

# Performance Evaluation of Regional Rural Banks Using the CAMELS Model with reference to Andhra Pradesh Grameena Vikas Bank, India

B. Upendra Rao<sup>1</sup>, Pala Suriyala<sup>2</sup>, Dr. Rajesh C<sup>3</sup>

<sup>1</sup>Assoc. Professor, Department of Management Studies, Srinivasa Institute of Management Studies, Visakhapatnam

<sup>2</sup>Joint Director, CMT Business School, Visakhapatnam

<sup>3</sup>Professor, MBA Department, Acharya Bangalore Business School, Bengaluru

*Abstract* - The current study is confined to the performance of APGVB covering 22 districts of Andhra Pradesh & Telangana States and examine how the CAMELS method helps in evaluation of the efficiency in the financial performance of the Bank. The study has considered the individual functional elements of the CAMELS model i.e., Capital Adequacy, Asset's quality, Management, Earnings, Profitability, Liquidity and Sensitivity of Market Risk that can be applied to APGVB. This study objectives are to make a critical analysis of the existing functions & functional efficiencies of the Regional Rural Banks in India, identify the key performance indicators for the growth of RRBs, make a thorough analysis of the financial performance of APGVB and the application of CAMELS analysis. Quantitative research has been carried out considering the details at micro level of all aspects of the financial performance of APGVB with the help of various types of financial statements, ratios, balance sheets and annual reports of 10 years (2009-2019) vis-à-vis the applicable norms. All the suggestions are oriented towards betterment in the areas of Capital Adequacy, Asset quality, Management efficiency, Earning and Profitability, Liquidity and Sensitivity.

*Index Terms* - CAMELS Model, RRB's of India, Evaluation of RRB's, Financial Performance of RRB's.

## INTRODUCTION

The Banking system in India has its origins back to 18th century with the establishment of Bank of Calcutta by the East India Company in 1786. The banking system could be classified into three phases viz. Pre independence phase i.e. before 1947, the second phase from 1947 to 1991 and the third phase representing the initiation of the reforms in Indian Financial and Banking sector after 1991.

RRBs (Regional Rural Banks) were formed on October 2, 1975, following the recommendations of the Narasimham committee. Essentially, the purpose of RRBs was to provide financial services to the unnerved rural population and promote financial inclusion. In order to meet specific needs of the diverse sectors (i.e. agriculture, housing, foreign trade, and industry), an apex level banking institution was also set up like NABARD (est. 1982), EXIM (est. 1982), NHB (est. 1988), and SIDBI (est. 1990).

At the initial stage, five regional rural banks were established on October 2, 1975: Prathama Bank in Moradabad, Uttar Pradesh under the sponsorship by Syndicate bank, Gorakhpur Kshetriya Grameena Bank, Gorakhpur (U.P) sponsored by State Bank of India, Haryana Kshetriya Grameena Bank, Bhivani, Haryana sponsored by Panajab National Bank, Jaipur Nagaur Ananchali, Jaipur, Rajasthan sponsored by United Commercial Bank and Gaur Grameena Bank, Bhiwani in West Bengal sponsored by United Bank of India.

### *I. The Objectives of Regional Rural Banks:*

Rural banks in India are primarily concerned with lending credit and providing other financial services, especially to small and marginal farmers, agricultural workers, artisans, and entrepreneurs, so that agriculture, commerce, industry, and other usual productive activities can be expanded in rural areas. As per their special charter of operations, the regional rural banks provide direct loans to rural people at concessional rates, and they receive loans from the Reserve Bank of India and the sponsoring banks. The other important objectives of RRB's are:

Providing cheap and liberal credit facilities to small and marginal farmers, agri-culture labourers, artisans, small entrepreneurs and other weaker sections.

Saving the rural poor from the extortion by moneylenders.

Accelerate economic growth by acting as a catalyst between the customers and the government.

Mobilizing savings for the development of rural economies and cultivating banking habits among rural populations.

