

Article Type: Research Paper

The portrait of challenges and strategies of village-owned enterprise in achieving SDGs: The perspective of sustainable development

Tri Satya Rifah Nugraheni, Evy Rahman Utami* and Tiyas Puji Utami



AFFILIATION:

Department of Accounting, Faculty of Economics and Business, Universitas Muhammadiyah Yogyakarta, Yogyakarta, Indonesia

*CORRESPONDENCE:

evy.rahman@umy.ac.id

DOI: [10.18196/jai.v26i2.26741](https://doi.org/10.18196/jai.v26i2.26741)

CITATION:

Nugraheni, T. S. R., Utami, E. R., & Utami, T. U. (2025). The portrait of challenges and strategies of village-owned enterprise in achieving SDGs: The perspective of sustainable development. *Journal of Accounting and Investment*, 26(2), 548-578.

ARTICLE HISTORY

Received:

29 Dec 2024

Revised:

13 Apr 2025

Accepted:

30 May 2025



This work is licensed under a Creative Commons Attribution-Non-Commercial-No Derivatives 4.0 International License

JAI Website:



Abstract

Research aims: This study analyzed the challenges and strategies of the Tirta Mandiri Village-Owned Enterprise (VOE) in Ponggok Village, Klaten Regency, to reach the Sustainable Development Goals (SDGs). In addition, our study examines how VOE, as a social enterprise entity, can improve economic, social, and environmental sustainability at the village level.

Design/Methodology/Approach: A qualitative approach with semi-structured interviews with administrators of VOE, the government of the village, beneficiaries, and VOE experts was used in this research, and it was used to explore the challenges and strategies of VOE.

Research findings: The findings indicated that VOE had functioned as a social entrepreneurial entity. Tirta Mandiri VOE successfully empowered the community and generated wealth. Furthermore, VOE initiatives have accomplished the following SDGs: No Poverty (1), Quality Education (4), Gender Equality (5), Decent Work and Economic Growth (8), Industry, Innovation and Infrastructure (9), Climate Action (13), Life on Land (15), and Partnerships for the Goals (17). Nonetheless, numerous issues must be addressed, such as the evolving mindset of the community and constrained human resources. Furthermore, VOE encountered numerous competitors that operated analogous business units. These difficulties must be addressed through several techniques, including education, cultural literacy, and collaboration. VOE enhanced human resource capability, innovation, and delivery service. VOE served as an excellent mechanism for sustainable rural development.

Practitioner/Policy implication: This study emphasized the importance of developing community empowerment and environmental sustainability programs by VOE and the need for greater support from local government to achieve SDGs effectively.

Research limitation/Implication: This study had limitations, such as focusing on Tirta Mandiri VOE in Ponggok Village. In addition, a qualitative approach was used in this study.

Keywords: Challenges; Empowerment; Social Enterprise; Strategies; Sustainable Development Goals (SDGs); Village-Owned Enterprise (VOE)

Introduction

Regional economies are important in strengthening the economy, especially in developing countries (Suryanto et al., 2025). One of the main focuses is to support the economy, namely the establishment of Village-Owned Enterprises (VOE), which aims to improve the quality of people's

life at the village level (Kania et al., 2021). VOEs have played an important role in improving several developing countries' economies. In Thailand, VOEs increase financial access for rural communities, increasing income and expenditure, reducing poverty and long-term economic development, with significant implications for rural development (Chatkaewnapanon & Lee, 2022; Hartwig & Nguyen, 2023). In addition, VOEs in Malaysia focus on some tourism industries, contributing significantly to the national economy and job creation (Musthofa et al., 2023).

The term related to VOE differs in certain nations according to the local context. In Thailand, Community Enterprise refers to a business entity collectively managed by the local community, aimed to enhance the community's economic welfare and promote social independence and sustainable development in rural regions (Chatkaewnapanon & Lee, 2022). In the Philippines, Barangay Micro-Business Enterprises (BMBE) catalyze local economic growth by generating employment and fostering innovation (Codon, 2025). In India, Self-Help Groups (SHGs) serve as a platform to address poverty, enhance women's empowerment, and promote socio-economic development in rural areas (Yadav et al., 2024).

In Indonesia, sustainable village development is one of the government's main focuses in realizing community welfare (Daniswara, 2024). In this case, VOEs are vital to drive the village economy and improve community welfare independently (Wilujeng, 2023). In line with the mandate of the 1945 Constitution, rural development must be carried out through community empowerment so that welfare can be achieved optimally (Tasia & Martiningsih, 2023). VOEs are expected to increase Village Original Income and empower village communities directly (Sofyani et al., 2020). Indonesia showed a robust commitment to reaching the SDGs by incorporating them into national policies (Usman et al., 2024). The government acknowledges that achieving all of the SDGs necessitates involvement beyond the national level, requiring the participation of local governments, particularly those at the village level (Muzhaqi, 2024). VOE is a crucial element in executing the SDGs at the village level. By implementing inclusive economic management rooted in local wisdom, VOE aims to expedite the achievement of the SDGs and create more wealthy and resilient village communities (Saputra et al., 2021).

Some literature has explained the success of VOEs in developing local potential, but research on VOE strategies and challenges in supporting the achievement of SDGs is still limited (Mu'minin et al., 2024). Previous studies have focused more on proving VOEs to improve the economy without delving deeper into how VOEs strategies can overcome challenges in achieving a balance between the economy, society, and environment (Sari & Ilham, 2024). This is important because VOEs support the national economy and function as a social institution while fighting for economic sustainability (Suryanto et al., 2025). Therefore, this study aims to fill the gap by comprehensively analyzing the challenges and strategies implemented by the VOE of Tirta Mandiri to support the achievement of SDGs. Furthermore, our study examines the practice of VOE as a social enterprise that has an essential role in overcoming economic, social, and environmental problems.

Since the issuance of Permendesa No. 4 of 2015, the number of VOs in Indonesia has continued to increase. Central Java Province has more than 6,851 registered VOs, with 361 in Klaten Regency (BPS, 2022). Ponggok Village is one example of a village that has succeeded in managing its local potential through Tirta Mandiri VO. Since its establishment in 2009, VOs aimed to improve the village economy, manage existing resource potential, and encourage broader community development and empowerment. Ponggok Village, situated in Polanharjo District, Klaten Regency, is an excellent example of success demonstrating the transition from a marginalized village to an independent village. Previously, the village was regarded as one of the most struggling, with an annual income of only IDR 80 million. In 2001, it received recognition as a village with the category of Disadvantaged Village Infrastructure (Enggraini et al., 2020). Tirta Mandiri VO has been widely recognized as one of the best VOs in Indonesia (Sidik et al., 2018). Its success lies in utilizing the potential of water resources in the village to develop community-based tourism (Rahoyo et al., 2024). Ponggok Village, good at water sources, manages this potential innovatively by making it a water tourism destination and attracting many tourists. It increases the village's income and opens new jobs and business opportunities for the local community. However, despite its success, Tirta Mandiri VO still faces various challenges in managing a sustainable business. These challenges include limited capital, a management system that still needs to be improved, bureaucratic constraints, and a lack of sustainable policy support (Mu'minin et al., 2024). In addition to economic and administrative challenges, social and environmental aspects are also concerned with managing Tirta Mandiri VO.

Besides economic and administrative challenges, social and environmental aspects have become a concern in the management of Tirta Mandiri VO. Social impacts, such as changes in community culture, unequal distribution of economic benefits, and the potential for exploitation of natural resources, must be overcome (Kurniawan et al., 2023). On the other hand, excessive tourism management can damage the environment if it is not balanced with a good sustainability strategy. Therefore, the main key to achieving the SDGs is a management strategy prioritizing a balance between economic, social, and environmental aspects.

Social enterprise is one of the main factors in achieving SDGs. Social enterprise is developed to solve social problems and generate economic wealth by providing goods or services to improve the community's quality of life (Rachim & Santoso, 2023). In the context of VOs, this approach can be applied to ensure that the business will be profit-oriented and positively impact society and the environment. Therefore, understanding sustainable development in VOs management becomes increasingly relevant (Shi et al., 2019). VOs have great potential to create new economic resources, especially for villages with limited natural resources. With good management, VOs can be a key strategy in achieving SDGs at the village level. SDGs is a global development agenda covering some aspects, including economic, social, and environmental, aiming to create a more sustainable world by 2030.

Indonesia has strongly committed to achieving the SDGs by integrating SDGs into national policies (Usman et al., 2024). The government realizes that achieving the SDGs cannot be

done only at the national level but must also involve local governments, including at the village level (Muzhaqi, 2024). In this case, VOEs are a significant factor in implementing the SDGs at the village level. Through inclusive economic management based on local wisdom, VOE is expected to accelerate the achievement of the SDGs and create more prosperous and independent village communities (Saputra et al., 2021).

This study had some contributions. First, it was expected to enrich the literature, especially regarding the role of VOEs in achieving village SDGs. Second, this study was also expected to provide practical benefits for local governments, VOEs managers, and village communities in designing more effective strategies for managing VOEs to support sustainable development. By understanding the existing challenges and strategies that could be implemented, it was hoped that VOEs could increasingly contribute to creating more independent, prosperous, and sustainable villages. This study also contributed to regulators formulating policies and strategies, especially in developing VOEs as social enterprises.

Literature Review

Village-Owned Enterprises (VOEs) as Social Enterprise

Social enterprises are generally understood as organizations that use business strategies to solve social problems, such as homelessness, race, inequality, injustice, unemployment, or health disparities (Merriitt et al., 2024). Judijanto et al. (2024) explained that social enterprises were a solution to overcome poverty or provide education to underprivileged children. The goal of social enterprise was to contribute to the common good, benefit society, and further this earth (Bull & Ridley-Duff, 2019).

