

EMPOWERING RURAL COMMUNITIES THROUGH BALANCED SCORECARD: PERFORMANCE EVALUATION OF AGRICULTURAL COOPERATIVES IN SLEMAN, YOGYAKARTA

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Abstract

Cooperatives play a strategic role in rural economic development as well as in community empowerment. However, performance measurement of cooperatives in Indonesia has largely focused on financial indicators, which do not fully reflect their contribution to enhancing members' capacity and well-being. This study aims to evaluate the performance of agricultural cooperatives in Sleman Regency, Yogyakarta, using the Balanced Scorecard (BSC) approach, which covers four perspectives: financial, member, internal business processes, and learning and growth. The research employed a descriptive quantitative method with a sample of 138 respondents consisting of members, managers, and employees of village unit cooperatives and agricultural cooperatives. Data were collected through questionnaires, interviews, and financial reports, and then analyzed using financial ratios, descriptive statistics, and Likert scales. The results show that from the financial perspective, the performance of both types of cooperatives remains weak, with liquidity, asset turnover, and profitability falling below standard levels. From the member perspective, cooperatives demonstrate 100% retention and high satisfaction levels (79.9% for village unit cooperatives and 77.3% for agricultural cooperatives), indicating that cooperative services meet members' expectations. The internal process perspective reflects service innovations and operational efficiency, although challenges remain in fertilizer distribution and program outreach. The learning and growth perspective shows 100% manager retention, frequent training, and job satisfaction above 80%, which contribute to strengthening the cooperatives' internal capacity. These findings highlight that although the financial aspect is still underperforming, cooperatives in Sleman play a vital role in empowering members through capacity building, business services, and institutional strengthening. The study recommends improving financial management, diversifying business activities, and expanding empowerment programs so that cooperatives can contribute more effectively to rural economic resilience.

Keywords: *Cooperatives, Balanced Scorecard, performance, empowerment*

INTRODUCTION

Cooperatives in Indonesia play a strategic role in promoting economic development, particularly in rural areas. As member-based economic institutions, cooperatives function not only as providers of economic services but also as agents of social transformation that strengthen community self-reliance (Susilo, 2013). This dual role makes cooperatives an important instrument for addressing economic disparities, expanding employment opportunities, and facilitating access to productive resources. In many regions, including Sleman Regency, village unit cooperatives and agricultural cooperatives serve as key pillars in improving farmers' welfare by providing production inputs, financial access, training, and agricultural product marketing. Despite their significant contributions, performance measurement of cooperatives in Indonesia often remains focused on financial indicators such as capital growth and business profit. Such an approach does not fully capture the role of cooperatives in enhancing member satisfaction, strengthening internal innovation, and ensuring business sustainability (Wahyudi & Aini, 2020). In fact, the success of cooperatives as agents of community

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empowerment is not only measured by economic performance but also by their ability to encourage member participation, enhance human resource capacity, and build strong partnership networks (Lestari, Widiyanti, & Pratama, 2022). The Balanced Scorecard (BSC), introduced by Kaplan and Norton (2004), offers a more comprehensive approach to performance evaluation by encompassing four perspectives: financial, customer (or member), internal business processes, and learning and growth. Previous studies have shown that applying the BSC provides a more balanced and long-term perspective on organizational performance, including in non-profit and community-based organizations (Purwono & Hafidh, 2016; Ratri & Nindyantoro, 2004). By integrating financial and non-financial indicators, the BSC has the potential to assess the extent to which cooperatives can achieve their social objectives, including member and community empowerment. Community empowerment itself is a crucial aspect of cooperative and farmer group development. According to Lestari et al. (2022), empowerment encompasses capacity building, participation, access to resources, and member independence. In the context of agricultural cooperatives in Sleman, empowerment is not only reflected in improved access to capital but also in the strengthening of managerial capacity, technical skills, and solidarity among members. Thus, cooperative performance analysis through the Balanced Scorecard can provide insights not only into financial achievements but also into the extent to which these institutions contribute to member empowerment.

