community service programs experience significant improvements in environmental knowledge, production process efficiency, and innovative capacity in developing products and business models (Suryawan et al., 2025). Moreover, community service contributes to shaping sustainability-oriented mindsets that encourage MSMEs to perceive environmentally friendly practices as long-term investments. Other studies highlight that increased awareness of green business practices strengthens MSMEs' competitive advantages in markets that are increasingly sensitive to sustainability issues (Hasanah & Wardianto, 2025). These findings reinforce the argument that community service provides tangible and measurable contributions to MSME transformation toward a sustainable economy.

A concrete case study reflecting the strategic role of community service can be observed in the batik waste management program in Kampung Batik Laweyan, Surakarta (Astuti et al., 2025). In this case, universities collaborated with local batik MSMEs to introduce environmentally friendly wastewater treatment technologies, accompanied by training in sustainable production practices and environmental awareness enhancement. This approach targeted not only technical aspects but also encouraged behavioral change among business actors by reframing waste management as an integral component of business sustainability. Program implementation results indicate that MSMEs were able to significantly reduce environmental pollution while simultaneously enhancing their product image as environmentally friendly batik. This case illustrates how community service can concretely integrate green economy principles and entrepreneurial innovation within a local context.

Another relevant case study can be found in the community service program targeting coffee-based MSMEs in Bondowoso Regency, East Java, which focused on developing sustainable business models (Mansur et al., 2023). Through intensive mentoring, coffee MSME actors were encouraged to adopt environmentally friendly agricultural practices, sustainable packaging, and marketing strategies based on sustainability narratives and local identity. This approach not only improved product quality and differentiation of Bondowoso coffee but also expanded market access, including premium markets that value sustainability attributes. Furthermore, the program contributed to strengthening social sustainability through improved welfare of coffee-farming communities. This case confirms that community service can drive entrepreneurial innovation aligned with green economy principles while reinforcing competitiveness rooted in local wisdom.

Despite these reported successes, several studies also identify structural challenges in implementing community service programs (Abdillah et al., 2025; Sina et al., 2025). Key challenges include short program durations, insufficient continuity of post-program mentoring, and limited commitment among some MSME actors to adopt proposed changes. Additionally, differences in orientations and interests between academics and MSME actors often hinder the development of shared and sustainable objectives. These conditions indicate that the success of community service is determined not only by program content or methods but also by institutional design, collaboration mechanisms, and the sustainability of interactions among stakeholders. More systemic and adaptive community service approaches are therefore required to ensure long-term impact.

In response to these implementation challenges, the literature broadly recommends community service approaches based on co-creation and long-term partnerships. Grounded in participation and empowerment theories, this approach positions MSMEs as active subjects throughout all program stages—from planning and implementation to evaluation—thereby enhancing ownership and sustainability of outcomes (Hafidz et al., 2025). By actively involving MSMEs, community service is no longer perceived as a temporary external intervention but as a continuous collaborative process. Furthermore, integrating community service with research and teaching activities strengthens academic relevance while ensuring program continuity. Strengthening multi-stakeholder

collaboration, including local governments and the private sector, also serves as a strategic solution to secure resource support, institutional legitimacy, and sustainable impacts of community service initiatives.

Within the context of entrepreneurial innovation, the literature proposes solutions such as the development of community-based green business incubators facilitated through community service programs. These incubators function as collective learning spaces for MSMEs to develop products, processes, and business models aligned with green economy principles. From an organizational learning theory perspective, incubation enables continuous learning through experimentation, reflection, and knowledge sharing among entrepreneurs (Fithri et al., 2024; Li et al., 2025). Additionally, the utilization of digital technologies in education and mentoring activities is considered effective in expanding the reach of community service, overcoming geographical constraints, and enhancing learning efficiency. Consequently, entrepreneurial innovation is understood not merely as an end result but as a dynamic and evolving process systematically facilitated through community service.

Overall, this discussion affirms that community service plays a strategic role in mobilizing MSMEs toward a sustainable economy through the integration of green economy perspectives and entrepreneurial innovation. Supported by sustainable development theory, empowerment theory, empirical research findings, and case studies, it can be concluded that community service constitutes a transformative instrument capable of holistically enhancing MSME capacity across economic, social, and environmental dimensions. Therefore, strengthening program design, implementation quality, and sustainability of community service initiatives is essential for creating an innovative, competitive, and sustainability-oriented MSME ecosystem in the long term. This approach further underscores the strategic position of community service as a critical bridge between academic knowledge and grassroots-level sustainable development practices.