Social enterprise is related to sovereign states' political, social, and economic systems (Quaye et al., 2024). Social enterprises have tried to meet social needs that cannot be met by the government and commercial sector (Muma et al., 2024). Social enterprise activities are dominated by simultaneous commercial and charitable activities subject to public accountability (Maksum et al., 2020). The importance of social enterprise is increasingly magnified by international bodies such as the United Nations (UN) due to concerns about the increased risk of failure of the world economy to meet the 17 SDGs needed to achieve a decent life for all people this healthy earth by 2030 (Rajah et al., 2022).

Village-owned enterprises (VOEs) are social institutions that prioritize the community's interests through their contributions to providing social services. The purpose of establishing VOE is to improve the village economy by optimizing village resources, both natural and human resources, and to improve community welfare and increase village income (PADES) (Rahayu et al., 2024). Therefore, VOE is a tool to increase PADES and a place for the community to participate actively in village development.

VOEs can be defined as an instrument of village autonomy, which means that the village government encourages the development of village potential according to their abilities

and authorities (Panjaitan & Hutapea, 2024). In addition, VOEs can be considered an instrument of welfare by involving the community in managing VOEs and as a program designed by the government to improve the community's standard of living (Nuak et al., 2020). The village community is fully responsible for managing VOEs from the village and for the village (Andriyani, 2020). VOE managers manage their village's potential well and can provide reports on their work, including VOE income and expenditure (Gunawan, 2024).

Sustainable Development Goals (SDGs)

Sustainable Development Goals (SDGs) are long-term international initiatives to improve each country's resources and potential (Sharifi et al., 2024). SDGs are global development plans that are a continuation of Millennium Development Goals (MDGs), consisting of 17 Goals and divided into 169 targets that are interconnected, influential, inclusive, universal, or none is left behind with a timeframe of achievement until 2030 (Rahmaddhani & Prasetyoningsih, 2023). The objectives of SDGs are designed to conserve and improve existing resources to continue supporting a country's progress and society's welfare (Monteiro et al., 2019). VOEs have goals that are in line with SDGs, namely improving community welfare, maintaining the sustainability of the community in social life, maintaining the quality of life, inclusive development, and implementing governance which can preserve the quality of life of the community itself from generation to generation (Subekti, 2022).

The Profile of Tirta Mandiri (VOE in Ponggok Klaten)

Tirta Mandiri VOE is located in Ponggok Village, Polanharjo District, Klaten Regency, Central Java. This VOE was established on December 15, 2009, with the main aim of improving the village's economy, managing its potential, and supporting community development and empowerment. Tirta Mandiri manages various business units: fish pond rental, meeting places, event organizers, mini markets, village study tours, and water tourism (Purnamawati & Indriani, 2021).

Tirta Mandiri has a business and provides programs to the local people of Ponggok Village. These programs aim to improve community welfare through effective management of natural resources and human resources (Putri & Zetra, 2021). The VOE of Tirta Mandiri won the Community Empowerment of Tourism Village category. In addition, the performance of Tirta Mandiri is good, with an increase in gross income from 150 million in 2012 to 14.2 billion to increase the business units managed by Tirta Mandiri (Nurfaisal et al., 2024). The success of VOE has shown how effective it is in improving the village economy.

Previous Research and Propositions

Village SDGs are defined as a concept of efforts to realize the freedom of a village from poverty and hunger; these efforts are arranged in a document with 17 goals, which are divided into four interrelated pillars (Humanika et al., 2023). It can be concluded that the

achievement of national SDGs can be realized through the harmony of SDGs at the village level. At the village level, VOE is formed, which is expected to achieve the goals contained in the SDGs of the village by improving community welfare through development programs to overcome unemployment and poverty problems (Humanika et al., 2023). The objectives of the village's SDGs align with establishing VOEs to grow and strengthen the village's economy (Rosiani & Siyami, 2022). The development of VOE business units has become one of the drivers of the economy through some business units that are already operated and have great potential to increase employment opportunities to achieve the SDGs goals (Siagian & Sitorus, 2024).

Siagian and Sitorus (2024) showed that the development of VOEs contributed to achieving the village's SDGs despite facing obstacles such as a lack of community participation and budget. Besides that, Firdaus et al. (2024) explained that the existence of VOEs had a positive impact on the community through the management of business units, such as waste management and local economic development, which supported the achievement of SDGs goals in reducing poverty and improving the welfare of village communities. Bocken et al. (2014) highlighted the importance of integrating sustainability principles in social enterprise as a business model to ensure the long-term sustainability of ecosystem and community welfare.

Theoretically, social enterprise is explained as a combination of the business sector and social sector, with the main goal of creating social impact and, at the same time, being financially sustainable (Rogerson et al., 2013). Social enterprises have a role in encouraging the achievement of the United Nations (UN) SDGs, as illustrated by the UN General Assembly statement in September 2015 (Quaye et al., 2024). Social enterprises have offered solutions for today's most pressing social, economic, and environmental problems (Halsall et al., 2022).

Based on the explanation conveyed by previous research, the researcher concluded that VOEs had great potential to play a role as social enterprises in encouraging the achievement of SDGs at the village level. By combining sustainable business principles with social goals, VOEs can mobilize problems such as poverty, unemployment, and inequality in rural areas (Natalia & Maulidya, 2023). Through their various business activities, VOEs improve the village's economy and play a strong role in overcoming social and environmental problems. Therefore, this study aims to examine in depth how VOEs contributes to achieving SDGs and identify some factors that support and obstruct the success of achieving SDGs. Based on this, Figure 1 presents an image of this conceptual framework.

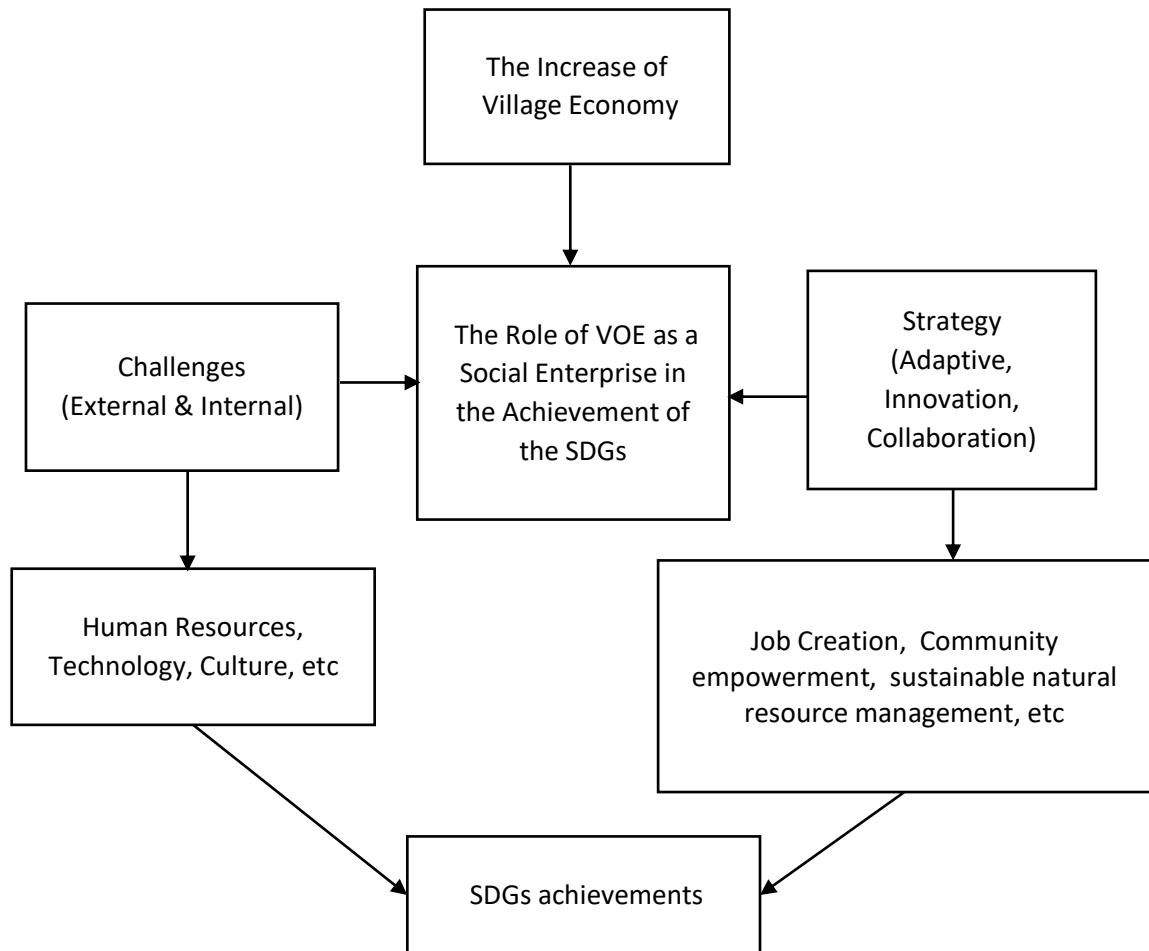


Figure 1 Research Model

Research Method

A qualitative approach was used in this research to deeply understand the challenges and strategies of VOE toward the economy of the village and the achievement of SDGs. The object of this study was Tirta Mandiri VOE, which operated in Ponggok Village, Polanharjo District, Klaten Regency. The criteria for selecting research subjects include individuals directly managing VOE, specifically VOE administrators, village government officials, and beneficiary communities from the executed programs. Initially, VOE administrators are selected according to their responsibilities in decision-making and daily operations. Additionally, village government officials are appointed to contribute insights on support and policies concerning VOE development. Furthermore, communities benefiting as workers, SME participants, or social program recipients must have a holistic understanding of the influence of VOE on their lives. Table 1 presents the subjects of this study.

