

## **THE ROLE OF GREEN FINANCING IN SUPPORTING SUSTAINABLE BUSINESS FOR MSMEs IN TUNAS AUR VILLAGE, INDRALAYA DISTRICT, OGAN ILIR REGENCY**

**Ariodillah Hidayat, Liliana, Rasyida Pertiwi, Yunisvita, Sri Andaiyani,  
Rahma Nida, Halia Butra Aini, Waldi Nopri Yarsyah, Xenaneira Shodroкова**

Department of Economic Development, Faculty of Economics, Sriwijaya University, Indonesia  
*ariodillahhidayat@fe.unsri.ac.id*

### **Abstract**

Micro, Small and Medium Enterprises (MSMEs) play a crucial role in the economy, contributing significantly to economic growth and job creation. However, MSMEs often face challenges, particularly in terms of limited access to financial resources needed for innovation and growth. Meanwhile, sustainability and environmental protection are increasingly becoming a global concern, encouraging the role of green financing as a solution to encourage environmentally friendly businesses. This research focused on Tunas Aur Village, Ogan Ilir Regency, involving 20 MSME participants. Through literacy and training activities, participants are given an in-depth understanding of the importance of green financing, with an approach involving lectures, discussions, and experiential learning using peer to peer lending applications, crowdfunding, and digital wallets. A total of 20 MSME participants in Tunas Aur Village illustrated that green financing literacy and training can create positive understanding and motivation for MSME actors in adopting sustainable business practices. In conclusion, this activity succeeded in increasing the understanding and interest of MSME participants in green financing, opening up potential for similar developments in the future, and providing valuable insights for improving MSME business sustainability through the application of green financing.

*Keywords: Green Financing, Micro, Small and Medium Enterprises (MSMEs), Sustainability.*

### **Abstrak**

Usaha Mikro, Kecil, dan Menengah (UMKM) memainkan peran krusial dalam perekonomian, memberikan kontribusi signifikan terhadap pertumbuhan ekonomi dan penciptaan lapangan kerja. Meskipun begitu, UMKM sering menghadapi tantangan, khususnya dalam hal akses terbatas terhadap sumber daya keuangan yang diperlukan untuk inovasi dan pertumbuhan. Sementara itu, keberlanjutan dan perlindungan lingkungan semakin menjadi perhatian global, mendorong peran green financing sebagai solusi untuk mendorong usaha yang ramah lingkungan. Penelitian ini berfokus di Desa Tunas Aur, Kabupaten Ogan Ilir, melibatkan 20 peserta UMKM. Melalui kegiatan literasi dan pelatihan, peserta diberikan pemahaman mendalam tentang pentingnya green financing, dengan pendekatan melibatkan ceramah, diskusi, serta experiential learning dengan menggunakan aplikasi peer to peer lending, crowdfunding, dan dompet digital. Sebanyak 20 peserta UMKM di Desa Tunas Aur memberikan gambaran bahwa literasi dan pelatihan green financing dapat menciptakan pemahaman positif dan motivasi bagi pelaku UMKM dalam mengadopsi praktik bisnis berkelanjutan. Kesimpulannya, kegiatan ini berhasil meningkatkan pemahaman dan minat peserta UMKM terhadap green financing, membuka potensi untuk pengembangan serupa di masa depan, serta memberikan wawasan yang berharga bagi peningkatan keberlanjutan usaha UMKM melalui penerapan green financing.

*Keywords: Green Financing, Usaha Mikro, Kecil, dan Menengah (UMKM), Keberlanjutan.*

## INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) play a central role in the structure of the national economy, as a result of research by Jaswal, (2014). In many national contexts, MSMEs consistently make substantial contributions to macroeconomic indicators, such as economic growth, job creation, and mitigation of social and economic inequalities (Fiseha & Oyelana, 2015). However, MSMEs are faced with various challenges that often hinder their ability to develop, one of which is limited access to financial resources that are crucial to support innovation and growth (Mukherjee, 2018).

Amid the complexity of global environmental challenges, including increasingly worrisome climate change and widespread ecosystem destruction, sustainability and environmental protection have become a central focus on the global agenda (Keesstra et al., 2018). These phenomena encourage stakeholders from various sectors, from government to business and civil society, to collaborate to find solutions that can not only reduce negative impacts on the environment, but also embody the principle of sustainability in every aspect of life and business. One of the concrete efforts in responding to this sustainability issue is through the application of financial practices specifically focused on sustainability aspects, known as Green Financing (Miroshnychenko et al., 2017). Green Financing not only prioritizes financial returns, but also considers positive impacts on the environment as a parameter for assessing success. This approach aims to allocate financial resources, both through investment and financing, to projects that support sustainable

development.

