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Analysis of Cooperative Performance Efficiency Levels at the Puskopdit Timor Primary Credit Cooperative in Kupang City

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Abstract: This study aims to analyze the performance efficiency level of cooperatives in 13 Primary Credit Cooperatives of Puskopdit Timor in Kupang City from 2021 to 2023 using the Data Envelopment Analysis (DEA) method and variable return to scale assumptions. Efficiency is achieved when the amount of input produces a greater amount of output. Inputs include the number of members, capital, assets, and expenses, while outputs are income and surplus. The analysis results show that eight credit unions were efficient during 2021-2023. Kopdit Solidaritas achieved efficiency in 2022 and 2023. Kopdit Sami Jaya, Timau Indah, and Harapan Sejahtera were only efficient in 2023. Kopdit Familia was the credit union that did not achieve efficiency during 2021-2023. Factors causing differences in efficiency levels between credit unions include: Low member participation experienced by the five credit unions that were not yet efficient; Idle capital (Kopdit Sami Jaya, Solidaritas, Familia, and Timau Indah); Non-productive assets (Kopdit Solidaritas, Familia (2021, 2022), Timau Indah (2022), and Harapan Sejahtera. High operational costs, only Kopdit Sami Jaya. The strategy for inefficient credit unions is to improve their input management by following the benchmark credit unions. Kopdit Sami Jaya, Familia, and Timau Indah refer to Kopdit Adiguna and Harmoni Jaya. Kopdit Solidaritas refers to Kopdit Adiguna. Kopdit Familia refers to Kopdit Embu Welu (2021). Kopdit Harapan Sejahtera refers to Kopdit Sesawi Mandiri and USP Kopsen Kasema.

Keywords: number of members, capital, assets, operating expenses, income, net income.

INTRODUCTION

According to Rahayu (2020:7), financial performance is the success of a company's achievements or work capabilities in creating value for the company or capital owners in effective and efficient ways, where performance measures can be analyzed into three groups, namely profitability ratios, growth ratios, and operational efficiency.

Efficiency is the use of fewer inputs compared to the number of inputs used by other companies to produce the same output, or using the same number of inputs to produce a larger amount of output (Nismawati, 2014:113). Financial management efficiency is not only limited to companies that are more profit-oriented, but also applies to cooperatives that focus on serving their members. Financial management efficiency is not only limited to companies that are more profit-oriented, but also applies to cooperatives that focus on serving their members.

One type of cooperative that has grown significantly in recent years is the savings and loan cooperative, also known as a credit union or CU for short. A credit union is a financial institution engaged in savings and loans, owned and managed by its members, and aimed at improving the welfare of its members. (https://id.m.wikipedia.org)

Credit unions always strive to manage their finances so that their cooperatives are safe and sound. According to Munaldus (2024:45), a safe and healthy credit union is demonstrated by member mobilization (increase in membership), savings mobilization (increase in capital and total assets), and managing member funds or savings (to increase surplus income/SHU).

One of the districts/cities with fairly good credit union growth is Kupang City. Credit unions in Kupang City can join the Bekatigade Timor Credit Union Center (PUSKOPDIT), commonly abbreviated as Puskopdit Timor. Puskopdit Timor is a regional secondary credit union, located in Kupang City, East Nusa Tenggara Province, and functions as a regional financial service center to serve primary credit unions (Kopdit) throughout its working area. Puskopdit Timor's service area covers West Timor Island, Rote Ndao Regency, Alor Regency, and Sabu Raijua Regency.

The number of Primary Credit Unions served by Puskopdit Timor until the end of the 2023 Fiscal Year was 23 credit unions. The largest number of Primary Credit Unions served by Puskopdit Timor was in Kupang City, namely 13 credit unions. These credit unions, in order of Member Book Number, are Swasti Sari, Sami Jaya, Adiguna, Serviam, Solidaritas, Familia, Embu Welu, Harmoni Jaya, Timau Indah, Sanyona, Harapan Sejahtera, Sesawi Mandiri, and USP Kopsen Kasih Sejahtera Utama (Kasema). The phenomenon that occurred was that several credit unions experienced a decline in SHU, as shown in the following table:

Table 1. Development of Net Income (Rp) of the Primary Credit Union Puskopdit Timor in Kupang City in 2021-2023

No	Credit Union Name	Year		
		2021	2022	2023
1	Kopdit Swasti Sari	2.777.420.895	2.937.279.725	3.561.313.061
2	*Credit Union* Serviam	2.302.719.550	2.437.147.516	2.585.079.299
3	Kopdit Solidaritas	1.343.060.494	1.219.911.414	2.221.568.811
4	Kopdit Adiguna	1.567.040.917	1.151.450.358	1.316.855.175
5	Kopdit Timau Indah	109.314.724	425.066.399	658.156.924
6	Kopdit Harmoni Jaya	382.391.755	450.315.718	452.871.462
7	Kopdit Sami Jaya	59.816.133	312.351.860	231.191.307
8	USP Kopsen Kasih Sejahtera Utama (Kasema)	56.292.218	110.566.333	185.255.805
9	*Credit Union* Sanyona	100.065.165	130.401.104	143.410.092
10	Kopdit Familia	29.125.893	252.706.981	100.212.873
11	Kopdit Harapan Sejahtera	35.490.056	61.669.952	69.107.554
12	Kopdit Embu Welu	67.488.324	9.238.386	17.284.250
13	Kopdit Sesawi Mandiri	38.486.902	41.555.237	27.124.829

Source: Accountability Report of Management and Supervisors at the 2021-2023 Annual General Meeting of each Credit Union

There are six credit unions that experienced a decline in SHU during the 2021-2023 TB, namely: TB 2022 Kopdit Solidaritas (9.17%), Adiguna (26.52%), and Embu Welu (86.31%); then TB 2023 Samijaya (25.98%), Familia (60.34%), and Sesawi Mandiri (34.73%).

Considering the phenomenon of credit union performance in Kupang City, as illustrated in the above issues, this study aims to analyze the efficiency level of credit unions in Kupang City using the DEA method. Previous studies related to credit unions have focused more on discussing the financial efficiency of credit unions using financial ratios. For example, Widyanti et al. (2022) analyzed financial ratios to assess the financial performance of the Dana Penta Mandiri Savings and Loan Cooperative in Jimbaran, Bali. Similarly, Telaumbanua (2023) measured the financial performance of cooperatives using a ratio approach at the Osseda Faolala Perempuan Nias Cooperative in North Sumatra..

The performance assessment of credit cooperatives that has been carried out by the Cooperative and SME Office is based on Regulation of the Deputy for Supervision of the Ministry of Cooperatives and SMEs No. 01/Per/Dep.6/III/2016, which assesses the performance of cooperatives based on seven aspects to determine whether a savings and loan cooperative is in a healthy, fairly healthy, less healthy, or unhealthy condition. Internally, credit cooperatives conduct their own performance assessments using the PEARLS Analysis. In addition to the PEARLS Analysis and Health Assessment, the Data Envelopment Analysis (DEA) method can also be used to assess the efficiency of a cooperative's performance.

Data Envelopment Analysis (DEA) is a linear programming-based technique for measuring the performance efficiency of organizational units called Decision Making Units (DMUs). This technique aims to measure how efficiently DMUs use available resources to produce a series of outputs. Decision-making units can include manufacturing units, large organizational departments, such as universities, schools, bank branches, hospitals, and so on (Ramanathan in Rachmawati 2017:25). DEA can also be used to analyze the efficiency of Pension Funds and Insurance (Seran, 2023).

The use of the DEA method in research on Credit Unions/KSP is still very limited. There are several studies on efficiency using the DEA method in the field of non-credit unions/KSP. Wirnoto's (2011) study found that 17 of the 21 KPRI cooperatives studied were still inefficient. In the study by Wibowo et al. (2022), 6 out of 36 consumer cooperatives in Banyumas Regency were found to be operating efficiently, while the other 30 were inefficient. Then, Sudarmadji's (2016) research compared two types of KSPs, and the results showed that community-owned savings and loan cooperatives had higher efficiency than government employee-owned cooperatives.

