

# A Study on the Profitability and Financial Performance of District Central Cooperative Banks in Tamil Nadu

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## Abstract

Agriculture has a crucial role in the Indian economy. Institutional and non-institutional sources of agricultural loans exist in India. Institutional credit cooperatives play a significant role in the provision of finance to the agricultural sector. The formation of these societies dates back to 1904 when the first Cooperative Credit Societies Act was passed. The objective was to provide cheap credit to the farmers to relieve them from the clutches of money lenders are thought to be the foundations of the overall cooperative structure. Cooperative societies not only mobilized deposits and provide agricultural and rural credit but also extend credit to priority sectors of the country. Banks' profitability and financial operations are always solid as they expand services to subsidiaries. *The present analysis is based on secondary data from the years 2012-13 to 2021-22. The growth of different parameters is done by using Compound Average Growth Rate (CAGR) and profitability and financial performance by using ratio analysis and regression analysis of the data.* The poor financial condition affects the growth of banks due to their reliability, liquidity, and profitability. The present analysis is based on secondary data from the years 2012-13 to 2021-2022. This paper deals with the profitability and financial performance of District Central Cooperative Banks (DCCBs) in Tamil Nadu.

**Keywords:** Cooperative banks, Deposits, Working Capital, Loan Operations, Non – Performing Assets, Cooperative Structure, Source of Funds, Ratios, Financial Performance.

## 1. INTRODUCTION

The agricultural cooperative credit system started in India from small beginnings in 1904 and was developed by organizing rural credit societies. The cooperative movement was introduced by the government in India to eliminate the role of usurious moneylenders and to provide institutional arrangements for the rural credit market. After independence, based on the recommendations of the All India Rural Credit Survey Committee in 1954, the Government of India paid much attention to organizing such societies throughout the country. Today this system consists of short-term and long-term credit structures, which meet the different forms of credit needs of the cultivators and others in rural areas. The short-term cooperative credit structure consists of 31 State Cooperative Banks at the State

level, 351 District Central Cooperative Banks at the district level, and 95509 PACCS at the village level as of 2020-2021.

In the cooperative banking structure, the District Cooperative Banks (DCBs) are nodal centers of the cooperative financial institutions. They have to mobilize the available resources and utilize them most efficiently and profitably. The DCCBs constitute an important link between the Apex Cooperative Banks and the Primary Agricultural Cooperative Credit Societies (PACCS). Evaluating the success of the cooperative movement, in general, depends on the effective functioning of the cooperative banking business. Therefore the DCCBs can be referred to as a leader of the cooperative movement and they undertake various developmental and promotional activities. DCCB is considered a social banker because they take banking facility to the rural areas and brings lower segment people under the principle of financial inclusion through their member societies. The most important aspect of the DCCBs is providing personal banking services to the people who are living in the particular district along with financing to the member societies.

## 2. REVIEW OF LITERATURE

The subject of evaluation of DCCBs has attracted considerable research attention in the recent past. Various Committees and Commissions of the Government of India (GOI), Reserve Bank of India (RBI), National Bank for Agriculture and Rural Development (NABARD), and State Government, and the studies conducted by individual researchers have covered various dimensions of the financial performance of DCCBs. In their study, *Raja, S (2005)* found that the burden rate should be reduced and the spread rate is increased so that profitability can be at a higher rate. *Hulas Pathak (2005)* examined the efforts that should also be made to step up deposit mobilization especially in the rural sector by introducing innovative schemes and incentives based on the specific credit needs of the people. *Jadhav, K.L and Kasar. D.V. (2005)* suggested that efforts should be made to enhance deposit mobilization and investment of funds in government securities and fixed deposits for transparency in financial management. The higher proportion of own funds in the working funds of the bank and the concern showed by the bank in the timely recovery of loans resulted in an increased financial margin of the CCB. It was found that less dependence on new outside resources helped these banks in increasing their financial margin. *Fulbag Singh and Balwinder Singh (2006)* found that profitability ratios invite the serious attention of the management to put an integrated effort to correct the financial performance. In the future *Mohan, S (2008)* found that the bank should expand its operations to significantly increase non-interest income. *Mayilsamy, R (2008)* the loan operations of financial institutions including DCCBs carry on business out of funds, which are collected as deposits or borrowings from higher financial agencies. It was found that the efficiency of banking institutions as financial intermediaries depends to a great extent on the timely recovery of loans. *Jeyakumaran.M & Muthumeena. M (2017)* analyzed the profitability and performance of the DCCBs with the help of earning ratios which are represented by return on assets and interest to total income ratio, the management capability ratios represented by expenditure to income ratio, diversification ratio, and credit deposit ratio and also with assets quality ratio.