Table 1 The Subjects of Research

No	Informants	Position	The Duration of Interview	Description
1.	YT	VOE Management	35:18	It consists of the management of Tirta Mandiri VOE, which is responsible for managing the organization's operations and finances.
2.	CR	VOE Management	30:00	
3.	ASR	VOE Management	32:25	
4.	YS	The Local Government of Ponggok Village	29:16	Village officials providing insights on government support and functions in VOE development.
5.	AML	Society	31:34	Comprising individuals who gain directly from VOE, such as employees, SME participants, or beneficiaries of social programs.
6.	PS	Society	29:00	
7.	AS	Management of Business Unit	30:54	VOE business units that significantly contribute to the village economy.
8.	RS	The Experts of VOEs	28:30	Academic and professionals offering perspectives and insights on sustainable VOE management practices.

A qualitative approach was used in this research, and some data were obtained through semi-structured interviews with informants. Some data were collected using interview guidelines and recording devices to ensure accuracy in recording information (Rifa'i, 2023). The data validity in this study was strengthened through source triangulation techniques, namely by comparing and validating information obtained from various informants. This approach allowed researchers to ensure that the collected data was highly reliable (Syarif et al., 2021).

The data analysis process in this research was carried out in several stages. First, data transcription was done by converting interview recordings to text to facilitate further analysis (Kusumawardani & Andanawarih, 2018). Second, some data reduction was done by filtering and simplifying relevant data to focus on the main aspects of the research (Purnamasari & Afriansyah, 2021). Third, data was presented by organizing data in the form of narratives, tables, or diagrams to facilitate understanding of research findings (Tsabita et al., 2023). Finally, some conclusions were drawn by compiling interpretations based on the results of interviews and data analysis; it was done by carrying out repeated verification to ensure the accuracy of findings (Yusran et al., 2021).

Result and Discussion

VOEs as Social Enterprise

Based on the results of interviews with the management of the VOE of Tirta Mandiri, the local government in the village, and the community in Ponggok Village, the VOE has a significant role in improving the village's economy and supporting the achievement of SDGs. The main vision of VOE is to realize Ponggok Village as an independent tourist village so it can optimally manage local potential. This is as explained by one of the VOE administrators:

"The vision and mission of VOE act as triggers in increasing village income. By increasing village income, village development programs can automatically be realized" (YT, 2025).

Social enterprise is a hybrid organization that pursues a dual mission: achieving financial sustainability and social goals (Doherty et al., 2014). As a social enterprise entity, VOE of Tirta Mandiri is oriented towards economic profit and has social and environmental goals. As a business entity owned by the village, this VOE manages various programs to improve community welfare, reduce poverty, and preserve the environment. One of the main characteristics of social enterprise reflected in the management of Tirta Mandiri is its commitment to opening up employment opportunities for villagers. The internal policy of VOE stipulates that all recruited workers must be from Ponggok Village.

"Our Articles of Association and Bylaws stipulate that all workers recruited by VOE must be residents of Ponggok Village. With the development of the tourism sector, village residents automatically have the opportunity to work in various related sectors, such as traders, parking attendants, or managers of supporting facilities and infrastructure for the tourism sector" (YT, 2025).

Besides the employment aspect, VOE also acts as an aggregator and connector for the existence of village businesses. VOE has a strategic function in mapping potential things in the village, developing local resource-based VOE, and connecting village business actors with a broader market (Kusuma et al., 2025). This is explained by one of the VOE experts:

"VOE has several main functions, including mapping potential things in the village by identifying local resources, developing businesses based on those potentials through organizing business actors (aggregators) and increasing the scale of existing businesses. In addition, VOE is a connector that bridges business actors in the village with external parties. The main principle in managing VOE is to be a forum for local business actors, not competitors, to avoid unhealthy business competition and encourage the growth of existing businesses" (RS, 2025).

Based on the results of this research, we concluded that VOE acts as a social entrepreneur who is not only oriented towards some economic aspects but also has broad social and environmental impacts. Through various community empowerment and environmental

management programs, VOE supports SDGs achievement, especially in poverty alleviation efforts, job creation, and sustainable development at the village level. Our result is in line with Mair and Marti (2006), which emphasized that social enterprises have a role in encouraging the achievement of SDGs through local economic development and community empowerment.

The Contribution of VOE to Achieve Sustainable Development Goals (SDGs)

Activity 1

A real example of the form of social enterprise in VOE of Tirta Mandiri is a program entitled "One House, One Bachelor," which aims to improve the quality of human resources by providing monthly scholarships to students from Ponggok Village to enhance the quality of human resources there.

"One of our steps is conducting a One House, One Scholar program, where each family is expected to have at least one child who earns a bachelor's degree. We provide monthly scholarships to students so that they can complete their studies and return to build their villages with the knowledge they have gained" (YT, 2025).

This program aligns with SDGs point 4 (Quality Education), which aims to ensure inclusive, equitable, and quality education for all. With this program, VOE strives to create a more educated young generation who is ready to return to rebuild the village. It was emphasized by one of the young people of Ponggok Village who had said:

"VOE helps the young generation, especially with such a scholarship program which provides us with an opportunity to continue our education to a higher level and with the hope that we will later contribute to village development in the future" (AML, 2025).

This program provides scholarships to local students to improve access to education. This aligns with Cho et al. (2019), which showed that better education could reduce poverty and improve the quality of life. Through the increased level of education, village communities are expected to be more independent and able to contribute to village development. By increasing the education levels, it is hoped that the communities in the village could be more economically independent, which also supported the achievement of SDGs point 8 (Decent Work and Economic Growth).

Activity 2

One of the programs conducted by VOE of Tirta Mandiri to support the achievement of SDGs was the establishment of Small Medium Enterprise (SME) Pawone Umbul Ponggok. This program aimed to improve community welfare through economic empowerment, especially for homemakers who wanted an independent business. The management of VOE explained that this initiative was carried out to create a stronger economic ecosystem in the village.

"In the past, in the Umbul Ponggok area, some stales were managed individually by the community, but after we formed Pawone Umbul Ponggok, the management improved. Pawone Umbul Ponggok is managed by the women who rent the stalls, who must be residents of Ponggok" (CR, 2025).

As explained by a VOE expert:

"VOE can contribute to women's empowerment, especially mothers, by providing opportunities for them to be involved in local economic enterprises. This is important because women often have limited mobility and need easy access to work" (RS, 2025).

The existence of Pawone Umbul Ponggok also plays a role in giving new jobs to the community, especially for homemakers and young people who do not have permanent jobs yet. Overall, Pawone Umbul Ponggok, as an SME program, has contributed directly to achieving SDGs 8 (Decent Work & Economic Growth) and 5 (Gender Equality) by creating decent jobs and improving the economic welfare of village communities.

Pereira et al. (2024) emphasized that entrepreneurship has an essential role in supporting the SDGs, especially in creating jobs, reducing inequality in the field of economy, and increasing sustainable growth. Implementing programs like Pawone Umbul Ponggok shows that VOE empowers local communities, especially women, and supports sustainable environmental aspects. This is in line with Quaye et al. (2024), who highlighted the role of social enterprises in simultaneously creating social and economic impacts.

Activity 3

VOE of Tirta Mandiri efforts to support achieving SDGs through the Waste Management and Facilities program. The program aimed to maintain the cleanliness of the village environment, especially in tourist areas, and to increase public awareness of managing waste sustainably. In its implementation, this program focuses on two main aspects: waste management around tourist locations and a waste savings system. VOE collaborated with the village government and residents to manage waste around tourist locations, such as Umbul Ponggok and Umbul Besuki, by providing adequate waste bin facilities and ensuring that the cleanliness around tourist areas was well maintained. According to a resident who sold around Umbul Ponggok, this waste management system was very helpful in maintaining the comfort of tourists and its surrounding community.

"Residents are taught how to process waste to become economic value" (PS, 2025).

Besides waste management in tourist areas, the village developed an integrated waste management system with a waste-saving concept. Using waste banks contributes to reducing the amount of waste in the environment and reducing the negative impacts caused by waste on the environment (Apriansah et al., 2025). The program involved the community in collecting and recycling household waste with a savings mechanism, where

residents could deposit sorted waste and receive compensation in the form of savings, which could be disbursed within a specific period. One of the residents involved in this program explained:

"We had a waste savings system so that residents could collect household waste which could be recycled, then every one or two weeks, the management group collected the waste. Each deposit was recorded and could be cashed after a few months" (PS, 2025).

With a good waste management system, VOE has succeeded in creating a clean and healthy environment for its community and tourists and building a circular economic system that contributes to the community's welfare in the village. Tirta Mandiri supports SDGs point 9 (Industry, Innovation, and Infrastructure), especially in waste management and sustainable community-based infrastructure development. VOE implements an integrated waste management program and reforestation to maintain environmental sustainability. Bocken et al. (2014) highlighted the importance of incorporating sustainability principles into social enterprise business models to ensure the sustainability of ecosystems and community welfare in the long term.

Activity 4

As a form of commitment to support the achievement of Sustainable Development Goals (SDGs), the VOE of Tirta Mandiri, together with the Ponggok Village Government, implemented the Mandatory Tree Planting program for Newlyweds. The program required every married couple to plant at least two trees as part of an environmental conservation effort that aimed to reduce the impact of climate change, maintain the village ecosystem, and increase public awareness of the importance of reforestation as a legacy for future generations. As conveyed by the VOE management who explained that:

"We remain in that sustainability; we had 'one house, one bachelor' program and a tree planting program for newlyweds" (YT, 2025).

