

## **State Cooperative Banking in Northeast India: Financial and Operational Viability Analysis**

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State Cooperative Banks provide the necessary financial resources to District Cooperative Banks and Primary Agricultural Cooperative Societies, and are responsible for their recovery. They have played significant role in the development of rural economy of India. The paper explores and evaluates the growth and progress of State Cooperative Banks in the Northeastern region of India. Further, efforts are also given to make a comparative analysis of State Cooperative Banks in the Northeastern region and India through some selected financial indicators. It is found that all the financial variables (capital, reserves, deposits, advances, demand, collection and over dues) increased with higher growth rate during 2002-2009 on the basis of Compound Annual Growth Rate. The paper highlights the reasons for slow progress of State Cooperative Banking in the Northeastern region of India which is considered as the most backward region of the country. Further, this paper focuses on several pitfalls and shortcomings faced by State Cooperative Banks in region. Finally, it is observed that the State Cooperative Banks in the Northeastern region are not at par with the all India level which is evidenced from the study of some selected financial indicators.

**Keywords:** State Cooperative Banks, Northeastern region of India, Compound Annual Growth Rate, Selected Financial Ratios.

### **Introduction**

The economic development emerging out of globalisation, liberalisation and privatisation has resulted in the creation of very competitive environment. Due to this prevailing environment of competition, the role of public sector is declining and private sector is rising very strong. Hence, cooperative banks have no option but to compete with these highly professionalised institutions in providing rural credit to the farmers (Bhagwati, 2005). Before 1969, Cooperative Credit institutions had the sole monopoly in the field of rural credit in India. Even today cooperative credit institutions deliver credit to the largest portion of rural population in India (Murry 2008). An emphasis was laid on

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the disbursement of rural credit through a multi-agency network (Tripathy & Jain 2009: 49-58) consisting of Commercial Banks, Regional Rural Banks and Cooperatives. So, the performance of cooperative banks should have to be analysed and evaluated.

In the North Eastern Region (NER), the Credit Cooperative Movement which started with the establishment of "Gaonlia Banks" in 1912 in Assam led to the establishment of "Assam Cooperative Apex Bank" in 1948 with seven District Central Cooperative Banks (DCCBS) at the intermediary level and Gaonlia Banks/Primary Agricultural Credit Societies (PACS) at the grass root level. With the reorganisation of the erstwhile Assam State Cooperative bank over a period of time, the cooperative movement spread to other states in the region. The region as well as the country's youngest state Cooperative Bank was established in Sikkim which started banking operations in 1998.

The Assam Cooperative Apex Bank, which had three-tier structure, was reorganised in 1978 and was converted into a two-tier structure. All other states of the region have two-tier structure with the State Cooperative Bank at the apex level and the grass root level societies in the form of Primary Agriculture Credit societies, Service Cooperative Societies, LAMPS, Farmer Service Societies, etc. at the grass root level. The state of Assam, Tripura and Manipur have separate Long Term Cooperative credit structure in the form of Agriculture and Rural Development Bank (ARDBS), whereas in other States, the Short Term Cooperative credit structure itself is taking care of the long term credit portfolios.

According to the latest statistics, the eight State Cooperative Banks (SCBs) in the region have 231 branches. It is observed that a sizeable percentage of SCBs branches in the region are located in the semi-urban and urban areas. Only 42.42 percent of the total branches of SCBs in the region are situated in the rural area while this is 45.67 percent at all India level.

### **Review of Previous Studies**

In this section, an effort is made to review studies that have undertaken so far in respect to the various issues, problems and performance of cooperative banking in India. Rao, Krishna and Rao (1990) undertook a case study of Vijayawada District Central Cooperative Bank in which they studied the factors affecting deposits, advances and profits of that bank. They tried to ascertain the extent of the impact of certain important factors on key financial indicators of the bank under study with the aim to identify the strong and weak factors of growth. Dayanandan and Kumar (1993) evaluated the performance of Central Cooperative Banks of Kerala state and found that though the central cooperative banks achieved better performance in terms of share capital, membership, deposits and reserve funds, there was no corresponding achievement in the net profits during the study period because of high over dues of the banks. Chellani (2008), in a case study analysed the pattern and composition of deposits of Baroda District Central Cooperative bank Ltd. and found that the share of deposits from individuals in total deposits remained around only one fifth till 2000. But it is raised up to two fifth at the end of 2007. He concluded that the proportion of fixed deposits in total deposits had been around four fifth. Vijay Singh (2008) appraised the financial performance of the Rohtak Central Cooperative Bank Limited (Haryana) and analysed the deposits, advances and profitabil-

ity position the bank. He found that the aggregate deposits of the bank increased with low growth rate and the bank did not make good performance in terms of credit advanced to the beneficiaries. Biswa Swarup Misra (2009) examined the performance of PACSs and observed that government's contribution to the share capital of PACS is found to be detrimental to their recovery performance. He also observed that growth of membership size in the PACSs is another factor detrimental to recovery performance. Sakthivel and Aranganathan (2010) examined the working funds, loans portfolio, recovery performance and solvency position of the Salem District Central Cooperative Banks (SDCCB) and Cuddalore District Central Cooperative Banks (CDCCB). They found that there was no much difference in the extent of volatility in short term loans they also used loans between these banks while the medium term issued of SDCCB has been highly inconsistent as compared to that of CDCCB. They also used Altman Model (Z score) to study the solvency position of these two banks. Das & Chaudhury (2011) examined the performance of SCBs in the NER and also make a comparative study on the growth and financial performance of SCBs. They observed that SCBs in NER is not performing well at par with all India level. The SCBs in the NER suffers from low profitability and high NPAs which hinders the growth of SCBs in the Northeast. In another study Das (2012) studies the Meghalaya State cooperative banks financial performance. Hooda (2011a) examines the performance of SCBs and Scheduled Commercial Banks and forwarded comparative assessment between them through some selected financial ratios. He observed that SCBs and Scheduled Commercial Banks differ significantly as per these selected ratios during the years of study. In another study Hooda (2011b) examines the financial performance of DCCBs in India and found that all the financial variables increased with higher growth rate during the study period.

A lot of studies were made to analyse and evaluate the performance of SCBs in India or in respect of SCBs in different states. However, only a few researches is undertaken to study the performance of SCBs in NER which is predominantly an agrarian economy and most of the states of the region are rural based.

## **Objectives**

The objectives of this paper are to assess the growth and structure of cooperative credit societies in the North Easter Region of India and to make a comparative study on the financial health and to identify overall performance of SCBs of NER in the context of all India level. Specifically, the objectives are as follows:

1. To study the growth and status of SCBs in the North Eastern Region of India.
2. To study the financial performance of SCBs in the NER.
3. To make assessment about the future projection of SCBs in the region.
4. To study the extent of progress in owned funds of SCBs in terms of share capital and reserves during the study period.
5. To examine the growth of business SCBs in terms of deposits mobilisation and credit advanced during the study period.
6. To evaluate the recovery performance of SCBs in NER.
7. To study the overall performance financial performance of SCBs with the help of some selected ratios.

8. Finally, efforts are also taken to identify the prospects and constraints of State Cooperative Banks in the region and also to forward some suggestion in this regard.