## 3. OBJECTIVES OF THE STUDY

- To evaluate the Growth of Central Cooperative Banks in Tamil Nadu

- To Analysis the Profitability and Financial Performance of Central Cooperative Banks in Tamil Nadu.
- To suggest suitable measures to strengthening the financial performance of DCCBs in Tamil Nadu.

#### 4. METHODOLOGY OF THE STUDY

In this paper, an attempt has been made to study the profitability and financial performance of DCCBs in Tamil Nadu. The present analysis is based on secondary data from the years 2012-13 to 2021-22. The data on share capital, deposits, borrowings, working capital, loans issued, recovery, demand, overdue, total income, total expenditure, net profit, etc., were gathered from various websites and publications. Personal interaction was held with the officials of DCCBs to understand various issues involved in the increases in growth. The growth of different parameters is done by using Compound Average Growth Rate (CAGR) and profitability and financial performance by using ratio analysis and regression analysis of the data.

#### 5. RESULTS AND DISCUSSION

##### 5.1 Resources Funds through DCCBs in Tamil Nadu

The sources of funds of DCCBs consist of share capital, reserves and other funds, Deposits from members and non-members and borrowings from State Cooperative Banks, RBI, and NABARD minus fixed assets.

**Table-1: Growth of Funds Resources through DCCBs in Tamil Nadu**

*(Rs. In Crores)*

| Years   | Share Capital     | Reserve Fund       | Deposits            | Borrowings         | Working Capital     |
|---------|-------------------|--------------------|---------------------|--------------------|---------------------|
| 2012-13 | 1260.99<br>(4.58) | 2760.89<br>(10.03) | 18856.34<br>(68.53) | 7071.95<br>(25.70) | 27514.37<br>(-)     |
| 2013-14 | 1362.36<br>(4.34) | 2703.71<br>(8.61)  | 21823.66<br>(69.53) | 6231.39<br>(19.85) | 31385.33<br>(12.33) |
| 2014-15 | 1285.60<br>(3.70) | 3104.26<br>(8.94)  | 24158.77<br>(69.55) | 5591.18<br>(16.10) | 34737.94<br>(9.65)  |
| 2015-16 | 1365.02<br>(3.67) | 3232.22<br>(8.69)  | 29660.28<br>(76.79) | 5123.01<br>(16.78) | 37174.36<br>(6.55)  |
| 2016-17 | 1386.98<br>(3.51) | 3280.47<br>(8.29)  | 30702.84<br>(77.62) | 4319.68<br>(10.92) | 39552.93<br>(6.01)  |
| 2017-18 | 1320.15<br>(3.28) | 3821.37<br>(9.50)  | 29708.32<br>(73.86) | 4881.32<br>(12.14) | 40220.40<br>(1.66)  |
| 2018-19 | 1500.49<br>(3.55) | 3870.98<br>(9.15)  | 31712.08<br>(74.95) | 6325.88<br>(14.95) | 42311.02<br>(4.94)  |
| 2019-20 | 1756.15<br>(3.92) | 3678.73<br>(8.21)  | 32220.69<br>(71.93) | 7731.98<br>(17.26) | 44797.13<br>(5.55)  |
| 2020-21 | 1697.52<br>(3.63) | 3767.21<br>(8.05)  | 33782.96<br>(72.15) | 8529.61<br>(18.22) | 46826.19<br>(4.33)  |
| 2021-22 | 1862.96<br>(3.79) | 3952.97<br>(8.04)  | 35862.19<br>(72.98) | 9368.35<br>(19.06) | 49142.68<br>(4.71)  |

|                 |                |                |                 |                |                 |
|-----------------|----------------|----------------|-----------------|----------------|-----------------|
| <b>Average</b>  | <b>1479.82</b> | <b>3417.28</b> | <b>28848.80</b> | <b>6517.44</b> | <b>39366.20</b> |
| <b>CGAR (%)</b> | <b>1.80</b>    | <b>1.90</b>    | <b>2.80</b>     | <b>1.90</b>    | <b>2.60</b>     |