Green financing involves using financial resources to support projects that have a positive impact on the environment, such as investments in renewable energy, energy efficiency, waste management, and reduction of greenhouse gas emissions (Taghizadeh-hesary & Yoshino, 2020). Green financing can help MSMEs adopt environmentally friendly business practices, improve operational efficiency, reduce energy costs, and improve their brand image in the eyes of consumers who are increasingly concerned about the environment (Chien & Ngo, 2021).

Sustainable financing has a central role in supporting the acceleration of the achievement of the Sustainable Development Goals (SDGs) (Bai et al., 2022). Of the 17 SDGs, sustainable financing is useful in achieving the targets in Goal 13 SDGs, namely Climate Action to overcome climate change. The concept of sustainable financing has a clear foundation to encourage environmentally friendly investment and sustainable development (Shahbaz et al., 2016). However, unfortunately there are still many Micro, Small and Medium Enterprises (MSMEs) who are not familiar with the concept of sustainable financing and do not understand how to access available financial resources. MSME players may not know how to craft attractive business proposals for financial institutions that focus on sustainable financing, or even do not realize the long-term benefits of adopting sustainable business practices. Addressing this knowledge and understanding gap is crucial to empower MSMEs to effectively embrace sustainable financing initiatives, so that they can make a

meaningful contribution to both environmental conservation and sustainable business development (Machado et al., 2021).

Tunas Aur Village is one of the villages located in Indralaya District, Ogan Ilir Regency with an area of 2.81 km<sup>2</sup>. The distance from Tunar Alur Village to the District Capital is 5 km<sup>2</sup> while the distance to the District Capital is 9 km<sup>2</sup>. As for the administrative area, Tunas Aur Village in 2021 has 2 hamlets/neighborhoods with 4 neighboring neighborhoods. Tunas Aur Village has 379 male residents and 394 female residents or a total of 773 residents. The population density of Tunas Aur Village is 275 per Km<sup>2</sup>.

The number of trading facilities in Indralaya District consists of 6 Shopping Groups, 1 Market with Permanent Buildings, 18 Mini Markets/Supermarkets/Supermarkets, and 8 Restaurants/Restaurants. The mini market/supermarket/supermarket is located in 2 villages and 3 villages. Micro and small industries have a workforce of less than 20 workers. There are 572 textile industries in Indralaya District. The largest number of textile industries is found in Muara Penimbung Ulu Village, which is as many as 120 industries. For the Food Industry there are a total of 78 Food Industries in this sub-district. Based on this information, the large number of trading facilities in Indralaya District indicates the potential for significant economic growth and business activities in the area.

This research aims to address the challenges faced by Micro, Small and Medium Enterprises (MSMEs) in developing their businesses, particularly regarding limited access to financial resources needed for innovation and growth. Sustainability

and environmental protection are becoming a global focus, encouraging the importance of adopting green financial practices, known as green financing, as a solution to encourage MSMEs to become environmentally friendly. Although Green financing has great benefits in supporting the Sustainable Development Goals (SDGs), many MSMEs do not fully understand this concept, including how to access available financial resources. MSME players may be less familiar with drafting attractive business proposals for green-focused financial institutions, or unaware of the long-term benefits of adopting sustainable business practices.

This research focused on Tunas Aur Village in Ogan Ilir Regency, involving 20 MSME participants. The village has significant economic potential, but its growth raises concerns for sustainability and environmental impact. Therefore, the purpose of this study is to provide literacy and training to MSME actors in Tunas Aur Village regarding the importance of green financing. The novelty of this research lies in the application of community service methods through socialization approaches, lectures, discussions, and experiential learning using peer to peer lending applications, crowdfunding, and digital wallets. Through this activity, participants are expected to understand the concept of green financing, improve operational efficiency, and access financial resources that support the sustainability of their business. This research is important because it leads to increasing the capacity of MSMEs in facing economic and environmental challenges, as well as contributing to the achievement of SDGs.