The impact of this program was not only oriented toward reforestation, but also it had educational value for the community. This policy was a form of community involvement in direct environmental conservation efforts. This was emphasized by another VOE administrator who said that:

"One of the village programs in collaboration with VOE was that every resident who wanted to get married was required to plant at least two trees. Then, if there were community service programs or research, they usually planted trees. We collected the trees first, then when they reached 50, we planted them in the village forest in Umbul Besuki" (CR, 2025).

The benefits of this program are also felt directly by the local community. A resident who sold around the tourist area of Ponggok said that the reforestation carried out through

this program had a real impact on the village environment. One of the residents of Ponggok Village explained:

"Now the air around Umbul Ponggok is cold, especially during the day. The trees planted long ago were getting bigger and provide shadiness for residents and tourists" (PS, 2025).

Overall, the Mandatory Planting Tree program for Newlyweds contributed directly to SDG 13 (Managing Climate Change) because it helped increase village resilience to the impacts of climate change through reforestation and environmental conservation.

Activity 5

One of the key factors in the sustainability of the economic development of a village is good collaboration between some parties; it can be with the government, financial institutions, or business partners from the private sector. VOE has implemented this strategy by establishing partnerships with various parties, including banks and private investors, to support business development and improve community welfare. One of the VOE Administrators explained that:

"To face some challenges in obtaining funding, VOE relies on strategic collaboration with various parties, such as banks and third parties, both from the local community and outside the Ponggok area. This collaboration has opened access to greater capital to support business development so that we can continue to innovate and expand our business scope" (ASR, 2025).

Through access to external funding sources, VOE develops new business units, improves community services, and creates more job opportunities for villagers. Besides collaborating with banks, VOE established partnerships with various stakeholders from the private sector to support business operations and community empowerment. Collaboration played a significant role in VOE businesses' growth, especially in investment and business management.

"We cannot manage alone in developing VOE. Therefore, we collaborate with some parties, including private investors and banking institutions, to ensure that our businesses can have sufficient financial support" (YT, 2025).

One form of strategic partnership by VOE was cooperation with a third party from Bali in managing water tourism in Umbul Ponggok. It was done to ensure better safety and service standards in water tourism, especially for diving activities and special equipment such as underwater walker helmets. CR explained that:

"In Umbul Ponggok, there was a walker (diving helmet) ride that people initially managed ourselves; because the safety standards were high and required special expertise, we collaborated with a third party from Bali who was more experienced in this field" (CR, 2025).

Overall, the partnership built by VOE with banks and third parties was clear evidence that cross-sector collaboration could accelerate the achievement of goals in sustainable development. This program directly supported the achievement of SDG 17 (Partnership to Achieve Goals) because it showed how cooperation with several parties could positively impact village development.

Activity 6

VOE of Tirta Mandiri in Ponggok Village had a program that contributed to achieving SDGs with routine cleaning activities of swimming pools as part of efforts to maintain water quality and aquatic ecosystems. In an interview with VOE management, he showed that environmental preservation was an important aspect of the sustainability of their business. As conveyed by YT, who was also a VOE management staff:

"We have created a water defender (maintaining the sustainability of water sources) because our basic is in water potential and how we maintain water. This organization involves young people in maintaining water" (YT, 2025).

VOE experts also emphasized the following:

"For example, VOE maintained environmental sustainability. For example, and people did not damage tourism, did not damage water sources so that disasters would not occur, famine would not happen" (RS, 2025).

Furthermore, the role of VOE in maintaining the water ecosystem was also confirmed by AS, who explained:

"We ensured that the water resources used in the tourism business unit were managed properly and maintained. Therefore, we routinely cleaned the pools, ensured that the water quality remained clear, and educated the public so that they would not pollute the environment" (AS, 2025).

The cleaning program was carried out periodically to maintain the balance of the water ecosystem and create a clean and healthy environment for tourists and aquatic biota. It was also explained by AS, who said that:

".....We also maintained the pool's cleanliness by cleaning its surface and bottom once a week. Dirty bottom of the pool disturbed the view and ecosystem in Umbul Ponggok" (AS, 2025).

Moreover, the people of Ponggok Village also felt the positive impact of the existence of VOE, especially in some programs related to the environment. As conveyed by PS, a resident of Ponggok Village:

"Now, the employees are mostly from the surrounding community, and they also play a role in maintaining the environment, such as cleaning tourist areas and

managing waste. This is helpful to improve village cleanliness and community welfare" (PS, 2025).

Cleaning regularly in the Umbul Ponggok pool is one of the genuine efforts to support SDG 15 (Terrestrial Ecosystems) because it helps maintain water resources as part of a healthy terrestrial ecosystem.

Activity 7

Tirta Mandiri has an important role in supporting the achievement of SDGs through empowering local business units. By managing 12 business units covering tourism, stalls rental, fisheries, culinary, and packaged/ bottled drinking water production (AIDK). VOE focuses on increasing village income and providing job opportunities for the local community. This business model allows villages to manage local resources optimally to improve community welfare and reduce poverty. Business units managed by VOE have a significant economic impact on villagers.

"In terms of business units, we have 12 business units. There is one main unit in the tourism sector. In the sector of stall rental, then in the culinary sector, we are in the main village sector, building rental, fisheries, village studies, homestays, savings and loans, and AIDK (Packaged Water)" (YT, 2025).

With these business units' diversity, VOE creates many jobs for village communities and enables them to be involved in various business sectors based on their skills. Besides that, VOE has a policy that prioritizes residents recruiting workers so the community can feel the economic benefits generated by the business unit. It was emphasized by the VOE management, who said:

"One of the purposes of VOE is to empower. VOE employees must be residents of Ponggok Village" (YT, 2025).

With this policy, VOE functions as a business entity and an effective community empowerment tool to reduce unemployment in the village. Moreover, VOE has a primary function as a poverty alleviation tool, providing wider access to some jobs for village communities. This was also emphasized by a resident who said:

"In the past, we were under the poverty line; we started to develop since the Aqua factory was in Wangen Polanharjo, so the source of Aqua was from Ponggok, but the place was in Wangen. From there, there was a lot of labor absorption, so now the unemployment rate is minimal" (PS, 2025).

Through this system, VOE created new businesses and strengthened the local SMEs to develop better. Community economic empowerment was carried out through the fisheries sector, where VOE collaborated with residents to manage fish ponds. As explained by the VOE administrator and said that:

"In fisheries, we collaborated with residents through a pond rental system. They could rent their ponds from VOE for fish production businesses. In this way, people who owned land could get additional income, and fishery products could be distributed to the village culinary sector" (YT, 2025).

Furthermore, one of the newest business units being developed by VOE was the Bottled/Packaged Water Factory (AIDK), which used the village's natural water sources. VOE management added that this project was expected to benefit the community significantly and open new business opportunities.

"Something that would be launched soon was Bottled Water Factory (AIDK), which will be operated this year. It was built to accommodate the needs of SMEs in Ponggok Village so that the community could use the water produced for their businesses" (CR, 2025).

VOE can contribute both directly and indirectly to the achievement of SDGs. Direct impact can be seen when VOE succeeds in creating jobs and providing a decent income for villagers. As emphasized by a VOE expert who said that:

"If VOE were able to create jobs and pay those people based on the standard of regional minimum wage (UMR), it would contribute directly as efforts to reduce poverty in the village" (RS, 2025).

Overall, the management of 12 business units done by VOE shows that villages can be economically independent by optimizing local potential. This program has succeeded in creating jobs, increasing community income, and encouraging economic growth of the village itself, which contributes to the achievement of SDGs 1 (No Poverty) and 8 (Decent Work and Economic Growth).

The Challenges and Strategies of VOE to Achieve The Goals of Sustainable Development (SDGs)

Challenges

VOE of Tirta Mandiri, the main driver of Ponggok Village's economy, has faced various challenges in achieving SDGs. One of the main challenges faced is a change of community mindset from an agrarian economy to a tourism-based economy. The management of VOE explains that the community initially had difficulties adapting to a tourism-based business model. In an interview, he also explained that:

"The initial challenge has opened the community's mindset, from a community that was used to farming to a community that was ready to adapt to the tourism sector" (YT, 2025).

Besides changes in one's mindset, competition with other tourist destinations continues to develop, which is a significant challenge to the sustainability of VOE. Along with the

increasing number of other villages adopting the concept of natural resource-based tourism, Umbul Ponggok must face strict competition. VOE management highlighted that the appeal of Umbul Ponggok has begun to decline due to some similar destinations that emerged in the surrounding area.

"We cannot remain silent because some other villages develop similar tourism concepts, so we must continue to develop and always upgrade by following the times" (CR, 2025).

Moreover, limited Human Resources (HR) with skills in the tourism sector was a serious challenge. Some local workers who worked in VOE still did not have skills that met the standards of the tourism industry. The local government of Ponggok village emphasized that improving HR skills was necessary so VOE could continue growing. He also explained that:

"The challenge was not only from outside but also from inside, namely HR, which was not fully ready to manage tourism-based businesses. Therefore, we provided various training so that the community could be directly involved and gave benefit to this VOE" (YS, 2025).

"The biggest challenge was not about capital, technology, or cooperation, but a human aspect, especially regarding innovation and entrepreneurship. The main problem was low entrepreneurial spirit at the village level" (RS, 2025).

Besides the HR skills, technological development and digitalization were also challenges faced by VOE in increasing business competitiveness. McMullen and Warnick (2016) emphasized that good governance and digital innovation could increase the competitiveness of social enterprises. Nowadays, tourists search for more information from the internet and social media, so marketing strategies must adapt to digital trends. However, a lack of public understanding of the use of technology is an obstacle to implementing this digitalization strategy. YT emphasized the importance of utilizing technology in marketing strategies.

"Nowadays, everything is digital, and we must upgrade ourselves not to be left behind. VOE must be active on social media, using digital marketing strategies, and providing technology-based services to make it easier for tourists" (YT, 2025).