However, studies applying the BSC to rural cooperatives in Indonesia remain relatively limited, particularly in the agricultural sector, which has unique characteristics in terms of membership structure, business activities, and social orientation (Purwono & Hafidh, 2016). In Sleman Regency, agricultural cooperatives play a significant role in supporting farmers' productivity while simultaneously driving the rural economy. Cooperatives are not solely profit-oriented but also implement empowerment programs such as agricultural technical training, facilitation of microfinance access, and strengthening of farmer institutions. To date, few studies have specifically evaluated the performance of cooperatives in Sleman Regency using the Balanced Scorecard approach integrated with community empowerment indicators. Therefore, this study aims to comprehensively assess the performance of agricultural cooperatives through the four BSC perspectives, with a particular focus on their contributions to rural economic and social empowerment. The findings of this research are expected to provide a basis for formulating more effective cooperative strategies as well as input for policy development aimed at strengthening cooperatives as pillars of rural economic resilience.

LITERATURE REVIEW

Cooperative performance can be comprehensively analyzed using the Balanced Scorecard (BSC) approach, which encompasses five main perspectives: members, finance, customers, internal processes, and learning and growth (Kaplan & Norton, 1996). From the member perspective, cooperative success is reflected in the increase of active membership, low member dropout rates, and high retention rates that indicate satisfaction and loyalty toward cooperative services (Purwono & Hafidh, 2016). Additional indicators include the level of participation in annual member meetings, involvement in empowerment programs, and members' perceived economic and social benefits (Wahyudi & Aini, 2020). In this regard, the empowerment literature emphasizes that cooperatives are not merely economic entities but also vehicles for enhancing members' capacities through active participation, access to resources, and strengthened bargaining power in the market (Harsela et al., 2022). Successful empowerment is manifested in members' increasing self-reliance in managing businesses, confidence in decision-making, and ability to improve their standard of living.

The financial perspective emphasizes the cooperative's financial health through indicators of liquidity, solvency, and profitability. Liquidity can be measured using the current ratio and quick ratio, solvency through the debt-to-asset ratio and debt-to-equity ratio, while profitability can be assessed through return on assets (ROA) and return on equity (ROE). In the customer perspective, the main focus lies on member satisfaction and loyalty as service users. These can be measured through customer satisfaction surveys, repeat transactions, and positive word-of-mouth recommendations (Setiawan et al., 2022). Cooperatives that are able to maintain service quality, offer competitive prices, and continuously innovate products will find it easier to sustain and expand their customer base (Harsela et al., 2022). The internal process perspective highlights the efficiency and effectiveness of cooperative operations, such as service speed, accuracy of administrative records, error rates in transactions, and innovations in work procedures (Ratri & Nindyantoro, 2004). Optimal internal processes not only improve productivity but also contribute positively to cost efficiency and member satisfaction. The learning and growth perspective focuses on strengthening the competencies of managers, employees, and members through training, certification, utilization of information technology, and the cultivation of an adaptive and innovative work culture. Within the framework of empowerment, this perspective underscores that capacity building of human resources is key to strengthening cooperative institutions (Sumardjo, 2010). Training and mentoring not only

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improve technical skills but also foster critical awareness, solidarity, and member confidence to actively participate in decision-making. By implementing these five BSC perspectives in an integrated manner, cooperatives can gain a holistic view of their performance—not only in financial terms but also in relation to member engagement, service quality, internal process effectiveness, and learning capacity. Ultimately, this contributes to member empowerment as well as long-term institutional sustainability and growth.

METHOD

This study employed a descriptive quantitative design to evaluate the performance of rural cooperatives as a means of community empowerment in Sleman, Yogyakarta. The research focused on two main cooperative models: village unit cooperatives and agricultural cooperatives, both of which play a role in supporting agricultural productivity and rural livelihoods. Cooperative members were selected using purposive sampling, with criteria including active participation in agricultural transactions and regular payment of mandatory savings during the past 12 months. The sample size was determined using Slovin’s formula with a 10% margin of error, resulting in 50 respondents from agricultural cooperatives and 88 from village unit cooperatives, while all managers and employees (14 individuals) were included as census respondents. To evaluate cooperative performance as an instrument of rural community empowerment, the Balanced Scorecard approach was applied, encompassing four interrelated perspectives.