Based on the description of the background of the problem above, the problems in this study can be formulated as follows:

1. What is the level of performance efficiency of the Puskopdit Timor Primary Credit Cooperative in Kupang City using the DEA method for 2021-2023?
2. What factors cause differences in the level of performance efficiency between the Puskopdit Timor Primary Credit Cooperative in Kupang City in 2021-2023?
3. What strategies can be implemented to improve the level of performance efficiency of the Puskopdit Timor Primary Credit Cooperative in Kupang City in 2021-2023?

METHOD

This study is classified as descriptive quantitative research (Sahir, 2021:6). The population in this study consists of all 13 Primary Credit Cooperatives of Puskopdit Timor in Kupang City that were actively operating during the period of 2021-2023. Therefore, all of them were included in this study. The data used is quantitative in nature and secondary in source. The efficiency analysis tool uses the DEA method with a Variable Return to Scale (VRS) approach, using WinDea and DEAP software. According to Ramanathan (2003) in Rachmawati (2017:20), DEA is a non-parametric efficiency measurement method. Efficiency measurement using the DEA method consists of eight (8) steps.

RESULTS AND DISCUSSION

Efficiency Level of the Bekatigade Timor Primary Credit Cooperative in Kupang City from 2021 to 2023

1. The year 2021

The Efficiency Level of the Puskopdit Bekatigade Timor Primary Credit Cooperative in Kupang City in 2021, as shown in Table 2, is as follows:

Table 2. Efficiency Values of the Bekatigade Timor Primary Credit Cooperative in Kupang City in 2021

No	Credit Union Name	*Crste*	*Vrste*	*Scale*	Ket	Category
1	Kopdit Swasti Sari	1.000	1.000	1.000	-	Efficient
2	Kopdit Sami Jaya	0.869	0.947	0.918	drs	Inefficient
3	Credit Union Serviam	0.776	1.000	0.776	drs	Efficient
4	Kopdit Adiguna	1.000	1.000	1.000	-	Efficient
5	Kopdit Solidaritas	0.931	0.948	0.982	drs	Inefficient
6	Kopdit Familia	0.680	0.787	0.863	drs	Inefficient
7	Kopdit Embu Welu	1.000	1.000	1.000	-	Efficient
8	Kopdit Harmoni Jaya	0.939	1.000	0.939	drs	Efficient
9	Kopdit Timau Indah	0.786	0.824	0.954	drs	Inefficient
10	Credit Union Sanyona	1.000	1.000	1.000	-	Efficient
11	Kopdit Harapan Sejahtera	0.774	0.777	0.997	drs	Inefficient
12	Kopdit Sesawi Mandiri	1.000	1.000	1.000	-	Efficient
13	USP Kasema	1.000	1.000	1.000	-	Efficient
	Mean	**0.904**	**0.945**	**0.956**		

Source: Data processed using WinDeap 2.1

Based on data processing using the Variable Return to Scale (VRS) assumption, the average technical efficiency of credit unions in 2021 reached 94.5%, indicating fairly good use of resources. Eight credit unions — Swasti Sari, Credit Union Serviam, Adiguna, Embu Welu, Harmoni Jaya, Sanyona, Sesawi Mandiri, and USP Kasih Sejahtera Utama — were fully efficient (VRSTE = 1.000). Conversely, Kopdit Sami Jaya (0.94), Solidaritas (0.94), Familia (0.78), Timau Indah (0.82), and Harapan Sejahtera (0.77) are still inefficient. Most credit unions, such as Sami Jaya, Serviam, Solidaritas, Familia, Harmoni Jaya, Timau Indah, and Harapan Sejahtera, have a Decreasing Return to Scale (DRS) status, indicating that efficiency declines as the size of the credit union grows.

2. The Year 2022

The Efficiency Level of the Puskopdit Bekatigade Timor Primary Credit Cooperative in Kupang City in 2022, as shown in Table 3, is as follows:

Table 3. Efficiency Values of the Bekatigade Timor Primary Credit Cooperative in Kupang City in 2022

No	Credit Union Name	*Crste*	*Vrste*	*Scale*	Ket	Category
1	Kopdit Swasti Sari	0.970	1.000	0.970	drs	Efficient
2	Kopdit Sami Jaya	0.881	0.928	0.949	drs	Inefficient
3	Credit Union Serviam	0.805	1.000	0.805	drs	Efficient
4	Kopdit Adiguna	1.000	1.000	1.000	-	Efficient
5	Kopdit Solidaritas	0.978	1.000	0.978	drs	Efficient