Sources: *Performance of District Central Cooperative Banks for Various Years*, [www.nafscob.org](http://www.nafscob.org).

Note:

1. Figures in brackets are percentage to total working capital
2. Figures in brackets in working capital are percentage of change over previous years.

The growth of funds resources through DCCBs in Tamil Nadu still depends on deposits from members and non-members as the main sources of their working capital. For example, the total deposits at DCCBs increased from Rs. 18856.34 crores in the year 2012-13 to Rs. 35862.19 crores in the year 2021-22. Further, its percentage to total working capital also increased fluctuating trend from 68.53 per cent to 71.93 per cent during the period from 2012-13 to 2021-22 and stood at 77.62 per cent in the year 2016-17 (*Table - 1*). However, it was found that the growth rate of working capital was 1.66 per cent lower than the previous year 2016-17 due to currency devaluation during these periods.

## 5.2 Loan Operations of DCCBs in Tamil Nadu

DCCBs deploy a major portion of their funds for granting different types of loans and advances. On the basis of duration, loans are mainly classified into short-term loan, medium-term loan and long-term loan.

**Table - 2: Trends in Loan Operations of PACS in Tamil Nadu**

(Rs. in Crores)

| <b>Years</b> | <b>Total Loans Issued</b> | <b>Total Outstanding</b> | <b>Total Demand</b> | <b>Total Collection</b> | <b>Total Overdue</b> |
|--------------|---------------------------|--------------------------|---------------------|-------------------------|----------------------|
| 2012-13      | 29655.35<br>(-)           | 24181.06<br>(-)          | 20579.54<br>(-)     | 19515.92<br>(-)         | 1063.62<br>(-)       |
| 2013-14      | 31182.34<br>(4.90)        | 25185.90<br>(3.99)       | 24857.26<br>(17.21) | 23310.15<br>(16.28)     | 1547.11<br>(31.25)   |
| 2014-15      | 29095.74<br>(-7.17)       | 24851.31<br>(-1.35)      | 22800.18<br>(-9.02) | 21262.44<br>(-9.63)     | 1537.74<br>(-0.61)   |
| 2015-16      | 27569.36<br>(-5.54)       | 24819.26<br>(-0.13)      | 21726.24<br>(-4.94) | 20063.91<br>(-5.97)     | 1662.33<br>(7.49)    |
| 2016-17      | 25030.19<br>(-10.14)      | 23374.91<br>(-6.18)      | 21153.81<br>(-2.71) | 19707.01<br>(-1.81)     | 1446.80<br>(-14.90)  |
| 2017-18      | 25820.31<br>(3.06)        | 24450.74<br>(4.40)       | 19846.66<br>(-6.59) | 18148.18<br>(-8.59)     | 1698.48<br>(14.82)   |
| 2018-19      | 28237.00<br>(8.56)        | 27458.70<br>(10.95)      | 21152.02<br>(6.17)  | 19374.01<br>(6.33)      | 1778.01<br>(4.47)    |
| 2019-20      | 30592.23<br>(7.70)        | 29683.46<br>(7.49)       | 24229.30<br>(12.70) | 22306.18<br>(13.15)     | 1923.12<br>(7.55)    |
| 2020-21      | 32683.69<br>(6.40)        | 31568.26<br>(5.97)       | 26354.91<br>(8.07)  | 24338.51<br>(8.35)      | 2167.42<br>(11.27)   |
| 2021-22      | 35273.04<br>(7.34)        | 33629.11<br>(6.13)       | 28740.64<br>(8.30)  | 26635.40<br>(8.62)      | 2219.07<br>(2.33)    |

|                 |                 |                 |                 |                 |                |
|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|
| <b>Average</b>  | <b>29513.93</b> | <b>26920.27</b> | <b>23144.06</b> | <b>21466.17</b> | <b>1704.37</b> |
| <b>CAGR (%)</b> | <b>0.60</b>     | <b>1.50</b>     | <b>0.90</b>     | <b>0.80</b>     | <b>2.80</b>    |

