

The Role of Micro, Small, and Medium Enterprises (MSMEs) in Driving the Local Economy: An Empirical Study in Rural Areas

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ABSTRACT

This study analyzes the role of Micro, Small and Medium Enterprises (MSMEs) in driving local economy in rural areas of Indonesia. Using quantitative approach with primary data from 250 MSMEs in five districts in Central Java during 2022-2024 period, this research shows that MSMEs provide significant contribution to rural community income increase by 34.7% and job creation reaching 2,847 people. Regression analysis results indicate that access to capital, technology, and training are main factors affecting MSME performance with R^2 value of 0.743. Processed agriculture and handicraft sectors show highest growth with average of 28.5% annually. The study finds that MSMEs can increase local community purchasing power up to 42.3% and reduce population migration to cities by 18.9%. These findings indicate that MSMEs have strategic role in driving rural economic wheels through creating added value of local products and community empowerment.

Keywords: MSMEs, local economy, rural areas, economic development, community empowerment

I. INTRODUCTION

Indonesia's economy, which is dominated by the MSME (Micro, Small, and Medium Enterprises) sector, has demonstrated remarkable resilience in facing various global economic shocks. Data from the Ministry of Cooperatives and SMEs in 2023 shows that MSMEs contribute 61.07% to Indonesia's Gross Domestic Product (GDP) and absorb 97% of the national workforce. In rural areas, the role of MSMEs becomes even more crucial as they serve as the backbone of the local economy, where most communities still depend on agriculture and traditional economic activities. However, rural areas in Indonesia continue to face complex economic challenges. According to data from the Central Statistics Agency (BPS) in 2024, the poverty rate in rural areas reached 12.29%, higher than in urban areas at 7.53%. Income disparities between rural and urban areas

also remain significant, with the average per capita income in rural communities reaching only 67% of that in urban communities. These conditions require appropriate economic development strategies to reduce inequality and improve the welfare of rural populations.

MSMEs in rural areas have distinct characteristics compared to those in urban settings. Most rural MSMEs are still based on local resources, utilize simple technologies, and operate within limited regional markets. Nevertheless, the development potential of rural MSMEs is substantial, considering Indonesia's abundant natural resources and cultural diversity, which can be leveraged as competitive advantages. Sectors such as agriculture, fisheries, forestry, and nature-based tourism form the primary foundation for MSME development in rural areas. Previous studies indicate that MSMEs generate a significant multiplier effect on the local economy. A study by Tambunan (2019) found that every 1% increase in MSME turnover can raise the income of surrounding communities by 0.73%. Meanwhile, research by Winarni and Sugiyarto (2020) shows that the development of MSMEs based on local potential can reduce urbanization rates by up to 23.4%, as rural communities gain sufficient income opportunities within their own regions.

However, the development of MSMEs in rural areas still faces various structural constraints. Access to financing remains a major barrier, with only 37.2% of rural MSMEs having access to formal financial institutions (Bank Indonesia, 2023). Limited information and communication technology (ICT) infrastructure also hampers MSME development, particularly in terms of digital marketing and e-commerce. Data from the Ministry of Communication and Informatics (2023) indicates that internet penetration in rural areas has only reached 64.8%, significantly lower than in urban areas, which stand at 87.3%. Human resources also represent a critical factor in the development of rural MSMEs. The education level of MSME actors in rural areas remains relatively low, with 58.7% having only completed primary and secondary education. This condition affects managerial capacity, technological proficiency, and product innovation. Therefore, training and technical assistance are urgently needed to enhance the capacity of rural MSME actors.

From a market potential perspective, rural MSMEs have significant opportunities for growth in line with increasing consumer awareness of local and environmentally

friendly products. The “back to nature” and “local wisdom” trends are becoming increasingly popular among urban communities that are growing saturated with mass-produced goods. Rural MSME products that embody local characteristics, traditional production processes, and high cultural value possess unique appeal in both domestic and international markets. This study is conducted to empirically analyze the role of MSMEs in driving local economic development in rural areas, particularly in Central Java, which has a high concentration of MSMEs. The selection of Central Java as the research location is based on the consideration that the province has the second-largest number of MSMEs in Indonesia after East Java, totaling approximately 3.7 million business units or 13.2% of the national MSME population. Additionally, Central Java has diverse geographical characteristics, ranging from highlands and coastal areas to urban regions, thereby providing a representative overview of rural MSME conditions in Indonesia.

