

Social Return on Investment (SROI) Analysis of Village Fund Use Through Village-Owned Enterprises (Bumdes) (Sambirejo Village, Mantingan District, Ngawi Regency)

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Abstract

This study measures the success of Village Funds through village-based economic programs to improve community welfare. The method used was Social Return on Investment (SROI), which aims to measure the economic, social, and environmental impacts of a program with a benefit-based approach. This study was conducted in Sambirejo Village, Mantingan District, Ngawi Regency. The research method used was Mixed Methods, which combines qualitative and quantitative methods. Data collection techniques were carried out through observation, interviews, questionnaires, and documentation, with data instrument tests using Pearson Correlation and Cronbach's Alpha. The results indicated that the Social Return on Investment (SROI) value is obtained from a comparison between the input value and the impact. The impact value is greater than the input value, meaning this program produces economic and social benefits for stakeholders. Village Funds through Village-Owned Enterprises has succeeded in providing a positive impact for stakeholders. This study concluded that village funds through the Village-Owned Enterprise (BUMDES) in Sambirejo Village, Mantingan District, Ngawi Regency, have had a positive socioeconomic impact, providing easier access for residents to shop, expanding employment opportunities, encouraging active community participation, and developing local economic potential. Village fund management through BUMDES also has a positive environmental impact by reducing carbon emissions through fewer vehicles used by residents to meet household needs.

Keywords

Sustainability, Development, Impact Value

Introduction

According to Law Number 6 of 2014 concerning Villages, a village is a community unit that has the authority to make regulations and manage government and community needs by referring to the original rights and traditions recognized in the state government system. According to the Central Statistics Agency (2019), there are approximately 19,152 villages in Indonesia that are still considered underdeveloped due to the low quality of human resources, limited accessible infrastructure, and lack of capital for businesses. To strengthen the role of villages, the Indonesian government introduced the Village Fund program in 2015. This program aims to accelerate infrastructure development, reduce poverty, and empower village communities. During the 2015-2019 period, an average village received IDR 960.59 million per year (Sidik, 2019). One important strategy in utilizing the Village Fund is the establishment of Village-Owned Enterprises (BUMDes). By 2023, there were more than 74,000 Village-Owned Enterprises (BUMDes) across Indonesia, operating in various business sectors, including trade, financial services, natural resource management, and tourism (PDPT, 2021). BUMDes is considered an effective strategy for increasing Village Original Income (PADes), creating jobs, and maximizing the use of natural and human resources in villages (Suleman et al, 2020).

However, not all BUMDes operate optimally. Research by Rahardjo & Pratiwi (2022) shows that BUMDes have not been able to contribute to community welfare significantly. One relevant method for evaluating BUMDes programs is Social Return on Investment (SROI) analysis. Implementing SROI also benefits by increasing transparency and accountability in village fund management. With social impact-based measurements, village governments can more easily demonstrate the results of their investments to the community and other stakeholders (Allawi & Wibowo, 2021). For example, Septasawitri et al. (2023) showed that using the Social Return on Investment (SROI) method can determine the benefits generated by programs. In this study, BUMDes plays a crucial role as an instrument for effectively utilizing Village Funds. With various programs spanning trade, MSME empowerment, and social activities, BUMDes Sambirejo has provided tangible benefits to the village community. However, to understand the program's success, an in-depth evaluation is required, including an analysis of the program's inputs, outputs, outcomes, and impact. Therefore, this research combines the Social Return on Investment (SROI) method with the theme of Village-Owned Enterprises (BUMDes).

Theoretical Framework

The Social Return on Investment (SROI) method is a relevant evaluation tool. SROI is an evaluation method that assesses the social, economic, and environmental impacts of a program in monetary terms. For example, research by Septasawitri et al. (2023) shows that every IDR 1.00 invested in a community-based program generates social benefits of IDR 23.60. The SROI method has significant potential in providing a comprehensive overview of a program's success. Social Return on Investment (SROI) is an evaluation method applied to assess the social, economic, and environmental impacts of a program relative to the resources invested. This method aims to provide a broader perspective on the benefits generated by an initiative, not only in financial terms

but also in terms of the social changes that occur.

