A Study of Non-Performing Assets (NPA) in PACS – A Comparative Analysis of Selected Pacsin Villupuram District, Tamil Nadu

Dr. U. Homiga  
Faculty, NICM, Chennai

Dr. V. Alagu Pandian  
Faculty, ICM, Madurai

Abstract  
The present study observed that the NPA level of the selected cooperative societies showed a declining trend over the study period. The study also observed that even though there is an improvement in the Non-performing asset management in the societies, in the case of Sithathur PACS, a higher AAG rate of overdue advances is found. It is indicated that they have a poor credit management system. Therefore Co-operative Societies should manage their NPA effectively and systematically.

Keywords: NPA, Standard Assets, Doubtful Assets, Loss Assets, Villupuram District and PACS.

Introduction  
The present study observed that the NPA level of the selected cooperative societies in Villupuram Districts.

Statement of the Problem  
A loan might fail for numerous reasons. Banks are actively marketing unsecured loans to individuals/members to avoid idle assets. Most cooperative bank consumers are uneducated in finance, and banks often provide loans without assessing their financial situation. A lack of adequate recovery mechanisms, purposeful defaults, natural catastrophes, changes in government policy, demonetisation and loan waivers have all contributed to the NPA crisis, affecting cooperative banks the most.
When a bank is not able to recover the loan given or not getting regular interest on such a loan:

- The flow of funds in the banking industry is affected.
- Also, the earning capacity is adversely affected.
- This has a direct and immediate impact on bank profitability and efficiency.
- Under the prudential norms, banks cannot book any income from NPA.
- At the same time, they have to make necessary provisions for NPA.
- Moreover, the money is blocked as the provisions for NPAs is not available for further use of business, and thus the profit margin of the societies goes down.
- The low profitability of the banking sector affects its growth and expansion.
- NPA is a double-edged sword. On the one hand, banks cannot recognise interest income on NPA, and on the other hand, it is a drain of banks’ profitability.
- Moreover, profits earned are required to be diverted for provision on NPA. The high level of NPA is dangerous to the very existence of banks.
- Gross NPA reflects the quality of the society loans, and the Net NPA reflects the actual burden of the societies.

**Objectives of the Study**

The objective of this research is:

- To Study the Non-Performing Assets of selected Primary Agricultural Co-operative Societies (PACS).
- To comparative analyse the various ratios to NPA of selected PACS.
- Based on findings, suggest measures for better performance of Primary Agricultural Co-operative Societies concerning NPAs.

**Research Design**

Descriptive studies are designed to describe what is going on or says what exists. Descriptive studies are usually the best methods for collecting information that will demonstrate relationships and describe them as it exists.

**Sources of Data**

Secondary Data refers to the data which has already been generated and is available for use. The data about NPAs and their composition, classification of loan assets, profits and advances of selected PACS in Villupuram district from their published annual reports for the study purpose.

**Data Analysis**

The data collected will be tabulated, analysed and interpretation has to arrive based on statistical analysis. It is a comparative study through ratio analysis using essential ratios.

**Tools of Analysis**

Accountants utilise ratio analysis, a kind of financial statement analysis, to quickly assess numerous aspects of a business’ financial health. Financial statement analysis is defined as the use of ratios to evaluate the company’s performance and financial situation in the context of the financial statements.

- Gross NPA ratio.
- Net NPA ratio
- Provisions Coverage ratio
- Problem Assets ratio
Statistical Techniques

The following tools used to analyse the data

- **Mean**
- **Standard Deviation**
- **Coefficient of variation**

**Mean**: Mean has been used to find the average of various items. It refers to a central value of a discrete set of numbers, specifically the sum divided by the number of values.

**Standard Deviation**: measures the absolute dispersion or variability from the mean values. It shows the variation in data. A small standard deviation implies a high degree of uniformity or homogeneity in the distribution or vice versa.

**Coefficient of Variation**: It is a relative measure of dispersion based on standard deviation. The coefficient of variation was used to test the consistency. There is an inverse relationship between the coefficient of variation and consistency. More the value of the coefficient of variation lesser is the consistency and vice versa.

