Evaluating the Financial Trajectory of PACS in Kerala: A Fifteen-Year Analysis (2008-2023)

Johnson N J.¹; Dr Deepa Paul² Associate Professor of Commerce and Research Supervisor (Calicut University Research Centre, Sri C Achutha Menon Government College Thrissur, P O Kuttanellur, Kerala, India, PIN: 680014)

Abstract:- This article examines the financial and operational performance of Primary Agricultural Credit Societies (PACS) in Kerala over a 15-year period. focusing on key variables such as the number of societies, membership strength, paid-up share capital, reserves, deposits, working capital, loans issued, loan outstanding, and loan overdue. The analysis highlights significant growth in capital mobilization and deposit mobilization, reflecting the expanding role of PACS in rural financial inclusion. However, the rising trend in loan overdue amounts indicates challenges in loan recovery, necessitating improved credit risk management. The findings suggest that while PACS have shown robust financial growth and stability, strategic interventions are required to address loan recovery issues and sustain their pivotal role in supporting rural communities. The article concludes with recommendations for enhancing credit risk management, member education, financial product innovation, and leveraging technology to ensure the continued success and stability of PACS in Kerala.

Keywords:- Primary Agricultural Credit Societies (PACS), Loan Recovery, Financial Performance, Membership, Deposits, Working Capital, Non-Performing Assets (NPAs)

I. INTRODUCTION

Primary Agricultural Credit Societies (PACS) stand as the cornerstone of rural financial infrastructure in Kerala, dotting every nook and cranny of the state's landscape. Over the past fifteen years, from FY 2008-09 to 2022-23, these grassroots financial institutions have played a pivotal role in fostering economic resilience and promoting financial inclusion among rural communities. Rooted in the cooperative principles of thrift and self-help, PACS have been instrumental in meeting the diverse financial needs of their members, facilitating credit access, and encouraging savings. PACS, by their very nature, are designed to serve the underserved. They bridge the gap between the formal banking sector and the rural populace, ensuring that financial services reach the remotest corners of Kerala. By providing affordable credit, promoting savings habits, and supporting various agricultural and non-agricultural activities, PACS contribute significantly to the socio-economic development of rural areas.

This article delves into the financial performance of PACS in Kerala over a 15-year span, offering insights into their growth, challenges, and contributions to rural financial inclusion. By analysing key financial indicators and trends, we aim to understand how these institutions have evolved, the impact they have had on rural economies, and the extent to which they have succeeded in their mission to promote cooperative values and support community development.

II. LITERATURE REVIEW

(Ashraf, Muhammed, Bhandari, & Kumar, 2023) examined the stability of cooperative banks in Kerala from 2006 to 2016, comparing them with other banks in the region. The findings indicated that cooperative banks demonstrate greater stability than (a) commercial banks as a whole, and (b) both private and public ownership groups within commercial banks. Although cooperative banks tend to have relatively lower returns and capitalization, their low return volatility contributes to their overall stability. Additionally, the analysis showed that the loan-to-asset ratio positively correlates with stability, while the credit-deposit ratio and inflation are negatively correlated with stability [1].

(Chalam & Prasad, 2007) investigated the changing profitability and financial condition of Primary Agriculture Cooperative Societies (PACS) in Andhra Pradesh, India, analysing data from nine selected PACS over a 10-year period (1994-95 to 2003-04). The societies are highly liquid due to high cash, investment, and credit to deposit ratios, and low management costs, but suffer from low spread to total assets and high net worth to fixed assets. Despite satisfactory ratios of interest earned to total income and total income to working capital, operational efficiency, productivity, and profitability need improvement. The societies lend more than they receive in deposits, with high per employee income but also high per employee expenditure, resulting in low per employee spread and profit. To enhance financial performance, PACS should balance liquidity and profitability, reduce the ratio of interest paid to total income and establishment expenditure, and improve deposit mobilization and fund deployment. Increasing return on equity to at least 10% is also suggested [2].

(Kanti, Arabinda, & Sudipta, 2018) assessed the performance of PACS in terms of their reach, inclusivity, economic efficiency, social responsibility, and financial management prudence. The study utilised secondary data covering the period from 2007-08 to 2016-17, focusing on seven randomly selected PACS in Nadia district, West Bengal. The authors identified weaknesses and challenges faced by these societies and offered suggestions for their effectiveness. While PACS enhancing demonstrated growth in membership and loan disbursement, their performance in loan recovery and managing Non-Performing Assets (NPAs) had been inadequate. The reasons behind the increase in Overdue and NPA require careful examination at the grassroots level. A thorough evaluation is necessary to determine whether these issues stem from deliberate defaulters or from non-deliberate factors [3].