Social aspects are a consequence of the interaction between humans and their environment, including social inequality arising from acts of violence and oppression against other individuals, which ultimately lead to an imbalance in the distribution of power. Furthermore, economic aspects also play a crucial role in assessing the effectiveness of a program, where the program must be able to have a positive impact on reducing poverty levels. Environmental aspects refer to elements of human activity that are directly related to nature, such as global warming, increased carbon dioxide (CO₂) emissions, and environmental damage. These events occur due to development that is solely oriented towards economic profit without considering the social, economic, and environmental impacts. Therefore, a sector has emerged that seeks to restore social balance in society, run by organizations, non-profit institutions, and social enterprises. This sector aims to create prosperity for all stakeholders and support sustainable social, economic, and environmental development (Rahma et al, 2024). SROI was first developed by the Roberts Enterprise Development Fund (REDF) in the United States in the mid-1990s. Over time, the concept has evolved and become a widely used evaluation tool by various organizations, including non-profits, social businesses, and the public and private sectors (Corvo et al, 2022). This method helps stakeholders understand how investments provide tangible added value to the surrounding community and environment.

SROI aims to provide a more holistic picture of an initiative's impact by assessing the resulting benefits and comparing them to the costs incurred. This method looks beyond the financial aspects of an investment and also measures the social, environmental, and economic value created as a result of a program or project. Using this approach, stakeholders can gain a deeper understanding of how their activities contribute significantly to the well-being of society and the environment (Ravulo et al, 2019). SROI also identifies areas where positive impacts can be enhanced and identifies more effective ways to allocate available resources, which can make it easier for them to make more strategic and data-driven decisions, so that the resulting benefits can be maximized.

The main concept of SROI is calculating the ratio between the benefits (value) generated and the investment made. This value is expressed as a ratio, for example, 1:3, meaning that each unit of investment produces 3 units of benefit. However, SROI focuses not only on numbers but also on the process of identifying changes (outcomes) relevant to stakeholders. In practice, this approach involves the active involvement of stakeholders to ensure that the measured values truly reflect the impact experienced (Pribadi et al, 2019). Theoretically, SROI is based on the Theory of Change, which describes how resources (inputs) can produce products or services (outputs) and, ultimately, impacts (outcomes). This Theory of Change is an important tool for understanding the complex cause-and-effect relationships within a program. SROI also adopts accountability principles, such as stakeholder engagement, measuring relevant outcomes, and transparency in the reporting process (Santoso et al., 2021). SROI provides an approach that can help organizations better understand and manage their impact, while providing robust evidence

to donors, partners, and other stakeholders. In academic contexts, SROI is often used as an evaluation method to assess the effectiveness of social intervention programs and to expand the literature on non-financial impact measurement (Corvo et al., 2022). This methodology emphasizes that impact is determined through a process involving stakeholders who directly experience the impact. Both positive and negative impacts, including unintended ones, must be taken into account. In summary, the SROI ratio can be calculated using the following formula:

$$\text{SROI Ratio} = \frac{\text{Present Value of Benefits}}{\text{Value of Input}}$$

The SROI ratio obtained can provide an overview of the success of an investment in social business activities, particularly in terms of business sustainability. A business is considered successful if each unit of currency invested creates social benefits (social value) equivalent to the amount invested. In other words, the SROI ratio should be greater than 1:1, meaning the resulting benefits must exceed the capital invested.

Methods

The object of this research was conducted in Sambirejo Village, located in Mantingan District, Ngawi Regency. BUMDes Sambirejo Mart, as a new phenomenon in Sambirejo Village, is an interesting object that needs to be studied more deeply through the SROI approach. The selection of this research location is based on various strong considerations. It is relevant to the research objectives, particularly in measuring the social and economic impacts of BUMDes Sambirejo Mart using the Social Return on Investment (SROI) method. The subjects in this study included all stakeholders who play a role in the BUMDes Sambirejo program.