Scope of the Study

This study covers seven years ranging between 2013-14 and 2019-20 to study the trends and comparative study of two PACS, from Villupuram District, Tamilnadu.

The selected PACS are:

- Sithathur PACS, Mugaiyur Block, Villupuram Dist.
- Veerapandy PACS, Mugaiyur Block, Villupuram Dist.

This study has a major focus only on the financial performance of both the PACS concerning Non Performance Assets (NPA). Other functional and operational transactions like deposit mobilisation and credit expansion are not considered for analysis purposes.

Review of Literature

Barki (2015), the study analysed the lending practices of the PACS and its performances during the study period. The study found that the financial performance of UCBs is improved over the period by satisfying customers with the excellent quality of services, easy mode of repayment of instalment, simple procedure and reasonable rate of interest and quick sanction of loans. It was suggested that the bank adopt digital banking and introduce new schemes for attracting new customers and satisfying the present ones.

Sivakumar (2018), in his study “A Study on Non-Performing Asset Management with Special Reference to Coimbatore City Co-Operative Bank Ltd, Tamilnadu”, analysed the various concepts of NPAs and their impact on the performance and profitability of the selected bank. It was revealed in the study that the bank failed to control the NPA in the early years of the decade. The study also observed that the contribution of the priority sector was high towards total NPA. The study suggested that the bank take corrective steps to prevent further NPAs and recover existing NPAs. The study also suggested the bank take some effective measures to control NPAs in priority sector and non-priority sector lending.

Namboodiri, N. V., Natarajan, D. P. (2018), the study revealed the trends, causes, and impact of NPAs on the performance of the District Central Co-operative Bank Ltd. The study observed that there exist a high positive correlation between actual values and trend values of Net NPA
to Total Assets. The study also suggested various preventive measures to manage NPA, such as presanctioning evaluation and Post disbursement monitoring, strict recovery efforts, strict rules against willful defaulters and introduction of professional expertise.

Ali and Kaveri’s (2018) study focused on the Pre-Sanction Credit Appraisal (PSCA) and Post Sanction Credit Monitoring (PSCM) stages in PACS in Kanchipuram District Tamilnadu State. The study suggested several strategies for effective lending, such as a sound credit appraisal system, effective follow-up system, strict loan sanctioning and disbursement system and regular monitoring of the financial performance of the borrowers.

**Gross NPA Ratio**

The Gross NPA Ratio is the proportion of gross NPA and loans (advances). The ratio is used as a measure of the overall quality of Credit portfolio of the banks. The high gross NPA ratio indicates the low Credit portfolio of the bank, and the low gross NPA ratio indicates the good Credit portfolio of the bank.

Gross NPA Ratio = Gross NPA/Total Loans and Advances (Rs. in Lakhs)

**Table 1 Average Level and Stability of Gross NPA Ratio**

<table>
<thead>
<tr>
<th>Name of the PACCS: I.I.601 SITHATHUR PACCS</th>
<th>Name of the PACCS: I.I.520 VEERAPANDI PACCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>Gross NPA</td>
</tr>
<tr>
<td>2013-14</td>
<td>6.36</td>
</tr>
<tr>
<td>2014-15</td>
<td>7.66</td>
</tr>
<tr>
<td>2015-16</td>
<td>3.15</td>
</tr>
<tr>
<td>2016-17</td>
<td>3.42</td>
</tr>
<tr>
<td>2017-18</td>
<td>3.32</td>
</tr>
<tr>
<td>2018-19</td>
<td>5.25</td>
</tr>
<tr>
<td>2019-20</td>
<td>5.60</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>CV</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Computed based on Record of SITHATHUR PACS & VEERAPANDY PACS during period 2013-14 to 2019-20

It is found from Table 1 that the Gross NPA ratio of SITHATHUR PACS’s, on average, throughout the study was found to be lower than VEERAPANDY PACS’s ratio. The average ratio over the period from 2013-14 to 2019-20 was 1.36 % for SITHATHUR PACS and 9.68 % for VEERAPANDY PACS. It concludes that SITHATHUR PACS’s recovery is satisfactory, which leads to lower gross NPA over VEERAPANDY PACS. Also, Co-efficient of Variation (CV) figures show that the ratio of gross NPA of SITHATHUR PACS is relatively stable throughout the study compared to VEERAPANDY PACS.