From a policy perspective, regulatory challenges and administrative policies influence the sustainability of VOE. YS explained that although the village government fully supported VOE, several regulations needed to be adjusted so that VOE could be more flexible in operating their businesses.

"VOE was established through village deliberation and received full support from the local village government. However, there were still some challenges in regulations and administration, which must be adjusted to AD-ART to be more advanced and more competitive" (YS, 2025).

VOE is part of the local authority at the village level (Annisa & Tristiani, 2024). Therefore, local government should give freedom to each village to recognize its potential and develop it independently. Ideally, the government only facilitates by providing the necessary stimulus and support. As stated by the VOE expert:

"VOE is part of the local authority at village level. The local government should give each village the freedom to recognize its potential and develop it so the government can provide stimulus and support. Still, many regulations do not support" (RS, 2025).

As an entity still being developed in the tourism sector, VOE faces social challenges, especially in maintaining local cultural values. One of the biggest challenges Ponggok Village faces is the acculturation of foreign cultures due to the large number of tourists. AML explained that the presence of tourists from various regions had brought diverse cultures, which then influenced the lifestyle and mindset of the young generation in the village.

"The first challenge is the influence of foreign culture. Many tourists bring various cultures from abroad, which will later result in the acculturation of foreign culture and its local culture where the culture of young people here will be mixed with foreign culture" (AML, 2025).

This cultural acculturation can be a challenge if local cultural values begin to be eroded by foreign cultures that are not by the local community norms in the village. Therefore, a strategy is needed to strengthen local cultural identity and increase awareness of the younger generation in filtering outside influences.

Furthermore, the "One House, One Bachelor" program with scholarships provided by VOE mainly aims to improve the quality of human resources in Ponggok Village. However, AML also highlights the challenges in implementing this program, namely the low number of scholarship recipients who come back home as contributions to the village.

".. many friends of those students who got scholarships did not do their duties. It was hoped that they would return to the village after getting a scholarship and dedicate their knowledge, themselves, and energy to the village. However, some friends did not contribute to the village" (AML, 2025).

Those challenges showed that many students lacked the awareness to return to develop or contribute to their village after getting benefits from the scholarship program. It could impact the program's sustainability and long-term benefits for the village community.

Strategy

One of the main challenges was changing the community's mindset from an agrarian economy to a tourism-based economy. VOE has responded to this challenge by holding training and workshops to open the community's insight into the potential of a local tourism-based economy. As expressed by the VOE management who said:

"It was not easy to change their mindset, but with gradual education, the community would begin to see the economic potential which could be explored and conducted through village studies in other villages" (YT, 2025).

This education was conducted continuously to help the community understand the new economic potential that could be explored from tourism. In addition, VOE also conducted successful study visits to tourist villages so that the community could see the positive impact of tourism sector development. Rahman and Baddam (2021) emphasized that community involvement was crucial in developing sustainable tourism. Therefore, VOE solved this challenge by holding ongoing training and education to increase community understanding of tourism-based economic potential.

Besides changing mindsets, competition with other tourist destinations, which continue to develop, has also become a significant challenge for the sustainability of VOE. To overcome this challenge, the strategy aimed to increase competitiveness through product and service innovation. Onea (2022) explained that innovation in products and services was a key strategy to maintain competitiveness. An approach was also taken to develop new business units, such as "VW tours," which offered a unique experience of exploring the village. CR explained:

"After the pandemic, we started to develop a new business unit, namely VW tours, because there would be more and more tours in the Umbul Ponggok area, and the conditions started to be organized" (CR, 2025).

Responding to similar challenges, ASR emphasized that continuous innovation is important to maintaining competitiveness.

"We must continue to develop new ideas and follow the development of tourism trends so that we would not be left behind by other destinations which increased rapidly" (ASR, 2025).

This was also supported by the VOE expert, who said:

"Innovation is a major factor in tourism management, considering this dynamic industry. Therefore, changes and new attractions are needed periodically. This process requires careful thinking, ongoing research, and consistency in maintaining quality and service" (RS, 2025).

Besides product innovation, VOE strengthened promotions through social media such as Instagram, TikTok, and Facebook and utilized local events to attract more visitors. CR added:

"The strategy is through social media, either from Instagram, Facebook, TikTok or from us who provided some promos as promotion in each monthly event" (CR, 2025).

Furthermore, the strategy was used to overcome the challenges of limited human resources in the tourism sector at VOE, and it needed to focus on developing competencies, training innovation, and collaboration with external parties. One of the initial steps that could be taken was to expand training programs based on the needs of the tourism industry. As conveyed by the Village Official who said:

"The challenge was not only from outside but also from internal factors, namely human resources, which were not fully ready to manage tourism-based businesses. Therefore, we provided various training so the community could be directly involved and benefit from this VOE" (YS, 2025).

In addition to technical training, digital skills development was crucial, considering that the trend of tourism promotion was shifting to online platforms. This strategy could be implemented by providing training in social media, such as Instagram and TikTok, and digital content creation to help people promote their local products or services. As stated by the VOE administrators:

"We also conducted digital training so that people could use technology to promote their businesses. It was important to strengthen the position of VOE in this digital era" (YT, 2025).

VOE could hold workshops or leadership training with professional training institutions or universities to improve managerial skills. VOE could expand access to higher-quality training through collaboration with external parties. As emphasized by one of the VOE administrators who said:

"We are always involved in tourism exhibitions held by the Klaten Tourism Office, which were also a place for learning and promotion for the local community" (CR, 2025).

Another strategy could be implemented was establishing a recruitment policy focused on residents, accompanied by a structured internship program.

"Articles of Association states that VOE employees must be residents of Ponggok Village so that the community can truly feel the direct benefits of the business being managed" (YT, 2025).

In facing some HR challenges, several strategies have been used by VOE, namely collaboration with universities in community service programs, having consultants, and holding regular training. As conveyed by the VOE Expert:

"Yes, right now, the collaboration with Universitas Gadjah Mada is conducted; for example, Ponggok Village already has consultants or training programs for community service. Various efforts have been made but are not optimal yet" (RS, 2025).

VOE focuses on short-term skills development and building a foundation for more sustainable HR development. This strategy is expected to increase the competitiveness of VOE in the tourism industry while strengthening the role of local communities in managing village tourism potential. Therefore, VOE holds various training courses in management, service, and digital marketing to prepare the community to compete better in the tourism sector.

Some strategies to face the challenges of technological development and digitalization in VOE require an integrated approach that prioritizes digital innovation, human resource capacity development, and collaboration with external parties. The first step that needs to be taken is to increase the digital literacy of VOE managers and local communities. As conveyed by VOE administrators who said that:

"We hold digital training for the community so that they can utilize technology to promote their businesses. This is important to strengthen the position of VOE in this digital era" (YT, 2025).

In addition, other VOE administrators also emphasized the importance of digital promotion in expanding the market:

"A strategy is utilizing social media such as Instagram, Facebook, and TikTok to promote monthly events. We also actively participate in exhibitions from Klaten Tourism Office to expand the promotion scope" (CR, 2025).

Furthermore, VOE administrators have emphasized adapting to digitalization to maintain business continuity.

"We realize that digitalization is a challenge as well as a great opportunity. Therefore, we continue to innovate so that VOE remains relevant and can compete in an increasingly competitive market" (YT, 2025).

By implementing this strategy, VOE faces some challenges of digitalization effectively, strengthening competitiveness, increasing operational efficiency, and encouraging sustainable village economic growth. Integrating technology in tourism management improves service quality and helps VOE achieve SDGs.

Some strategies in solving challenges from the perspective of administrative policies and regulations to support the sustainability of VOE need to focus on strengthening internal regulations, increasing administrative capacity, and collaborating with village government and external parties. One main challenge is the limited understanding of effective regulations and governance, which affects operational efficiency and business sustainability. As also conveyed by the local government of the village:

"Another challenge was about wrong business, so the business was not optimal. We made a regulation that managed how VOE could be more advanced and more competitive" (YS, 2025).

To solve this condition, VOE strengthened internal regulations by improving the Articles of Association and Bylaws (AD-ART) to align with the principles of good governance. Updating these internal regulations must involve deliberation with the village government, Village Deliberation Agency (BPD), and community leaders to ensure transparency and inclusive participation. As expressed by the VOE management:

"We evaluate and report at the Village Deliberation (Musdes) every year to ensure financial transparency and business continuity" (ASR, 2025).

In addition, to strengthen the administrative aspect, VOE needs to increase the capacity of human resources in administration and financial management. It can be done through training on modern accounting systems and digital technology-based governance.

"One of our main obstacles is limited understanding of human resources in financial management and the integration of financial strategies with SDGs" (ASR, 2025).

By strengthening administrative capacity, VOE improves financial management efficiency and ensures that every expenditure and investment aligns with the sustainability vision. Another strategy can be implemented is strengthening coordinative relations with the village's local government. Every VOE policy needs to be adjusted to the village development plan, which is determined in the village deliberation.

"Every three months, we report our business activities to the local government of the village and the community through BPD representatives. From the village deliberation, we can design a targeted work program based on community needs" (YT, 2025).

Moreover, collaboration with external parties such as related agencies, banks, and training institutions can be an important strategy. This partnership allows VOE to expand access to funding sources, get the latest regulatory training, and strengthen business legality. As explained by the VOE management below:

"We collaborate with various parties, including private investors and banking institutions, to ensure that the businesses we run have adequate financial and legal support" (YT, 2025).

Mair and Marti (2006) emphasized that supportive regulations are essential for the sustainability of social enterprises. As a solution, VOE conducted policy advocacy and coordination with local governments to make rules more flexible and support village businesses' growth.