(Kulantaiswamy & Murugesan, 2004) assessed performance of primary agricultural cooperative credit societies (PACS) in India, using eight variables: membership, share capital, working capital, loan disbursement, deposits, borrowings, demand, and overdue. Among the 30 PACS evaluated, only 7 (23.3%) exhibited good performance, 12 (40%) showed moderate performance, and 11 (36.7%) were found to be poor. This empirical evidence highlights the need for policy interventions, such as recapitalization, amalgamation, reducing overdue, and enhancing overall efficiency, to address these deficiencies [4].

(Murugesan, 2007110-116) examined eight broad categories of indicators used to evaluate and quantify the performance of primary agricultural credit societies: organizational, functional, self-reliance, profitability, cost, democratic participation, and social efficiency. In conclusion, given that an agricultural cooperative society is a complex entity encompassing both economic and social aspects, performance measurement must comprehensively address both dimensions [5].

(Sekhar & Vijayan, 2021) used the DEA benchmarking technique to assess the productive efficiency of 168 PACS in Kerala, finding significant variation. Under CRS assumption, 117 PACS, and under VRS assumption, 98 PACS, are less than 50% efficient compared to their peers. Addressing these inefficiencies can enhance profitability and stability [6].

(Thipathy, Paliwal, & Nistala, 2021) explored the business activities of selected PACS in Kerala, providing insights into their governance practices and their impact on competitiveness. Using a descriptive-analytical approach, it incorporated both primary and secondary data. The research concluded that participation, accountability, and transparency are essential pillars of cooperative governance, particularly when accompanied by a diversification strategy, which enhances the competitive performance of Kerala's PACS. The study demonstrated that good governance was a key determinant in the growth and development of cooperatives [7].

(Vishnu & Selvanayaki, 2018) presented a comparative study of NPAs in six cooperative banks in Thrissur district, Kerala, over five years from 2012-13 to 2016-17. The study analysed trends in gross NPA, gross NPA as a percentage of gross advances, gross NPA as a percentage of total assets, and net NPA as a percentage of net advances using Compound Annual Growth Rate (CAGR). The banks were ranked based on their performance in managing NPAs. The analysis revealed that NPAs show an increasing trend over the years,

and the banks were actively working to manage the issue. A

strong negative correlation existed between net profit and

https://doi.org/10.38124/ijisrt/IJISRT24MAY1550

III. OBJECTIVES OF THE STUDY

gross NPA [8].

- To Assess the Growth and Development of PACS in Kerala
- Evaluate the growth trends in the number of societies, membership, paid-up share capital, and reserves over the 15-year period from FY 2008-09 to 2022-23.
- To Analyse the factors contributing to the growth or decline in these metrics.
- ➤ To Analyse the Financial Performance of PACS
- Examine the trends in key financial indicators such as deposits, working capital, loans issued, loan outstanding, and loan overdue.
- Identify patterns and significant changes in the financial health of PACS over the study period.
- ➤ To Evaluate the Role of PACS in Promoting Rural Financial Inclusion
- Investigate how PACS have facilitated access to financial services in rural areas, focusing on credit provision and savings mobilization.
- Assess the impact of PACS on the economic well-being of their members and the broader rural community.
- > To Identify Challenges and Provide Recommendations for Improvement
- Identify the major challenges faced by PACS in terms of financial management, loan recovery, and member engagement.
- Offer actionable recommendations to enhance the operational efficiency and financial sustainability of PACS.

IV. SCOPE AND IMPORTANCE OF THE STUDY

A. Scope

This study focuses on the financial performance of Primary Agricultural Credit Societies (PACS) in Kerala over a 15-year period, from FY 2008-09 to 2022-23. The scope of the study includes:

- Geographical Focus: The study is confined to the state of Kerala, where PACS play a crucial role in the rural financial ecosystem.
- *Temporal Scope*: The analysis covers a 15-year period, providing a long-term perspective on the financial trends and performance of PACS.
- Variables Analysed: The study considers key financial and operational variables such as the number of societies, number of members, paid-up share capital, reserves, deposits, working capital, loans issued, loan outstanding, and loan overdue.
- Data Sources: Secondary data published by the Department of Cooperation, State Planning Board, Economic Reviews, and the Handbook on Cooperatives are utilized for comprehensive data collection.
- Analytical Tools: Simple statistical tools such as percentages, ratios, and trend analysis are used to interpret the data and derive meaningful insights.