No	Credit Union Name	*Crste*	*Vrste*	*Scale*	Ket	Category
6	Kopdit Familia	0.732	0.875	0.836	drs	Inefficient
7	Kopdit Embu Welu	1.000	1.000	1.000	-	Efficient
8	Kopdit Harmoni Jaya	1.000	1.000	1.000	-	Efficient
9	Kopdit Timau Indah	0.916	0.997	0.919	drs	Inefficient
10	Credit Union Sanyona	1.000	1.000	1.000	-	Efficient
11	Kopdit Harapan Sejahtera	0.839	0.847	0.991	drs	Inefficient
12	Kopdit Sesawi Mandiri	1.000	1.000	1.000	-	Efficient
13	USP Kasema	1.000	1.000	1.000	-	Efficient
	Mean	**0.932**	**0.973**	**0.958**		

Source: Data processed using WinDeap 2

The results of the analysis assuming Variable Return to Scale (VRS) show that the average technical efficiency of credit unions in 2022 reached 97.3%, indicating a fairly high level of efficiency. Of the 13 credit unions analyzed, nine achieved technical efficiency (VRSTE = 1,000), namely Kopdit Swasti Sari, Credit Union Serviam, Adiguna, Solidaritas, Embu Welu, Harmoni Jaya, Sanyona, Sesawi Mandiri, and USP Kasih Sejahtera Utama. The other four credit unions, namely Sami Jaya (0.92), Familia (0.87), Timau Indah (0.99), and Harapan Sejahtera (0.84), are still inefficient. In terms of scale efficiency, six credit unions achieved full efficiency, while Swasti Sari, Sami Jaya, Serviam, Solidaritas, Familia, Timau Indah, and Harapan Sejahtera had Decreasing Returns to Scale (DRS), indicating a decline in efficiency as the scale of operations increased.

3. Tahun 2023

The Efficiency Level of the Puskopdit Bekatigade Timor Primary Credit Cooperative in Kupang City in 2023, as shown in Table 4, is as follows:

Table 4. Efficiency Values of the Bekatigade Timor Primary Credit Cooperative in Kupang City in 2023

No	Credit Union Name	*Crste*	*Vrste*	*Scale*	Ket	Category
1	Kopdit Swasti Sari	0.992	1.000	0.992	drs	Efficient
2	Kopdit Sami Jaya	0.983	1.000	0.983	drs	Efficient
3	Credit Union Serviam	0.786	1.000	0.786	drs	Efficient
4	Kopdit Adiguna	1.000	1.000	1.000	-	Efficient
5	Kopdit Solidaritas	1.000	1.000	1.000	-	Efficient
6	Kopdit Familia	0.760	0.855	0.889	drs	Inefficient
7	Kopdit Embu Welu	0.855	1.000	0.855	irs	Efficient
8	Kopdit Harmoni Jaya	0.984	1.000	0.984	drs	Efficient
9	Kopdit Timau Indah	0.921	1.000	0.921	drs	Efficient
10	Credit Union Sanyona	1.000	1.000	1.000	-	Efficient
11	Kopdit Harapan Sejahtera	0.911	1.000	0.991	irs	Efficient
12	Kopdit Sesawi Mandiri	0.962	1.000	0.962	irs	Efficient
13	USP Kasema	1.000	1.000	1.000	-	Efficient
	Mean	**0.935**	**0.989**	**0.945**		

Source: Data processed using WinDeap 2.1

The results of the analysis assuming Variable Return to Scale (VRS) show that the average technical efficiency of credit cooperatives in 2023 will reach 99%, an increase from the previous year. Most cooperatives have achieved full efficiency (VRSTE = 1.000), namely Swasti Sari, Sami Jaya, Serviam, Adiguna, Solidaritas, Embu Welu, Harmoni Jaya, Timau Indah, Harapan Sejahtera, Sanyona, Sesawi Mandiri, and USP Kasih Sejahtera Utama. Three credit unions, namely Sami Jaya, Timau Indah, and Harapan Sejahtera, experienced an increase in efficiency compared to 2021–2022, while Kopdit Familia (0.85) was still inefficient. Four credit unions (Adiguna, Solidaritas, Sanyona, Kasema) achieved perfect efficiency in both CRS and VRS. In terms of scale, several credit unions, such as Swasti Sari, Sami Jaya, Serviam, Familia, Harmoni Jaya, and Timau Indah, had a Decreasing Return to Scale (DRS) status, while Embu Welu, Harapan Sejahtera, and Sesawi Mandiri had an Increasing Return to Scale (IRS) status, which indicates opportunities for increased efficiency through business expansion and member participation.