Source: As in Table: 1

Note: Figures in bracket are percentage of change over the previous years

The trends of loan operations of DCCBs in Tamil Nadu were found that the loans issued increasing fluctuated trends from Rs. 29655.35 crores in the year 2012-13 to Rs. 35273.04 crores in the year 2021-22. The overall growth of loans issued in the study period at DCCBs in Tamil Nadu was the lowest at Rs. 25030.19 crores in the year 2016-17 (*Table - 2*). Though there were fluctuations in the percentage of change over previous years, the CAGR for total loan outstanding stood at 1.50 per cent. The cumulative result is that the members and non-members, who are mostly borrowers, have little or no interest in their stakes in the DCCBs. On the contrary, the Government policies related to loan and interest waivers and delaying of recovery here led the borrowers to presume that they could with impunity, delay or even fail to meet their repayment obligations.

### 5.3 Ratio Analysis

Ratio analysis is a concept or technique which is as old as accounting concepts. Financial analysis is a scientific tool. It has assumed an important role as a tool for appraising the real worth of an enterprise, its performance, and its pitfalls. It also helps to find out any cross-sectional and time series linkages between various groups. Ratio analysis means the process of computing, determining, and presenting the relationship between related items and groups of terms of the financial statements.

#### 5.3.1 Operational Ratios

An analysis of the operational ratios might bring to light the operational efficiency of the bank in its various activities, namely, mobilization of funds uses of funds, cost of funds, earning capacity, etc. the funds of members, creditors, and deposit holders are invested in various kinds of assets and lent as advances to generate revenue and profit. *Table - 3* reveals the analysis of operational ratios of establishment expenditure to the total expenditure of DCCBs in Tamil Nadu, this ratio has ranged in small fluctuation increasing from 0.32 percent in the year 2012-13 to 0.33 per cent in the year 2021-22. The ratio percentage of total income to working capital was higher than all the years of the study period registering 4.15 per cent in the year 2013-14. Total expenditure to total income slowly increased from 51.91 per cent to 58.06 per cent during the year from 2012-13 to 2021-22. The ratio percentage of recovery to demand was decreasing from 94.83 per cent in the year 2012-13 to 92.68 per cent in the 2021-2022. The overdue to demand ratio fluctuated and increased during the study period.

**Table - 3: Analysis of Operational Ratios**

(In percentage)

| Years   | Establishment Expenditure to Total Expenditure | Total Income to Working Capital | Total Expenditure to Total Income | Recovery to Demand | Overdue to Demand |
|---------|--|---------------------------------|-----------------------------------|--------------------|-------------------|
| 2012-13 | 0.32   | 3.10                            | 51.91                             | 94.83              | 5.17              |
| 2013-14 | 0.23   | 4.15                            | 62.16                             | 93.78              | 6.22              |
| 2014-15 | 0.29   | 3.05                            | 55.43                             | 93.26              | 6.74              |
| 2015-16 | 0.24   | 3.41                            | 59.41                             | 92.35              | 7.65              |

|         |      |      |       |       |      |
|---------|------|------|-------|-------|------|
| 2016-17 | 0.29 | 2.95 | 55.20 | 93.16 | 6.84 |
| 2017-18 | 0.23 | 3.87 | 62.59 | 91.44 | 8.56 |
| 2018-19 | 0.33 | 3.52 | 57.49 | 91.59 | 8.41 |
| 2019-20 | 0.32 | 2.91 | 57.91 | 92.06 | 7.94 |
| 2020-21 | 0.33 | 2.95 | 57.41 | 91.75 | 8.25 |
| 2021-22 | 0.33 | 3.07 | 58.06 | 92.68 | 7.32 |