### **Methodology**

The present paper is exploratory-cum-comparative in nature. It is a census study in which all SCBs of NER and India during the study period have been taken. The nature of data which is collected and used for this research article is secondary. The study covers seven years from 2002-03 to 2008-09. The relevant and required data are collected from secondary sources such as text books, national as well as international journals, dailies and annual reports of NABARD, NAFSCOB, NEC, RBI, and National Cooperative Union of India Publications. The statistical tools which are used in this research study are the methods of central tendency, mean test, correlation and correlation matrix, Probability Density Functions (P value), method of least squares and linear trend. The method of least square and the future prediction (expected value) are obtained using linear trend. Some selected ratios have also been used to study the performance of SCBs in depth. The financial performance of the banks were measured using standard measures like C-D ratio, spread to working funds ratio (Spread/WF), establishment expenses to total expenses ratio (EE/TE), loan out ratio (Loans/Deposits) and non-performing assets to net advances ratio (NPA/Net Adv). Efficiency of the banks was measured using accounting ratios such as deposits per employee (deposit/staff), advances per employee (loans/staff), and net profit per employee (NP/Staff). In this study, the analysis is confined to the traditional financial ratios to measure performance and efficiency mainly because of the readily available data. The following parameters are taken to evaluate the performance of SCBs:

- 1) Owned Funds parameters: a. Share Capital b. Reserves
- 2) Business Parameters: a. Deposits b. Loans and Advances (Outstanding)
- 3) Recovery Performance Parameters: a. Demand b. Collection c. Over dues

### **Results and Discussions**

#### *A) Growth and current status of SCBs in NER and India*

It is observed from the data tabulated in Table 1 and 2 that NER of India shares only a small portion of total SCBs. It is also observed that urban cooperative banks in the region shares more than the rural SCBs and semi-urban SCBs. Moreover, it is also observed that in NER the rate of distribution of staffs in SCBs are not uniform and there is a decreasing trend of employees in offices or branches of SCBs in NER. The percentage of manpower in SCBs of NER in 2002-03 was 17.23 percent which declined to 16.20 percent in 2008-09.

#### *B) Financial and operational performance of SCBs in NER and India-Descriptive statistics (2002-03 to 2008-09)*

It is widely acceptable and recognised that no institution can survive without adequate own resources. Financial health of any financial institution is very important for continuous improvement, making risky cum profitable investment and meeting contingen-

Table 1. State-wise Distribution of Offices/Branches of SCBs

| States    | State Cooperative Banks<br>(As on end March 2009) |            |           |            |
|-----------|---|------------|-----------|------------|
|           | Rural   | Semi-Urban | Urban     | Total      |
| NER       | 98 (2.43)   | 59 (2.14)  | 74 (4.14) | 231 (2.62) |
| All India | 4032  | 2751       | 1787      | 8829       |

Data: Fig in brackets indicates share of NER (in %); Source: Rural Planning & Credit Planning, RBI, NABARD and Report on Trend and Progress of Banking in India-2009-10.

Table 2. Distribution of Staffs of SCBs

| State     | Distribution of Staffs of SCBs |                 |                 |                 |                 |                 |                 |
|-----------|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|           | 2002-03                        | 2003-04         | 2004-05         | 2005-06         | 2006-07         | 2007-08         | 2008-09         |
| NER       | 2721<br>(17.23)                | 2721<br>(17.23) | 2733<br>(17.88) | 2589<br>(17.56) | 2492<br>(16.90) | 2492<br>(16.90) | 2371<br>(16.20) |
| All India | 15793                          | 15793           | 15288           | 14742           | 14748           | 14748           | 14635           |

Data: Fig in brackets indicates share of NER (in %); Source: NAFSCOB

-cies. Table 3 and 4 reveal the growth in owned funds of SCBs in terms of both share capital and reserves. The average amount of total owned funds in SCBs in India is Rupees 8250.45 crores in which the share of share capital is 15 percent while the contribution of reserves is 85 percent during the study period. Again, the average amount of total owned funds in SCBs in NER is Rupees 200.97 crores in which the share of share capital is 45 percent while the contribution of reserves is 55 percent during the study period. The minimum amount of both indicators was in the year 2002-03 and the maximum in 2008-09 in case of SCBs in NER while the minimum amount of both indicators was in the year 2002-03 and the maximum in 2007-08 in case of all India. If we see the growth in owned funds, it is found that the owned funds have increased with 7.4 percent CAGR during 2002-03 to 2008-09 in case of NER and for India it is 8.07 percent. The same pace of growth can be seen in case of the growth of capital and reserves individually. But share capital has been showing better growth as compared to the reserve capital during the study period.

Table 3. Share Capital of SCBs in India & NER (Amount in Rupees Crores)

| State     | Share Capital                |                 |                 |                  |                  |                  |                  |
|-----------|------------------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
|           | 2002-03                      | 2003-04         | 2004-05         | 2005-06          | 2006-07          | 2007-08          | 2008-09          |
| NER       | 50.50<br>(5.63)              | 50.50<br>(5.63) | 68.10<br>(6.86) | 105.38<br>(9.63) | 116.47<br>(8.11) | 116.47<br>(8.11) | 124.32<br>(8.94) |
| All India | 897.15                       | 897.15          | 992.28          | 1094.24          | 1436.68          | 1436.68          | 1390.48          |
| Mean      | NER= 90.25, India = 1163.52  |                 |                 |                  |                  |                  |                  |
| SD        | NER= 32.70, India = 124.32   |                 |                 |                  |                  |                  |                  |
| Min       | NER= 50.5, India = 897.15    |                 |                 |                  |                  |                  |                  |
| Max       | NER= 124.32, India = 1436.68 |                 |                 |                  |                  |                  |                  |
| r         | 0.9351                       |                 |                 |                  |                  |                  |                  |
| P         | 0.001                        |                 |                 |                  |                  |                  |                  |
| CAGR      | NER= 16.20%, India = 7.58%   |                 |                 |                  |                  |                  |                  |

Data: Fig in brackets indicates share of NER (in %), r= Correlation Coefficient, p= P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate Source: Compiled and Calculated from NAFSCOB Reports.

It is observed from the Table 3 that the CAGR of share capital of SCBs in NER during 2002-03 to 2008-09 is 16.20 percent which is much higher than All India (7.58 percent) during the same period. The mean of share capital of SCBs in NER is Rupees 90.25 crores with SD 32.70 and that for all India are Rupees 1163.52 crores with SD of 124.32. The degree of association between the two variables, i.e. share capital of SCBs in NER and India is also observed which is found positive ( $r = 0.9351$ ) and the association is extremely significant as p value 0.001 which is less than the tabulated value.

| Table 4. Reserves of SCBs in India & NER (Amount in Rupees Crores)   |                              |                 |                  |                  |                  |                  |                  |
|--|------------------------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| State  | Reserves                     |                 |                  |                  |                  |                  |                  |
|  | 2002-03                      | 2003-04         | 2004-05          | 2005-06          | 2006-07          | 2007-08          | 2008-09          |
| NER  | 93.11<br>(1.86)              | 93.11<br>(1.86) | 104.58<br>(1.59) | 124.52<br>(1.70) | 134.83<br>(1.66) | 112.45<br>(1.28) | 112.45<br>(1.28) |
| All India  | 5001.68                      | 5001.68         | 6589.81          | 7342.51          | 8144.90          | 8763.95          | 8763.95          |
| Mean   | NER= 110.72, India = 7086.93 |                 |                  |                  |                  |                  |                  |
| SD   | NER= 15.47, India = 1620.34  |                 |                  |                  |                  |                  |                  |
| Min  | NER= 93.11 India = 5001.68   |                 |                  |                  |                  |                  |                  |
| Max  | NER= 134.83 India = 8763.95  |                 |                  |                  |                  |                  |                  |
| r  | 0.740                        |                 |                  |                  |                  |                  |                  |
| p  | 0.0285                       |                 |                  |                  |                  |                  |                  |
| CAGR   | NER= 3.20%, India = 9.80%    |                 |                  |                  |                  |                  |                  |
| Data: Fig in brackets indicates share of NER (in %), r= Correlation Coefficient, p= P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports. |                              |                 |                  |                  |                  |                  |                  |

Further, it is observed from the Table 4 that the reserves of SCBs in NER and India are not significantly associated, since the 'r' is equal to 0.74 and p value is less than 0.05. The mean of reserves of SCBs in NER is Rupees 110.72 crores while that of India it is Rupees 7086.93 crores. The CAGR of reserve capital of SCBs in NER during 2002-03 to 2008-09 is 3.20% which is much lower than All India (9.8%) during the same period.