## LITERATURE REVIEW

Green financing has become an increasingly important topic in the context of sustainable development (Zhang et al., 2019). In an effort to address climate change and other environmental issues, green financing provides funding focused on projects and ventures that promote sustainability and resource efficiency (Artie, 2018). Green financing refers to financing projects that contribute to sustainable development and protect the environment (Wang & Zhi, 2016). Green and inclusive finance policies play an important role in efforts to create a sustainable financial system to achieve the Sustainable Development Goals (SDGs) 2030 (Streimikiene et al., 2023). In this case, policy makers and regulators need to understand the taxonomy and definition of green and blue finance in the context of MSME development as the vanguard of financial inclusion, so that the policies issued will be effective in supporting sustainable MSME growth.

Green financing has positive economic impacts that can drive sustainable growth and create new economic opportunities (Zhang et al., 2021). Several economic benefits associated with green financing include the enhancement of resource efficiency, as investments in energy-efficient projects and better resource utilization can reduce operational costs for companies and yield long-term savings. Additionally, green financing stimulates innovation and technology development by supporting the implementation of sustainable technologies such as renewable energy and sustainable transportation. This, in turn, can create new business opportunities and foster the growth of sustainable economic sectors (Falcone & Sica, 2019). Moreover,

adopting environmentally friendly business practices through green financing can improve a company's competitiveness in a market increasingly conscious of environmental issues. Green financing assists companies in developing a competitive edge and meeting the growing consumer demand for sustainable products and services.

Results of research conducted by Yuliawati et al., (2017) about the effectiveness of the implementation of green financing as an alternative sustainable financing for MSMEs in the footwear processing industry sector in Bandung City, it showed that 82% of respondents stated that they were not or had not been interested in the financing scheme. The reason for respondents' lack of interest in green financing schemes is because the requirements are considered quite difficult to apply to their business. One of the requirements set by the government is that business actors must meet environmentally sound business indicators, such as implementing a reduce, reuse, and recycle system. Research conducted by Trisninawati et al., (2017) regarding the perspective of banking in Palembang City in green microfinance emphasized that banking institutions must provide education to MSMEs that the products produced can be based on go green to produce environmentally friendly products. Sriyono et al., (2019) In the analysis and identification of non-APBN financing models in MSMEs based on green economy, it is concluded that financing derived from non-APBN sources can improve the performance and competitiveness of MSMEs.

The existence of technological developments in the digital era like today which is increasingly rapid triggers the development of Fintech (financial technology) (Liliana et al., 2021). Fintech has supported SME to develop

their business through collaboration with e-commerce partners (Hidayat et al., 2022). Research by Muganyi et al., (2021) regarding green finance, fintech, and environmental protection in China shows that policies related to green finance in China as a whole have resulted in significant reductions in industrial gas emissions. The development of fintech also contributes to the depletion of sulfur dioxide emissions and has a positive impact on environmental protection investment initiatives. Chowdhury et al., (2013) In research discussing the importance of green finance for economic development and sustainability, it is emphasized that investment in renewable energy projects and other environmentally friendly projects can reduce greenhouse gas emissions significantly. They stated that green financing is the key to addressing the problem of global warming and contributing to a country's sustainable development.

## **RESEARCH METHOD**

In this study, the method of activities and implementation was carried out through a socialization approach to provide understanding to the community of Micro, Small and Medium Enterprises (MSMEs) in Tunas Aur Village, Indralaya District, Ogan Ilir Regency. The target of this activity includes 20 MSME actors in the village. The main focus of this service activity is related to economics in finance, especially green financing. The implementation of this service involves cooperation with the Tunas Aur village government in Indralaya District, Ogan Ilir Regency.

The method used in the implementation of this service is the provision of literacy and training. Literacy and training focused on

understanding the concept and importance of green financing, as well as practical training for participants in using business sustainability supporting applications, such as peer-to-peer lending, crowdfunding, and digital wallets as payment methods.

The methodology of implementing this service includes various activities, including lectures, discussions, and experiential learning. The experiential learning approach was applied through the use of smartphones by each participant, where peer-to-peer lending, crowdfunding, and digital wallet applications were installed. This process is accompanied by mentoring and participatory approaches that involve the community directly in various processes and implementation of activities.

The delivery of teaching materials is carried out through presentation media using power points that have been prepared by the research team. In addition, participants were also given practical experience in using green financing applications as an effort to support capital and utilize digital payment methods for MSME business activities. The entire research method is designed to provide in-depth understanding and practical skills to participants related to the implementation of green financing in the context of MSMEs in Tunas Aur Village.

Evaluation of activities will be carried out through the distribution of questionnaires to participants, with the aim of assessing their level of understanding of the material presented, identifying shortcomings that may arise, and capturing participants' expectations for future activities. The evaluation results of this questionnaire will be the main guideline in developing and refining similar activities in the future.