Enhancing rural employment opportunities through trade and commerce.

Encouraging entrepreneurship in rural areas.

Serving the needs of backward regions not covered by other government initiatives

Aim to reduce the economic disparity among regions by developing underdeveloped regions.

At 31 March 2018, there were 56 Regional Rural Banks (RRBs) in the country, with a network of 21,747 branches across 683 notified districts spread across 27 states including the union territory of Puducherry. Various initiatives to develop RRBs during

2018-2019 are described in the following sections. NABARD provided extensive inputs to the Government of India for developing the Road Map for Phase III, which is intended to result in reducing the number of Regional Rural Banks in India to 40 (as of 31 March 2019 there were 53).

Since the early 1980s, RRBs have played an active role in various programmes designed to aid the identified beneficiaries of the 20 Point Programme, the IRDP and other programmes meant for scheduled castes and tribes. As part of differential rate of industrial (DIR) schemes, RRBs are also providing loans to weaker sections and people with disabilities. On the recommendation of an internal working group, the RRBs were asked to maintain a capital-to-risk-weighted asset ratio of 5% in 2005. Over the following years, the RRBs were expected to align themselves with Basel I standards. However, the most important reform was the merger of the RRB's with the sponsor banks.

## II. *Establishment of Andhra Pradesh Grameena Vikas Bank (APGVB):*

Andhra Pradesh Grameena Vikas Bank was established on 31st March 2006 consequent to the amalgamation of 5 Regional Rural Banks Sri Visakha Grameena Bank (Established on 30-09-1976), Nagarjuna Grameena Bank (Established on 30-04-1976), Sangameswara Grameena Bank (Established on 31-03-1982), Manjira Grameena Bank (Established on 31-03-1982), Kakathiya Grameena Bank (Established on 28-06-1982) in accordance with Regional Rural Banks Act of 1976 under the sponsorship of State Bank of India with the very idea of seeking effective participation in the up-liftment of the Rural Farm and non-farm Sectors, assisting the deprived, and overall progress of the rural poor & rural crafts. APGVB has its headquarters at Hanmakonda, Warangal District.

Having the total staff of 3386 & and with 774 branches, Currently APGVB has operations in 5 districts of Telangana and 3 districts of Andhra Pradesh viz. Visakhapatnam, Vizianagaram and Srikakulam districts. The Forum for Development of North Andhra (FDNA) has urged the ministry of finance to shift the headquarters of Andhra Pradesh Grameena Vikas Bank from Warangal to north Andhra region. It is yet to happen.

APGVB is contemplating to improvise the total system with concentration on ratios and efficiency parameters such as cost of deposits, cost of borrowings, yield on advances and investments, expenses ratio, asset quality and reduction of NPAs culminated over the years in terms of profitability. The thrust is also given on maintaining asset quality right from making day to day MIS enabling initiating appropriate actions and remedial measures as applicable so as to bring down the NPAs to the barest minimum. The strictures imposed have yielded good results in the area of NPA, which was brought down to Rs. 195.64 Crore (1.36%) as on 31.3.2018 from Rs. 209.74 Crore (1.69%) and the performance efficiency was enhanced.

Though, most of the RRBs trailing under shortcomings in various fronts, the APGVB stands a lot better in terms of financial performance. The NPA (Non-Performance Assets) has been brought down from 1.69 per cent (2017-18) to 1.36 per cent (2018-19) which marks a great achievement compared to general public sector banking. No doubt the functioning & results of APGVB are progressive compared to all other RRBs in the country, still there are many setbacks and intricacies that have to be overcome in the shortest possible time so as to make the APGVB stand at good stead. The current management is has adopted several strictures and improvisation methods which are yielding results. The balance between the sponsoring bank & other controlling agencies and APGVB is also to be leveraged as shortly as possible in order to enhance its image. With its success rate APGVB emulates all other RRBs in the country in terms of functional and financial performances.