| Table 5. Borrowings of SCBs in India & NER (Amount in Rupees Crores)   |                               |                 |                  |                  |                  |                  |                  |
|--|-------------------------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| State  | Borrowings                    |                 |                  |                  |                  |                  |                  |
|  | 2002-03                       | 2003-04         | 2004-05          | 2005-06          | 2006-07          | 2007-08          | 2008-09          |
| NER  | 78.87<br>(0.66)               | 98.16<br>(0.73) | 205.97<br>(1.40) | 155.40<br>(0.92) | 240.98<br>(1.09) | 240.98<br>(1.09) | 265.73<br>(1.23) |
| All India  | 11985.08                      | 13522.65        | 14670.97         | 16871.66         | 22150.24         | 22150.24         | 21582.21         |
| Mean   | NER= 183.73, India = 17561.86 |                 |                  |                  |                  |                  |                  |
| SD   | NER= 74.04, India = 4368.81   |                 |                  |                  |                  |                  |                  |
| Min  | NER= 78.87, India = 11985.08  |                 |                  |                  |                  |                  |                  |
| Max  | NER= 265.73, India = 22150.24 |                 |                  |                  |                  |                  |                  |
| r  | 0.8968                        |                 |                  |                  |                  |                  |                  |
| p  | 0.0031                        |                 |                  |                  |                  |                  |                  |
| CAGR   | NER= 22.44%, India = 10.30%   |                 |                  |                  |                  |                  |                  |
| Data: Fig in brackets indicates share of NER (in %), r= Correlation Coefficient, p= P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate; Source: Compiled and Calculated from NAFSCOB Reports. |                               |                 |                  |                  |                  |                  |                  |

Regarding borrowings of SCBs in NER and India, it is observed from the Table 5 that the

association between the two variable is positive and also extremely significant ( $r=0.8968$  and  $p$  value is 0.003). The CAGR of borrowings of SCBs in NER during 2002-03 to 2008-09 is 22.44% which is much higher than All India (10.30%) during the same period. The average borrowings of SCBs in NER are Rupees 183.73 crores with SD 15.47 while the average borrowing of SCBs in India is Rupees 7086.93 crores with SD 1620.34.

| State  | Investments                    |                  |                  |                  |                  |                  |                   |
|--|--------------------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
|  | 2002-03                        | 2003-04          | 2004-05          | 2005-06          | 2006-07          | 2007-08          | 2008-09           |
| NER  | 561.90<br>(3.41)               | 645.17<br>(3.49) | 744.19<br>(3.49) | 688.69<br>(3.03) | 803.24<br>(3.35) | 803.24<br>(3.35) | 1830.62<br>(4.54) |
| All India  | 16485.01                       | 18476.87         | 21328.06         | 22749.90         | 23970.29         | 23970.29         | 40350.04          |
| Mean   | NER= 868.15, India = 23904.35  |                  |                  |                  |                  |                  |                   |
| SD   | NER= 433.18, India = 7777.57   |                  |                  |                  |                  |                  |                   |
| Min  | NER= 561.90, India = 16485.01  |                  |                  |                  |                  |                  |                   |
| Max  | NER= 1830.62, India = 40350.04 |                  |                  |                  |                  |                  |                   |
| r  | 0.9809                         |                  |                  |                  |                  |                  |                   |
| p  | 0.00005                        |                  |                  |                  |                  |                  |                   |
| CAGR   | NER= 21.76%, India = 16.09%    |                  |                  |                  |                  |                  |                   |
| Data: Fig in brackets indicates share of NER (in %), r= Correlation Coefficient, p= P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports. |                                |                  |                  |                  |                  |                  |                   |

Further, it is observed from the Table 6 that the Investments of SCBs in NER and India are extremely significantly, since the 'r' is equal to 0.9809 and p value (0.00005) is less than 0.05. The mean of investment of SCBs in NER is Rupees 868.15 crores while that of India it is Rupees 23904.35 crores. The CAGR of investment of SCBs in NER during 2002-03 to 2008-09 is 21.76% which is higher than All India (16.09%) during the same period.

| State  | Working Capital                 |                   |                   |                   |                   |                   |                   |
|--|---------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|  | 2002-03                         | 2003-04           | 2004-05           | 2005-06           | 2006-07           | 2007-08           | 2008-09           |
| NER  | 1929.60<br>(3.18)               | 2003.80<br>(3.07) | 2398.78<br>(3.39) | 2167.26<br>(2.91) | 2489.25<br>(2.98) | 2489.25<br>(2.98) | 3346.64<br>(3.16) |
| All India  | 60754.75                        | 65216.29          | 70682.13          | 74543.66          | 83446.90          | 83446.90          | 105906.20         |
| Mean   | NER= 2403.51, India = 77713.83  |                   |                   |                   |                   |                   |                   |
| SD   | NER= 473.36, India = 15076.69   |                   |                   |                   |                   |                   |                   |
| Min  | NER= 1929.60, India = 60754.75  |                   |                   |                   |                   |                   |                   |
| Max  | NER= 3346.64, India = 105906.20 |                   |                   |                   |                   |                   |                   |
| r  | 0.9665                          |                   |                   |                   |                   |                   |                   |
| p  | 0.000194                        |                   |                   |                   |                   |                   |                   |
| CAGR   | NER= 9.61%, India = 9.70%       |                   |                   |                   |                   |                   |                   |
| Data: Fig in brackets indicates share of NER (in %), r= Correlation Coefficient, p= P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports. |                                 |                   |                   |                   |                   |                   |                   |

Regarding working capital of SCBs in NER and India, it is observed from the Table 7 that the association between the two variable is positive and also extremely significant ( $r$

=0.9665 and p value is 0.0002). The CAGR of working capital of SCBs in NER during 2002-03 to 2008-09 is 9.61% which is equal to All India level (9.70%) during the same period. The average working capitals of SCBs in NER are Rupees 2403.51 crores while the average borrowing of SCBs in India is Rupees 77713.83 crores.

| State  | Total Demand                  |                  |                  |                  |                  |                  |                  |
|--|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|  | 2002-03                       | 2003-04          | 2004-05          | 2005-06          | 2006-07          | 2007-08          | 2008-09          |
| NER  | 410.74<br>(1.83)              | 410.74<br>(1.83) | 307.67<br>(1.32) | 536.53<br>(2.20) | 562.06<br>(2.03) | 562.06<br>(2.03) | 493.78<br>(1.25) |
| All India  | 22412.79                      | 22412.79         | 23294.19         | 24389.56         | 27706.81         | 27706.81         | 39607.51         |
| Mean   | NER= 469.08, India = 26790.07 |                  |                  |                  |                  |                  |                  |
| SD   | NER= 96.01, India = 6086.49   |                  |                  |                  |                  |                  |                  |
| Min  | NER= 307.67, India = 22412.79 |                  |                  |                  |                  |                  |                  |
| Max  | NER= 562.06, India = 39607.51 |                  |                  |                  |                  |                  |                  |
| r  | 0.399                         |                  |                  |                  |                  |                  |                  |
| p  | 0.188                         |                  |                  |                  |                  |                  |                  |
| CAGR   | NER= 3.12%, India = 9.95%     |                  |                  |                  |                  |                  |                  |
| Data: Fig in brackets indicates share of NER (in %), r= Correlation Coefficient, p= P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports. |                               |                  |                  |                  |                  |                  |                  |

Regarding total demand of SCBs in NER and India, it is observed from the Table 8 that the association between the two variable is positive and but not significant ( $r=0.399$  and p value is 0.188). The CAGR of total demand of SCBs in NER during 2002-03 to 2008-09 is 3.12% which is much lower than All India level (9.95%) during the same period. The average demands of SCBs in NER are Rupees 469.08 crores while the average demand of SCBs in India is Rupees 26790.07 crores.