Evaluation of this activity will be carried out using the short period method, where the evaluation process is carried out immediately after the delivery of the material. This approach will help measure participants' understanding and skills in using green financing, especially Peer-to-Peer (P2P) Lending and Crowdfunding, which have been conveyed by the resource persons.

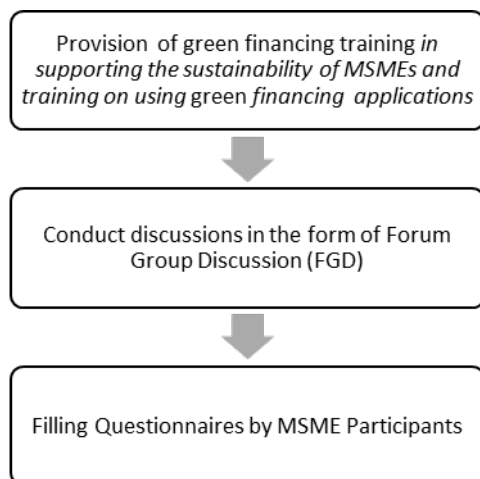


Figure 1: Activity Method Scheme

## RESULTS AND DISCUSSION

Before the community service activities, the service team conducted a survey in Tunar Aur Village, Ogan Ilir Regency. This activity was carried out to determine the characteristics of the region, the economy of the local population, and a survey with several MSMEs in local villages related to financing issues.



Figure 2: Community Service Survey

In the participant participation analysis, Table 1 shows the distribution by sex. Of the total 20 participants, 5 of them were men, accounting for 25% of the total, while female participants reached 15 people or 75% of the total participants. This data illustrates the significant participation of women in these service activities.

Table 1. *Community Service Participants*

Participants	Sum	Percentage
Man	5	25
Woman	15	75
Total	20	100

Source: Data processed, 2023



Figure 3: Delivery of Opening Remarks by the Head of Tunar Aur



Figure 4: Submission of Material by Resource Persons



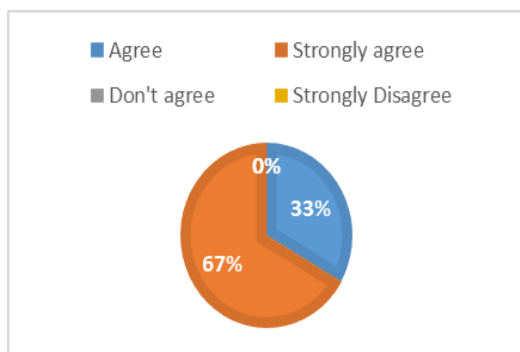
Figure 5: Photo with Team and Community Service participants

### Evaluation Results

This study aims to analyze participants' understanding and perception of green financing in supporting business sustainability, as well as evaluate the effectiveness of the implementation of service activities and their impact on participants. By detailing the results of several questions asked to participants, this study tries to describe an overview of participants' acceptance and views related to green financing.



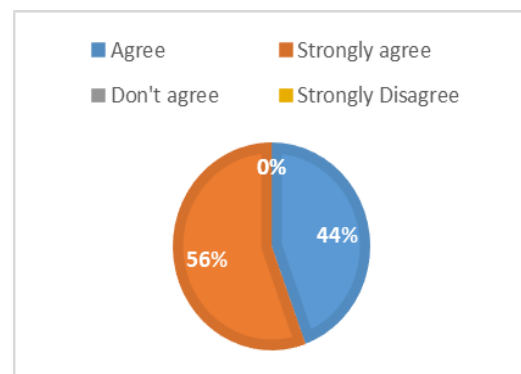
**Figure 6: Filling Questionnaire by Service Participants**



**Figure 7: General Understanding of Green financing by Participants**

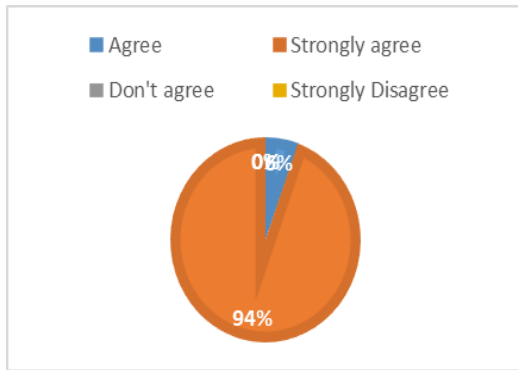
Figure 7 shows that the majority of respondents (67%) gave a "strongly agree" answer to the first question, while 33% expressed "agree". This result reflects respondents' positive understanding of service materials related to the concept of green financing. The high percentage of "strongly agree" indicates that the

material presented in the service activity managed to achieve a deep understanding of most participants. Meanwhile, the presence of respondents who "agree" indicates that a small percentage of participants have a positive understanding of the topic. This analysis provides a positive picture regarding the effectiveness of material delivery and the level of understanding of respondents to the concept of green financing.