- a. Village Government
- b. Village-Owned Enterprise Management
- c. Micro, Small, and Medium Enterprises (MSMEs)
- d. Sambirejo Village Community

In primary data management, tools are needed to measure data validity and reliability. In testing validity and reliability, the author used Microsoft Excel. In this study, data analysis used Social Return on Investment (SROI). This concept was first developed by the Roberts Enterprise Development Fund (REDF) in the United States in the mid-1990s (Corvo et al., 2022). This method helps stakeholders understand how investments made can provide real added value to the community and the surrounding environment. The Social Return on Investment (SROI) method chosen by the researcher aims to measure the economic, social, and environmental impacts of a program with a benefit-based approach. According to Corvo et al. (2022), the calculation of Social Return on Investment (SROI) is as follows:

$$Present Value (PV) = \frac{Value\ of\ impct\ in\ year\ n}{(1+i)^n}$$

$$NPV = [Total\ PV\ of\ benefits] - [Value\ of\ investment]$$

$$SROI\ Ratio = \frac{Present\ Value\ of\ Benefits}{Value\ of\ Input}$$

Description:

NPV = Net Present Value

i = Discount value/percentage

n = Program year

When selecting a model to use to manage Social Return on Investment (SROI), there are several points to consider:

1. Problems underlying the program
2. Stakeholders and Input
3. Activities or Programs
4. Output
5. Outcome
6. Impact

In primary data management, tools are needed to ensure that research instruments actually measure what they are supposed to, such as by testing data validity using Pearson Correlation. To provide consistent results, reliability testing uses Cronbach's Alpha (Iba & Wardhana, 2024).

Results and Discussion

Data Instrument Quality Test

1. Validity Tes

Validity testing was conducted using Pearson Correlation to assess the extent to which each item in the questionnaire reflects the expected construct. An item is considered valid if the correlation value is (rcount) >0,300.

Table 1. Results of the Validity Test of the Questionnaire for the Community

Item	Corrected Item Total Correlation Value/rcount	Sig.	rtable	Criteria
M1	0,536	0,000	0,300	Valid
M2	0,605	0,000	0,300	Valid
M3	0,695	0,000	0,300	Valid
M4	0,413	0,000	0,300	Valid
M5	0,626	0,000	0,300	Valid
M6	0,448	0,000	0,300	Valid
M7	0,448	0,000	0,300	Valid
M8	0,508	0,000	0,300	Valid

Item	Corrected Item Total Correlation Value/rcount	Sig.	r _{table}	Criteria
M9	0,716	0,000	0,300	Valid
M10	0,580	0,000	0,300	Valid

Source: Excel Processed Data, 2025

Based on Table 1, all questions posed to the public are valid, as seen by the calculated r value (Corrected Item-Total Correlation) > r_{table} by 0,300.

Table 2. Results of the Questionnaire Validity Test for MSMEs

Item	Nilai Corrected Item Total Correlation/rcount	Sig.	r _{table}	Criteria
U1	0,617	0,000	0,300	Valid
U2	0,888	0,000	0,300	Valid
U3	0,957	0,000	0,300	Valid
U4	0,973	0,000	0,300	Valid

Source: Excel Processed Data, 2025

Based on Table 5.2, all questions for MSMEs have a valid status, because the r-count (Corrected Item-Total Correlation) value > r_{table} by 0,300.

2. Reliability Test

Reliability testing is a crucial indicator in quantitative research, providing consistent results and ensuring the instrument's reliability under different conditions or repeated measurements. Reliability testing uses the Cronbach's Alpha method, one of the most frequently used techniques for measuring the internal consistency of a research instrument. An instrument is considered reliable if the Cronbach's Alpha value is >0.700.

Table 3. Reliability Test Results

No.	Variable	r _{alpha}	r _{critical}	Criteria
1	Community	0,774	0,700	Reliable
2	MSMEs	0,833	0,700	Reliable

Source: Excel Processed Data, 2025

Based on Table 3, the reliability coefficient results for the Community Variable have a value of r_{ll} = 0.719, and the MSME Variable has a value of r_{ll} = 0.727. Both variables are declared reliable because their values are >0.700.