Factors Causing Differences in Efficiency Levels at the Puskopdit Timor Primary Credit Union in Kupang City from 2021 to 2023

1. Factors Contributing to the Efficiency of Credit Union Groups in 2021-2023

The factors contributing to the efficiency of credit unions are their ability to optimally utilize available inputs to generate maximum outputs. Credit unions in this category generally have an active and growing membership base, strong capital from member deposits and reserves, and productively managed assets. In addition, they are able to reduce operational costs through efficient management without compromising the quality of service to members. Credit unions that are included in the efficient group for the 2021-2023 period are Kopdit Swasti Sari, CU Serviam, Kopdit Adiguna, Kopdit Embu Welu, Kopdit Harmoni Jaya, Credit Union Sanyona, Kopdit Sesawi Mandiri, and USP Kasema.

2. Factors Contributing to the Inefficiency of Credit Union Groups in 2021-2023

a. Year 2021

Factors causing credit unions to be inefficient in 2021, as shown in Table 5 below:

Table 5. Factors Causing Credit Union Groups to be Inefficient in 2021

No	Credit Union	Causal Factors	Brief Description
1.	Kopdit Sami Jaya	Number of Members, Capital, and Expenses	Many members are inactive (18.91% negligence), causing bad debt and idle capital. High operational costs are almost equal to income, resulting in very small net income.
2.	Kopdit Solidaritas	Number of Members, Capital, Assets	Passive members (6.94% negligence), large but unproductive capital and assets. Many fixed assets are unproductive, resulting in low income and net income despite large wealth..
3.	Kopdit Familia	Number of Members, Capital, Assets	Low member participation (18.38% negligence). Excess capital and assets, but not optimally utilized. Fixed assets are unproductive (12.52%) and cash is idle, putting pressure on SHU.
4.	Kopdit Timau Indah	Number of Members, Capital	Many members are inactive (32.03% negligence). Capital is not absorbed in credit. menyebabkan pendapatan dan SHU rendah.
5.	Kopdit Harapan Sejahtera	Number of Members, Assets	Passive members (62.86% negligence). Non-income-generating assets, including excess

			cash (3.59%) and fixed assets (26.52%). Low net income due to low revenue.

b. Year 2022

Factors causing credit unions to be inefficient in 2022, as shown in Table 6 below:

Table 6. Factors Causing Credit Union Groups to be Inefficient in 2022

No	Credit Union	Causal Factors	Brief Description
1.	Kopdit Sami Jaya	Number of Members, Capital	Member participation remains low (1,671 inactive members). Capital is large (Rp 14.04 million), but Rp 3.53 million is idle. SHU has not yet reached an efficient value.
2.	Kopdit Familia	Number of Members, Capital, Assets	Passive members (8.45% negligence). Idle capital of Rp 21.94 million and unproductive assets (cash 3.24%; fixed assets 12.28%). Low income and SHU
3.	Kopdit Timau Indah	Number of Members, Capital, Assets	Weak member participation (12.92% negligence). Capital not used optimally, fixed assets unproductive (A2 = 27.45%).
4.	Kopdit Harapan Sejahtera	Number of Members, Assets	Inactive members (83.58% negligence). Non-productive assets (cash 1.96%, fixed assets 19.97%). Low income and SHU..

c. Year 2023

Factors causing credit unions to be inefficient in 2023, as shown in Table 7 below:

Table 7. Factors Causing Credit Union Groups to be Inefficient in 2023

No	Credit Union	Causal Factors	Brief Description
1.	Kopdit Familia	Number of Members, Capital,	Members are not yet fully active (7.8% negligence). Capital is large (Rp 30.29 million), but only part of it is used for productive businesses. SHU fell to 60.35%.