Table 1. Summary of Key Findings and Discussion

| Aspect of Analysis | Key Findings | Discussion and Implications |
|--|---|---|
| Role of MSMEs in Sustainable Development | MSMEs have strong potential as local agents of sustainable and green economic transformation, but this potential is often underutilized due to internal capacity limitations. | This finding highlights the gap between sustainability demands and MSME operational realities, reinforcing the need for external facilitation to activate MSMEs' strategic role in sustainable development. |
| Internal Constraints of MSMEs | Limited managerial skills, restricted access to resources, weak sustainability literacy, and low innovation capacity remain dominant challenges. | These constraints explain why MSMEs tend to maintain conventional practices and struggle to adopt sustainable business models without structured support. |
| Community Service as a Strategic Instrument | Community service functions as a bridge between sustainability ideals and MSME realities by facilitating knowledge transfer, | Community service should be positioned not merely as knowledge dissemination, but as a transformative process enabling MSMEs to |

| | | |
|--|---|---|
| | empowerment, and behavioral change. | internalize sustainability values. |
| Green Economy Perspective | Green economy provides a normative framework emphasizing resource efficiency, environmental protection, and inclusive social value creation. | Community service enables MSMEs to operationalize green economy principles through contextual education, mentoring, and practical implementation. |
| Barriers to Green Economy Adoption | MSMEs face structural barriers such as limited capital for green technology, low environmental awareness, and limited access to green innovation. | These barriers necessitate intervention mechanisms that are adaptive, participatory, and tailored to local MSME contexts. |
| Entrepreneurial Innovation Capacity | Innovation in MSMEs extends beyond products to include processes, business models, and sustainable marketing strategies. | Community service acts as a catalyst for innovation by fostering experiential learning, research-based practices, and collaborative networks. |
| Empowerment Perspective | Community service enhances MSMEs' critical awareness, self-confidence, decision-making capacity, and control over resources. | Participatory and long-term empowerment-oriented programs generate stronger and more sustainable impacts than short-term, top-down interventions. |
| Empirical Impact of Community Service | Participation in community service programs improves MSME environmental knowledge, production efficiency, innovation capacity, and sustainability-oriented mindset. | These improvements strengthen MSMEs' competitiveness, particularly in markets increasingly sensitive to sustainability issues. |
| Case Study: Batik MSMEs (Laweyan) | Community service reduced environmental pollution and improved the green image of batik products through waste management innovation. | This case demonstrates the concrete integration of green economy principles and entrepreneurial innovation facilitated by academic collaboration. |
| Case Study: Coffee MSMEs (Bondowoso) | Adoption of sustainable agriculture, green packaging, and sustainability-based marketing improved product differentiation and market access. | Community service reinforced economic, social, and environmental sustainability while strengthening local identity and community welfare. |
| Challenges in Implementation | Short program duration, lack of continuity, limited MSME commitment, and misalignment between stakeholders hinder program effectiveness. | Successful community service depends not only on content but also on institutional design, collaboration mechanisms, and long-term engagement. |
| Recommended Strategic Approaches | Co-creation, long-term partnerships, multi-stakeholder collaboration, and integration with research and teaching are essential. | These approaches enhance ownership, sustainability, resource support, and institutional legitimacy of community service programs. |
| Innovation-Oriented Solutions | Green business incubators and digital-based mentoring expand learning, experimentation, and collaboration among MSMEs. | Entrepreneurial innovation is understood as a dynamic process continuously facilitated through structured and adaptive community service. |
| Overall Synthesis | Community service is a transformative instrument integrating green economy and entrepreneurial innovation to | Strengthening program design, implementation quality, and sustainability is critical to building an innovative, competitive, and green |

strengthen MSME sustainability. MSME ecosystem.

CONCLUSION

This study concludes that community service plays a strategic role in mobilizing MSMEs toward a sustainable economy through the integration of green economy principles and entrepreneurial innovation. Based on a literature review employing a qualitative approach and descriptive analysis, the findings indicate that community service functions not only as a mechanism for knowledge transfer but also as an empowerment process that encourages behavioral change, enhances innovative capacity, and strengthens sustainability awareness among MSME actors. The reviewed literature demonstrates that the success of MSME transformation is strongly influenced by the design of community service programs that are participatory, context-specific, and sustainable. Accordingly, community service can be positioned as a transformative instrument that bridges the gap between the demands of sustainable development and the operational realities of MSMEs at the local level.

The theoretical implication of this study lies in strengthening an integrated conceptual framework that connects community service, the green economy, and entrepreneurial innovation within a unified analytical perspective. This study enriches the literature by affirming that community service should not be understood in isolation, but rather as an integral component of the sustainable MSME development ecosystem. Practically, the findings offer important implications for higher education institutions, government agencies, and MSME support organizations in designing community service programs that are more structured, needs-based, and long-term oriented. In addition, policy implications may be directed toward strengthening multi-stakeholder collaboration to ensure that community service initiatives generate sustainable economic, social, and environmental impacts.

This study has several limitations that should be carefully considered. First, the use of a literature review methodology means that the findings are highly dependent on the quality and comprehensiveness of the available literature. Second, data sources were limited to publications obtained from Google Scholar and selected credible websites within the 2019–2026 period, which may have resulted in the omission of other relevant studies. Third, this study did not incorporate direct empirical field data, and therefore was unable to capture in detail the operational dynamics of community service implementation at the MSME level. These limitations should be taken into account when interpreting the findings.

Based on the findings and limitations of this study, future research is recommended to combine literature reviews with empirical approaches, such as field-based case studies or mixed-methods designs, to achieve a more comprehensive understanding of the impact of community service on MSME sustainability. Future studies are also encouraged to expand literature sources by incorporating reputable international databases in order to enrich global perspectives. Furthermore, for practitioners and policymakers, it is recommended to develop integrated, long-term collaboration-based community service

models that emphasize green innovation, so that community service initiatives move beyond being merely programmatic activities and become sustainable strategies for strengthening MSMEs toward a green and inclusive economy.

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