### 5.3.2 Profitability Ratios

Profitability indicates the efficiency of the bank in generating surplus and the overall financial performance of the unit. *Table - 4* shows the analysis of the profitability ratio of net profit to the total deposit of DCCBs in Tamil Nadu, this ratio has highly fluctuated and declined from 1.06 per cent in 2012-13 to 0.63 per cent in the year 2021-22. The net profit to working capital ratio and net profit to total income ratio also fluctuated and declined trends during the study period. It was found that the DCCBs focused on augmenting the portion of deposits, and effective lending practices were not undertaken. The increase in operating expenses reduced the net profit of DCCBs and lowered the proportion of net profit in the total income.

**Table - 4: Analysis of Profitability Ratios**

(In percentage)

| Years   | Net Profit to Total Deposits | Net Profit to Working Capital | Net Profit to Total Income |
|---------|------------------------------|-------------------------------|----------------------------|
| 2012-13 | 1.06                         | 0.72                          | 23.35                      |
| 2013-14 | 1.12                         | 0.78                          | 18.75                      |
| 2014-15 | 0.98                         | 0.68                          | 22.42                      |
| 2015-16 | 0.91                         | 0.73                          | 21.36                      |
| 2016-17 | 0.83                         | 0.65                          | 21.89                      |
| 2017-18 | 0.96                         | 0.71                          | 18.25                      |
| 2018-19 | 0.67                         | 0.50                          | 14.27                      |
| 2019-20 | 0.58                         | 0.42                          | 14.46                      |
| 2020-21 | 0.60                         | 0.43                          | 14.59                      |
| 2021-22 | 0.63                         | 0.46                          | 14.96                      |

### 5.3.3 Productivity Ratios

Banking was essentially a service-oriented institution. However, the productivity of all banks can be measured through the performance of their employees over a particular period. The analysis of the productivity ratio of Tamil Nadu, the total deposits to the number of employees has increased from Rs. 444.41 lakhs in the year 2012-13 to Rs. 781.14 lakhs in the year 2021-22. The total loans and advances to the number of employees fluctuated trend from Rs. 698.92 lakhs to Rs. 768.31 in the period from 2012-13 to 2021-2022 and stood at Rs. 526.40 lakhs in the year 2016-17. The total income to the number of employee's ratio has fluctuated and increased during the study period. The net profit for the number of employees has slowly fluctuated increasing from Rs. 4.70 lakhs in the year 2012-13 to Rs.4.91 lakhs in the year 2021-2022 and highest at Rs. 6.09 lakhs in the year 2016-17 (*Table - 5*).



**Table - 5: Analysis of Productivity Ratios**

(Rs. In Lakhs)

| Years   | Total Deposits to No. of Employees | Total Loans and Advances to No. of Employees | Total Income to No. of Employees | Net Profit to No. of Employees |
|---------|------------------------------------|--|----------------------------------|--------------------------------|
| 2012-13 | 444.41                             | 698.92                                       | 20.11                            | 4.70                           |
| 2013-14 | 526.12                             | 751.74                                       | 31.40                            | 5.89                           |
| 2014-15 | 606.24                             | 730.13                                       | 26.56                            | 5.96                           |
| 2015-16 | 626.54                             | 582.37                                       | 26.77                            | 5.72                           |
| 2016-17 | 645.70                             | 526.40                                       | 24.53                            | 5.37                           |
| 2017-18 | 636.70                             | 553.37                                       | 33.38                            | 6.09                           |
| 2018-19 | 701.44                             | 624.57                                       | 32.81                            | 4.68                           |
| 2019-20 | 729.14                             | 692.29                                       | 29.48                            | 4.26                           |
| 2020-21 | 754.76                             | 730.20                                       | 30.91                            | 4.51                           |
| 2021-22 | 781.14                             | 768.31                                       | 32.81                            | 4.91                           |

### 5.3.4 Solvency Ratios

Financial strength is a pre-requisite for any bank to run its banking operation successfully. To measure the financial strength, it is essential to calculate the solvency ratio of the DCCBs. This ratio evaluates the long-term financial viability of the banks. The analysis of solvency ratios of investment of total deposits has fluctuated increasing from 28.97 per cent to 35.59 per cent during the period from 2012-13 to 2021-22 and highest at 44.29 per cent in the year 2017-18. The total deposits to loans and advances ratio have above 85 per cent during the study period except in the year 2016-17. The cost of management to working capital ratio has slowly fluctuated and increased from 2.38 per cent to 2.51 per cent during the study period from 2012-13 to 2021-22 (Table - 6). The DCCBs were very cautious in investing the deposit money in various avenues to bring stable growth.