Analisis Social Return on Investment

Prior to 2021, Sambirejo Village did not have a Village-Owned Enterprise (BUMDes) to drive the local economy. With the availability of Village Funds, in 2021, the village government established Sambirejo Mart as a business unit of the Sambirejo BUMDes. The main objective of establishing Sambirejo Mart is to improve community welfare by providing access to daily necessities and empowering local Micro, Small, and Medium Enterprises (MSMEs). In its operations, Sambirejo Mart functions not only as a shopping center but also as a village economic center involving various parties. Through these activities, Sambirejo Mart contributes to increasing community income and reducing dependence on products from outside the village. This analysis identifies activities that have been implemented over three years, namely in 2022,

2023, and 2024, which are the operational periods of the Sambirejo Mart Village-Owned Enterprise (BUMDes).

Table 4. Stakeholders of the Sambirejo Mart Village-Owned Enterprise

No.	Stakeholder	Related Roles	Desired or Undesired Changes
1	Sambirejo Village Government	Providing initial resources and policy support	Intentionally improving the social and economic conditions of villages through successful independent business operations.
2	Village-Owned Enterprise Managers	Implementing the program through the "BUMDes Sambirejo Mart" business activity	Increasing business income and village-generated revenue (PADes).
3	MSMEs	Using facilities provided by the Village-Owned Enterprise Program	Increasing markets, competitiveness, and sales.
4	Sambirejo Village Community	Being a beneficiary of the Village-Owned Enterprise Program	Easier access, reduced transportation costs, time savings, and a cleaner environment.

Source: Authors (2025)

Table 4 shows that the Sambirejo Village Government plays a primary role in providing initial support in resources and policies that support business continuity. The Village-Owned Enterprise (BUMDes) management is responsible for implementing programs and ensuring the business's smooth operation. MSMEs and the community utilize the facilities provided by the BUMDes.

Table 5. Input Assessment

No.	Input	Year	Value (Rp)
1	Construction of the "BUMDes Sambirejo Mart" Building	2021	350.000.000
2	Business Capital for "BUMDes Sambirejo Mart"	2021	150.000.000
Total Value			500.000.000

Source: Authors (2025)

Table 5 shows two main components: building construction and business capital for the Sambirejo Mart Village-Owned Enterprise (BUMDes). The building construction has an investment value of Rp350,000,000.00, while the business capital for the Sambirejo Mart BUMDes is recorded at Rp150,000,000.00. Thus, the total investment spent on these two components reaches Rp500,000,000.00.

Table 6. Output and Outcome of Sambirejo Mart Village-Owned Enterprise

Process	Output	Outcomes
Program management through the "BUMDes Sambirejo Mart's business activities	Increased Turnover	Increased Village Revenue
	All remaining transaction refunds will be distributed to ZISDes	Allocated to Village-Owned Enterprises (ZISDes) for Free Ambulance Operations
	Free Shelving Facilities for MSMEs	Savings on Display Costs
	Local Residents Employed	New Job Opportunities
	Easier access for the community	1. Transportation cost savings 2. Time savings

Source: Authors (2025)

Table 6 shows the outputs and outcomes of each Management Program conducted through the Sambirejo Mart BUMDes business activities, reflecting the achievements and benefits derived from the various activities implemented. These results were determined based on predetermined indicators to ensure objective and structured impact measurement.

Table 7. Value Outcome

Outcomes	Financial Proxy	2022 (Rp)	2023 (Rp)	2024 (Rp)	Total (Rp)
Increased Village Revenue	Total net profit of Sambirejo Village-Owned Enterprises	-	16.800.000	16.719.647	33.519.647
Increased Sales of MSME Products	Mart × 20%	67.658.780	166.952.950	171.310.425	405.922.155
Display Cost Savings	MSME turnover	3.273.810	7.023.540	7.206.850	17.504.200
Allocated to Village-Owned Enterprises (ZISDes) for Free Ambulance Operations	Before and after	624.233	1.511.869	1.277.430	3.413.532
Transportation cost savings	Distance saved × Number of users	25.317.480	26.712.473	27.409.668	79.439.621
Time savings	Time saved × Number of users	39.263.009	41.426.401	42.507.630	123.197.040
New job opportunities	Number of workers × Average	37.200.000	70.800.000	70.080.000	178.080.000
Total		136.137.312	260.427.233	266.431.650	841.076.195