| State  | Total Collection              |                  |                  |                  |                  |                  |                  |
|--|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|  | 2002-03                       | 2003-04          | 2004-05          | 2005-06          | 2006-07          | 2007-08          | 2008-09          |
| NER  | 131.35<br>(0.71)              | 131.35<br>(0.71) | 133.52<br>(0.68) | 247.77<br>(1.18) | 233.11<br>(0.97) | 233.11<br>(0.97) | 258.02<br>(0.71) |
| All India  | 18437.42                      | 18437.42         | 19736.08         | 21033.49         | 24031.33         | 24031.33         | 36170.93         |
| Mean   | NER= 195.46, India = 23125.43 |                  |                  |                  |                  |                  |                  |
| SD   | NER= 59.92, India = 6213.50   |                  |                  |                  |                  |                  |                  |
| Min  | NER= 131.35, India = 18437.42 |                  |                  |                  |                  |                  |                  |
| Max  | NER= 258.02, India = 36170.93 |                  |                  |                  |                  |                  |                  |
| r  | 0.71                          |                  |                  |                  |                  |                  |                  |
| p  | 0.0372                        |                  |                  |                  |                  |                  |                  |
| CAGR   | NER= 11.91% , India = 11.89%  |                  |                  |                  |                  |                  |                  |
| Data: Fig in brackets indicates share of NER (in %), r= Correlation Coefficient, p= P value (One Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports. |                               |                  |                  |                  |                  |                  |                  |

Further, it is observed from the Table 9 that the degree of association of total collection of SCBs in NER and India are significant, since the 'r' is equal to 0.71 and p value (0.0372) is less than 0.05. The mean of collection of SCBs in NER is Rupees 195.46 crores while that of India it is Rupees 23125.43 crores. The CAGR of investment of

SCBs in NER during 2002-03 to 2008-09 is 11.91% which is equal to All India level (11.89%) during the same period.

Bank does two main functions viz. mobilizing the deposits and advancing the loans to the public in its territory. Operating efficiency of a bank can be assessed by evaluating and analyzing the growth in deposits mobilized and loans advances. In the same direction, Table 10 & 11 shows the growth and progress made by all SCBs in India and NER. The minimum amount of deposits and loans outstanding was in 2002-03 and maximum amount in 2008-09. Deposits have showed better growth than advances in terms of CAGR.

Table 10. Deposits of SCBs in India & NER (Amount in Rupees Crores)

| State  | Deposits                       |                   |                   |                   |                   |                   |                   |
|--|--------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|  | 2002-03                        | 2003-04           | 2004-05           | 2005-06           | 2006-07           | 2007-08           | 2008-09           |
| NER  | 1420.42<br>(3.63)              | 1420.42<br>(3.63) | 1717.74<br>(3.90) | 1827.81<br>(3.83) | 2006.46<br>(4.14) | 2006.46<br>(4.14) | 2872.36<br>(4.03) |
| All India  | 39111.78                       | 39111.78          | 44067.65          | 47672.21          | 48469.61          | 48469.61          | 71315.07          |
| Mean   | NER= 1895.95, India = 48316.82 |                   |                   |                   |                   |                   |                   |
| SD   | NER= 494.38, India = 10930.86  |                   |                   |                   |                   |                   |                   |
| Min  | NER= 39111.78 India = 60754.75 |                   |                   |                   |                   |                   |                   |
| Max  | NER= 2872.36, India = 71315.07 |                   |                   |                   |                   |                   |                   |
| r  | 0.9883                         |                   |                   |                   |                   |                   |                   |
| p  | 0.00001                        |                   |                   |                   |                   |                   |                   |
| CAGR   | NER= 12.45% , India = 10.53%   |                   |                   |                   |                   |                   |                   |
| Data: Fig in brackets indicates share of NER (in %), r= Correlation Coefficient, p= P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports. |                                |                   |                   |                   |                   |                   |                   |

Regarding deposits of SCBs in NER and India, it is observed from the Table 10 that the association between the two variable is positive and they are extremely significant ( $r = 0.9883$  and  $p$  value is  $0.00001$ ). The CAGR of deposits of SCBs in NER during 2002-03 to 2008-09 is 12.45% which is higher than All India level (10.53%) during the same period. The average deposit of SCBs in NER is Rupees 1895.95 crores while the average deposit of SCBs in India is Rupees 48316.82 crores.

Table 11. Loans and Advances Issued of SCBs in India & NER (Amount in Rupees Crores)

| State  | Loans and Advances            |                  |                  |                  |                  |                  |                  |
|--|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|  | 2002-03                       | 2003-04          | 2004-05          | 2005-06          | 2006-07          | 2007-08          | 2008-09          |
| NER  | 295.80<br>(0.75)              | 332.67<br>(0.95) | 309.97<br>(0.70) | 377.55<br>(0.77) | 403.65<br>(0.86) | 403.65<br>(0.86) | 561.61<br>(1.08) |
| All India  | 39202.86                      | 34864.49         | 44325.06         | 48803.54         | 47068.98         | 47068.98         | 51866.21         |
| Mean   | NER= 383.56, India = 44742.87 |                  |                  |                  |                  |                  |                  |
| SD   | NER= 89.68, India = 5866.59   |                  |                  |                  |                  |                  |                  |
| Min  | NER= 295.80, India = 34864.49 |                  |                  |                  |                  |                  |                  |
| Max  | NER= 561.61, India = 51866.21 |                  |                  |                  |                  |                  |                  |
| r  | 0.7466                        |                  |                  |                  |                  |                  |                  |
| p  | 0.0269                        |                  |                  |                  |                  |                  |                  |
| CAGR   | NER= 11.28%, India = 4.78%    |                  |                  |                  |                  |                  |                  |
| Data: Fig in brackets indicates share of NER (in %), r= Correlation Coefficient, p= P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports. |                               |                  |                  |                  |                  |                  |                  |

Regarding loan and advances issued by SCBs in NER and India, it is observed from the Table 11 that the association between the two variable is positive and significant ( $r=0.7466$  and p value is 0.0269). The CAGR of loans and advances issued by SCBs in NER during 2002-03 to 2008-09 is 11.28% which is much higher than All India level (4.78%) during the same period. The average of loan and advance issued by SCBs in NER are Rupees 383.56 crores while the average loan and advance issued by SCBs in India is Rupees 44742.87 crores.

| State  | Loan Outstanding               |                  |                  |                  |                  |                  |                   |
|--|--------------------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
|  | 2002-03                        | 2003-04          | 2004-05          | 2005-06          | 2006-07          | 2007-08          | 2008-09           |
| NER  | 626.61<br>(1.79)               | 626.61<br>(1.79) | 837.50<br>(2.37) | 883.64<br>(2.27) | 962.31<br>(2.06) | 962.31<br>(2.06) | 1197.45<br>(2.59) |
| All India  | 35052.15                       | 35052.15         | 35306.52         | 38960.99         | 46675.82         | 46675.82         | 46200.84          |
| Mean   | NER= 870.92, India = 40560.61  |                  |                  |                  |                  |                  |                   |
| SD   | NER= 201.65, India = 5736.64   |                  |                  |                  |                  |                  |                   |
| Min  | NER= 626.61, India = 35052.15  |                  |                  |                  |                  |                  |                   |
| Max  | NER= 1197.45, India = 46675.82 |                  |                  |                  |                  |                  |                   |
| r  | 0.8365                         |                  |                  |                  |                  |                  |                   |
| p  | 0.0095                         |                  |                  |                  |                  |                  |                   |
| CAGR   | NER= 11.40%, India = 4.71%     |                  |                  |                  |                  |                  |                   |
| Data: Fig in brackets indicates share of NER (in %), r= Correlation Coefficient, p= P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports. |                                |                  |                  |                  |                  |                  |                   |

Further, it is observed from the Table 12 that the degree of association of loan outstanding of SCBs in NER and India are significant, since the 'r' is equal to 0.8365 and p value (0.0095) is less than 0.05. The mean of loan outstanding of SCBs in NER is Rupees 870.92 crores while that of India it is Rupees 40560.61 crores. The CAGR of investment of SCBs in NER during 2002-03 to 2008-09 is 11.40% which is higher than All India level (4.71%) during the same period.