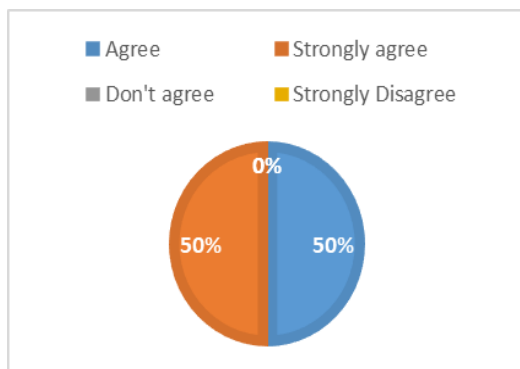
**Figure 8: Participants before this training had never utilized capital through green financing**

Figure 8 indicates that the majority of respondents (56%) gave a "strongly agree" answer to the fourth question, while 44% expressed "agree". This result shows a positive perception from respondents regarding the statement that before this training, participants had never used green financing. A significant percentage in the "strongly agree" category reflects respondents' strong belief that they have not previously used green financing. Meanwhile, the percentage of 44% in the "agree" category shows that a small percentage of participants also agree with the statement. This analysis scientifically highlights the low experience of participants in utilizing green financing before attending the training.



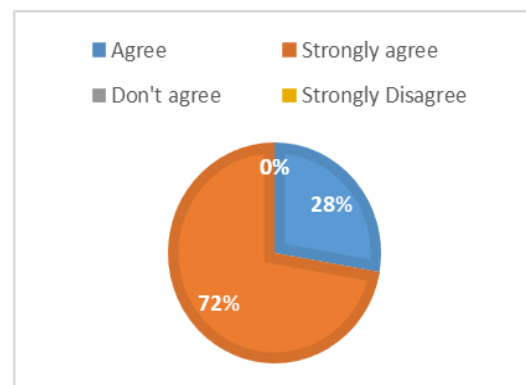
**Figure 9: Participants Interested in Making Capital Loans Through Green Financing-Based MSME Funding Applications to Support Business Sustainability**

Based on Figure 9, it can be concluded that the majority of participants, 94%, gave a "strongly agree" answer to the fourth question. Meanwhile, only 6% said they "agreed". This result indicates the high interest and approval of participants to make capital loans through green financing-based MSME funding applications to support business sustainability. A very high percentage in the "strongly agree" category reflects participants' enthusiasm for the concept, while a low percentage in the "agree" category indicates a small percentage of participants who also agree with the idea. This analysis highlights the potential adoption of green financing in supporting the sustainability of MSME businesses in Tunas Aur Village.



**Figure 10: The participating MSME products/businesses have been classified as businesses that can be financed by Green Financing**

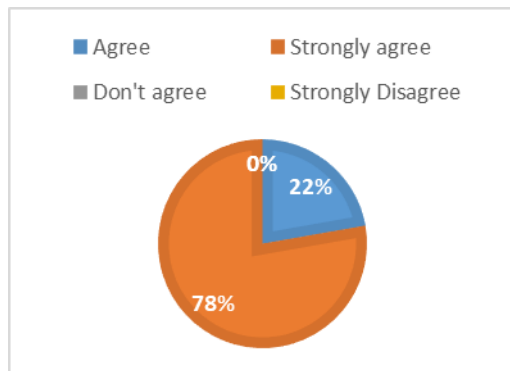
Based on the analysis in Figure 10, it can be observed that the "strongly agree" answer dominated the response to the fourth question with a percentage of 50%, while the "agree" answer also reached 50%. This finding reflects the conclusion that research participants tend to be in line with the view that the products or businesses they run are already included in the criteria that can be funded through green financing. This shows that their efforts are considered to support environmental sustainability and are eligible for sustainable financial support. The results of this analysis have important implications related to participants' perceptions of the feasibility of green financing in supporting their businesses. The balance between "strongly agree" and "agree" answers shows a strong belief from participants in the potential of green financing to support the sustainability of their business. Therefore, it can be suggested that parties involved in the development of green financing further consider the aspects that have been found in this analysis to support the implementation of green financing at the MSME level.