Strategies to Improve the Efficiency of the Puskopdit Timor Primary Credit Union in Kupang City

Strategies that need to be implemented by inefficient credit unions to improve their efficiency levels can focus on increasing member participation, more optimal capital management, productive use of assets, and control/reduction of operational costs.

1. Increased Member Participation

A large number of members does not guarantee high participation, so a strategy to increase participation is needed. The strategy that needs to be implemented is to follow the credit unions that serve as references.

a. For Kopdit Sami Jaya, Kopdit Solidaritas, Kopdit Familia, and Kopdit Timau Indah, they follow the Kopdit Adiguna Strategy, namely:
   1) Low credit interest rate (1% fixed/month)
   2) High savings interest rate (12%/year for Siharta).
   3) SHU per member always increases from year to year (60–65%).
   4) Year-end gift giving.
   5) 0.5% loan interest for loans ≤ savings
   6) Savings and loan services outside office hours, such as Sundays or other days, in accordance with the activities of the arisan/UB/member groups in the village.

b. Kopdit Sami Jaya, Kopdit Familia, and Kopdit Timau Indah also follow the Kopdit Harmoni Jaya Strategy, namely:
   1) Door prizes at the Annual General Meeting to increase member.

2) Low-interest loans, thereby increasing asset and membership growth.
3) *"AMAL"* rewards for members who recruit new members..

c. Specifically, KSP Kopdit Familia also follows the Kopdit Embu Welu Strategy, namely:
1) Socialization to social groups and families
2) AMAL method and distribution of leaflets.
3) Monitoring of services to villages.
4) Basic education for members during monthly meetings and RAT.

d. For Kopdit Harapan Sejahtera, the strategy follows Kopdit Sesawi Mandiri & USP Kopsen Kasema, namely:
1) Socialization in churches and community forums.
2) Professional management, resulting in increased Daperma compensation payments by PT. Pandai and becoming an attraction for increased member participation.
3) Large SHU (60%) for members.
4) Low interest rates as rewards for productive businesses.
5) Training and guidance for members' productive businesses.

2. Optimal Capital Management

Idle capital in several credit unions needs to be optimized by following the strategies of credit unions that serve as benchmarks..

a. For Kopdit Sami Jaya, Kopdit Solidaritas, Kopdit Familia, and Kopdit Timau Indah, the strategy refers to Kopdit Adiguna:
1) Low interest rate program.
2) Use of own capital for loans.
3) Periodic assessment of loan collectability
4) Promotion & direct approach to members.

b. For Kopdit Familia and Kopdit Timau Indah, the strategy refers to Kopdit Harmoni Jaya:
1) Productive business assistance
2) Fast loan disbursement process.
3) Use of the CuBisPay application
4) Promotion through existing digital channels.

c. For Kopdit Familia, it is also necessary to refer to the Kopdit Embu Welu strategy, namely:
1) Establishment of collateral/security for large loans
2) Collection of delinquent loans and sending of warning letters to defaulters.
3) Recruitment of a special collection officer
4) Increasing deposits at Puskopdit/banks to avoid capital accumulation.

3. Productive Use of Assets

Credit unions that have non-productive assets need to utilize their assets productively by following the credit unions that serve as their reference.

a. Kopdit Solidaritas implements the following strategy:
1) Evaluate non-productive assets (cash, fixed assets).
2) Sell/change the function of fixed assets that are less productive.
3) Maintain an L3 ratio < 1% and an A2 ratio ≤ 5%.

b. Kopdit Familia and Kopdit Timau Indah implement the following strategy:
1) Avoid building new offices by renting offices and facilities only
2) Sell vehicles that have reached the end of their depreciation period..
3) Invest idle cash in Puskopdit/banks..

c. Kopdit Harapan Sejahtera implements the following strategies,
   1) Offer credit to active members to reduce idle cash.
   2) Offer low interest rates for productive businesses.
   3) Sell unproductive land (4 plots) to increase income & SHU.