**Net NPA Ratio**

Net NPA ratio explains whether the PACS has made sufficient provisions or not, against NPA during the study period of seven years. This ratio indicates the degree of risk prevailing in the credit
portfolio of the PACS. The high Net NPA ratio indicates the high quantity of risky assets in the PACS for which no provisions had been made.

\[
\text{Net NPA Ratio} = \frac{\text{Net NPA}}{\text{Total Loans and Advances}} \quad \text{(Rs. in Lakh)}
\]

Table 2 Average Level and Stability of Net NPA Ratio

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SITHATHUR PACCS</th>
<th>Name of the PACCS: I.I.601</th>
<th>Name of the PACCS: I.I.520</th>
<th>VEERAPANDI PACCS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Net NPA</td>
<td>Total Advances</td>
<td>NET NPA Ratio</td>
<td>Net NPA</td>
</tr>
<tr>
<td>2013-14</td>
<td>4.39</td>
<td>346.60</td>
<td>1.27</td>
<td>3.30</td>
</tr>
<tr>
<td>2014-15</td>
<td>5.33</td>
<td>377.87</td>
<td>1.41</td>
<td>3.38</td>
</tr>
<tr>
<td>2015-16</td>
<td>0.53</td>
<td>383.74</td>
<td>0.14</td>
<td>24.74</td>
</tr>
<tr>
<td>2016-17</td>
<td>0.64</td>
<td>288.73</td>
<td>0.22</td>
<td>10.81</td>
</tr>
<tr>
<td>2017-18</td>
<td>0.39</td>
<td>364.39</td>
<td>0.11</td>
<td>12.30</td>
</tr>
<tr>
<td>2018-19</td>
<td>2.32</td>
<td>382.21</td>
<td>0.61</td>
<td>0.68</td>
</tr>
<tr>
<td>2019-20</td>
<td>2.65</td>
<td>410.99</td>
<td>0.64</td>
<td>20.11</td>
</tr>
</tbody>
</table>

\[\text{Mean} = 0.63 \quad \text{SD} = 0.49 \quad \text{CV} = 78.33\]

Source: Computed based on Record of SITHATHUR PACS & VEERAPANDY PACS during period 2013-14 to 2019-20

Table 2 shows that SITHATHUR PACS has a lower average net NPA ratio than VEERAPANDY PACS. That means SITHATHUR PACS made more sufficient provisions for NPA accounts than VEERAPANDY PACS. Table 2 also shows that the CV of VEERAPANDY PACS’s net NPA ratio is quite stable than SITHATHUR PACS’s net NPA ratio.

Provision Coverage Ratio

Provision Coverage ratio indicates the degree of safety measured adopted by the society. If the provision ratio is less, it indicates that society has made under-provisioning. Lesser provisioning is possible only by identifying lesser NPA. Lesser NPA must be due to more recovery. A high PCR ratio (ideally above 70%) means most asset quality issues have been taken care of, and the bank is not vulnerable.

\[
\text{Provisions Coverage Ratio} = \frac{\text{Total Provisions}}{\text{Gross NPA}} \quad \text{(Rs. in Lakh)}
\]