| State   | Total Assets                  |         |         |         |                |                |                |
|---|-------------------------------|---------|---------|---------|----------------|----------------|----------------|
|   | 2002-03                       | 2003-04 | 2004-05 | 2005-06 | 2006-07        | 2007-08        | 2008- 09       |
| NER   | NA                            | NA      | NA      | NA      | 3004<br>(3.50) | 3636<br>(4.03) | 4091<br>(3.86) |
| All India   | NA                            | NA      | NA      | NA      | 85756          | 90151          | 106038         |
| Mean  | NER= 3577 , India = 93981.67  |         |         |         |                |                |                |
| SD  | NER= 545.90, India = 10669.84 |         |         |         |                |                |                |
| Min   | NER= 3004, India = 85756      |         |         |         |                |                |                |
| Max   | NER= 4091, India = 106038     |         |         |         |                |                |                |
| r   | 0.917                         |         |         |         |                |                |                |
| p   | 0.130604                      |         |         |         |                |                |                |
| CAGR  | NER=10.84%, India =7.33%      |         |         |         |                |                |                |
| Data: Fig in brackets indicates share of NER (in percentage), r= Correlation Coefficient, p= P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports, Rural Planning & Credit Planning, RBI, NABARD and Report on Trend and Progress of Banking in India-2009-10. |                               |         |         |         |                |                |                |

Regarding total assets of SCBs in NER and India, it is observed from the Table 13 that the association between the two variable is positive and not significant ( $r = 0.917$  and  $p$  value is 0.13). The CAGR of loans and advances issued by SCBs in NER during 2006-07 to 2008-09 is 10.84% which is much higher than All India level (7.33%) during the same period. The average assets of SCBs in NER are Rupees 3577 crores while the average asset SCBs in India is Rupees 93981.67crores.

**C) Operational efficiency and Profit/Loss of SCBs in NER and India- Descriptive statistics (2002-03 to 2008-09)**

It is observed from Table 14 that SCBs in NER is growing in a positive way as the CAGR of over dues of SCBs in NER is (-) 2.79% while that of India (-2.04%). Further, the degree of association between the two is positive and not significant as the descriptive statistics shows the  $r$  value is 0.2447 and  $p$  value 0.2985. Further, the average over dues for SCBs in NER is Rupees 273.62crores and that all India which is Rupees 3664.64crores (Mean).Thus, it is concluded that all the SCBs in India and NER are growing in the same direction particularly in respect to over dues.

| Table 14. Over dues of SCBs in India & NER (Amount in Rupees Crores)   |                              |                  |                  |                  |                  |                  |                  |
|--|------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| State  | Over dues                    |                  |                  |                  |                  |                  |                  |
|  | 2002-03                      | 2003- 04         | 2004-05          | 2005-06          | 2006-07          | 2007-08          | 2008-09          |
| NER  | 279.39<br>(7.03)             | 279.39<br>(7.03) | 174.15<br>(4.89) | 288.76<br>(8.60) | 328.95<br>(8.95) | 328.95<br>(8.95) | 235.76<br>(6.86) |
| All India  | 3975.37                      | 3975.37          | 3558.11          | 3356.07          | 3675.48          | 3675.48          | 3436.58          |
| Mean   | NER=273.62, India = 3664.64  |                  |                  |                  |                  |                  |                  |
| SD   | NER= 54.38, India= 242.18    |                  |                  |                  |                  |                  |                  |
| Min  | NER= 174.15, India = 3356.07 |                  |                  |                  |                  |                  |                  |
| Max  | NER= 328.95, India = 3975.37 |                  |                  |                  |                  |                  |                  |
| $r$  | 0.2447                       |                  |                  |                  |                  |                  |                  |
| $p$  | 0.2985                       |                  |                  |                  |                  |                  |                  |
| CAGR   | NER= -2.79%, India = -2.04%  |                  |                  |                  |                  |                  |                  |
| Data: Fig in brackets indicates share of NER (in %), $r$ = Correlation Coefficient, $p$ = P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports. |                              |                  |                  |                  |                  |                  |                  |

Regarding profit/loss of SCBs in NER and India, it is observed from the Table 15 that the association between the two variable is positive and is extremely significant ( $r = 0.9648$ ) and  $p$  value is 0.00022). The CAGR of loss incurred by SCBs in NER during 2002-03 to 2008-09 is 43.31% which is much higher than all India level (10.81%) during the same period. The average loss of SCBs in NER is Rupees 190.78crores with huge variation (SD 120.5) while the average profit SCBs in India is Rupees 198.81crores with huge variation (SD 157.16).

Further from Table 16 it is observed that out of eight SCBs in NER, only five incurred profit during 2008-09 while only three incurred profit during 2002-03. Further, the trend analysis (Table 17) on the amount of profit or loss of SCBs in NER shows that there is a clear trend of increasing loss in SCBs in NER i.e. from Rupees 55.87 crores in 2002-03 to Rupees 325.69 crores in 2008-09. Again, the trend analysis on the amount of profit or loss of SCBs in India shows that there is a clear trend of decreasing profit in

SCBs in India i.e. from Rs. 347.55 crores in 2002-03 to Rs. 50.07 crores in 2008-09.

| State     | Profit/Loss                      |                   |                      |                      |                      |                      |                      |
|-----------|----------------------------------|-------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|           | 2002-03                          | 2003-04           | 2004-05              | 2005-06              | 2006-07              | 2007-08              | 2008-09              |
| NER       | -25.28<br>(-6.15)                | -25.28<br>(-6.15) | -207.24<br>(-222.05) | -234.89<br>(-132.89) | -311.89<br>(-672.61) | -311.89<br>(-672.61) | -219.01<br>(-105.84) |
| All India | 410.98                           | 410.98            | 93.33                | 176.75               | 46.37                | 46.37                | 206.92               |
| Mean      | NER= -190.78, India = 198.81     |                   |                      |                      |                      |                      |                      |
| SD        | NER= 120.51, India = 157.16      |                   |                      |                      |                      |                      |                      |
| Min       | NER= -311.89, India = 46.37      |                   |                      |                      |                      |                      |                      |
| Max       | NER= -25.28, India = 410.98      |                   |                      |                      |                      |                      |                      |
| r         | 0.9648                           |                   |                      |                      |                      |                      |                      |
| p         | 0.00022                          |                   |                      |                      |                      |                      |                      |
| CAGR      | NER= - 43.31% , India = - 10.81% |                   |                      |                      |                      |                      |                      |

Data: Fig in brackets indicates share of NER (in %), r= Correlation Coefficient, p= P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports.

| Profit/ Loss Range | 2002-03 | 2003-04 | 2004-05 | 2006 | 2007 | 2008 | 2009 |
|--------------------|---------|---------|---------|------|------|------|------|
| Loss               |         |         |         |      |      |      |      |
| >20                | 1       |         |         |      |      |      |      |
| 10—20              |         | 1       | 1       | 1    |      | 2    | 1    |
| 5—10               |         |         | 1       |      | 1    |      |      |
| 0—5                | 4       | 3       | 2       | 2    | 2    | 2    | 2    |
| Profit             |         |         |         |      |      |      |      |
| 0—5                | 3       | 4       | 4       | 4    | 4    | 4    | 3    |
| 5—10               |         |         |         | 1    | 1    |      | 1    |
| 10—20              |         |         |         |      |      |      | 1    |
| >20                |         |         |         |      |      |      |      |
| Total              | 8       | 8       | 8       | 8    | 8    | 8    | 8    |

Source: Compiled and Calculated from NAFSCOB Reports and Report on Trend and Progress of Banking (RBI, 2008).

| Year    | NER                    |             | India                  |             |
|---------|------------------------|-------------|------------------------|-------------|
|         | Amount of Profit /Loss | Trend Value | Amount of Profit /Loss | Trend Value |
| 2002-03 | -25.28 (-6.15)         | -55.87      | 410.98                 | 347.55      |
| 2003-04 | -25.28 (-6.15)         | -100.84     | 410.98                 | 297.97      |
| 2004-05 | -207.24 (- 222.05)     | -145.81     | 93.33                  | 248.39      |
| 2005-06 | -234.89 (-132.89)      | -190.78     | 176.75                 | 198.81      |
| 2006-07 | -311.89 (-672.61)      | -235.75     | 46.37                  | 149.23      |
| 2007-08 | -311.89 (-672.61)      | -280.72     | 46.37                  | 99.65       |
| 2008-09 | -219.01 (-105.84)      | -325.69     | 206.92                 | 50.07       |

Data: Fig in brackets indicates share of NER (in percentage), Trend value is under Least Square Method. Source: Compiled and Calculated from NAFSCOB Reports, Report on Trend and Progress of Banking.