B. Importance

The significance of this study is multi-faceted, reflecting the critical role PACS play in the socio-economic development of rural areas in Kerala:

- Promoting Financial Inclusion: PACS serve as the backbone of rural finance in Kerala, ensuring that financial services reach even the remotest areas. By examining their performance, the study highlights how PACS contribute to financial inclusion, providing insights into their effectiveness in bridging the gap between formal banking institutions and rural communities.
- Supporting Rural Economy: The study underscores the importance of PACS in supporting agricultural and non-agricultural activities through credit provision. Understanding the financial health of PACS helps in assessing their role in sustaining and boosting the rural economy.
- Encouraging Savings and Thrift: PACS promote a culture
 of savings and financial discipline among rural
 populations. Analysing trends in deposits and paid-up
 share capital provides an understanding of how effectively
 PACS have encouraged savings habits over the years.
- Informing Policy and Decision-Making: The findings of this study can inform policymakers and stakeholders about the strengths and challenges faced by PACS. Insights from the study can guide the formulation of policies aimed at strengthening the cooperative sector and enhancing its contribution to rural development.
- Evaluating Cooperative Principles: The study evaluates the extent to which PACS adhere to and promote cooperative principles such as self-help, mutual aid, and democratic member control. By focusing on financial performance, the study assesses how these principles translate into tangible economic benefits for members.
- *Identifying Areas for Improvement*: The analysis identifies trends and patterns in key financial metrics, pointing out areas where PACS excel and where they face difficulties. Recommendations based on these findings can help PACS improve their operations, financial management, and overall sustainability.

 By providing a detailed examination of the financial performance of PACS in Kerala, this study contributes valuable knowledge to the field of rural finance and cooperative management. It underscores the essential role of PACS in fostering economic resilience, promoting financial inclusion, and supporting the overall development of rural areas in Kerala.

V. METHODOLOGY

This study examines the financial performance of Primary Agricultural Credit Societies (PACS) in Kerala over the 15-year period from FY 2008-09 to 2022-23. The analysis is based on secondary data obtained from reputable sources, including the Department of Cooperation (Handbook on Cooperatives) and the State Planning Board (Economic Reviews).

A. Variables

The study focuses on the following financial and operational variables:

- Number of Societies: Total count of PACS operating in Kerala in each year.
- Number of Members: Total Membership strength of PACS in Kerala.
- Paid-up Share Capital: The total capital paid by members.
- Reserves: Accumulated reserves held by PACS in Kerala.
- Deposits: Total deposits mobilized by PACS from their members.
- Working Capital: Overall capital available for operational activities.
- Loans Issued: Total amount of loans disbursed to members.
- Loan Outstanding: Amount of loans yet to be repaid.
- Loan Overdue: Amount of loans not repaid by the due
 date

B. Analytical Tools

- Percentages: Used to calculate the growth rate and distribution of various financial metrics.
- Ratios: Applied to assess the relationship between different financial variables, such as the loan-to-deposit ratio.
- Trends: Analysed to identify patterns and changes in the performance of PACS over the study period.

C. Procedure

- Data Collection: Gathered secondary data from the sources for each fiscal year from 2008-09 to 2022-23.
- Data Compilation: Compiled data into a structured format to facilitate analysis. This involved organizing data yearwise for each variable.
- Statistical Analysis: Calculated percentages, ratios, and trends to derive insights from the compiled data. This analysis helped in understanding the financial health, growth, and challenges faced by PACS.

 Interpretation: Interpreted the statistical results to draw conclusions about the financial performance and operational efficiency of PACS over the study period.

D. Limitations

The study relies on secondary data, which may have limitations in terms of accuracy and completeness. Additionally, the analysis is confined to the financial variables available from the sources and may not capture qualitative aspects of PACS' performance. By utilizing these methodologies, the study aims to provide a comprehensive assessment of the financial performance of PACS in Kerala, shedding light on their role in promoting rural financial inclusion and cooperative principles.

VI. RESULT AND DISCUSSION

A. Operational Variables

These variables reflect the basic operational aspects and membership strength of PACS:

- Number of Societies: Total count of PACS operating in Kerala in each year.
- Number of Members: Total Membership strength of PACS in Kerala.