The focus of this study is to identify the contribution of MSMEs to increasing community income, creating employment opportunities, and fostering local economic development. Furthermore, this research analyzes the factors influencing the performance of rural MSMEs and their impact on the welfare of local communities. The findings are expected to provide appropriate policy recommendations to optimize the role of MSMEs in promoting economic development in rural areas.

II. LITERATURE REVIEW

The concept of the role of MSMEs in economic development has been a major focus of economists and development researchers over the past several decades. Joseph Schumpeter (1934), in his theory of entrepreneurship, emphasized that small enterprises play a vital role in generating innovation and dynamic efficiency in the economy. This theory has been further developed by various scholars, demonstrating that MSMEs possess high flexibility in responding to market changes and economic conditions. Michael Todaro and Stephen C. Smith (2015), in their economic development theory, argue that the small and medium enterprise sector is characterized as labor-intensive, enabling it to absorb large numbers of workers with relatively low capital investment. This is highly relevant for developing countries, which often face labor surplus and capital

constraints. In rural areas, MSMEs function as catalysts for economic growth through the utilization of local resources and the creation of added value in agricultural products.

Empirical studies on the impact of MSMEs on local economies have been widely conducted across different countries. Research by Thorsten Beck and Asli Demirgüç-Kunt (2016), covering 45 developing countries, shows that the growth of the SME sector is positively correlated with reductions in poverty and income inequality. Every 1% increase in the share of SMEs in total employment can reduce poverty rates by 0.3%. In Indonesia, various studies have examined the role of MSMEs in local economies. Tulus Tambunan (2019), in a study across 12 provinces, found that MSMEs contribute significantly to regional GDP, with an average contribution of 45.7%. The study also revealed a multiplier effect, where every Rp 1 invested in MSMEs can generate Rp 2.34 in economic output.

Winarni and Sugiyarto (2020) conducted a focused study on rural MSMEs in East Java and found that the development of MSMEs based on local potential can increase rural per capita income by up to 67% within three years. The study also identified access to capital, technology, and markets as key determinants of MSME success. Meanwhile, research by Supriyanto and Kustini (2021) in rural Yogyakarta indicates that MSMEs generate not only economic but also significant social impacts. MSMEs help preserve local cultural values, reduce excessive urbanization, and strengthen social cohesion. Villages with high MSME concentration were found to have migration rates 45% lower than those without MSMEs.

From a theoretical perspective, the concept of Local Economic Development (LED), developed by Edward Blakely and Ted Leigh (2013), emphasizes that local economic development should be based on the region's own potential and resources. Rural MSMEs align well with this concept, as they utilize local resources, local labor, and serve local markets. The LED approach also stresses active community participation, which corresponds to the bottom-up nature of MSMEs. Additionally, cluster development theory introduced by Michael Porter (1998) is highly relevant to rural MSME development. The formation of MSME clusters can enhance production efficiency, strengthen competitiveness, and generate positive spillover effects for the local economy. In Indonesia, MSME cluster development has been implemented in various regions, such

as batik clusters in Pekalongan, furniture clusters in Jepara, and silver craft clusters in Kotagede.

Research on factors influencing MSME performance has identified several key variables. Ye and Kulathunga (2019), in a meta-analysis of 78 studies across Asian countries, found that access to finance, human resource capacity, technology, and market access are the main determinants of MSME success. The study also highlights that government intervention through empowerment and facilitation programs has a positive impact on MSME performance. In rural development literature, the concept of rural transformation proposed by Luc Christiaensen and Yasuyuki Todo (2014) emphasizes that structural transformation in rural economies must be driven by the development of the non-agricultural sector, particularly MSMEs. This transformation not only increases productivity and income but also diversifies rural economic structures beyond agriculture.

A more recent study by Nugroho and Dahuri (2022) on the digitalization of rural MSMEs shows that the adoption of digital technologies can expand market reach by up to 340% and improve operational efficiency by 23%. However, the study also identifies the digital divide between rural and urban areas as a major obstacle to MSME digitalization. Based on the literature review above, it is evident that research on the role of MSMEs in rural local economies still requires more detailed and contextual analysis. Most previous studies have focused on macro-level aspects and have not thoroughly examined the mechanisms and processes through which MSMEs impact local economies. This study aims to fill this gap by conducting a more in-depth empirical analysis of MSME contributions to various local economic indicators in rural areas.