Regarding cost of management of SCBs in NER and India, it is observed from the Table 18 that the association between the two variable is positive and the degree of association is significant ( $r = 0.7307$ ) and  $p$  value is 0.0311). The CAGR of cost of management by SCBs in NER during 2002-03 to 2008-09 is 5.55% which is much higher than all India level (0.72%) during the same period. The mean of cost of management of SCBs in NER is Rupees 113.62 crores with low variability of SD 44 while the mean cost of management of SCBs in India is Rupees 1027.03 crores with high variability of SD 275.07.

| State  | Cost of Management           |                  |                   |                 |                  |                  |                   |
|--|------------------------------|------------------|-------------------|-----------------|------------------|------------------|-------------------|
|  | 2002-03                      | 2003-04          | 2004-05           | 2005-06         | 2006-07          | 2007-08          | 2008-09           |
| NER  | 120.12<br>(9.56)             | 120.12<br>(9.56) | 171.86<br>(15.55) | 58.72<br>(6.44) | 79.20<br>(11.75) | 79.20<br>(11.75) | 166.12<br>(12.67) |
| All India  | 1255.97                      | 1255.97          | 1105.15           | 911.99          | 674.29           | 674.29           | 1311.57           |
| Mean   | NER= 113.62, India = 1027.03 |                  |                   |                 |                  |                  |                   |
| SD   | NER= 44.00, India = 275.07   |                  |                   |                 |                  |                  |                   |
| Min  | NER= 58.72, India = 674.29   |                  |                   |                 |                  |                  |                   |
| Max  | NER= 171.86, India = 1311.57 |                  |                   |                 |                  |                  |                   |
| r  | 0.7307                       |                  |                   |                 |                  |                  |                   |
| p  | 0.0311                       |                  |                   |                 |                  |                  |                   |
| CAGR   | NER= 5.55%, India = 0.72%    |                  |                   |                 |                  |                  |                   |
| Data: Fig in brackets indicates share of NER (in %), $r$ = Correlation Coefficient, $p$ = P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports. |                              |                  |                   |                 |                  |                  |                   |

The recovery performance of all SCBs in India and NER with the help of the figures of demand, collection (recovery) and over dues as analyzed earlier. The trends and pattern of growth of recovery of all SCBs have been shown in the cited tables 19, 20 and 21.

| State  | Percentage of Recovery to Demand |         |         |         |         |         |         |
|--|----------------------------------|---------|---------|---------|---------|---------|---------|
|  | 2002-03                          | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| NER  | 31.98                            | 31.98   | 43.40   | 46.18   | 41.47   | 41.47   | 52.25   |
| All India  | 82.26                            | 82.26   | 84.73   | 86.24   | 86.73   | 86.73   | 91.32   |
| Mean   | NER= 41.25, India = 85.75        |         |         |         |         |         |         |
| SD   | NER= 7.32, India = 3.12          |         |         |         |         |         |         |
| Min  | NER= 31.98, India = 82.26        |         |         |         |         |         |         |
| Max  | NER= 52.25, India = 91.32        |         |         |         |         |         |         |
| r  | 0.9221                           |         |         |         |         |         |         |
| p  | 0.0016                           |         |         |         |         |         |         |
| CAGR   | NER= 8.53%, India = 1.76%        |         |         |         |         |         |         |
| Data: Fig in brackets indicates share of NER (in %), $r$ = Correlation Coefficient, $p$ = P value (one Tailed), SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports. |                                  |         |         |         |         |         |         |

It is observed from the Table 19 that the degree of association between the percentage of recovery to demand of SCBs in NER and India are significant, since the 'r' is equal to

0.9221 and p value (0.0016) is less than 0.05. The mean of percentage of recovery to demand of SCBs in NER is Rupees 41.25 crores while that of India it is Rupees 85.75 crores. The CAGR of percentage of recovery to demand of SCBs in NER during 2002-03 to 2008-09 is 8.53% which is higher than all India level (1.76%) during the same period. Further, it is observed from Table 19 that the SCBs in NER have a positive aspect of high percentage of recovery to demand in comparison to all India level.

| % of Recovery | Number of SCBs |         |         |         |         |         |         |
|---------------|----------------|---------|---------|---------|---------|---------|---------|
|               | 2002-03        | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| Up to 20%     | 2              | -       | 1       | -       | 1       | 1       | 1       |
| 20%–40%       | 3              | 4       | 3       | 3       | 2       | 1       | 1       |
| 40%–60%       | 2              | 4       | 2       | 3       | 2       | 4       | 1       |
| Above 60%     | 1              | -       | 2       | 2       | 3       | 2       | 5       |
| Total         | 8              | 8       | 8       | 8       | 8       | 8       | 8       |

Source: Compiled and Calculated from NAFSCOB Reports and Report on Trend and Progress of Banking.

Further, Table 20 shows the classification of SCBs according to range of recovery in NER. It is observed that out of eight SCBs in NER, five SCBs achieve the recovery percentage of above 60% in 2008-09, while in 2002-03 the number was only one in 2002-03.

| Year    | NER                                   |             | India                                 |             |
|---------|---------------------------------------|-------------|---------------------------------------|-------------|
|         | Recovery to Demand (% as at end June) | Trend value | Recovery to Demand (% as at end June) | Trend Value |
| 2002-03 | 31.98                                 | 32.91       | 82.26                                 | 81.67       |
| 2003-04 | 31.98                                 | 35.69       | 82.26                                 | 83.03       |
| 2004-05 | 43.40                                 | 38.47       | 84.73                                 | 84.39       |
| 2005-06 | 46.18                                 | 41.25       | 86.24                                 | 85.75       |
| 2006-07 | 41.47                                 | 44.03       | 86.73                                 | 87.11       |
| 2007-08 | 41.47                                 | 46.81       | 86.73                                 | 88.47       |
| 2008-09 | 52.25                                 | 49.59       | 91.32                                 | 89.83       |
| CAGR    | 8.53%                                 |             | 1.60%                                 |             |

Data: Trend value is under Least Square Method, CAGR= Compound Annual Growth Rate.  
Source: Compiled and Calculated from NAFSCOB Reports and Report on Trend and Progress of Banking.

The trend analysis (Table 21) on percentage of recovery to demand of SCBs in NER shows that the percentage of recovery to demand of SCBs is in increasing trend i.e. from 32.91% in 2002-03 to 49.59% in 2008-09. Again, percentage of recovery to demand of SCBs in India shows that the percentage of recovery to demand of SCBs is in increasing trend i.e. from 81.67% in 2002-03 to 89.83% in 2008-09.

Table 22. Amount of NPA's of SCBs & Trend Analysis  
(As at end March; Amount in Rupees Crores)

| Year    | NER                          |             | India     |             |
|---------|------------------------------|-------------|-----------|-------------|
|         | Total NPA                    | Trend value | Total NPA | Trend Value |
| 2002-03 | 330.96 (5.26)                | 369.96      | 6293.70   | 6508.52     |
| 2003-04 | 382.62 (5.84)                | 384.83      | 6547.73   | 6448.87     |
| 2004-05 | 438.93 (7.23)                | 399.70      | 6071.60   | 6389.22     |
| 2005-06 | 452.41 (6.72)                | 414.57      | 6734.93   | 6329.57     |
| 2006-07 | 417.10 (6.72)                | 429.44      | 6704.00   | 6269.92     |
| 2007-08 | 445.00 (7.19)                | 444.31      | 6191.00   | 6210.27     |
| 2008-09 | 435.00 (7.55)                | 459.18      | 5764.00   | 6150.62     |
| Mean    | NER= 414.57, India = 6329.57 |             |           |             |
| SD      | NER= 43.56, India = 355.67   |             |           |             |
| Min     | NER= 330.96, India = 5764.00 |             |           |             |
| Max     | NER= 452.41, India = 6734.93 |             |           |             |
| r       | -0.1047                      |             |           |             |
| p       | 0.412                        |             |           |             |
| CAGR    | NER=4.66%, India = - 1.45%   |             |           |             |

Data: Fig in brackets indicates share of NER (in percentage), r= Correlation Coefficient, p= P value (one Tailed), Trend value is under Least Square Method, SD= Standard Deviation, Min = Minima, Max=Maximum and CAGR= Compound Annual Growth Rate. Source: Compiled and Calculated from NAFSCOB Reports & Report on Trend and Progress of Banking.