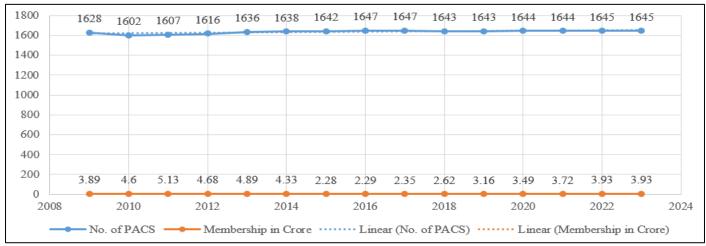


Fig 1: Number of PACS and Membership

Table 1. Number of PACS and Membership No. of PACS Membership in Crore Years 2009 1628 3.89 2010 1602 4.6 2011 1607 5.13 2012 1616 4.68 2013 1636 4.89 2014 1638 4.33 2015 1642 2.28 2.29 2016 1647 2017 1647 2.35 1643 2018 2.62 2019 1643 3.16 2020 1644 3.49 2021 1644 3.72 1645 2022 3.93 1645 3.93 2023

(Source: Compiled from Economic Review, State Planning Board, Kerala; and Handbook on Cooperatives, Department of Cooperation, Government of Kerala)

- ➤ Analysis and Comments (Table 1, Figure 1)
- *Number of PACS*: The number of PACS has fluctuated slightly but has mostly been within a range of 1600 to 1650. The linear trend line for the number of PACS is almost flat, indicating little to no significant change over the years.
- *Membership*: Membership numbers have varied more significantly compared to the number of PACS. There was a notable drop in 2020 to 2.29 crore, followed by a recovery to 3.93 crore by 2024. The linear trend line for membership shows a slight increase overall.

General Interpretation

ISSN No:-2456-2165

- Stability in PACS: The number of PACS has remained relatively stable, suggesting that the infrastructure for these societies has not changed much.
- Fluctuation in Membership: Membership numbers have been more volatile, possibly reflecting varying levels of engagement or other socio-economic factors affecting the willingness or ability of individuals to join PACS.
- Recent Trends: Despite a dip around 2020, membership numbers have been increasing again, reaching nearly 4 crores in 2024.

 This analysis indicates that while the structural base of PACS has been consistent, the participation level of members has seen ups and downs, potentially influenced by external factors such as economic conditions or policy changes.

B. Financial Health and Stability

These variables indicate the financial foundation and reserves of PACS:

- Paid-up Share Capital: The total capital paid by members.
- Reserves: Accumulated reserves held by PACS in Kerala.

Table 2: Paid up Share Capital and Reserves

Indicators	Paid up share capital (Rs in Crores)	Reserves (Rs in Crores)
2009	580.61	3840.83
2010	816.44	6127.89
2011	849.97	2017.21
2012	1809.81	2150.76
2013	1231.21	2193.41
2014	1473.8	2088.27
2015	1833	4761.93
2016	1497.06	3517.36
2017	1802.81	6811.14
2018	2428.74	6516.44
2019	2730.06	6914.13
2020	3607.34	9528.86
2021	4194.33	11601.05
2022	4523.97	13615.75
2023	4523.97	13615.75

(Source: Compiled from Economic Review, State Planning Board, Kerala; and Handbook on Cooperatives, Department of Cooperation, Government of Kerala)

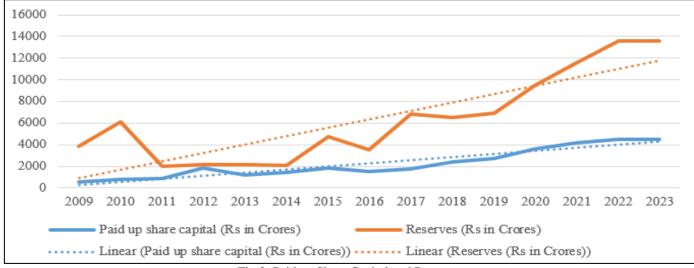


Fig 2: Paid up Share Capital and Reserves

- ➤ Analysis and Comments (Table 2, Figure 2)
- Paid-up Share Capital: The paid-up share capital shows a
 general upward trend over the 15-year period, increasing
 from Rs 580.61 crores in 2009 to Rs 4523.97 crores in
 2023. This indicates a strong growth in the capital base of
 PACS. From 2009 to 2010, there is a sharp increase from

Rs 580.61 crores to Rs 816.44 crores, reflecting a significant infusion of capital. The period from 2018 to 2021 shows consistent and substantial increases, particularly in 2020 and 2021, where it reaches Rs 4194.33 crores. The paid-up share capital stabilizes at Rs 4523.97 crores in 2022 and 2023, indicating a period of consolidation after rapid growth.