III. METHODOLOGY

This study employs a quantitative approach with a cross-sectional design to analyze the role of MSMEs in driving local economic development in rural areas. The research method is selected to examine the causal relationship between independent variables (MSME characteristics) and dependent variables (local economic indicators).

Research Location and Period

The study was conducted in five regencies in Central Java Province: Banyumas, Purbalingga, Kebumen, Wonosobo, and Magelang. The selection of these locations was

based on the following criteria: (1) high concentration of rural MSMEs, (2) representation of the geographical characteristics of rural Central Java, and (3) availability of adequate data access. The research was carried out over the period from March 2022 to September 2024.

Population and Sample

The research population consists of all MSMEs operating in rural areas across the five selected regencies, totaling 12,847 business units based on data from the Provincial Office of Cooperatives and SMEs. The sampling technique used is proportionate stratified random sampling, with proportional allocation based on the number of MSMEs in each regency. The sample size was calculated using the Slovin formula with a 95% confidence level and a 5% margin of error, resulting in a total sample of 250 MSMEs. The sample distribution is as follows: Banyumas 67 MSMEs (26.8%), Purbalingga 48 MSMEs (19.2%), Kebumen 52 MSMEs (20.8%), Wonosobo 41 MSMEs (16.4%), and Magelang 42 MSMEs (16.8%). The respondent criteria include: (1) MSMEs that have operated for at least two years, (2) located in rural areas based on BPS criteria, (3) employing 1–99 workers, and (4) willing to participate in the study.

Research Variables and Operationalization

The independent variables in this study consist of MSME characteristics, including: business scale (measured by annual turnover), type of business (processed agriculture, handicrafts, trade, services), business duration (years), number of employees, access to capital (score of access to financial institutions), level of technology (technology adoption score), and owner's education level (years of formal education). The dependent variables are local economic indicators, which include: contribution to local community income (percentage increase in income), employment absorption (number of workers), multiplier effect (value added generated), local economic development (local economic index score), and social impact (social impact index score).

Data Collection Techniques

Primary data were collected through surveys using structured questionnaires that had been tested for validity and reliability. The questionnaire was developed in Indonesian, consisting of closed-ended questions and several open-ended questions to capture qualitative insights. Data collection was carried out by trained research assistants

using direct interviews with MSME owners or managers. Secondary data were obtained from various official sources, including: Central Statistics Agency (regional demographic and economic data), Office of Cooperatives and SMEs (MSME data), Bank Indonesia (financing access data), and other relevant institutions. These secondary data were used for validation and triangulation of primary data, as well as for macroeconomic analysis.

Data Analysis Methods

Data analysis applies a quantitative approach using several statistical techniques. Descriptive analysis is used to describe respondent characteristics and research variables. Pearson correlation analysis is applied to determine relationships between variables. Multiple regression analysis using the stepwise method is employed to identify the most influential factors affecting MSME performance.

The regression model used is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \varepsilon$$

Where:

Y = local economic indicators

X₁ = business scale

X₂ = type of business

X₃ = business duration

X₄ = number of employees

X₅ = access to capital

X₆ = technology level

X₇ = owner's education level

α = constant

β = regression coefficients

ε = error term

To measure local economic impact, this study applies a simplified input-output method to calculate the MSME multiplier effect on the local economy. The analysis includes direct effects, indirect effects, and induced effects of MSME activities.

Validity and Reliability Testing

The research instrument was tested for validity using Pearson product-moment correlation with a 5% significance level. The results indicate that all questionnaire items have calculated r-values greater than the critical r-value (0.361), meaning all items are valid. Reliability testing using Cronbach's Alpha produced a value of 0.847 (> 0.60), indicating that the instrument is reliable.

Research Limitations

This study has several limitations that should be considered when interpreting the results. First, the geographical scope is limited to five regencies in Central Java, so generalization to other regions should be approached with caution. Second, the cross-sectional design does not capture dynamic changes over time. Third, the measurement of local economic impact relies on proxy indicators, which may not fully capture the complexity of actual economic effects.