Source: Authors (2025)

Table 7 shows that overall, the total value of benefits generated by this program in reaching IDR 841,076,195.00 reflects a significant economic and social impact on various stakeholders, including village governments, MSME actors, and the general public.

Table 8. Value of Deadweight, Attribution, and Impact

Outcomes	Value (Rp)	Deadweight	Attribution	Impact (Rp)
Increased Village Revenue	33.519.647	0%	0%	33.519.647
Increased Sales of MSME Products	405.922.155	10%	10%	328.795.945
Savings on Display Costs	17.504.200	0%	5%	16.628.990
Allocation to Village-Owned Enterprises (ZISDes) for Free Ambulance Operations	3.413.532	0%	5%	3.242.855
Savings on Transportation Costs	79.439.621	5%	5%	71.647.120
Savings on Time	123.197.040	5%	5%	111.484.187
New Job Opportunities	178.080.000	0%	10%	160.272.000
Total Value of Impact				725.590.744

Source: Authors (2025)

Table 8 shows that for the increase in MSME product sales, there was a 10% deadweight correction and a 10% attribution correction. Approximately 10% of the increase in MSME turnover could have occurred naturally, even without this program. The other 10% came from external factors such as independent marketing strategies implemented by business actors or other programs. For MSMEs, there was a 5% attribution correction for display costs, indicating a small contribution from other factors. For the allocation of funds to ZISDes for free ambulance operations, there was a 5% attribution correction, indicating a small contribution from other factors. For savings in time and transportation costs for the community, there were 5% deadweight and attribution corrections, each of which was 5%. Although the program provides significant savings, a small portion of these benefits could have occurred without direct intervention from the program. For new job creation, after being corrected by the attribution factor of 10%, other external factors also contributed to opening up employment opportunities.

b. Calculation of Social Return on Investment

The Social Return on Investment (SROI) calculation was conducted to assess the extent to which the utilization of Village Funds through the Sambirejo Mart BUMDes provides social and economic benefits to the community. This analysis aims to measure the effectiveness of the investments that have been made. Through this approach, it can be determined whether the allocated funds truly provide added value to the village community or whether a more optimal management strategy is needed. The initial SROI calculation was carried out by discounting the Value of Impact of Rp725,590,744.00 using the Bank Indonesia Discount Rate of 3.5% following the average interest rate of Bank Indonesia (www.bi.go.id). The calculation results are as follows.

$$\begin{aligned} \text{Present Value (PV)} &= \frac{\text{Value of impact in year } n}{(1+i)^n} \\ &= \frac{725.590.744}{(1+3,5\%)^3} \\ &= 654.441.279 \end{aligned}$$

$$\begin{aligned} \text{NPV} &= [\text{Total PV of benefits}] - [\text{Value of investment}] \\ &= 654.441.279 - 500.000.000 \\ &= 154.441.279 \end{aligned}$$

$$\begin{aligned} \text{SROI Ratio} &= \frac{\text{Present Value of Benefits}}{\text{Value of Input}} \\ &= \frac{654.441.279}{500.000.000} \\ &= 1,31 \end{aligned}$$

Based on the Net Present Value (NPV) calculation, which is the difference between the total present value of the benefits generated and the initial investment value that has been spent. In this study, it was found that the initial investment made by BUMDes was Rp500,000,000.00. After deducting the investment value, the NPV was obtained at Rp154,441,279.00. This positive NPV value indicates that the benefits generated from the BUMDes program are much greater than the amount of investment spent. The activities carried out by BUMDes have a profitable and sustainable economic impact. In the Social Return on Investment (SROI) ratio carried out on BUMDes activities, a ratio of 1.31:1 was obtained. This ratio means that every Rp1.00 invested in programs or activities run by BUMDes can generate social and economic benefits of Rp1.31. The programs run by BUMDes have a good level of effectiveness and are able to create added value for the community. Similarly, Septasawitri et al. (2023) showed that using the Social Return on Investment (SROI) method can determine the benefits generated from the program.