• Reserves: The reserves have also generally increased, starting from Rs 3840.83 crores in 2009 and reaching Rs 13615.75 crores in 2023. However, there are significant fluctuations in the reserves data, such as a decline from Rs 6127.89 crores in 2010 to Rs 2017.21 crores in 2011. From 2016 onwards, there is a marked and steady increase, particularly notable from 2020 to 2023. From 2017 to 2023, the reserves have shown consistent growth, indicating an improved financial health and ability to accumulate savings and profits.

➤ General Interpretation

- Strong Financial Growth: The consistent increase in both paid-up share capital and reserves over the 15 years signifies robust financial growth and an enhanced capital base of PACS in Kerala.
- Increased Member Contributions: The increase in paid-up share capital suggests a growing confidence and participation of members, likely due to effective governance and promising returns.
- Improved Financial Stability: The substantial growth in reserves indicates that PACS have become more financially stable, with greater ability to absorb shocks and invest in development activities.
- Periods of Rapid Expansion: Notable periods of rapid expansion, particularly in the late 2010s and early 2020s, point towards strategic initiatives that significantly boosted financial resources.
- Sustained Growth in Recent Years: The stability of paidup share capital in the last two years and the continued rise in reserves reflect a mature phase where PACS are focusing on sustainable growth and consolidation.

• Trend Line for Paid-up Share Capital: Shows an upward trajectory, confirming the increasing trend. Trend Line for Reserves: Shows fluctuations with a strong upward trend from mid-2010s onward, highlighting phases of significant accumulation. In summary, the data indicates that PACS in Kerala have experienced significant growth and improvement in financial health over the last 15 years, with strong member participation and effective capital and reserve management strategies.

https://doi.org/10.38124/ijisrt/IJISRT24MAY1550

C. Deposits and Capital Utilization

These variables reflect the ability of PACS to mobilize and utilize capital:

- Deposits: Total deposits mobilised by PACS from their members.
- Working Capital: Overall capital available for operational activities.
- ➤ Analysis and Comments (Table 3, Figure 3)
- Deposits: The deposits show a substantial increase from Rs 20432.31 crores in 2009 to Rs 168406.9 crores in 2023, indicating strong growth in member savings and trust in PACS. There is a notable increase each year, particularly from 2009 to 2016. The period from 2019 to 2020 shows an exceptionally large jump from Rs 111100.19 crores to Rs 173816 crores, suggesting significant mobilization of deposits. From 2021 to 2023, deposits show some fluctuation but stabilise at Rs 168406.9 crores in 2022 and 2023

Table 3: Deposits and Capital Utilisation

Indicators	Deposits (Rs in Crores)	Working Capital (Rs in Crores)	
2009	20432.31	27535.21	
2010	27312.04	33775.63	
2011	32527.61	39921.01	
2012	39856.86	76472.82	
2013	56942.33	70500.91	
2014	67785.06	90245.74	
2015	73795.62	94095.36	
2016	80190.41	98852.63	
2017	83157.38	141285.35	
2018	95477.89	119649.29	
2019	111100.19	130123.97	
2020	173816	192831	
2021	139460.66	161960.68	
2022	168406.9	182874.85	
2023	168406.9	182874.85	

(Source: Compiled from Economic Review, State Planning Board, Kerala; and Handbook on Cooperatives, Department of Cooperation, Government of Kerala)

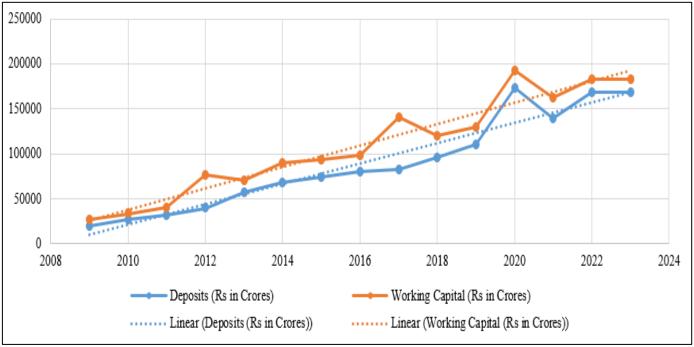


Fig 3: Deposits and Capital Utilisation

• Working Capital: The working capital also exhibits significant growth, rising from Rs 27535.21 crores in 2009 to Rs 182874.85 crores in 2023. From 2010 to 2012, there is a sharp increase, especially in 2012, where working capital nearly doubles from Rs 39921.01 crores to Rs 76472.82 crores. There are further significant increases in 2017 and 2020. Similar to deposits, the working capital stabilises at Rs 182874.85 crores in 2022 and 2023.