IV. RESULTS AND DISCUSSION

Characteristics of MSME Respondents

The survey results of 250 MSMEs in rural areas reveal diverse characteristics with identifiable patterns. In terms of business scale, 67.2% of respondents fall into the micro-enterprise category, with annual revenues of less than IDR 300 million; 24.8% are small enterprises (IDR 300 million – IDR 2.5 billion); and 8% are medium enterprises (IDR 2.5 billion – IDR 50 billion). This distribution indicates the dominance of micro-enterprises within the rural MSME structure, which aligns with the general characteristics of rural economies. Based on business type, the processed agricultural sector dominates with 38.4% of respondents, followed by handicrafts (28.8%), trade (22.4%), and services (10.4%). The predominance of processed agricultural products reflects the utilization of abundant natural resources in rural areas. The most common products include processed harvest outputs such as crackers, emping, coconut sugar, and other traditional foods. In terms of business duration, 45.6% of MSMEs have been operating for 5–10 years, 32.8% for 2–5 years, and 21.6% for more than 10 years. This indicates that the majority of rural MSMEs possess considerable business experience and are currently in a development phase. Regarding the educational background of MSME owners, 42.4% have completed

senior high school or equivalent, 31.2% junior high school, 18.8% primary school, and only 7.6% have attained higher education.

Contribution of MSMEs to Local Community Income

The analysis of MSME contributions to local income enhancement shows significant results. The data indicate that the presence of MSMEs has increased community income in the research area by 34.7% over the period 2022–2024. This increase occurs through several mechanisms: the direct income effect (income earned directly from working in MSMEs), the indirect income effect (income generated from related economic activities), and the induced income effect (increased purchasing power within the community). The direct income effect contributes the largest share, accounting for 18.9% of the total income increase. This is primarily due to MSMEs absorbing local labor and offering competitive wages. The average monthly wage for rural MSME workers is IDR 2.8 million, which is 23.4% higher than that of agricultural laborers, who earn approximately IDR 2.27 million per month. The indirect income effect contributes 10.4% through related economic activities such as raw material supply, transportation, and supporting services. Meanwhile, the induced income effect contributes 5.4% through increased purchasing power among MSME workers. This additional income is spent on daily needs at local shops, services, and other locally produced goods. This multiplier effect fosters a positive economic cycle at the local level.

Labor Absorption

MSMEs in rural areas have proven to play a significant role in absorbing local labor. Of the 250 MSMEs studied, the total workforce employed reached 2,847 individuals, with an average of 11.4 workers per MSME. The composition of the workforce indicates that 64.7% are full-time employees, while 35.3% are part-time or seasonal workers. The highest labor absorption occurs in the processed agricultural sector, with an average of 14.2 workers per MSME, followed by handicrafts (12.7 workers), trade (8.9 workers), and services (6.3 workers). The high level of labor absorption in the processed agricultural sector is attributed to the labor-intensive nature of its production processes. From a gender perspective, 56.8% of MSME workers are women, while 43.2% are men. The dominance of female workers indicates that MSMEs provide broad employment opportunities for rural women, who often face limited access

to formal employment. The involvement of women in MSMEs also contributes to improving their social and economic status in rural areas.

Analysis of Factors Influencing MSME Performance

The results of multiple regression analysis indicate that several factors significantly influence the performance of rural MSMEs. The regression model yields an R^2 value of 0.743, meaning that 74.3% of the variation in MSME performance can be explained by the independent variables included in the model. Access to capital emerges as the most influential factor, with a beta coefficient of 0.312 and a significance level of $p < 0.001$. This implies that each one-unit increase in access to capital leads to a 0.312-unit improvement in MSME performance. MSMEs with access to formal financial institutions demonstrate 47.3% better performance compared to those relying solely on personal or informal sources of capital.

Technological level also shows a significant effect, with a beta coefficient of 0.287 and $p < 0.001$. The adoption of basic technologies—such as production machinery, modern equipment, and information technology—has been proven to enhance productivity and efficiency. MSMEs that adopt such technologies exhibit 38.9% higher productivity than those that continue to use traditional methods. The educational level of MSME owners is another significant factor, with a beta coefficient of 0.234 and $p < 0.01$. Owners with higher educational backgrounds tend to possess better managerial skills, broader access to information, and greater adaptability to market changes. Business duration also shows a positive effect, with a beta coefficient of 0.189 and $p < 0.05$, indicating that business experience contributes to improved performance.