In contrast, Rahardjo & Pratiwi (2022), who did not use Social Return on Investment (SROI), showed that BUMDes have not been able to make a significant contribution to community welfare. Therefore, this study combined the Social Return on Investment (SROI) method with the theme of Village-Owned Enterprises (BUMDes). Overall, this study reflects that investments made by the Village Government in the BUMDes program have a positive impact and provide significant social and economic benefits. Thus, BUMDes can be said to be an effective instrument in village economic development and in sustainably improving community welfare.

Conclusion

Based on research on Social Return on Investment (SROI) in Village Funds through BUMDes Sambirejo Mart, several aspects can be concluded as follows:

1. Village Funds through the Sambirejo Mart BUMDes have proven to provide economic and social benefits to the community. Funds allocated to support the BUMDes have improved access to necessities, created jobs, and provided opportunities for MSMEs to grow. The existence of the BUMDes also helps increase the village's original income (PADes), which can be used for several village programs. The community is also increasingly familiar with a community-based economy, which encourages active participation in the management of village businesses.

2. The Social Return on Investment (SROI) value showed that every Rp1.00 invested through the Sambirejo Mart BUMDes provides social and economic benefits greater than the initial investment. The Social Return on Investment (SROI) ratio of 1.31:1 indicates that the program has successfully created significant social and economic value for the community. This success indicated that Village Funds through the Sambirejo Mart BUMDes provides sustainable benefits for various stakeholders, including the surrounding community, the village government, and local businesses.
3. From a social aspect, BUMDes Sambirejo Mart provides easy access to daily necessities for the community without having to leave the village. Local MSMEs are supported by free shelves for product display, which improves their marketing and competitiveness. Savings in transportation costs and time can now be allocated to other productive activities. The existence of BUMDes also contributes to social services by donating funds for the operation of free ambulances for the village community through the ZISDes program, which helps the community access emergency health services. From an economic aspect, the community greatly feels BUMDes Sambirejo Mart. MSMEs experience increased income because their products can be marketed through Sambirejo Mart. The community also experiences savings in transportation costs because they do not need to travel far to get necessities. These BUMDes also create new job opportunities for villagers as Sambirejo Mart employees. From an environmental aspect, the existence of BUMDes Sambirejo Mart helps reduce vehicle emissions because residents do not need to travel far to shop. It has a positive impact in reducing air pollution and excessive fuel use.

References

- Allawi, A. R. & Wibowo, H., 2021. The Impact of The Management of Zakat, Infaq, and Shadaqah on the Social-Based Program of the Sumedang Sehat based on Social Return on Investment (SROI) (Case Study of BAZNAS Sumedang Regency). *Jurnal Zakat dan Wakaf*, 8(2), pp. 91-103.
- Bezzola, S. (2022). Do Social Investments by Mining Companies Harm Citizen-State Relations? Experimental Evidence from Burkina Faso. *Journal of Development Studies*, 58(3), 417-435, ISSN 0022-0388, <https://doi.org/10.1080/00220388.2021.1983166>
- Corvo, L., Pastore, L., Mastrodascio, M. & Cepiku, D., 2022. The Social Return on Investment Model: A Systematic Literature Review. *Meditari Accountancy Research*, 30(7), pp. 49-86.
- Ekawati, R., Prasetyo, A. D., & Suesilowati, S. (2025). *Social Return On Investment (SROI) Program Tanggung Jawab Sosial Dan Lingkungan (TJSL) BUMN Tahun 2024*. *Jurnal Minfo Polgan*, 13(2), 2692–2698. <https://doi.org/10.33395/jmp.v13i2.14591>
- Iba, Z. & Wardhana, A., 2024. *Analisis Regresi dan Analisis Jalur Untuk Riset Bisnis Menggunakan SPSS 29.0 & Smart-PLS 4.0*. 1st ed. Purbalingga: Eureka Media Aksara.
- Kandpal, E. (2019). The social lives of married women: Peer effects in female autonomy and investments in children. *Journal of Development Economics*, 140, 26-43, ISSN 0304-3878, <https://doi.org/10.1016/j.jdeveco.2019.05.004>
- Khadjavi, M. (2021). Social Capital and Large-Scale Agricultural Investments: An Experimental Investigation. *Economic Journal*, 131(633), 420-449, ISSN 0013-0133, <https://doi.org/10.1093/ej/ueaa050>