➤ General Interpretation

- Strong Deposits Growth: The continuous and significant increase in deposits indicates a growing confidence among members, with PACS effectively attracting and retaining member savings. The large jump in 2020 suggests successful campaigns or economic factors driving higher savings.
- Expanding Working Capital: The dramatic rise in working capital, especially in key years like 2012 and 2017, reflects PACS's growing capacity to fund operations and expand services. The stabilisation in recent years indicates a mature phase where PACS are effectively managing their operational funds.
- Periods of Rapid Expansion: Specific periods, such as 2012 and 2020, show marked increases in both deposits and working capital, indicating strategic growth phases, possibly driven by policy changes, economic conditions, or effective management practices.

- Sustained Financial Growth: The overall upward trend in both deposits and working capital underscores the financial robustness of PACS, showing their ability to continuously attract funds and reinvest them effectively into their operations.
- *Trend Line for Deposits*: Shows a strong upward trajectory with steep increases in specific years, particularly around 2019-2020.
- Trend Line for Working Capital: Mirrors the trend for deposits with significant peaks corresponding to key years (2012, 2017, 2020), showing a steady and robust increase over the period.
- The data indicates a strong and sustained growth in both deposits and working capital for PACS in Kerala over the 15-year period. This reflects increasing member trust, effective deposit mobilization strategies, and efficient management of operational funds, contributing to the overall financial health and performance of PACS in the region. The stabilization in recent years suggests a phase of consolidation and mature financial management.

D. Lending and Credit Management

These variables are related to the lending activities and credit performance of PACS:

- Loans Issued: Total amount of loans disbursed to members.
- Loan Outstanding: Amount of loans yet to be repaid.
- Loan Overdue: Amount of loans not repaid by the due date.

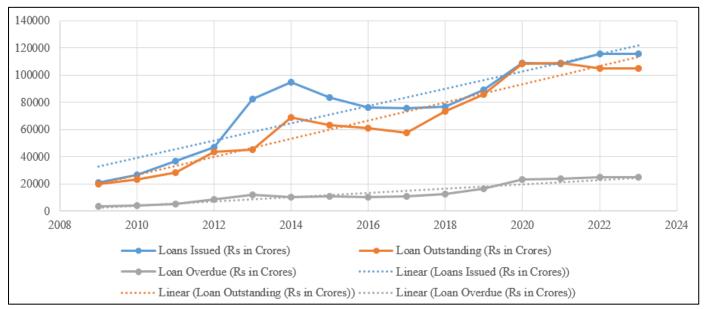


Fig 4: Lending and Credit Management

Table 4: Lending and Credit Management
--

To disastana	Loans Issued	Loan Outstanding	Loan Overdue
Indicators	(Rs in Crores)	(Rs in Crores)	(Rs in Crores)
2009	21080.74	19796.94	3446.88
2010	26307.35	23233.5	4190.37
2011	36822.34	28442.68	5300.86
2012	46689.63	43620.83	8372.86
2013	82410.64	45121.56	12104.31
2014	94881.88	68854.43	10097.68
2015	83308.04	63164.44	10668.81
2016	76007.84	61123.57	10285.64
2017	75350.9	57379.75	10624.7
2018	76643.52	73153.78	12472.33
2019	89153.03	85971.82	16250.36
2020	108816	107989	23158
2021	108333.07	108988.27	23565.29
2022	115432.19	104784.19	24896.34
2023	115432.19	104784.19	24896.34

(Source: Compiled from Economic Review, State Planning Board, Kerala; and Handbook on Cooperatives, Department of Cooperation, Government of Kerala)

➤ Analysis and Comments (Table 4, Figure 4)