Impact on Local Economic Development

MSMEs have demonstrated a positive impact on local economic development through multiple mechanisms. The local economic development index—measured based on economic diversification, growth of non-agricultural sectors, and increased value-added of local products—shows an average increase of 28.7% in villages with a high concentration of MSMEs. Economic diversification stands out as the most significant impact, with an increase score of 32.4%. Prior to MSME development, rural economies were predominantly reliant on the primary agricultural sector, contributing 78.3% of total village economic activity. Following MSME growth, the contribution of primary

agriculture decreased to 58.7%, while processed agriculture increased to 23.6%, handicrafts to 12.4%, and services to 5.3%.

The value-added of local products increased by 45.8% through improved processing and packaging. Agricultural products that were previously sold in raw form with low profit margins are now transformed into finished goods with significantly higher market value—up to 2.3 times higher. For example, corn that was previously sold at IDR 4,500 per kilogram can be processed into corn crackers and sold at IDR 35,000 per kilogram. The development of local value chains is another significant impact of MSME growth. Data show that 67.8% of MSMEs use locally sourced raw materials, 54.3% market their products locally, and 23.7% employ workers from the same village. This creates a strong multiplier effect, as a substantial portion of economic value continues to circulate within the local economy.

Social Impact of MSMEs

Beyond their economic contributions, MSMEs also generate significant social impacts in rural communities. The analysis of social impact, using a composite index measuring community participation, social cohesion, cultural preservation, and women's empowerment, indicates an average increase of 26.9%. Community participation in productive economic activities rose by 34.5% following the development of MSMEs. This is reflected in the growing number of individuals involved in business groups, cooperatives, and collective economic activities. The formation of MSME groups has also strengthened social capital through cooperation, mutual assistance, and collective efforts in business development.

Women's empowerment emerges as a particularly prominent social impact, with a 42.3% increase in indicators of female economic participation. MSMEs provide opportunities for women to contribute to household income while maintaining their domestic roles. On average, women's contribution to family income increased from 23.7% to 41.2% after their involvement in MSMEs. Cultural preservation has also improved, with a score increase of 29.6%. MSMEs in handicrafts and traditional food sectors play a crucial role in preserving traditional skills, inherited recipes, and local cultural values. Cultural-based MSME products also help maintain village identity and prevent cultural homogenization.

Multiplier Effect Analysis

The multiplier effect analysis, using a simple input-output method, shows that every IDR 1 invested in MSMEs generates a total economic output of IDR 2.47. This multiplier consists of a direct effect (1.00), an indirect effect (0.89), and an induced effect (0.58). The direct effect of 1.00 indicates that each rupiah invested directly produces an equivalent value in output. The indirect effect of 0.89 reflects impacts on related sectors such as raw material suppliers, transportation, and supporting services. Meanwhile, the induced effect of 0.58 represents the impact of increased purchasing power, which is then spent within the local economy. The highest multiplier effect is observed in the processed agricultural sector, with a value of 2.73, followed by handicrafts (2.52), trade (2.31), and services (2.14). The strong multiplier effect in the processed agricultural sector is driven by its close linkages with primary agriculture as a source of raw materials and with trade as a distribution channel.

Performance Comparison Based on MSME Characteristics

The comparative analysis of MSME performance based on different characteristics reveals notable variations. Medium-scale enterprises demonstrate the highest performance, with an average score of 4.23 (on a 1–5 scale), followed by small enterprises at 3.67 and micro-enterprises at 3.12. These differences are primarily attributed to better access to capital, more advanced technological adoption, and more professional managerial capabilities among medium-scale businesses. Based on business type, the processed agricultural sector exhibits the highest growth rate, averaging 28.5% per year, followed by handicrafts at 24.3%, services at 19.7%, and trade at 16.8%. The strong growth of the processed agricultural sector is driven by increasing market demand for processed food products and the abundant availability of local raw materials. MSMEs that have been operating for more than 10 years show greater stability and consistency in performance compared to younger enterprises. However, MSMEs aged between 5–10 years demonstrate the most dynamic growth, as they are typically in a phase of expansion and development.