The strategy used was to integrate local cultural elements into various tourism activities. Therefore, tourists learn the local culture while the village community remains proud to maintain their traditions. As conveyed by the VOE management:

"We tried to involve local culture in every aspect of tourism, from place design to activities involving the local community" (YT, 2025).

It was emphasized by one of the societies in Ponggok Village who said that:

"There is also a cultural parade from VOE. This is also an activity organized by VOE and indeed mobilized younger generation as committees and as officers" (AML, 2025)

By implementing these strategies, Ponggok Village can manage the acculturation of foreign cultures wisely. The presence of tourists is not only an economic opportunity but also a means to introduce and preserve local culture so that the younger generation still has a strong identity in the rapid flow of globalization. Kwiatak-Sottys and Bajgier-Kowalska (2019) explained that social enterprises manage cultural acculturation wisely to maintain local identity. Therefore, VOE has integrated cultural elements into every aspect of tourism and holds an annual cultural festival to preserve village traditions.

To overcome the challenge of a low rate of return as a contribution from scholarship recipients in the program of "One House, One Bachelor," VOE could enforce a post-graduation with a service contract, where each scholarship recipient was required to make a direct contribution to the village, either in the form of working in a VOE business unit, providing training to the community, or being involved in village development programs in a specific period. It was also reinforced by the statement of the VOE management who said that:

"We want to create a sense of belonging among college students so they can be part of VOE development in the future" (YT, 2025).

VOE experts also highlighted the importance of training and internships:

"VOE actively holds training and internship programs, especially to attract young people to return to the village. It can be a solution to overcome the challenge of suboptimal human resources" (RS, 2025).

Through a planned strategy and consistent implementation, the "One House, One Scholar" program had optimal function as a driver in increasing human resource capacity, creating an educated generation and a sense of social responsibility to sustain Ponggok Village. Battilana and Lee (2014) emphasized integrating social enterprises with local communities to ensure long-term benefits. VOE implemented a service contract that required scholarship recipients to contribute to village development after completing their education.

Through some serious strategies implemented, VOE demonstrated its role as a social enterprise, contributing to achieving SDGs through various educational, economic, and environmental programs. The success of VOE could not be separated from innovative strategies in facing some challenges, both in regulation, human resources, and market

competition. By continuing to focus on strengthening capacity and collaboration, it was hoped that the achievement of SDGs in Ponggok Village could be sustainable and provide greater benefits to the community in the future. Table 2 presents a summary of VOE achievements in the SDGs.

Table 2 The Achievement of SDGs

No	Activity	SDGs Points	Challenges	Strategy
1	Management of 12 types of business of VOE	SDGs 1 (No Poverty)	Some individuals struggle to fulfill fundamental requirements like food, housing, and education.	Creating job opportunities through the establishment of various business units.
		SDGs 8 (Decent Work & Economic Growth)	There are still unemployed individuals, although the unemployment rate is not significant.	Prioritize employment of local people and support SMEs.
2	One House, One Graduate	SDGs 4 (Quality Education)	Low rate of contributions from scholarship recipients after graduation.	Monthly scholarship funding and commitment for graduates to return to build or develop villages
3	SME of Pawone Umbul Ponggok	SDGs 5 (Gender Equality)	There is still a prevailing social belief that women's responsibilities should be restricted to household tasks.	Enhancing women's entrepreneurial abilities and competitiveness through the employment of women (mothers).
		SDGs 8 (Decent Work & Economic Growth)	Agrarian mindset	The focus is shifting from an agricultural economy to a tourist sector through training and establishing SMEs.
4	Integrated Waste Management	SDGs 9 (Industry, Innovation, and Infrastructure)	Public awareness of the importance of waste management is still low.	Public education and cooperation with village governments in waste management.
5	Mandatory Tree Planting for Newlyweds	SDGs 13 (Handling climate change)	Community participation that still needs to be improved	Collaboration with local government of village and local communities.
6	Cleaning Umbul Ponggok	SDGs 15 (Terrestrial Ecosystems)	Consistency in maintenance and active community participation.	Forming a Water Defender community and conducting environmental education.
7	Partnerships with Banks & Investors	SDGs 17 (Partnerships for the Goals)	Dependence on external parties and maintaining the sustainability of partnerships.	Access to external funding and strategic collaboration with business partners.

The concept of social enterprise was an effort to solve social problems and remain financially sustainable (Bradač Hojnik & Crnogaj, 2020). The study results on VOE in Ponggok Village showed how this entity played a role as a social enterprise that supported the achievement of SDGs. Based on the analysis, VOE focused on economic benefits and created significant social and environmental impacts.

Conclusion

Based on the results of this research, it could be concluded that VOE had a significant role in community empowerment to improve the village's economy and support the achievement of Sustainable Development Goals (SDGs). VOE was oriented towards economic profit and had broad social and environmental impacts. Through various community empowerment programs, VOE has contributed to eradicating poverty (SDGs 1), improving the quality of education (SDGs 4), empowering women (SDGs 5), creating jobs (SDGs 8), and preserving the environment (SDGs 9 and SDGs 13), cleaning ponds (SDGs 15) and partnerships with other parties (SDGs 17). Despite various successes, VOE faced many challenges, such as changing the community's mindset from an agrarian economy to a tourism-based economy, limited human resource skills, and competition with other tourist destinations.

In addition, some challenges in utilizing digital technology and regulations that still did not fully support the operational flexibility of VOE were also obstacles that needed to be solved. VOE has implemented various adaptive strategies to face these challenges, such as increasing human resource capacity through training and education, strengthening organizational governance, and optimizing digital marketing strategies. Some efforts to increase competitiveness were carried out through diversification of business units and cooperation with various stakeholders from the government, private sector, and local communities. VOE had proven that the concept of social enterprise could be applied effectively in the context of village development. The success of this VOE in integrating economic, social, and environmental aspects was a model that other villages in Indonesia could replicate.

This study had several limitations; it focused only on Tirta Mandiri in Ponggok Village, so the results could not be generalized to other villages' VOE. Moreover, this study emphasized the perspectives of administrators and the community. Analysis of the long-term impact of VOE programs was not the primary focus, so further research is needed to measure the effectiveness of this program for a long-term period. Theoretically, this study has contributed to developing studies on social enterprises in the context of village development. This study enriched the literature about the role of VOE in achieving SDGs with an approach based on community empowerment and sustainability. Practically, this study emphasized the importance of developing community empowerment and environmental sustainability programs by VOE and the need for greater support from local government to achieve SDGs effectively.

Further research can adopt a quantitative approach to measure social and economic impacts more objectively. In addition, comparative studies between several VOE in various regions can provide a broader picture of the factors that support success or failure in achieving the SDGs. In practice, VOE is expected to continue improving human resources' capacity through training and education to compete in the tourism and digital-based economy. Collaboration with the private sector and educational institutions also needs to be expanded to strengthen the competitiveness and sustainability of VOE.

References

- Andriyani, F. (2020). Pengelolaan potensi desa oleh Badan Usaha Milik Desa Sangatta Utara Sejahtera di Desa Sangatta Utara Kabupaten Kutai Timur: Management of village potentials by Village-Owned Company of North Sangatta Village, Kutai Timur District. *Journal of Government Science (GovSci): Jurnal Ilmu Pemerintahan*, 1(1), 31-41. <https://doi.org/10.54144/govsci.v1i1.4>
- Annisa, W. S., & Tristiani, I. N. (2024). Inovasi Pemerintah Desa dalam Meningkatkan Pendapatan Asli Desa (Studi pada Desa Sukowidi Kecamatan Panekan). *Jurnal Sosial Humaniora*, 1(2), 230-244. <https://doi.org/10.70214/bv003d30>
- Apriansah, R., Firdaus, N. M., & Mulyono, D. (2025). Peran Bank Sampah dalam Meningkatkan Pendapatan Masyarakat melalui Pengelolaan Sampah di Desa Rancamulya. *Comm-Edu (Community Education Journal)*, 8(1), 95-101.
- Battilana, J., & Lee, M. (2014). Advancing research on hybrid organizing—Insights from the study of social enterprises. *Academy of Management annals*, 8(1), 397-441. <https://doi.org/10.5465/19416520.2014.893615>
- Bocken, N. M., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42-56. <https://doi.org/10.1016/j.jclepro.2013.11.039>
- BPS. (2022). *Banyaknya Desa Menurut Kepemilikan Badan Usaha Dan Aset Desa, 2021*. Badan Pusat Statistik. <https://jateng.bps.go.id/id/statistics-table/1/MjY2MSMx/banyaknya-desa-menurut-kepemilikan-badan-usaha-dan-aset-des-2021.html>
- Bradač Hojnik, B., & Crnogaj, K. (2020). Social impact, innovations, and market activity of social enterprises: Comparison of European countries. *Sustainability*, 12(5), 1915. <https://doi.org/10.3390/su12051915>
- Bull, M., & Ridley-Duff, R. (2019). Towards an appreciation of ethics in social enterprise business models. *Journal of Business Ethics*, 159(3), 619-634. <https://doi.org/10.1007/s10551-018-3794-5>
- Chatkaewnapanon, Y., & Lee, T. J. (2022). Planning sustainable community-based tourism in the context of Thailand: Community, development, and the foresight tools. *Sustainability*, 14(12), 7413. <https://doi.org/10.3390/su14127413>
- Cho, S., Sultana, R., & Kwon, S. (2019). Social enterprise and sustainable development in Bangladesh and Korea: Opportunities and challenges. *Asian Social Work and Policy Review*, 13(2), 189-198. <https://doi.org/10.1111/aswp.12169>
- Codon, M. L. (2025). The Extent of Implementation of Republic Act No. 9178 Known as Barangay Micro Business Enterprises (BMBE) Act of 2002. *United International Journal for Research & Technology*.
- Daniswara, N. (2024). Pembangunan Wilayah Secara Endogen Sebagai Upaya Dalam Mewujudkan Potensi Desa Wisata. *SOSEBI: Jurnal Penelitian Mahasiswa Ilmu Sosial Ekonomi dan Bisnis Islam*, 4(1), 78-93. <https://doi.org/10.21274/sosebi.v4i1.9235>
- Doherty, B., Haugh, H., & Lyon, F. (2014). Social enterprises as hybrid organizations: A review and research agenda. *International Journal of Management Reviews*, 16(4), 417-436. <https://doi.org/10.1111/ijmr.12028>
- Enggraini, F., Putri, N. C., Salman, Y. A., & Handayani, W. (2020). Peran Kelembagaan Pemerintah Desa dalam Memajukan Desa Ponggok-Polanharjo, Klaten. *Matra Pembaruan: Jurnal Inovasi Kebijakan*, 4(2), 71-82. <https://doi.org/10.21787/mp.4.2.2020.71-82>
- Firdaus, M. I., Garis, R. R., & Anwar, A. N. R. (2024). Peran BUMDes Dalam Mendukung SDGs di Desa Sindangsari Kecamatan Cikoneng Kabupaten Ciamis. *Papsel*