Table 3 Average Level and Stability of Provision Coverage Ratio

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>1.97</td>
<td>6.36</td>
<td>30.97</td>
<td>3.30</td>
<td>23.00</td>
<td>14.35</td>
</tr>
<tr>
<td>2014-15</td>
<td>2.33</td>
<td>7.66</td>
<td>30.42</td>
<td>0.08</td>
<td>64.66</td>
<td>0.12</td>
</tr>
<tr>
<td>2015-16</td>
<td>2.62</td>
<td>3.15</td>
<td>83.17</td>
<td>21.35</td>
<td>45.91</td>
<td>46.50</td>
</tr>
</tbody>
</table>
Table 3 explains the provisions coverage ratio of both societies. As SITHATHUR PACS has an average provision ratio is 60.37, and VEERAPANDY PACS has an average of 8.71. It means SITHATHUR PACS made an adequate provision for NPA than VEERAPANDY PACS. The provision ratio indicates the degree of safety measured adopted by the society. If the provision ratio is less, society has made it under the provision. Lesser provisioning is possible only by identifying lesser NPA. Lesser NPA must be due to more recovery. Here SITHATHUR PACS made adequate provision from 2013-14, but VEERAPANDY PACS always made under the provision or no provision except 2015-16.

**Problem Assets Ratio**

The high problem assets ratio indicates low liquidity, and the low problem assets ratio indicates high liquidity of assets. To avoid financial problems, the problem assets ratio must be brought down to a minimal level.

Problem Assets Ratio = Gross NPA/Total Assets (Rs. in Lakhs)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Gross NPA</th>
<th>Total Assets</th>
<th>Problem Assets Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>6.36</td>
<td>26.65</td>
<td>3.77</td>
</tr>
<tr>
<td>2014-15</td>
<td>7.66</td>
<td>28.76</td>
<td>7.73</td>
</tr>
<tr>
<td>2015-16</td>
<td>3.15</td>
<td>25.55</td>
<td>12.33</td>
</tr>
<tr>
<td>2016-17</td>
<td>3.42</td>
<td>26.64</td>
<td>12.84</td>
</tr>
<tr>
<td>2017-18</td>
<td>3.32</td>
<td>45.24</td>
<td>7.34</td>
</tr>
<tr>
<td>2018-19</td>
<td>5.25</td>
<td>43.90</td>
<td>11.96</td>
</tr>
<tr>
<td>2019-20</td>
<td>5.60</td>
<td>48.00</td>
<td>11.67</td>
</tr>
<tr>
<td>Mean</td>
<td>5.60</td>
<td>30.67</td>
<td>11.33</td>
</tr>
<tr>
<td>SD</td>
<td>1.43</td>
<td>3.67</td>
<td>5.97</td>
</tr>
<tr>
<td>CV</td>
<td>9.26</td>
<td>2.56</td>
<td>16.20</td>
</tr>
</tbody>
</table>

**Source:** Computed based on Record of SITHATHUR PACS & VEERAPANDY PACS during period 2013-14 to 2019-20
From above table 4 Problem Ratio of SITHATHUR PACS shows a consistently decreasing trend during the study period except in 2014-15 till 2017-18 as VEERAPANDY PACS’s ratio has a fluctuation tendency. Throughout the study, an average problem ratio of SITHATHUR PACS is lower than VEERAPANDY PACS’s ratio. It shows that SITHATHUR PACS has more control over problem assets than VEERAPANDY PACS. Considering the CV of problem ratio of both societies, SITHATHUR PACS’s problem assets are relatively stable compared to VEERAPANDY PACS.

**Sub–Standard Assets Ratio**

The substandard assets ratio indicates the scope for improvement in NPA. The higher the ratio, the better is the position of recovering the advances. The variations in the substandard assets ratio are caused by the higher percentage of doubtful assets over substandard assets in some of the banks.

Substandard Assets Ratio = Sub Std. Assets/Gross NPA (Rs. in Lakhs)

**Table 5 Average Level and Stability of Sub-Standard Assets Ratio**

<table>
<thead>
<tr>
<th>Name of the PACCS: I.I.601 SITHATHUR PACCS</th>
<th>Name of the PACCS: I.I.520 VEERAPANDI PACCS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YEAR</strong></td>
<td><strong>Substandard Assets</strong></td>
</tr>
<tr>
<td>2013-14</td>
<td>1.26</td>
</tr>
<tr>
<td>2014-15</td>
<td>4.64</td>
</tr>
<tr>
<td>2015-16</td>
<td>22.06</td>
</tr>
<tr>
<td>2016-17</td>
<td>29.47</td>
</tr>
<tr>
<td>2017-18</td>
<td>21.89</td>
</tr>
<tr>
<td>2018-19</td>
<td>17.70</td>
</tr>
<tr>
<td>2019-20</td>
<td>18.60</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>424.43</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>301.13</td>
</tr>
<tr>
<td><strong>CV</strong></td>
<td>70.95</td>
</tr>
</tbody>
</table>