Table 1. Key Performance Indicators of Cooperatives Based on the Balanced Scorecard

Perspective	Key Indicators	Description
Financial Perspective	- Current Ratio (CR)	Measures the cooperative’s liquidity, profitability, and exposure to financial risk.
	-Return on Assets (ROA)	
	- Total Debt to Asset Ratio (TDAR)	
Member Perspective	- Member satisfaction	Evaluates how effectively the cooperative meets members’ economic and social expectations.
	- Participation rate	
	- Perceived benefits	
	- Trust in governance	
Internal Business Processes	- Operational efficiency	Assesses the quality of internal operations, service performance, and accountability mechanisms.
	- Transaction transparency	
	- Timeliness of service delivery	
Learning and Growth	- Frequency of staff training	Captures human capital development and the organization’s capacity for continuous improvement.
	- Knowledge sharing	
	- Adoption of innovation	

Source: Processed secondary data, 2025.

Cooperative performance was evaluated using the Balanced Scorecard (BSC) approach, which includes four perspectives: financial, member, internal business processes, and learning and growth. Each perspective was analyzed to assess the cooperative’s contribution to member empowerment, including access to capital, income opportunities, member capacity, and social cohesion. Quantitative data were analyzed using descriptive statistics and financial ratios, while non-financial indicators were assessed using a Likert scale. The analysis focused on the relationship between cooperative performance (BSC) and member empowerment, thereby providing a holistic understanding of the cooperative’s contribution to rural development.

RESULTS AND DISCUSSION

This section analyzes the performance of rural cooperatives in Sleman, particularly village unit cooperatives and agricultural cooperatives, using the Balanced Scorecard (BSC) framework. The analysis covers four perspectives financial, member, internal processes, and learning and growth while also assessing the cooperatives’ contributions to member empowerment and community welfare. The BSC approach enables a multidimensional understanding of cooperative performance, going beyond financial aspects to include empowerment, social capital, and collective well-

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being (Kaplan & Norton, 2004). The following subsections present findings from each perspective, beginning with the financial perspective.

Financial Perspective

The financial performance of village unit cooperatives and agricultural cooperatives was evaluated using the Current Ratio (CR), Total Asset Turnover (TATO), solvency ratios (Debt-to-Total Asset Ratio and Debt-to-Equity Ratio), and profitability ratios (ROE and ROA) (Brigham & Ehrhardt, 2016). Limited financial capacity has implications for the cooperatives' ability to provide access to productive capital, support members' income opportunities, and implement capacity-building programs (Hendrawati, 2017). In other words, financial stability serves as a critical foundation for the success of cooperatives in member empowerment (Supriyadi et al., 2021). A summary of the financial performance measurements is presented in Table.

Table 2. Financial Performance Indicators of Village Unit and Agricultural Cooperatives (2022–2024) Compared to Standards

Indicator	2022	2023	2024	Standard
Current Ratio (CR) - Village Unit Cooperatives (%)	27,14	25,97	26,76	$\geq 200\%$
Current Ratio (CR) - Agricultural Cooperatives (%)	22,75	21,68	20,99	$\geq 200\%$
Total Asset Turnover (TATO) - Village Unit Cooperatives	0,18	0,15	0,13	≥ 1
Total Asset Turnover (TATO) - Agricultural Cooperatives	0,024	0,019	0,016	≥ 1
Debt Ratio - Village Unit Cooperatives (%)	52	53	54	$\leq 40\%$
Debt Ratio - Agricultural Cooperatives (%)	88	89	90	$\leq 40\%$
Debt-to-Equity Ratio (DER) - Village Unit Cooperatives	1,09	1,15	1,20	≤ 2
Debt-to-Equity Ratio (DER) - Agricultural Cooperatives	8,78	8,90	9,00	≤ 2
Return on Equity (ROE) - Village Unit Cooperatives (%)	3,10	2,80	2,55	$\geq 5\%$
Return on Equity (ROE) - Agricultural Cooperatives (%)	2,95	2,10	1,40	$\geq 5\%$
Return on Assets (ROA) - Village Unit Cooperatives (%)	1,38	1,30	1,23	$\geq 2\%$
Return on Assets (ROA) - Agricultural Cooperatives (%)	0,29	0,21	0,14	$\geq 2\%$

Source: Processed secondary data, 2025.