- Journal of Humanities and Policy*, 1(3), 192-207.
<https://doi.org/10.63185/pjhp.v1i3.47>
- Gunawan, R. (2024). Exploration of the principle of accountability in the management of village-owned enterprises (BUMDes). *Jurnal Ekonomi, Manajemen Dan Akuntansi*, 2(1), 219-224.
- Halsall, J. P., Snowden, M., Clegg, P., Mswaka, W., Alderson, M., Hyams-Ssekasi, D., Oberoi, R., & Winful, E. C. (2022). Social enterprise as a model for change: mapping a global cross-disciplinary framework. *Entrepreneurship Education*, 5(4), 425-446.
<https://doi.org/10.1007/s41959-022-00084-w>
- Hartwig, T., & Nguyen, T. T. (2023). Local infrastructure, rural households' resilience capacity and poverty: evidence from panel data for Southeast Asia. *Journal of Economics and Development*, 25(1), 2-21. <https://doi.org/10.1108/JED-10-2022-0199>
- Humanika, E., Trisusilo, A., & Setiawan, R. F. (2023). Peran BUMDes (Badan Usaha Milik Desa) dalam Pencapaian SDGs Desa. *Agrijo: Jurnal Agribisnis Universitas Malikussaleh*, 8(2), 101-116. <https://doi.org/10.29103/ag.v8i2.14827>
- Judijanto, L., Rijal, S., Ahmad, M. I. S., & Harsono, I. (2024). Analisis Bibliometrik tentang Kewirausahaan Sosial dan Pemberdayaan Masyarakat dalam Pembangunan Ekonomi. *Jurnal Multidisiplin West Science*, 3(03), 314-322.
<https://doi.org/10.58812/jmws.v3i03.1050>
- Kania, I., Anggadwita, G., & Alamanda, D. T. (2021). A new approach to stimulate rural entrepreneurship through village-owned enterprises in Indonesia. *Journal of Enterprising Communities: People and Places in the Global Economy*, 15(3), 432-450.
<https://doi.org/10.1108/JEC-07-2020-0137>
- Kurniawan, I., Asri, M. D., Fitriani, L., & Priatna, R. (2023). Penguatan Kelembagaan Bumdes untuk Pembangunan Desa di Kecamatan Rancakalong. *Setia Mengabdi: Jurnal Pengabdian kepada Masyarakat*, 4(2), 73-83.
<https://doi.org/10.31113/setiamengabdi.v4i2.50>
- Kusuma, Y. A., Susilo, D., Khoiroh, S. M., & Pradana, M. V. K. (2025). Pemberdayaan Masyarakat Desa melalui Pengembangan BUMDes dalam Mengelola Potensi Wilayah yang Berorientasi Ekspor. *Jurnal Pengabdian Masyarakat dan aplikasi Teknologi*, 4(1), 7-12.
- Kusumawardani, D., & Andanawarih, P. (2018). Peran posyandu lansia terhadap kesehatan lansia di perumahan bina griya indah kota pekalongan. *Siklus: Journal Research Midwifery Politeknik Tegal*, 7(1). <https://doi.org/10.30591/siklus.v7i1.748>
- Kwiatek-Soltys, A., & Bajgier-Kowalska, M. (2019). The role of cultural heritage sites in the creation of tourism potential of small towns in Poland. *European spatial research and policy*, 26(2), 237-255. <https://doi.org/10.18778/1231-1952.26.2.11>
- Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of world business*, 41(1), 36-44.
<https://doi.org/10.1016/j.jwb.2005.09.002>
- Maksum, I. R., Rahayu, A. Y. S., & Kusumawardhani, D. (2020). A social enterprise approach to empowering micro, small and medium enterprises (SMEs) in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), 50.
<https://doi.org/10.3390/joitmc6030050>
- McMullen, J. S., & Warnick, B. J. (2016). Should we require every new venture to be a hybrid organization? *Journal of Management Studies*, 53(4), 630-662.
<https://doi.org/10.1111/joms.12150>

- Merritt, K., Clark, J., & Freedman, D. (2024). Social enterprise, food justice, and food sovereignty: Strange bedfellows or systemic supports? *Journal of Agriculture, Food Systems, and Community Development*, 13(2), 53–72–53–72.
- Monteiro, N. B. R., da Silva, E. A., & Neto, J. M. M. (2019). Sustainable development goals in mining. *Journal of Cleaner Production*, 228, 509-520.
<https://doi.org/10.1016/j.jclepro.2019.04.332>
- Mu'minin, M. A., Sakuntalawati, L. R. D., & Wijaya, M. (2024). Strategi Mengatasi Hambatan Perkembangan Bumdes: Kajian di Desa Jumpat, Bojonegoro. *Interdisciplinary and Multidisciplinary Studies: Conference Series*,
- Muma, S., Naidoo, K. S., & Hansraj, R. (2024). SWOT analysis of the models used by social enterprises in scaling effective refractive error coverage to achieve the 2030 in SIGHT in Kenya. *Scientific Reports*, 14(1), 3750. <https://doi.org/10.1038/s41598-024-54493-z>
- Musthofa, B. M., Pranita, D., Rasul, M. S., & Haidlir, B. M. (2023). Institutional dynamics of halal tourism development in Indonesia and Malaysia. *JAS (Journal of ASEAN Studies)*, 11(1), 21-41. <https://doi.org/10.21512/jas.v11i1.9431>
- Muzhaqi, A. (2024). *Pembangunan Berkelanjutan melalui Badan Usaha Milik Desa (Studi Kasus BUMDes Ketapanrame, Kecamatan Trawas, Kabupaten Mojokerto Jawa Timur)* UPN Veteran Jawa Timur].
- Natalia, A., & Maulidya, E. N. (2023). Aktualisasi Empat Pilar Sustainable Development Goals (SDGs) Di Perdesaan Kecamatan Natar Kabupaten Lampung Selatan. *JIIP: Jurnal Ilmiah Ilmu Pemerintahan*, 8(1), 21-41.
<https://doi.org/10.14710/jiip.v8i1.16513>
- Nuak, F. S., Djani, W., & Kase, P. K. (2020). Saving and loan business management strategy of Satu Hati Village-Owned Enterprises (BUMDes). *Journal of Sustainable Tourism and Entrepreneurship*, 1(3), 165-178. <https://doi.org/10.35912/joste.v1i2.290>
- Nurfaisal, M. D., Maulana, M. A., & Sari, I. (2024). Akuntabilitas Program Kemandirian Desa Berbasis Smart village: Studi Kasus Pengelolaan BUMDes Tirta Mandiri. *Jurnal Ranah Publik Indonesia Kontemporer (Rapik)*, 4(2), 97-108.
<https://doi.org/10.47134/rapik.v4i2.68>
- Onea, I. A. (2022). Exploring the COVID-19 pandemic impact on innovation and entrepreneurship—Review and evidence from Global Innovation Index. *Proceedings of the International Conference on Business Excellence*,
<https://doi.org/10.2478/picbe-2022-0051>
- Panjaitan, R. N., & Hutapea, T. (2024). Pengembangan Potensi Ekonomi Desa Melalui Badan Usaha Milik Desa (BUMDES) untuk Meningkatkan Kesejahteraan Masyarakat di Desa Denai Lama Kecamatan Pantai Labu Kabupaten Deli Serdang. *Jurnal Ilmu Sosial Dan Politik*, 4(1), 17-33.
<https://doi.org/10.51622/jispol.v4i1.2381>
- Pereira, J., Rodrigues, R. G., & Veiga, P. M. (2024). Entrepreneurship among Social Workers: Implications for the Sustainable Development Goals. *Sustainability*, 16(3), 996.
<https://doi.org/10.3390/su16030996>
- Purnamasari, A., & Afriansyah, E. A. (2021). Kemampuan komunikasi matematis siswa smp pada topik penyajian data di pondok pesantren. *Plusminus: Jurnal Pendidikan Matematika*, 1(2), 207-222. <https://doi.org/10.31980/plusminus.v1i2.1257>
- Purnamawati, A., & Indriani, Y. (2021). Kajian Media Online: Best Practice Manajemen Badan Usaha Milik Desa Dalam Menciptakan Ekonomi Inklusif: Kasus BUMDES Ponggok Tirta Mandiri Klaten Jawa Tengah. *Coopetition*, 12(2), 370338.
<https://doi.org/10.32670/coopetition.v12i2.453>