**Source:** Computed based on Record of SITHATHUR PACS & VEERAPANDY PACS during period 2013-14 to 2019-20

From the data available substandard asset ratio of VEERAPANDY PACS, on average, for the study, was found lower than the SITHATHUR PACS ratio. The average substandard ratio of VEERAPANDY PACS showed a lot of scope for improvement of the NPA.

**Doubtful Assets Ratio**

Lack of follow-up in upgrading the substandard assets, shift down to doubtful assets. In case of doubtful assets, societies must take immediate action. Banks should try to recover more advances through compromise by which the bank can reduce NPA.

Doubtful Assets Ratio = Doubtful Assets/Gross NPA  (Rs. in Lakhs)
### Table 6 Average Level and Stability of Doubtful Assets Ratio

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Doubtful Assets</th>
<th>Gross NPA</th>
<th>Doubtful Assets Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>6.36</td>
<td>6.36</td>
<td>100.00</td>
</tr>
<tr>
<td>2014-15</td>
<td>7.31</td>
<td>7.66</td>
<td>95.43</td>
</tr>
<tr>
<td>2015-16</td>
<td>0.80</td>
<td>3.15</td>
<td>25.40</td>
</tr>
<tr>
<td>2016-17</td>
<td>3.01</td>
<td>3.42</td>
<td>88.01</td>
</tr>
<tr>
<td>2017-18</td>
<td>2.97</td>
<td>3.32</td>
<td>89.46</td>
</tr>
<tr>
<td>2018-19</td>
<td>4.90</td>
<td>5.25</td>
<td>93.33</td>
</tr>
<tr>
<td>2019-20</td>
<td>4.95</td>
<td>5.60</td>
<td>88.39</td>
</tr>
<tr>
<td>Mean</td>
<td>82.86</td>
<td>30.57</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>23.80</td>
<td>32.50</td>
<td></td>
</tr>
<tr>
<td>CV</td>
<td>28.72</td>
<td>106.31</td>
<td></td>
</tr>
</tbody>
</table>

Source: Computed based on Record of SITHATHUR PACS & VEERAPANDY PACS during period 2013-14 to 2019-20

VEERAPANDY PACS’s doubtful debt ratio found an increasing trend during the period of the study except 2018-19. It is concluded from the data doubtful asset ratio of SITHATHUR PACS’s as on average, throughout the study was found lower than VEERAPANDY PACS’s ratio. The value of CV indicates that the ratio of substandard assets of SITHATHUR PACS’s relatively stable throughout the study as compared to VEERAPANDY PACS.

The average ratio of SITHATHUR PACS showed more than 50% of gross NPA is in the doubtful asset category, which required immediate actions to overcome it. The management must try to recover as many doubtful assets as possible to reduce the gross NPA.

### Loss Assets Ratio

The loss asset ratio shows the proportion of the loss that the society is likely to suffer as compared to the Gross NPA. The ratio must be minimum, as it means that the lost assets would be lower than Gross NPA. The loss assets are not likely to be recovered at all.