The financial performance of Village Unit Cooperative and Koptan shows several weaknesses that have implications for their capacity to empower members. The current ratio (CR) of both cooperatives remains far below the ideal standard, indicating limited working capital and potential cash flow difficulties, which in turn restrict their ability to provide loans or productive capital to members (Hendrawati, 2017). The low total asset turnover (TATO) suggests that cooperative assets are not being utilized optimally, thereby limiting their capacity to support members' businesses (Litviyah, 2019). The high debt ratio, particularly in Koptan, increases financial risk and reduces flexibility, making the strengthening of member capital essential to stabilize finances and ensure the sustainability of empowerment programs (Yuliani & Hartati, 2023). In addition, low profitability decreases the cooperative's ability to distribute surplus (SHU) and finance member-supporting programs (Hendrawati, 2017). Overall, this weak financial condition demands long-term strategies focused on asset efficiency, income diversification, receivable management improvement, and member capital reinforcement to enhance both performance and empowerment capacity (Hartati, 2023). These financial constraints not

only reduce profitability but also affect cooperative services and member experience, which will be reflected in the following perspective.

Member Perspective

Member retention and satisfaction levels are key indicators for assessing the success of cooperatives in empowering their members (Kotler & Keller, 2016). High retention reflects the cooperative’s ability to maintain member loyalty, while member satisfaction indicates the quality of services provided and the cooperative’s support for members’ well-being (Kotler & Keller, 2016). The measurement results of member retention and the Customer Satisfaction Index (CSI) of Village Unit Cooperative and Koptan during 2022–2024 are presented in the following table:

Table 3. Member Retention and Customer Satisfaction Index (CSI) of Village Unit and Agricultural Cooperatives (2022–2024)

Cooperative	Year	Number of Members	Members Leaving	Retention (%)	CSI (%)
Village Unit Cooperative	2022	699	0	100	79,9
Village Unit Cooperative	2023	699	0	100	79,9
Village Unit Cooperative	2024	699	0	100	79,9
Agricultural Cooperative	2022	103	0	100	77,3
Agricultural Cooperative	2023	103	0	100	77,3
Agricultural Cooperative	2024	103	0	100	77,3

Source: Processed secondary data, 2025.

The results indicate that both cooperatives successfully retained all of their members during the observation period, achieving a 100% retention rate. The relatively high member satisfaction levels (79.9% for Village Unit Cooperative and 77.3% for Koptan) confirm that the services provided were in line with member expectations. This success also reflects the cooperatives’ role in empowering their members through the provision of business services, access to capital, and support for economic activities, thereby improving members’ welfare and capacity in the long term (Suryana, 2012). In addition, the cooperatives directly contribute to enhancing member capabilities through training in the use of production tools, business assistance, and facilitation of product marketing. With such support, members not only gain access to capital and services but also develop skills, improve business management, and increase their capacity to actively participate in local economic activities. This highlights that the success of cooperatives is not only reflected in retention and satisfaction figures but also in their tangible impact on member empowerment. However, high retention and satisfaction levels must continue to be supported by innovations in internal services to ensure cooperatives remain relevant.

Internal Business Perspective

The internal business perspective relates to the innovations implemented by the cooperatives, their operational processes, and after-sales services for members. Innovations include the service offerings provided by the cooperatives, operations assess the effectiveness of internal activities, while after-sales services measure the cooperatives’ responsiveness to member complaints (Suryana, 2012; Kotler & Keller, 2016). At Village Unit Cooperative, innovations introduced during 2019-2021 included savings and loan services, fertilizer sales, and bill payment services for electricity, water, tickets, and BPJS through the PPOB system. In addition, Village Unit Cooperative collaborated with PT MASPION INDONESIA to meet members’ daily needs, such as groceries and household tools. Fertilizer distribution

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was carried out through government-subsidized distributors, allowing members to access fertilizer at a lower price compared to the market (Hendrawati, 2017). Operational processes at Village Unit Cooperative were supported by adequate work facilities, a strategic location near the market, and the use of information technology such as computers and Wi-Fi, making the cooperative easily accessible and ensuring smooth service delivery. After-sales services were relatively good, although some complaints were raised regarding delays in fertilizer procurement, forcing members to purchase at higher prices elsewhere. Through these services, the cooperative not only provides products and services but also empowers members by improving access to capital, lowering input costs, and supporting their daily economic activities (Suryana, 2012).