- Putri, N. A., & Zetra, A. (2021). Peran dan Sinergitas antar Aktor Badan Usaha Milik Desa (BUMDES) Tirta Mandiri, Desa Ponggok, Kabupaten Klaten dalam Perspektif Governance. *Jurnal Wacana Politik*, 6(2).
<https://doi.org/10.24198/jwp.v6i2.32107>
- Quaye, J. N. A., Halsall, J. P., Winful, E. C., Snowden, M., Opuni, F. F., Hyams-Ssekasi, D., Afriyie, E. O., Opoku-Asante, K., Ocloo, E. C., & Fairhurst, B. (2024). Social enterprises and the Sustainable Development Goals (SDGs): a means to an end. *Environment, Development and Sustainability*, 1-30. <https://doi.org/10.1007/s10668-024-05359-x>
- Rachim, H. A., & Santoso, M. B. (2023). Menggagas Social Enterprise pada Lembaga Kemasyarakatan Lokal Bumdes Sumber Sejahtera Desa Nagrog Kecamatan Cicalengka Kabupaten Bandung. *Focus: Jurnal Pekerjaan Sosial*, 6(2), 366-379.
<https://doi.org/10.24198/focus.v6i2.52829>
- Rahayu, M. J., Mukaromah, H., & Mulyanto, M. (2024). Social capital-based strategy of sustainable village-owned enterprises (BUMDes) development. *International Journal of Social Economics*, 51(3), 297-312. <https://doi.org/10.1108/IJSE-10-2022-0700>
- Rahmaddhani, T. W., & Prasetyoningsih, N. (2023). Achieving a Developing Village based on the Village Sustainable Development Goals in Tirtonirmolo Village, Bantul Regency. *Jurnal Penegakan Hukum dan Keadilan*, 4(1), 11-29.
<https://doi.org/10.18196/jphk.v4i1.16043>
- Rahman, S. S., & Baddam, P. R. (2021). Community engagement in Southeast Asia's tourism industry: Empowering local economies. *Global Disclosure of Economics and Business*, 10(2), 75-90. <https://doi.org/10.18034/gdeb.v10i2.715>
- Rahoyo, S., Slahanti, M., & Heriawan, B. (2024). Peran Kunci Social Entrepreneurship dalam Pengentasan Kemiskinan Melalui Community-Based Tourism. *KRITIS*, 33(2), 104-125. <https://doi.org/10.24246/kritis.v33i2p104-125>
- Rajah, N., Amran, A., & Cheah, J. (2022). Determinants that enhance resilience and performance of social enterprises in Malaysia: A conceptual framework. *Journal of Governance and Integrity*, 5(3), 297-307. <https://doi.org/10.15282/jgi.5.3.2022.8981>
- Rifa'i, Y. (2023). Analisis Metodologi Penelitian Kualitatif dalam Pengumpulan Data di Penelitian Ilmiah pada Penyusunan Mini Riset. *Cendekia Inovatif Dan Berbudaya*, 1(1), 31-37. <https://doi.org/10.59996/cendib.v1i1.155>
- Rogerson, A., Green, M., & Rabinowitz, G. (2013). Mixing business and social. *What is a social enterprise and how can we recognize one*.
- Rosiani, T., & Siyami, N. (2022). Dampak Tata Kelola Bumdes Dan Peran Kolaborasi Pentahelix Dalam Mewujudkan SDGS Desa. *Syntax Literate; Jurnal Ilmiah Indonesia*, 7(9), 15835-15851. <https://doi.org/10.36418/syntax-literate.v7i9.13573>
- Saputra, K. A. K., Atmadja, A. T., Koswara, M. K., & Tama, G. M. (2021). Examining the role of village funds in village Sustainable Development Goals (SDGs). *Southeast Asia Journal of Contemporary Business, Economics and Law*, 24(6), 45-51.
- Sari, A., & Ilham, T. (2024). A Deep Dive Into the Success of Joint Village-Owned Enterprises (Joint-BUMDes) in Indonesia: An Interpretive Structural Modeling (ISM) Approach. *Jurnal Bina Praja*, 16(1), 215-233.
<https://doi.org/10.21787/jbp.16.2024.215-233>
- Sharifi, A., Allam, Z., Bibri, S. E., & Khavarian-Garmsir, A. R. (2024). Smart cities and sustainable development goals (SDGs): A systematic literature review of co-benefits and trade-offs. *Cities*, 146, 104659.
<https://doi.org/10.1016/j.cities.2023.104659>

- Shi, L., Han, L., Yang, F., & Gao, L. (2019). The evolution of sustainable development theory: Types, goals, and research prospects. *Sustainability*, 11(24), 7158. <https://doi.org/10.3390/su11247158>
- Siagian, G. J. A., & Sitorus, A. B. (2024). Analisis implementasi Sustainable Development Goals (SDGs) desa melalui pengembangan badan usaha milik desa (BUMDes). *Jurnal Ilmu Sosial Dan Politik*, 4(1), 34-45. <https://doi.org/10.51622/jispol.v4i1.2382>
- Sidik, F., Nasution, F. G. A., & Herawati, H. (2018). Pemberdayaan Masyarakat Desa Menggunakan Badan Usaha Milik Desa: Desa Ponggok Dan Kritik Terhadap Prestasi ‘Terbaik Nasional’. *Jurnal Pemikiran Sosiologi*, 5. <https://doi.org/10.22146/jps.v5i2.44636>
- Sofyani, H., Ali, U. N. N. A., & Septiari, D. (2020). Implementasi Prinsip-Prinsip Tata Kelola yang Baik dan Perannya terhadap Kinerja di Badan Usaha Milik Desa (BUMDes). *JLA (Jurnal Ilmiah Akuntansi)*, 5(2), 325-359.
- Subekti, A. (2022). The Analysis Of Village Fund Contribution To Achieve A National Sustainable Development Goal (Sdgs Village) In Gadingrejo Village, Kepil Subdistrict Wonosobo Regency. *International Journal of Social Science*, 1(5), 739-746. <https://doi.org/10.53625/ijss.v1i5.1318>
- Suryanto, R., Widiastuti, H., Sofyani, H., Murtin, A., Yani, I., Thamrin, D. A. F., & Utami, T. P. (2025). Enhancing the sustainability performance of village-owned enterprises (VOEs): The mediation role of innovation capability. *Multidisciplinary Science Journal*, 7(9), 2025360-2025360. <https://doi.org/10.31893/multiscience.2025360>
- Syarif, I. A., Utomo, E., & Prihartanto, E. (2021). Identifikasi Potensi Pengembangan Wilayah Pesisir Kelurahan Karang Anyar Pantai Kota Tarakan. *Jurnal Cakrawala Ilmiah*, 1(3), 225-232. <https://doi.org/10.53625/jcijurnalcakrawalaindonesia.v1i3.604>
- Tasia, E., & Martiningsih, R. S. P. (2023). Implementasi Tata Kelola Badan Usaha Milik Desa Dalam Mewujudkan Sustainable Development Goals Desa (Studi Kasus: BUMDes Bahtera Mandiri Di Desa Jenggala, KLU). *Jurnal Riset Mahasiswa Akuntansi*, 3(3), 105-117. <https://doi.org/10.29303/risma.v3i3.880>
- Tsabita, A. S., Apriyadi, A., & Syarief, A. N. L. (2023). Kontribusi Kebun Melanik Farm dalam Mencapai Sustainable Development Goals (SDGS). *Jurnal Intelektualita: Keislaman, Sosial dan Sains*, 12(2). <https://doi.org/10.19109/intelektualita.v12i2.19329>
- Usman, U., Wartoyo, W., Haida, N., & Wahyuningsih, N. (2024). Implementasi Sustainable Development Goals (SDGS) Di Indonesia Perspektif Ekonomi Islam. *Al-Masharif: Jurnal Ilmu Ekonomi dan Keislaman*, 12(1), 108-126. <https://doi.org/10.24952/masharif.v12i1.12446>
- Wilujeng, S. (2023). Peran Badan Usaha Milik Desa (Bumdes) dalam Meningkatkan Kesejahteraan Masyarakat di Desa Banjar Kecamatan Licin Kabupaten Banyuwangi. *Jurnal Pendidikan Tambusai*, 7(1), 3624-3634.
- Yadav, J., Kaur, R., & Mishra, S. (2024). Contribution of self-help groups in addressing several development issues in India: a systematic review of literature. *International Journal of Management Practice*, 17(1), 67-94. <https://doi.org/10.1504/IJMP.2024.135195>
- Yusran, Y., Mamminanga, I., & Abbas, M. H. (2021). Analisis Gerakan One Agency One Innovation dalam Meningkatkan Kualitas Pelayanan Publik di Kabupaten Wajo. *YUME: Journal of Management*, 4(2), 104-110.

Nugraheni, Utami & Utami

The portrait of challenges and strategies of village-owned enterprise in achieving SDGs: ...

About the Authors

Tri Satya Rifah Nugraheni (TSRN) – is a student from Department of Accounting, Faculty of Economics and Business, Universitas Muhammadiyah Yogyakarta.

Evy Rahman Utami (ERU.) – is a young lecturer and researcher in Financial Accounting, Corporate Governance, Sustainability and Disclosure from Department of Accounting, Faculty of Economics and Business, Universitas Muhammadiyah Yogyakarta. Email: evy.rahman@umy.ac.id

Tiyas Puji Utami (TPU) – is a researcher assistant from Department of Accounting, Faculty of Economics and Business, Universitas Muhammadiyah Yogyakarta.

Author Contributions

Conceptualisation, TSRN and ERU.; Methodology, TSRN and ERU.; Investigation, TSRN; Analysis, TSRN and ERU.; Original draft preparation, TSRN, ERU., TPU.; Review and editing, TSRN, ERU., TPU.; Visualization, TSRN, ERU., TPU.; Supervision, ERU.

Conflicts of Interest

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.



© 2024 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC-BY-NC-ND 4.0) license (<http://creativecommons.org/licenses/by/4.0/>).