- Loans Issued: The amount of loans issued shows a general increase over the 15-year period, rising from Rs 21080.74 crores in 2009 to Rs 115432.19 crores in 2023. There are notable spikes, particularly in 2012 (Rs 46689.63 crores) and 2013 (Rs 82410.64 crores). The period from 2019 to 2022 shows consistent increases, with the peak at Rs 115432.19 crores in 2022 and 2023. The loans issued stabilise at Rs 115432.19 crores in 2022 and 2023, indicating a mature phase with steady loan issuance.
- Loan Outstanding: The loan outstanding shows a steady increase from Rs 19796.94 crores in 2009 to Rs 104784.19 crores in 2023. Significant jumps occur in 2012 (Rs 43620.83 crores), 2013 (Rs 45121.56 crores), and particularly in 2019 (Rs 85971.82 crores). The highest values are observed in 2020 (Rs 107989 crores) and 2021
- (Rs 108988.27 crores), followed by a slight decrease and stabilization at Rs 104784.19 crores in 2022 and 2023. Stability in Recent Years: Similar to loans issued, loan outstanding stabilizes in the last two years, reflecting effective loan management practices.
- Loan Overdue: The loan overdue amount shows an upward trend, increasing from Rs 3446.88 crores in 2009 to Rs 24896.34 crores in 2023. Notable increases occur in 2013 (Rs 12104.31 crores), 2019 (Rs 16250.36 crores), and 2020 (Rs 23158 crores). The highest values are seen from 2020 onwards, peaking at Rs 24896.34 crores in 2022 and 2023. The overdue amount stabilises at Rs 24896.34 crores in 2022 and 2023, indicating efforts to manage overdue loans effectively.

➤ General Interpretation

- Expansion in Lending Activities: The consistent increase in loans issued reflects the expanding lending activities of PACS, with significant growth phases in early 2010s and late 2010s.
- Management of Loan Portfolio: The steady increase in loan outstanding, with some stabilization in recent years, indicates effective management of the loan portfolio, despite the high issuance volumes.
- Challenges in Loan Recovery: The upward trend in loan overdue suggests challenges in loan recovery, with significant increases in the overdue amounts particularly in the last few years. The stabilization at high values in 2022 and 2023 indicates that overdue loans remain a concern.
- Sustained Lending Capacity: The stabilization of loans issued and outstanding at high values in recent years suggests that PACS have maintained their lending capacity while trying to manage the quality of their loan portfolios.
- *Trend Line for Loans Issued*: Shows a strong upward trajectory with notable peaks in specific years (2012, 2013, 2019-2022).
- Trend Line for Loan Outstanding: Mirrors the loans issued trend, with steady increases and stabilization in recent years.
- Trend Line for Loan Overdue: Show an upward trend with significant increases in certain years, reflecting ongoing challenges in loan recovery. The rising trend in loan overdue amounts highlights challenges in loan recovery

and the need for improved credit risk management. However, the stabilization of values in recent years suggests a phase of consolidation and mature financial management, but with a continued focus required on managing overdue loans to ensure sustained financial health.

➤ Analysis and Comments (Table 5)

- Loans Issued: Significant growth in 2011, 2012, and especially in 2013 suggests periods of aggressive lending or high demand for loans. Negative growth in 2015 and 2016 could indicate tightening of credit or decreased demand. Stabilization in recent years with minor fluctuations.
- Loan Outstanding: Consistent growth with significant increases in 2012 and 2014 reflecting the issuance of new loans. Slight declines in some years suggest improved loan repayment or adjustments in loan issuance.
- Loan Overdue: Increasing trend indicates growing challenges in loan recovery, particularly notable spikes in 2012, 2013, 2018, and 2020. The high growth rate in 2020 followed by stabilization suggests efforts to manage overdue loans, but the high values still reflect recovery challenges.
- The analysis of the financial and operational performance of Primary Agricultural Credit Societies (PACS) in Kerala over the past 15 years reveals significant growth and strategic development, along with certain challenges that need to be addressed for sustained progress.

Year **Loans Issued Growth Rate Loan Outstanding Growth Rate Loan Overdue Growth** (%)(%)**Rate (%)** 2010 24.78 17.39 21.6 2011 40 22.42 26.48 2012 26.81 53.5 58.01 2013 76.45 3.44 44.57 2014 15.1 52.56 -16.66 -12.22015 -8.27 5.66 2016 -8.76 -3.24 -3.6 2017 -0.87 -6.13 3.31 2018 1.72 27.52 17.41 2019 16.32 17.57 30.32 2020 $2\overline{2.12}$ 25.65 42.5 2021 -0.44 0.92 1.76 5.64 2022 6.55 -3.86 2023 0 0 0

Table 5: Growth Rate Table

(Source: Calculated from the data from Economic Review, State Planning Board, Kerala; and Handbook on Cooperatives, Department of Cooperation, Government of Kerala)

VII. KEY FINDINGS

 Operational Expansion: The number of PACS has remained relatively stable, with minor fluctuations, suggesting a well-established network that supports rural financial inclusion. Membership growth, particularly in the earlier part of the period, indicates increased trust and

- participation among rural communities in PACS activities.
- Financial Health: Both paid-up share capital and reserves have shown a robust upward trend, highlighting the growing financial strength and stability of PACS. Significant increases in capital during specific periods reflect successful capital mobilization efforts and enhanced member contributions.