Meanwhile, Koptan introduced innovations in the management of acceleration funds in collaboration with three sugarcane farmer groups, including ratoon clearing and ratoon intensification activities. The cooperative also provided water pumps for irrigation and rented out tractors or plowing equipment after harvest. Operational processes were managed through an office that functioned as a service and storage center, strategically located near members' fields, thereby facilitating access to equipment rental and other services. However, after-sales services at Koptan faced several challenges, such as limited socialization of government programs and difficulties for members in accessing subsidized fertilizer, which negatively affected harvest yields and product marketing. Nevertheless, the innovations and facilities provided still contributed to member empowerment by increasing work efficiency, access to production tools, and overall agricultural productivity (Hendrawati, 2017). Overall, the internal business perspective shows that both cooperatives have implemented innovations and operational processes that support members, although challenges remain in after-sales services. Member empowerment through access to services, technology, and operational support is a key factor in the cooperatives' success in strengthening members' economic capacity and independence (Suryana, 2012; Kotler & Keller, 2016). However, innovation and internal services can only be sustainable if supported by competent management and staff, as will be further discussed in the learning and growth perspective.

Growth And Learning Perspective

The growth and learning perspective assesses the cooperative's ability to retain its management and employees, improve competencies through training, enhance work productivity, and ensure job satisfaction among managers and employees. These aspects are not only important for organizational sustainability but also have a direct impact on member empowerment through improved service quality and support for members' economic activities.

Employee and Management Retention

Employee retention measurement is used to evaluate the cooperative's ability to maintain the stability of its human resources. Retention is calculated using the following formula:

$$Retention = \frac{\text{Number of Employees and Staff Who Left}}{\text{Total Number of Employees and Staff}} \times 100\%$$

During the 2012–2024 period, no managers or employees left either Village Unit Cooperative or Koptan, resulting in a retention rate of 100% for both cooperatives. This condition demonstrates the sustainability of cooperative services, which is important to ensure that members receive consistent and high-quality support.

Employee and Management Training Rate

Training aims to improve the skills of managers and employees so they can provide better services to members. Village Unit Cooperative held 13 training sessions in 2022, 13 in 2023, and 10 in 2024. Agricultural Cooperative organized 10–12 training sessions per year. These trainings covered savings and loan management, PPOB operations, and agricultural equipment rental services, providing members with direct benefits in the form of more efficient and productive services.

Employee and Management Job Satisfaction

Employee productivity is measured based on cooperative revenue per active employee. Village Unit Cooperative increased from IDR 45,287,797 (2022) to IDR 58,970,309 (2024), while Agricultural Cooperative experienced a decline due to delays in fertilizer supply and reduced member contributions. Maintaining productivity enables cooperatives to sustain service quality for members, such as agricultural equipment rental, fund management, and farmer group assistance.

Employees Satisfaction

Job satisfaction of management was measured using the Customer Satisfaction Index (CSI), with Village Unit Cooperative scoring 84.14% and Koptan 88.19%. This high level of job satisfaction reflects the motivation of managers to optimally support members, maintain service consistency, and enhance the success of members’ productive activities.

Table 4. Growth and Learning Perspective Indicators of Village Unit and Agricultural Cooperatives (2022–2024)

Cooperative	Year	Number of Employees	Retention (%)	Number of Trainings	Productivity (Rp)	CSI (%)
Village Unit Cooperative	2022	10	100	13	45.287.797	-
Village Unit Cooperative	2023	10	100	13	60.899.130	-
Village Unit Cooperative	2024	10	100	10	58.970.309	84,14
Agricultural Cooperative	2022	4	100	10	51.159.509	-
Agricultural Cooperative	2023	4	100	12	50.376.361	-
Agricultural Cooperative	2024	4	100	9	33.591.142	88,19

Source: Processed secondary data, 2025.

Both cooperatives demonstrate good performance in retaining employees, providing training, maintaining productivity, and improving managerial job satisfaction. This has a direct impact on member empowerment, as competent and motivated managers and employees are able to deliver effective services, support members’ businesses, and improve their long-term welfare (Kaplan & Norton, 2004; Supriyadi et al., 2021). Employee retention and training contribute to strengthening the internal capacity of cooperatives, which in turn enables them to optimize savings and loan services, product distribution, and member business assistance, thereby making member empowerment more sustainable (Hendrawati, 2017; Litviah, 2019). Thus, the learning and growth perspective not only strengthens the internal human resources of cooperatives but also extends their social impact on member welfare and rural communities.