**Table - 6: Analysis of Solvency Ratios**

(In percentage)

| Years   | Investment to Total Deposits | Total Deposits to Loans and Advances | Cost of Management to Working Capital |
|---------|------------------------------|--------------------------------------|---------------------------------------|
| 2012-13 | 28.97                        | 97.27                                | 2.38                                  |
| 2013-14 | 30.99                        | 92.88                                | 3.37                                  |
| 2014-15 | 31.36                        | 91.44                                | 2.36                                  |
| 2015-16 | 34.40                        | 92.95                                | 2.68                                  |
| 2016-17 | 38.89                        | 81.52                                | 2.30                                  |
| 2017-18 | 44.29                        | 86.91                                | 3.17                                  |
| 2018-19 | 38.92                        | 89.04                                | 3.01                                  |
| 2019-20 | 37.51                        | 94.95                                | 2.49                                  |
| 2020-21 | 36.94                        | 96.75                                | 2.52                                  |
| 2021-22 | 35.59                        | 98.36                                | 2.51                                  |

### 5.4 Regression Analysis

Regression analysis was applied to find the effect of the variable viz., share capital, total deposits, borrowings, and loans and advances on net profit. It was observed from the below table-7 that the multiple regression between the selected independent variables and net profit (Dependent) was 0.892, which indicated that there was a high level of correlation between the independent variables and the dependent variable.

**Table - 7: Regression Analysis of DCCBs in Tamil Nadu**

| Model                          | Regression Coefficients |            | Standardized Coefficients | t      | Sig. |
|--------------------------------|-------------------------|------------|---------------------------|--------|------|
|                                | B                       | Std. Error | Beta                      |        |      |
| (Constant)                     | 74.539                  | 129.102    |                           | .577   | .589 |
| Share Capital                  | -.156                   | .126       | -1.048                    | -1.240 | .270 |
| Deposits                       | .006                    | .003       | 1.000                     | 1.829  | .127 |
| Borrowing                      | -.028                   | .015       | -1.459                    | -1.948 | .109 |
| Loan and Advances              | .014                    | .006       | 1.323                     | 2.154  | .084 |
| Dependent Variable: Net Profit |                         |            |                           |        |      |

| R    | R Square | F     | Sig.          |
|------|----------|-------|---------------|
| .892 | .796     | 4.890 | Significant** |

The F-test value was not significant showing 4.890. The R2 value (0.796) indicated that 79.6 per cent of the variation in net profit/loss was influenced by the related independent variables. Individually, from the regression coefficients, it was found that deposits and loans, and advances have a positive effect on net profit whereas share capital, borrowings harm net profit.

### 6. CONCLUSIONS:

From the above analysis, the development of financial resources by DCCBs in Tamil Nadu depended on deposits of members and non-members as their main sources of working capital during the study period. The level of loans and advances of DCCBs had a fluctuating trend across Tamil Nadu during the study period. The NPA problem is high in DCCBs in Tamil Nadu. Hence, the NPA problem continues even after the introduction of loan waiver schemes and full-interest repayment schemes. The net profit to working capital ratio and net profit to total income ratio showed fluctuating and declining trends during the study period. DCCBs focused on increasing the portion of deposits. But it was found that effective lending practices were not followed. The increase in operating expenses reduced the net profit of DCCBs and reduced the ratio of net profit to total income. The DCCBs were very cautious in investing the deposit money in various avenues to bring stable growth. The operational efficiency, profitability, productivity, and solvency of the DCCBs have to be examined from time to time to ensure their effective performance.

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