- Mafuta, W. (2021). Wash financial and social investment dynamics in a conflict-arid district of jariban in somalia. *Sustainability Switzerland*, 13(9), ISSN 2071-1050, <https://doi.org/10.3390/su13094836>
- Najiyati, S. (2024). Social Investment Through A Collaborative Village Festival: The Case of Farmers' Village Festival in Jogjakarta. *Sage Open*, 14(4), ISSN 2158-2440, <https://doi.org/10.1177/21582440241288740>
- PDPT, K., 2021. *Laporan Keuangan KDPDPT AUDITED 2021*, Jakarta: Kemendes PDPT.
- Putra, M.R. (2024). Evaluating Community Empowerment through Social Return on Investment (SROI) in Tambakharjo Village: A Case Study of PT Pertamina Patra Niaga Central Java Region Pujasera Energy Culinary Program at Aviation Fuel Terminal Ahmad Yani Semarang. *15th International Conference on Advances in Computing Control and Telecommunication Technologies Act 2024*, 2, 2062-2072, <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85209080844&origin=inward>
- Rahardjo, M. & Pratiwi, S., 2022. Tantangan dan peluang pengelolaan BUMDes. *Jurnal Pengabdian Masyarakat dan Ekonomi Lokal*, 3(4), pp. 210-219.
- Septasawitri, D., Prabawani, B. & Susanta, H., 2023. Analisis Social Return on Investment (SROI) dalam Penerapan Program Ketahanan Ekonomi dan Pangan Rumah Tangga Desa Dendang. *Jurnal Administrasi Bisnis*, 12(1), pp. 43-53.
- Sidik, F., 2019. *Ketimpangan Yang Dipicu BUM Desa & Dana Desa*. Yogyakarta: IGPA.
- Siskawati, E. (2022). Analysis of the investors' motivation for social investment to the enterprises owned by the village. *Economic Annals Xxi*, 198(7), 45-50, ISSN 1728-6220, <https://doi.org/10.21003/EA.V198-06>
- Sridan, P. (2024). Social Return on Investment (SROI) from the Community Waste Bank Implementation under the Learning Center of Systematic Waste Management Innovation According to the Circular Economy Concept. *Applied Environmental Research*, 46(1), ISSN 2287-0741, <https://doi.org/10.35762/AER.2024011>
- Suleman, A. R. et al., 2020. *BUMDES Menuju Optimalisasi Ekonomi Desa*. Medan: Yayasan Kita Menulis.
- Wahyudi, F.E. (2023). Measuring the social return on investment of empowerment of persons with disabilities (Case study: The role of the corporate social responsibility (CSR) program of PT Pertamina fuel terminal (FT) Boyolali located in Tawang Sari village, Boyolali Regency, in developing independence for people with disabilities). *Aip Conference Proceedings*, 2722(1), ISSN 0094-243X, <https://doi.org/10.1063/5.0142943>
- Wang, A. (2022). The influence of clan social capital on collective biogas investment. *China Agricultural Economic Review*, 14(2), 349-366, ISSN 1756-137X, <https://doi.org/10.1108/CAER-01-2021-0010>
- Zaim, Z. (2025). Key social-economic factors boosting collective investments in communal land management. *Iop Conference Series Earth and Environmental Science*, 1518(1), ISSN 1755-1307, <https://doi.org/10.1088/1755-1315/1518/1/012003>