The APGVB is ranked in top three positions in terms of its profitability for the last couple of years, it is yet to make a considerable impact in the upliftment of the rural poor in the field of agricultural, SSIs, empowerment of artisans, development of crafts. Despite visibility of the growth in the important areas like slashing down the NPAs, increase in CASA ratio, Deposits mobilization, Advances, Net worth, Cash Reserves, Net Interest Income, Capital Adequacy, the financial performance ratios are yet to pick up to the required level. The efficiency of the management also is conspicuous in resolving the issues, it has not reached to the required level due to several internal problems like imbalance in staff functions, lack of co-ordination among management and staff, dissatisfaction levels of employees as well as customers, lackadaisical attitudes towards using technology and technology upgradation, inadequate efforts of banking staff to attract rural customers and deposit mobilization, finding potential borrowers and lack of jurisprudence in proper disbursement of loans. This study is to analyse the foregoing problem areas in all perspectives.

### REVIEW OF LITERATURE:

**Sheeran Sharif Khan (2019)** has evaluated the performance of Andhra Pradesh Grameena Vikas Bank in India with the objective to analyse the key performance indicators, growth-pattern of APGVB and measure its financial performance. The author concludes that RRBs play a vital role in serving the rural people by providing them financial needs and successfully achieved in reaching unbanked areas of rural sector by increasing branches year by year. Following the performance evaluation of APGVB, the author has observed that consistent efforts are being taken to reduce NPAs, which are a threat to the bank and as a result the profitability gets eroded. The author has found that there has been a significant improvement in branch expansion, deposit mobilization, credit disbursement and net profit earned by APGVB during the study period. The review of this paper has helped in understanding the performance of APGVB from various parameters and its efficiency.

**S.Panboli, Kiran Birda (2019)** have made an attempt to examine the CAMEL Research for measuring the efficiency of the bank functions. For this purpose, the authors have selected Five private sector banks (ICICI, HDFC, Axis, YES, Kotak Mahindra) and five public sector banks (SBI, PNB, BOB, UBI and Canara bank) for the period of 5 years (2012-2017). CAMEL analysis (Capital adequacy, Asset quality, Management efficiency, Earning quality, and Liquidity) was applied towards assessing the banks performance. The results of the CAMEL analysis are found that HDFC & AXIS Bank are considered as performing above average; whereas PNB & Canara Bank is seen as below average. Thus, it could be concluded that in all the parameters of the

CAMEL Model and its sub-parameters, the performance of the private sector is found to be better than the public sector. This review has given insight into how the application of CAMEL analysis helps in measuring the efficiency of the bank performance. **Satish Kumar, Vibhor Goyal, Poonam Sharma (2018)** have studied the performance evaluation of Regional Rural Banks (RRBs) in India, wherein, they have stated that in order to stay alive in the present cutthroat atmosphere, banks should be strengthened adequately and would attain competitiveness through the use of its obtainable resources and managing business in effective manner. The current study is focused on the financial performance of Regional Rural Bank (RRB), keeping in view the present trends of RRBs in the national perspective. The study found that the performance of Regional Rural Banks in India has drastically improved from the period of its establishment by the measures initiated by the Government of India after the amalgamation process towards rural upliftment.

**Seena P.C, Dr. R. Nirmala Devi (2018)** have analysed the performance of Regional Rural Banks in India and its role in agricultural credit for the period of 8 years (2008-16). They have stated that RRBs are key financing institutions at the rural level, which shoulders responsibility of meeting needs of different types of agricultural credit in rural areas for rural development. The present study is focused on key performance indicators analysis such as branch network of RRBs, deposits, loans and their role in agricultural credit and upliftment of the weaker sections. They have noted that the RRBs has played a significant role in reducing substantially the regional disparities in respect of banking facilities in India and stated that the efforts made by RRB in the above areas are much appreciable. The study has concluded that the RRBs could successfully achieve their objectives in bringing the banking to door steps of rural households particularly in banking deprived rural areas, to avail easy and cheaper credit to weaker rural section who are dependent on private lenders, to encourage rural savings for productive activities, to generate employment in rural areas and to bring down the cost of purveying credit in rural areas. They have made a suggestion that RRBs have to concentrate on speedy, qualitative and secure banking services to retain existing customers and attract potential customers under this competitive era.