From Table 22, it is observed that the amount of NPA's of SCBs in NER is in increasing trend i.e. from Rupees 330.96 crores in 2002-03 to Rupees 435.00 crores in 2008-09. The trend analysis also shows same trend of increase in the amount of NPAs of SCBs in NER i.e. from Rupees 369.96 crores in 2002-03 to Rupees 459.18 crores in 2008-09. On the other hand, the trend analysis on the amount of NPAs of SCBs in India shows the opposite trend of decrease in the amount of NPAs of SCBs in India i.e. from Rupees 6508.52 crores in 2002-03 to Rupees 6150.62 crores in 2008-09. Moreover, the CAGR of increase in the amount of NPA's in case on SCBs in NER is 4.66% while the CAGR of decrease in the amount of NPA's in case on SCBs in India is 1.45%.

Table 23. Trend Analysis on Amount of NPA's as percentage of loans outstanding of SCBs  
(As at end March)

| Year    | NER                            |             | India                          |             |
|---------|--------------------------------|-------------|--------------------------------|-------------|
|         | NPAs as % of Loans Outstanding | Trend Value | NPAs as % of Loans Outstanding | Trend Value |
| 2002-03 | 43.36                          | 51.01       | 18.11                          | 19.03       |
| 2003-04 | 51.26                          | 49.19       | 18.65                          | 17.85       |
| 2004-05 | 52.60                          | 47.37       | 16.25                          | 16.67       |
| 2005-06 | 51.19                          | 45.55       | 16.84                          | 15.49       |
| 2006-07 | 43.34                          | 43.73       | 16.84                          | 14.31       |
| 2007-08 | 40.4                           | 41.91       | 12.4                           | 13.13       |
| 2008-09 | 36.7                           | 40.09       | 12.0                           | 11.95       |
| Mean    | NER= 45.55, India = 15.87      |             |                                |             |
| SD      | NER= 6.17, India = 2.64        |             |                                |             |
| Min     | NER= 36.7, India = 12.00       |             |                                |             |
| Max     | NER= 52.6, India = 18.65       |             |                                |             |
| r       | 0.7068                         |             |                                |             |
| p       | 0.038                          |             |                                |             |

Data: SD= Standard Deviation, Min = Minima, Max=Maximum r= Correlation Coefficient, p= P value (one Tailed). Source: Compiled and Calculated from NAFSCOB Reports from NABARD and Report on Trend and Progress of Banking.

It is further observed from the Table 23 those NPAs as percentage of loans outstanding is also decreasing both in case of SCBs in NER and India. The average NPAs as percentage of loans outstanding in case of SCBs in NER is 45.55% while that for India is 15.87%. It is further observed that the degree of association between the two variable significant as  $r=0.7068$  and P value is 0.038. The trend analysis also shows the same trend of decreasing both in case of NER and India. The trend value of NPAs as Percentage of loan outstanding in case of NER was 51.01% in 2002-03 which declined to 40.09% in 2008-09. Again, the trend value of NPAs as Percentage of loan outstanding in case of India was 19.03% in 2002-03 which declined to 11.95% in 2008-09.

#### **D) Ratio Analysis of Financial Performance of SCBs in NER & India: Descriptive Statistics (2002-2009)**

Ratio analysis is widely acceptable and recognized to study and examine the performance of an organization. That is why, in the same direction, the various ratios related to financial performance of SCBs have been calculated and used. The mean value, standard deviation, minimum and maximum value of these ratios have been show in table 24A & B. Table 24 A reflects a brief picture of descriptive information about various financial ratios of SCBs in NER. It is evident from the table under consideration that, on an average, the proportion of owned funds in working capital has been 8% with a very low variability during the study period. The average of deposits as percentage of working capital is 78% i.e. deposits has been the main competent of working funds for SCBs. Similarly, the average of loans outstanding to working capital is 36 with 0.038 S.D. The mean value of borrowing to working capital is very low (8%). The average figure of investment to working capital is 35% and S.D. of this ratio is 0.09 .On an average, owned funds to borrowing ratio (mean = 1.21) says that SCBs have been highly dependent on borrowed funds rather than owned funds. This proportion has fluctuated highly during the study period (S.D. = 0.375). The average of C-D ratio (loan outstanding to deposits) is 46% that is significantly higher than the RBI guidelines. The mean value of investment to deposits ratio is 0.44 i.e. the 44% amount from deposits has been invested in various types of securities by SCBs during the study period. The over dues to demand ratio shows that the recovery of SCBs, on an average, has been 74% during the study period. It may be said that the recovery performance of SCBs been at satisfactory level and may be considered as not bad. If we see the variability of these financial ratios, it is found that fluctuations are higher in case of owned funds to borrowing ratio and lower in over dues to demand ratio among these ratios.

From Table 24 B, it is evident that mean of deposit over staff is 0.74 while loan outstanding over total staff is 0.34. It is also observed that the mean net loss to total staff and net loss to total asset is only 0.08. Further, the mean of NPA over loan outstanding is 0.49 i.e. 49% of loan outstanding is considered as Non -performing. Average of the ratio of number of offices and the working capital is 0.10.

**Table -24 A: Major Financial Ratios of SCBs in NER - Descriptive Statistics**

| Descriptive Statistics | OF/WC | DEP/WC | LOS/WC | BOR/WC | INVT/WC | OF/BOR | LOS/DEP | INVT/DEP | OVD/DEM |
|------------------------|-------|--------|--------|--------|---------|--------|---------|----------|---------|
| Mean                   | 0.08  | 0.78   | 0.36   | 0.08   | 0.35    | 1.21   | 0.46    | 0.44     | 0.74    |
| SD                     | 0.017 | 0.060  | 0.038  | 0.024  | 0.090   | 0.375  | 0.027   | 0.090    | 0.238   |
| MIN                    | 0.07  | 0.71   | 0.31   | 0.04   | 0.29    | 0.84   | 0.42    | 0.38     | 0.52    |
| MAX                    | 0.11  | 0.86   | 0.41   | 0.10   | 0.55    | 1.82   | 0.49    | 0.64     | 1.21    |

Data: SD= Standard Deviation, Min = Minima, Max=Maximum; OF/WC=Owned Funds to Working Capital, DEP/WC=Deposits to Working Capital, LOS/WC=Loans Outstanding to Working Capital, BOR/WC=Borrowings to Working Capital, INVT/WC=Investment to Working Capital, OF/BOR=Owned Funds to Borrowings, LOS/DEP= Loans Outstanding to Deposits, INVT/DEP= Investment to Deposits, Source: Compiled and Calculated from NAFSCOB Reports.

**Table -24 B: Major Financial Ratios of SCBs in NER - Descriptive Statistics**

| Descriptive Statistics | OVD/DEM | DEP/STAF | LOS/STAF | NL/STAF | NL/AST | SPRD/WC | LOS/DEP | NPA/LOS |
|------------------------|---------|----------|----------|---------|--------|---------|---------|---------|
| Mean                   | 0.74    | 0.74     | 0.34     | -0.08   | -0.08  | 0.10    | 0.86    | 0.49    |
| SD                     | 0.238   | 0.238    | 0.099    | 0.05    | 0.026  | 0.018   | 0.110   | 0.080   |
| MIN                    | 0.52    | 0.52     | 0.23     | -0.13   | -0.10  | 0.07    | 0.65    | 0.36    |
| MAX                    | 1.21    | 1.21     | 0.51     | -0.01   | -0.05  | 0.12    | 0.96    | 0.61    |

Data: SD= Standard Deviation, Min = Minima, Max=Maximum; OVD/DEM= Over dues to Demand, DEP/STAF=Deposits to Total Staff, LOS/STAF= Loans Outstanding to Total Staff, NL/STAF=Net Loss to Total Staffs, NL/AST= Net Loss to Total Assets, SPRD/WC= Spread (No of Total offices) to Working Capital, LOS/DEP= Loans Outstanding to Deposits, NPA/LOS= Non Performing Assets to Loans Outstanding. Source: Compiled and Calculated from NAFSCOB Reports.