- Deposit Mobilisation and Working Capital: Deposits have seen substantial growth, with notable jumps in certain years, particularly 2019-2020, indicating effective savings mobilization strategies. Working capital has similarly increased, reflecting PACS's ability to reinvest deposits into operational activities, thereby enhancing their financial capacity.
- Lending Activities: Loans issued have generally increased, with significant peaks in 2012, 2013, and the late 2010s, demonstrating a proactive lending approach and high demand for credit among members. Loan outstanding figures reflect a growing loan portfolio, though the slight stabilization in recent years suggests effective management of loan disbursement and repayment processes.
- Loan Recovery Challenges: The rising trend in loan overdue amounts indicates persistent challenges in loan recovery. The substantial increases in overdue loans in recent years, especially around 2019-2020, underscore the need for improved credit risk management and recovery mechanisms. Stabilization at high overdue amounts in the last few years points to ongoing efforts to manage these challenges, but also highlights the necessity for continued focus on this area.
- The overall performance of PACS in Kerala indicates strong financial growth and expanding operational capacities. However, the increasing loan overdue amounts call for strategic interventions to enhance loan recovery processes and manage credit risks more effectively.

VIII. RECOMMENDATIONS

- Strengthen Credit Risk Management: Implement robust risk assessment and monitoring frameworks to mitigate the risk of loan defaults and improve recovery rates.
- Enhance Member Education: Provide training and awareness programs for members on the importance of timely loan repayments to sustain financial health.
- Innovate Financial Products: Develop tailored financial products that meet the specific needs of members while ensuring manageable risk levels.
- Leverage Technology: Adopt advanced financial technologies for efficient loan processing, monitoring, and recovery efforts.

IX. CONCLUSION

The financial and operational analysis of PACS in Kerala demonstrates a resilient and growing sector that plays a crucial role in rural financial inclusion and economic development. While the sector shows strong performance in capital mobilization and lending, addressing the challenges in loan recovery will be pivotal in ensuring sustainable growth and stability in the future. Continued focus on strategic management, member engagement, and technological advancements will further strengthen the role of PACS in supporting rural communities.

REFERENCES

https://doi.org/10.38124/ijisrt/IJISRT24MAY1550

- [1]. Ashraf, Muhammed, H., Bhandari, & Kumar, A. (2023). tability of Cooperative Banks in Kerala, India: A Comparative Study of Banks across Ownership Structures. Prajnān, Vol 52, Issue 1.
- [2]. Chalam, G., & Prasad, A. (2007). An evaluation of financial performance of cooperative societies in Andhra Pradesh (a study of selected PACSs in West Godavari District). le: Indian Cooperative Review, Vol. 45, No. 1,, 42-58.
- [3]. Kanti, G. P., Arabinda, M., & Sudipta, S. (2018). An Appraisal of Performance of Primary Agricultural Cooperative Societies (PACS) in Nadia District of West Bengal. Economic Affairs, Vol 63, Issue 4, 891-896.
- [4]. Kulantaiswamy, V., & Murugesan, P. (2004). Performance of PACS an empirical evaluation. Indian Cooperative Review, Vol. 42, No. 2, 121-130.
- [5]. Murugesan, P. (2007110-116). Performance indicators of PACSs. Indian Cooperative Review, 45 (2).
- [6]. Sekhar, D., & Vijayan, S. (2021). Productive Efficiency of Primary Agricultural Credit Societies in Kerala, India. NVEO-Natural Volatiles & Essential Oils Journal NVEO, 8032 - 8040.
- [7]. Thipathy, K., Paliwal, M., & Nistala, N. (2021). Good Governance Practices and Competitiveness in Cooperatives: An Analytical Study of Kerala Primary Agricultural Credit Societies. International Journal of Global Business and Competitivesness, Vol 16, 153 161
- [8]. Vishnu, M., & Selvanayaki, S. (2018). A Comparative Analysis of Non-Performing Assets in Selected Cooperative Banks in Thrissur District, Kerala. Madras Agric. J., 105 (7-9), : 352-355.