4. Control/Reduction of Operational Costs

Kopdit Sami Jaya is the only credit union that has not been able to reduce or control its operational costs. Strategic steps, namely:

a. Evaluate the very high increase in RAT costs (from IDR 113,000,000 to IDR 308,000,000).
b. Evaluate electricity, water, telephone, and postage costs (± Rp 270,000,000)
c. Review other costs that have increased significantly (Rp 673,000,000 to Rp 1.25 billion)

CONCLUSION

Based on the results of the research and analysis that has been conducted, several conclusions can be drawn:

1. Tingkat Efisiensi
   a. There are 8 (eight) credit unions that consistently achieve optimal efficiency levels, namely Kopdit Swasti Sari, Credit Union Serviam, Kopdit Adiguna, Kopdit Embu Welu, Kopdit Harmoni Jaya, Credit Union Sanyona, Kopdit Sesawi Mandiri, and USP Kopsen KASEMA.
   b. The credit union that achieved optimal efficiency levels in 2022 and 2023 was Solidaritas Credit Union
   c. There are 3 (three) new cooperatives that have reached optimal efficiency levels in 2023, namely Kopdit Sami Jaya, Kopdit Timau Indah, and Kopdit Harapan Sejahtera
   d. Kopdit Familia is the only credit union that did not achieve optimal efficiency levels during those three years.
2. The main factors causing differences in efficiency levels among credit unions include
   a. Low member participation in savings and loan activities, experienced by the five credit unions that have not yet achieved efficiency levels;
   b. Capital management is not optimal, resulting in idle capital, as experienced by Kopdit Sami Jaya, Kopdit Solidaritas, Kopdit Familia, and Kopdit Timau Indah
   c. Unproductive or non-income-generating assets; experienced by Solidaritas Cooperative, Familia Cooperative (2021, 2022), Timau Indah Cooperative (2022), and Harapan Sejahtera Cooperative
   d. High operational costs, which are only experienced by Kopdit Sami Jaya
3. The strategies that need to be implemented by credit unions that have not yet achieved optimal efficiency are:
   a. Improve input management, especially the number of members for the five cooperatives that did not reach the efficiency level, capital (Kopdit Sami Jaya, Kopdit Solidaritas, Kopdit Familia and Kopdit Timau Indah), assets (Kopdit Solidaritas, Kopdit Timau Indah and Kopdit Harapan Sejahtera), while burden reduction needs to be carried out by Kopdit Sami Jaya.
   b. Follow the management strategies of credit unions that serve as references, namely:
      1) Kopdit Sami Jaya can refer to Kopdit Adiguna and Kopdit Harmoni Jaya;
      2) Kopdit Solidaritas can refer to or emulate the management of Kopdit Adiguna.
      3) Kopdit Familia can refer to Kopdit Embu Welu, Kopdit Adiguna, and Kopdit Harmoni Jaya;
      4) Kopdit Timau Indah can refer to Kopdit Adiguna and Kopdit Harmoni Jaya.

5) Kopdit Harapan Sejahtera can refer to Kopdit Sesawi Mandiri and Kopsen Kasema.

Recommendations

Based on the above conclusions, there are still five credit unions that have not reached their efficiency levels in certain years. Therefore, several suggestions are proposed, as follows:

1. Credit unions that are not yet efficient need to conduct ongoing education to encourage or make members aware of their obligations and rights, because the number of members is always increasing, but their participation in fulfilling their loan repayment obligations is decreasing, making it impossible to utilize existing capital and resulting in inefficient income and SHU. Be more selective in accepting new members, focusing on members who have the potential to use cooperative products more, with the requirement that they must first undergo training before being accepted as members.
2. To increase income and SHU, it is necessary to determine the loan ceiling for members based on their ability, and not based on multiples of savings, as has been applied in credit unions.
3. Add variety to credit services with varying interest rates, such as offering lower interest rates for loans equal to the amount of savings, or offering different interest rates for loans for productive purposes and loans for consumption purposes.
4. Following/referring to the credit unions that serve as benchmarks, namely Kopdit Adiguna and Kopdit Embu Welu, which serve as benchmarks for all credit unions, as well as several credit unions that serve as benchmarks for specific credit unions.
5. Other researchers who wish to conduct further research are encouraged to add several input variables, such as the number of employees, the amount of loans, outstanding loans, and non-share deposits, so that more accurate and comprehensive results on the financial performance of a credit union can be obtained.

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