**Anoop Kumar Singh, Ravi Agarwal (2017)** carried out a comparative study on the standalone and amalgamated RRBs using CAMELS approach to measure the financial soundness of Prathma Bank and Kashi Gomti Summit Gramin Banks. The study revealed that, Prathma Bank as a standalone RRB excelled over Kashi Gomti Summit Gramin Bank, which is an amalgamated RRB in Asset quality, Management efficiency, Earning efficiency and System and Control. The two sample banks do not differ significantly in Capital to Risk Weighted Assets Ratio (CRAR) and GSecurities to Total Investment ratio during the study period. Prathma bank proved to be good in Asset Quality perspective. Kashi Gomti Summit Gramin bank outperformed Prathma bank in front of Liquidity position during the study period. It could be concluded from the study that, only an amalgamation of RRBs is not enough for strengthening the financial performance of the RRBs. Standalone bank is better performing; hence amalgamation is not the only way of improving the status of regional rural banks. Consolidation of banks with proper strategy is essential for their sound and viable financial performance.

**Malihe Rostami (2015)** in his research on the use of CAMELS analysis in Banking Industry has found that the CAMELS model is a very effective, efficient and accurate performance evaluator in banking industries and to anticipate the future and relative risk and analysed all the applicable ratios for assessing the accuracy and efficiency of the banks' performance. The author has felt that there should be some rating system to demonstrate the banks position which the managers as well as the stakeholders are to be aware of. The author has contended the CAMELS rating model is a model to assess the banks strengths and weaknesses areas. He has concluded that the banks can use this method to calculate and discuss ratios and focus on some crisis and find best solution when there is competitive problem and try to challenge and get a new and better position among the others.

**B. Venkata Rao, G. Sudarsana Rao (2014)** have reviewed the performance of Regional Rural Banks in India with a special reference to Andhra Pradesh Grameena Vikas Bank in the backdrop of the farmers' suffering because of money laundering by the private money lenders. The purpose of the study is to study the national agriculture policy and programmes in rural credit in India in general particularly in Andhra Pradesh, analyze institutionalization of credit, commercialization of agriculture and adequacy of credit flow for production and consumption and analyze the performance of Andhra Pradesh Grameena Vikas Bank. The outcome of their study shows that the APGVB is one of the growing banks in Andhra Pradesh to serve the poor agricultural farmers and would expand its branches all over the rural areas in AP to assists the farmer's financial plight. The authors have suggested that the APGVB should spread to its branches to all villages, establish ATMs in potential areas, conduct awareness programmes to the farmers' and extend their financial services through post office accounts.

The above literature review has given enough exposure on various key performance indicators in evaluating the financial and functional performance of banks including RRBs and APGVB, their prospects & problems, the role played by APGVB in the rural upliftment, the applicability of CAMELS model in performance evaluation. Based on the in-depth literature review has helped in identifying the research gaps that has given way to proceed further on the research.

#### OBJECTIVES:

To have a comprehensive understanding on the functioning of Regional Rural Banks and to review the history, programmes and progress of Regional Rural Banks in India.

To make a critical analysis of the existing functions& functional efficiencies of the Regional Rural Banks in India.

To identify the key performance indicators for the growth of RRBs.

To make a thorough analysis of the financial performance of APGVB and the application of CAMELS analysis.

To analyze the management practices those are in vogue and the attitude of APGVB management towards its customers.

To identify the problem areas affecting the financial performance of APGVB and suggest suitable remedial measures for improvising the growth vis-à-vis the rural upliftment.