**E) Correlation matrix among the selected Financial Ratios of SCBs in NER**

Correlation coefficients can be used to specify the degree of relationship between variables under consideration. Table 26 shows the association among various financial ratios of SCBs in NER under consideration. Owned funds to working capital are significantly and positively correlated with all the working ratios here under this study. In fact, owned fund to working capital are significantly and positively correlated with deposits to working capital, loan outstanding to working capital, borrowings to working capital, investment to working capital, owned funds to borrowings ratios, loans outstanding to deposit (C-D ratio) investment to deposits, over dues to demand and deposits to staff. Deposits to working capital are significantly and positively correlated with loans outstanding to working capital ratio, borrowings to working capital, investment to working capital, owned funds to borrowings ratios, loans outstanding to deposit (C-D ratio) investment to deposits, over dues to demand and deposits to staff. Loan outstanding to working capital are also significantly and positively correlated with borrowings to working capital, investment to working capital, borrowing to working capital ratios, loans outstanding to deposit (C-D ratio), investment to deposits, over dues to demand and deposits to staff. The borrowing to working capital ratio has significantly direct relationship with investment to working capital, loans outstanding to deposit (C-D ratio), investment to deposits, over dues to demand and deposits to staff but not significantly related to owned funds to borrowings ratios. Investment to working capital ratio significantly associates with loans outstanding to deposit (C-D ratio), investment to deposits, over dues to demand and deposits to staff. The owned fund to borrowing ratio is positively correlated with loans outstanding to deposit (C-D ratio) investment to deposit ratio, over

dues to demand and not significantly correlated with deposits to staff. Again, loan outstanding to deposits (C-D ratio) are positively and significantly correlated with investment to deposits, over dues to demand, and deposits to staff. Further, investment to deposits is positively and significantly correlated with over dues to demand and deposits to staff. Finally, over dues to deposits is significantly correlated with deposits to staff ratio.

Table -26: Correlation Matrix among the selective Financial Ratios of SCBs in NER

| Correlations for all pairs of data series (method=Pearson) |           |            |            |            |             |            |             |              |             |              |
|--|-----------|------------|------------|------------|-------------|------------|-------------|--------------|-------------|--------------|
|  | OF/<br>WC | DEP/<br>WC | LOS/<br>WC | BOR/<br>WC | INVT/<br>WC | OF/<br>BOR | LOS/<br>DEP | INVT/<br>DEP | OVD/<br>DEM | DEP/<br>STAF |
| OF/WC  | 1         | 0.865      | 0.928      | 0.728      | 0.619       | 0.633      | 0.851       | 0.627        | 0.75        | 0.652        |
| DEP/WC   |           | 1          | 0.981      | 0.672      | 0.768       | 0.589      | 0.964       | 0.829        | 0.864       | 0.713        |
| LOS/WC   |           |            | 1          | 0.756      | 0.716       | 0.575      | 0.969       | 0.767        | 0.848       | 0.7          |
| BOR/WC   |           |            |            | 1          | 0.623       | 0.171      | 0.669       | 0.607        | 0.508       | 0.762        |
| INVT/WC  |           |            |            |            | 1           | 0.47       | 0.634       | 0.978        | 0.578       | 0.95         |
| OF/BOR   |           |            |            |            |             | 1          | 0.59        | 0.528        | 0.787       | 0.333        |
| LOS/DEP  |           |            |            |            |             |            | 1           | 0.733        | 0.918       | 0.565        |
| INVT/DEP   |           |            |            |            |             |            |             | 1            | 0.703       | 0.885        |
| OVD/DEM  |           |            |            |            |             |            |             |              | 1           | 0.455        |
| DEP/STAF   |           |            |            |            |             |            |             |              |             | 1            |

Data: Correlation is significant at the 0.05% level (Two tailed); Calculated by Kendall tau Correlation Matrix Software. Source: Compiled and Calculated from NAFSCOB Reports.

## Conclusion

In fine the cooperative banking in the NER in comparison to all India level is not performing as well. Though NER comprises 2.62% of the total share of SCBs in terms of number, but contributed negative share towards profit. The NER contributes a loss of Rupees 219.01 crores towards country's total profit of Rupees 206.92 crores in 2008-09. Further, it is observed that NER share in total cost of management of SCBs is 12.67 % and in case of total over dues, it is 6.86%, which are very high in the country's context. Thus, SCBs in NER suffers from low profitability, high operational expenses, high over dues and low recovery rate. Moreover, the C-D ratio of the SCBs in NER is only 46% while it is 85% in all India contexts. Again, over dues to demand to demand ratio of SCBS in NER is very high 74% which is much higher than all India rates (14%). Further, the operating and efficiency ratios of the SCBs in NER are also very poor in comparison to all India. Therefore, ensurement of effective policy is quite necessary for rapid correction of recovery and C-D ratio. As it is further observed that SCBs are facing various problems and challenges such as dual control, poor financial base, less focus on deposit mobilization, poor infrastructural facilities, lake of professionalism, low level of technology up gradation and poor recovery performance etc. but SCBs are very important financial institutions and are equally important of Govt. of India that is financial inclusion. But for making these banks efficient, the above said challenges should be addressed

and solved. Though various committees and task forces have been constituted from time to time related to co-operative banks, Govt. of India and NABARD should take some more initiatives to make SCBs more productive and efferent in particular and all rural credit co-operative institution in general. Govt. cannot change all these things solely but SCBs themselves should make such policies and programs that will be more competent and better in comparison to other commercial banks. The management of SCBs and policy makers of these banks should focus on the corporate governance, professionalism, better outlook of branches, various attractive schemes of deposits and speed up the procedure of computerization etc. Co-operative credit institutions should always be kept in minds of our policy makers when they think about Indian financial system because these institutions have very extensive networks of branches. One research study (Misra 2009) indicates that the Govt contribution to the share capital of the cooperative adversely affects the recovery performance. Instead of behaving diligently, members perceive Govt's involvement some sort of guarantee against bankruptcy. Further, larger membership size was found to be detrimental to recovery performance as reported by the research study but in fact this exceptional feature has its own limitations. In fact, large size of membership in cooperatives is the best for better management, financial efficiency and operational efficiency as advocated by other researchers. It is observed from another study (Das & Chaudhury, 2011) that the recovery rate of SCBs in India is 90% which is much higher than NER (50%) as a whole. The recovery rate of loans and advances of some State Cooperative Banks of NER states is lower than national average viz. Meghalaya (36%), Tripura (44%), Assam (44%) and Sikkim (64.1%). Therefore, situation demands a few effective steps to increase the recovery rate in the region. A few recommendations are forwarded here for due consideration and apprehension.

Firstly, the loan from credit societies should be granted in such a manner and under such conditions that these are used productively and not misused. Secondly, it is necessary to spread the movement as people's movement. People should not think it as a part of the Govt. or a department of the govt. People should own it and manage it. People should be educated about the advantages of this movement. Thirdly, Govt. participation and support is necessary. But it should not be patronage or interference or domination. It should facilitate its growth in healthy lines. Fourthly, there is need for extending the cooperative activities in all the regions of the country. The north –eastern states are lagging behind. Fifthly, there is urgent need for helping the weaker sections and vulnerable groups like SC and ST to form cooperatives in order to be free from the exploitation of middle men. Therefore appropriate concession and facilities should be extended to such societies. Sixthly, cooperative credit institutions were treated as if these were part and parcel of the administrative set up of the government. The Govt. interference thus became an essential element in the working of these institutions which needs to be minimized. Finally, there should be research and continuous monitoring and inspection about the problems and constraints of different cooperative societies. It will help to overcome the difficulties and proceed further with success. Cooperative movement will be an important impetus for rapid rural development of the country.

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