**Figure 11: Participants are interested in selling business products to be marketed at marketplace**

Based on the analysis in Figure 11, it can be observed that the "strongly

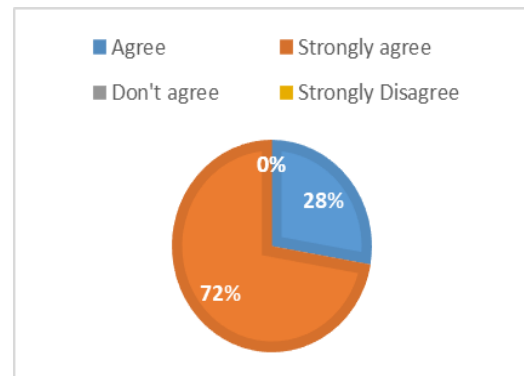
agree" answer dominated the response to the fourth question with a percentage of 72%, while the "agree" answer obtained 28 percent. This finding reflects participants' strong belief in the idea of selling their business products through marketplace platforms such as Shopee, Tokopedia, TikTok Shop, and others. The results of this analysis provide a positive picture regarding the interest of participants to market their business products online. With the dominance of "strongly agree" answers, it can be concluded that participants are very interested and believe that product marketing through marketplace platforms is an effective and potential step to increase the visibility and sales of their products. Thus, marketing strategies through marketplaces can be a good choice to be applied by MSME actors.



**Figure 12: Payment through digital wallets such as ovo, gopay, dana, etc. (fintech) is able to boost profits and business sustainability of MSMEs**

Based on the analysis in Figure 12, it can be seen that the "strongly agree" answer dominated the response to the fourth question with a percentage of 78%, while the "agree" answer obtained 22 percent. This finding reflects the strong confidence of participants in the positive role of payments through digital wallets (fintech) such as OVO, GoPay, Dana, and others in driving profits and

business sustainability of MSMEs. The importance of fintech as a payment method in the context of MSME business sustainability becomes clear with the dominance of "strongly agree" answers. This indicates that participants recognize the benefits of using digital wallets to improve the efficiency of financial transactions, support business growth, and create sustainability in their business operations.



**Figure 12: Participants felt that this training provided useful insights to improve the sustainability of their business**

Based on the analysis in Figure 12, it can be observed that the "strongly agree" answer dominated the response to the fourth question with a percentage of 72%, while the "agree" answer obtained 28 percent. These findings reflect the high level of approval from participants to the insights provided by the training to improve the sustainability of their efforts. The dominance of "strongly agree" answers indicates that participants not only recognize, but also feel confident that this training provides significant benefits in the context of MSME business sustainability. This can be interpreted as successfully providing participants with a deep understanding of the concept of green financing, as well as the application of sustainable business practices in micro, small, and medium enterprises.

## CONCLUSION

This research shows positive results related to participants' understanding of green financing as an effort to support MSME business sustainability. The results of the evaluation of service activities showed the dominance of "very agree" answers from participants on the understanding of the material, the effectiveness of the implementation of activities, and a positive impression of the training held. The high interest of participants in the use of green financing through green financing-based MSME funding applications illustrates that MSME actors in Tunas Aur Village have an awareness of the importance of sustainable business practices. The participants' positive response to the possibility of green financing-based financing for their MSME products or businesses reflects a good understanding of the relevance of the concept in their business context. In addition, the high interest of participants to sell business products in the marketplace and use payments through digital wallets indicates their readiness to adopt technology and innovation to increase competitiveness and business sustainability. This conclusion is consistent with the findings of the literature which confirms that green financing is not only a theoretical concept, but also has a positive impact on MSME business practices.

The policy implication that can be drawn from these findings is the need to strengthen government support in encouraging the adoption of sustainable business practices among MSMEs in Indonesia. Policies that support inclusivity, training, and green financial literacy need to be considered to ensure that MSMEs have better

access to environmentally friendly financial resources. Governments can develop broader and in-depth training programs to provide a better understanding of the benefits of green financing, the application process, and the utilization of available financial resources. In addition, policy initiatives that encourage financial institutions to facilitate MSME access to sustainable and environment-based financing can be a strategic step. By providing concrete support and adequate policy tools, the government can create a conducive environment for sustainable MSME growth and contribute to the achievement of sustainable development targets in Indonesia.

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