#### METHODOLOGY:

The current research, being financial analysis of banking, involves a systematic study of functional and financial performance by gathering quantifiable data and carrying out statistical, mathematical and computational techniques. The study has considered the merits and demerit of the quantitative approach.

Quantitative research has been carried out considering the details at micro level of all aspects of the financial performance of APGVB with the help of various types of financial statements, ratios, balance sheets and annual reports vis-à-vis the applicable norms. An empirical investigation has been made using statistical, mathematical and computational techniques for comprehensive understanding the overall performance of APGVB in the light of Rural Banking scenario and testing the formulated hypotheses for this study.

The focus of the study is on the functional and financial performances of APGVB and hence, the data was collected from its Annual Reports and Balance sheets for the last 10 years. The financial data collected from the annual reports and balance sheets was tested using the CAMELS model for measuring the bank's performance and efficiency and to determine the growth indicators for betterment of the overall performance of APGVB. The pertinent factors of CAMELS model in respect of its each element i.e., Capital Adequacy, Asset Quality, Management efficiency, Earnings and Profitability, Liquidity and Sensitivity deploying different statistical methods like correlation, regression, t test, z test as applicable for justifying the formulated hypotheses.

#### FINDINGS ON FINANCIAL ANALYSIS USING CAMELS MODEL - APGVB:

"CAMELS" model is an effective, efficient and precise tool for evaluating the banks financial performance so as to predict the relative and future risks. The CAMELS stands for Capital adequacy, Asset quality, Management, Earning and Liquidity and Sensitivity. In this study some important ratios are chosen relative to APGVB financial performance for the last 10 years i.e. 2009-10 to 2018-19. The study, which is comparative in nature, is based on the annual reports for 10 years, financial statements, bank bulletins and other peripheral banking data wherever required. The data has been analysed using statistical methods (Linear Regress Analysis) to verify and test the results with formulated hypotheses, findings of which are juxtaposed below:

Capital Adequacy is the prime component to assess the financial soundness of the Banks. As per RBI's stipulation, the RRBs are required to maintain a minimum Capital to Risk-weighted Assets Ratio (CRAR) of 9 per cent on an ongoing basis. APGVB data analysis indicates that in the 10 years of data analysis, the Capital Adequacy Ratio has risen from 11 per cent since 2009-10 to 15.50 per cent (2018-19).

During 2009-2010, the debt-to-equity ratio for APGVB was 1.29 percent, and for 8 years it remained below three percent. The ratio was 3.01 percent during 2017-18. Since APGVB is fully financed by the government institutions the ideal debt-equity (DER) could be 1.5-2per cent.

APGVB's total advances to total assets ratio for 10 years ranges from 1.25 per cent (2017-18) to 2.97 per cent (2013-14). The ratios are found to be favorable towards efficient financial performance due to the advances/loans exceeding the total assets every year.

Government securities to total investments range from 0.35 to 0.62 percent. According to standard norms, the higher the G-Secs to investment ratio, the lower the risk involved in bank investments.

In terms of the Gross NPA ratio, there has been a gradual decline in the same from 2.28 per cent (2009-10) to 1.14 per cent (2018-19). It's an extremely positive development as the standard gross NPA stipulated by RBI should be less than 10 per cent in most cases. However, it can sometimes go up to 15 per cent in rare cases and never more than that.

Based on the Net NPA ratio found in APGVB, the ratio varies between 0.33 percent (2018-19) and 3.61% (2011-12). This is quite a healthy sign. As per the RBI norms the maximum Net NPA should not exceed 10 per cent.

The yield ratio of advances of APGVB, which represents the sound asset quality of the bank, shows a gradual increase in loans and advances, as well as the interest corresponding thereto. These results illustrate the gradual increase in loans and advances and the corresponding interest earned therefrom.