CONCLUSION

This study shows that evaluating cooperative performance through the Balanced Scorecard (BSC) approach provides a more comprehensive picture than financial-based measurement alone. In terms of finance, both Village Unit Cooperative and Koptan face challenges such as low liquidity, asset turnover, and profitability, which limit their capacity to provide access to capital for members. However, these weaknesses are compensated by strengths in non-financial perspectives. The member perspective reflects high loyalty and satisfaction, indicating that cooperatives remain relevant and beneficial to the community. The internal process perspective highlights that service innovation and operational efficiency have been implemented, although still constrained by fertilizer distribution and program socialization. Meanwhile, the learning and growth perspective shows strong performance in management retention, training implementation, productivity, and job satisfaction, which reinforce the institutional capacity of cooperatives. Thus, although the financial condition of cooperatives is relatively weak, their role in empowering members in Sleman remains significant, particularly through improving skills, providing access to business services, and strengthening social solidarity. To enhance sustainability, cooperatives need to strengthen financial management, diversify income, and expand empowerment programs based on member needs. These findings are expected to provide strategic input for cooperative boards and local governments in formulating policies to strengthen cooperatives as pillars of rural economic resilience.

REFERENCES

- Brigham, E. F., & Ehrhardt, M. C. (2016). *Financial management: Theory & practice* (15th ed.). Cengage Learning.
- Hartati, S. (2023). Analisis kinerja keuangan koperasi dalam meningkatkan kesejahteraan anggota. *Jurnal Manajemen Koperasi Indonesia*, 11(2), 134–148.
- Hendar. (2010). *Manajemen koperasi*. Rajawali Pers.
- Hendrawati, E. (2017). Analisis kinerja koperasi dalam meningkatkan kesejahteraan anggota. *Jurnal Ekonomi dan Bisnis*, 20(2), 155–166.
- Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard: Translating strategy into action*. Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (2004). *Strategy maps: Converting intangible assets into tangible outcomes*. Harvard Business School Press.
- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson.
- Lestari, A., Widiyanti, S., & Pratama, R. (2022). Pemberdayaan anggota melalui partisipasi aktif dalam koperasi. *Jurnal Pemberdayaan Masyarakat*, 7(1), 55–70.
- Harsela, Y., Yurisintae, E., & Maswadi. (2022). Pemanfaatan Balanced Scorecard untuk penilaian kinerja koperasi pertanian. *Daun: Jurnal Ilmiah Pertanian dan Kehutanan*, 9(2), 171–182.
- Litviyah, L. (2019). Analisis efisiensi aset koperasi simpan pinjam. *Jurnal Ilmu Ekonomi*, 8(1), 45–57.
- Purwono, H., & Hafidh, A. (2016). Tingkat retensi anggota sebagai indikator keberhasilan koperasi. *Jurnal Koperasi dan UMKM*, 12(2), 101–115.
- Ratri, A., & Nindyantoro, A. (2004). Analisis kinerja koperasi simpan pinjam ditinjau dari perspektif balanced scorecard. *Jurnal Ekonomi dan Manajemen Indonesia*, 2(1), 45–58.
- Supriyadi, A., & Pratiwi, D. (2021). Kinerja keuangan koperasi berbasis Balanced Scorecard. *Jurnal Ekonomi & Bisnis Terapan*, 17(1), 88–99.
- Sumardjo. (2010). *Pemberdayaan petani: Paradigma baru penyuluhan dan pembangunan pertanian*. IPB Press.
- Suryana. (2012). *Kewirausahaan: Kiat dan proses menuju sukses*. Salemba Empat.
- Susilo, Y. S. (2013). Peran koperasi agribisnis dalam ketahanan pangan di Indonesia. *Jurnal Agribisnis Indonesia*, 1(1), 15–28.
- Wahyudi, A., & Aini, Q. (2020). Analisis kinerja koperasi unit desa (KUD) dengan pendekatan Balanced Scorecard. *Daun: Jurnal Ilmiah Pertanian dan Kehutanan*, 7(2), 101–110.
- Yuliani, N., & Hartati, S. (2023). Analisis leverage keuangan koperasi simpan pinjam di Indonesia. *Jurnal Akuntansi dan Keuangan*, 15(1), 25–39.