Loss Assets Ratio = Loss Assets/Gross NPA (Rs. in Lakhs)

### Table 7 Average Level and Stability of Loss Assets Ratio

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Loss Assets</th>
<th>Gross NPA</th>
<th>Loss Assets Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>0.00</td>
<td>6.36</td>
<td>0.00</td>
</tr>
<tr>
<td>2014-15</td>
<td>0.35</td>
<td>7.66</td>
<td>4.57</td>
</tr>
<tr>
<td>2015-16</td>
<td>0.35</td>
<td>3.15</td>
<td>11.11</td>
</tr>
<tr>
<td>2016-17</td>
<td>0.41</td>
<td>3.42</td>
<td>11.99</td>
</tr>
<tr>
<td>2017-18</td>
<td>0.35</td>
<td>3.32</td>
<td>10.54</td>
</tr>
<tr>
<td>2018-19</td>
<td>0.35</td>
<td>5.25</td>
<td>6.67</td>
</tr>
</tbody>
</table>

Loss Assets Ratio = Loss Assets/Gross NPA (Rs. in Lakhs)
The data indicate that SITHATHUR PACS and VEERAPANDY PACS lost assets found very negligible compared to Gross NPA during the study period. In that SITHATHUR PACS’s ratio is lower than VEERAPANDY PACS’s ratio throughout the study.

**Recommendations**

- In the light of the findings, a few suggestions are offered to improve the functioning of SITHATHUR PACS and VEERAPANDY PACS.
- Overdue can be minimised if the loan is provided to farmers who satisfy the technical feasibility and financial viability test.
- Generally, PACS must have a higher level of standard assets to provide safety of the fund positioned in the credit portfolio. PACS must have a loan-follow up program throughout the year to keep the level of standard assets always at the greatest.
- The Gross NPA ratio should be calculated for different categories of loans to know the contributing factor for high NPA in society. It will help to take the remedial course as ill as to review the disbursement of loans category wise.
- It is advised to the societies to follow RBI and NABARD in respect of agricultural advances to small farmers, SC and ST.
- It is suggested that societies should ensure that advances do not become NPA through proper follow-up and supervision at the post-disbursement stage.
- It is advised to provide loans and advances to those farmers who satisfy the test of technical feasibility and financial viability so that overdue can be minimised.
- It is suggested that the societies should set up an economic research wing by creating a group of PACS in the same area with the help of DCCB, which should provide data on various types of farm and non-farm activities and rural industries etc. required for proper appraisal of the loan.
- The societies may take steps, by creating a group of PACS with the help of DCCB, to establish more legal cells and tribunals, recovery branches, NPA management departments, Lok Adalat, etc., speedy recovery of NPA in addition to the existing systems.
- It is advised to PACS to display the detailed information related to NPA, capital adequacy, investments etc., in their annual reports.
- It is suggested that incentives can be given to honest repayers to create a better climate for repayment.
- The government should introduce proper measures to help societies take possessions of land belonging to wilful defaulters.
- As it is found higher AAG rate of overdue to advances, it is suggested that VEERAPANDY PACS must employ efficient machinery for lending and in timely recovery of loans. Society should concentrate on willful defaulters and speed up recovery efforts from them.

**Conclusion**

In this current Post Covid economic situation, financial institutions are exposed to many financial crises or challenges in their operating environment. The problem of Non-performing
Assets becomes a burden to the bank. A high NPA indicates poor asset quality and a lack of a credit management system in the bank. The magnitude of NPA has significant influences on the profitability and performance of the bank. The most challenging issue concern to the Primary Agricultural Cooperative Societies (PACS) is the mounting amount of Non-performing assets in the rural credit system.

The present study observed that the NPA level of the selected cooperative societies showed a declining trend over the study period. The study also observed that even though there is an improvement in the Non-performing asset management in the societies, in the case of SITHATHUR PACS, a higher AAG rate of overdue advances is found. It is indicated that they have a poor credit management system. Therefore Co-operative Societies should manage their NPA effectively and systematically.

The RBI and other regulatory authorities introduced prudential norms and guidelines to provide a systematic framework to manage the NPA effectively. The precautionary measures such as alarming early system, sound lending policy, evaluation of loan proposal, good credit appraisal system, systematic monitoring system, etc., are advisable to the bank. The post loan inspection and credit audit is an effective tool to verify the creditworthiness of the borrowers. The bank can make the best use of recovery measures and channels to overcome the problem of recovery and disposal of a problem loan. It is needless to say, the issue of NPA is solved only when the bank makes an effort to enhance the credit assessment and risk management system.

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