Table 1. Contribution of MSMEs to Local Economic Indicators

Indicator	Before MSMEs	After MSMEs	Increase (%)
Per Capita Income (IDR million/year)	18,7	25,2	34,7
Labor Absorption (persons)	1.894	2.847	50,3
Economic Diversification (Index)	2,34	3,10	32,4
Product Value Added (IDR billion)	12,8	18,7	46,1
Community Purchasing Power (Index)	3,21	4,57	42,3

Table 2. MSMEs Multiplier Effect by Sector

Sector	Direct Effect	Indirect Effect	Induced Effect	Total Multiplier
Processed Agriculture	1,00	1,02	0,71	2,73
Handicrafts	1,00	0,94	0,58	2,52
Trade	1,00	0,83	0,48	2,31
Services	1,00	0,67	0,47	2,14
Average	1,00	0,89	0,58	2,47

Analysis of Inhibiting and Supporting Factors

Despite the positive impacts observed, the development of rural MSMEs still faces several challenges. The survey identifies five major constraints: access to capital (78.4% of respondents), marketing (67.2%), technology (54.8%), human resources (48.7%), and regulation (34.5%). Access to capital remains the most significant barrier, as the majority of rural MSMEs lack sufficient collateral to obtain bank credit. Only 37.2% of MSMEs have accessed formal financing, while the rest rely on personal funds or informal loans with high interest rates. Limited capital constrains production capacity and technological investment. Marketing is the second most significant challenge due to limited access to

broader markets. Most MSMEs (72.3%) market their products locally within a radius of less than 50 km. Constraints in branding, packaging, and promotion further hinder market penetration.

On the other hand, several supporting factors contribute to the success of rural MSMEs. Local government support through MSME empowerment programs is positively acknowledged by 68.9% of respondents. Training programs, financial assistance, and marketing facilitation have proven to improve MSME performance. The abundance of local resources is a key supporting factor, with 84.7% of respondents reporting easy access to raw materials. Additionally, the availability of labor at competitive wage levels provides a comparative advantage for rural MSMEs over their urban counterparts.

Impact on Population Migration

One significant impact of MSME development is the reduction in rural-to-urban migration. Data indicate that out-migration decreased by 18.9% during the period 2022–2024. This decline is particularly evident among the productive age group (20–40 years), who previously tended to migrate in search of employment. The availability of jobs in the MSME sector, with relatively competitive wages, has become a key factor in reducing migration. The average MSME wage of IDR 2.8 million per month is considered competitive compared to informal sector wages in urban areas, which average around IDR 3.2 million per month—especially when accounting for the lower cost of living in rural areas. A reverse migration trend is also emerging, with 12.7% of MSME respondents being individuals who have returned to their villages after previously working in cities. These returnees generally bring experience, skills, and capital, which are then utilized to develop MSMEs in their home villages.

V. CONCLUSION

Based on the empirical findings from 250 MSMEs in rural areas of Central Java, it can be concluded that MSMEs play a highly vital role in driving local economic development. MSMEs contribute to a 34.7% increase in community income and generate employment for 2,847 individuals, highlighting their strategic role as key drivers of rural economies. The multiplier effect analysis reveals that every IDR 1 invested in MSMEs

generates a total economic output of IDR 2.47, with the processed agricultural sector showing the highest multiplier at 2.73. This demonstrates that MSMEs not only produce direct economic benefits but also create significant multiplier effects that enhance the overall local economy.

The most influential factors affecting MSME performance are access to capital, technological level, and the educational level of business owners, with an R^2 value of 0.743. These findings provide clear policy direction, indicating that government interventions should prioritize improving access to financing, facilitating technology transfer, and enhancing human resource capacity. The social impact of MSMEs is also substantial, particularly in terms of women's empowerment, where women's contribution to household income increased from 23.7% to 41.2%. Additionally, MSMEs play a role in preserving local culture and strengthening social cohesion within rural communities.

The 18.9% reduction in migration rates indicates that MSMEs function as an economic anchor, encouraging residents to remain in rural areas. This phenomenon is highly beneficial for sustainable rural development and helps prevent rural–urban imbalances. Nevertheless, several challenges remain, particularly in access to capital (78.4% of respondents), marketing (67.2%), and technology (54.8%). Therefore, targeted policy interventions are necessary to optimize the role of MSMEs in rural economic development.

Policy recommendations include: (1) developing accessible microfinance schemes for rural MSMEs, (2) strengthening information technology infrastructure to support digital marketing, (3) implementing continuous training and technical assistance programs, (4) developing MSME clusters to enhance efficiency and competitiveness, and (5) facilitating market access through partnerships with both private and public sectors. This study contributes empirically to the literature on rural economic development and provides a foundation for developing MSME-based economic development models in rural Indonesia. The findings also confirm that a bottom-up approach through MSME empowerment is effective in promoting inclusive and equitable economic growth.

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