APGVB's return on net worth ratio, or return on equity, went from 15.95 to 25.43 percent during the period covered by this study, but dropped to 4.7% in 2018-19, which represents an unhealthy level. An average return on net worth of 15% indicates better valuation and profitability, and below 10% indicates poor performance for a bank.

The loan-to-deposit ratio of APGVB for the 10 years studied was shown to have varied between 63.85% and 86.73% for nine of those years, except for the initial year (2009-10) which stood at 47.28 %. LDR should be in the range of 80 to 90 per cent for commercial banks and 60 - 90 per cent for regional banks. Accordingly, it can be viewed as favorable.

The study reveals that the business per employee ratio for APGVB for the study period, the total business (revenue), and the total employees are on an upward trend and the BPE ratio also increases. Ratios indicate healthy employee and management performance in relation to the growth of the business.

As a result of the study, APGVB's profit per employee (PPE) ratio for the period of 10 years has increased year by year until 2017-18. There is downturn in the net profit and the PPE ratio has decreased to Rs. 3.52 Lakhs. However, overall, the PPE ratio is still encouraging for APGVB.

The Net Profit Margin Ratio of APGVB shows a variance between 10.72 and 17.56 percent. A dramatic decline (3.42%) is recorded in 2018-19 owing to the fall in net profit from Rs. 503 Cr. (2017-18) to Rs. 112 Cr. (2018-19). Despite the negative trends in 2018-19, APGVB grew strongly in every sphere except in 2018-19, which can be attributed to growth in all fronts.

Return on Equity of APGVB varies between 15.95 per cent and 25.43 per cent for the years 2009-10 and 2017-18, but drops to 4.7 per cent in 2018-19, which is not favorable. Generally, banks should have a minimum interest rate of 15-20%.

The Net Interest Margin Ratio of APGVB shows that interest expenses and income have gradually increased over time. Net Interest Margin is found to range between 3.47 per cent and 4.44 per cent. An ideal NIM for commercial banks is around 3-4 per cent, and for regional banks the leverage can be up to 5 per cent.

The Interest Spread Ratio of APGVB was found to range from 1.89 percent to 4.96 percent. It increased the last two years (2017-18 and 2018-19), which was favorable.

The Interest Income to Total Income Ratios of APGVB for the 10 years studied are shown as 6.64 per cent to 7.75 per cent. Due to the high ratio of interest income, the above percentage is highly encouraging in terms of the bank's financial growth.

The Cash to Deposit (CD) ratios of APGVB for the study period of 10 years, it is noted that the same are exceeding 97 per cent all the years. The ideal CDR for commercial banks is 70-80 per cent but for RRBs due to limitations it may vary vertically. The results of APGVB orient towards a little pressure for resources.

The analysis shows that the government securities to total assets ratio of APGVB for the study period of 10 years increased from 12.39 percent to 22.46 percent and the highest ratios were observed in the last three years (2016-17 to 2018-19). The investment in government securities is safe, though it is not very lucrative, but it takes care of preparing for SLRs. APGVB has found these factors to be favorable for the smooth operation of its finances.

A comparison of the total investments to total deposits ratio of APGVB for the study period of 10 years indicates that the ratios are between 39.17 percent and 79.72 percent, which ensures liquidity for meeting obligations.

It can be concluded from the analysis that for the 10 years of study period, the interest expended to interest earned ratio of APGVB ranges between 0.56 and 0.65 per cent, which is a very positive sign in terms of maintaining liquidity since it is less than 1 percent.

The APGVB, as far as the sensitivity aspect is concerned, is found to have the ability to handle variables like unfavorable changes in interest rates, foreign exchange rates, commodity prices, and fixed assets to a large extent in relation to market risk, as it is a subordinate bank that is primarily meant for rural development, and there is no specific definition of market risk applicable to the RRBs. APGVB's annual reports and other bulletins make no mention of the sensitivity issue.

#### SUGGESTIONS:

In order to uplift the rural farming sector, the downtrodden as well as boost the craft industries and make artisans' lives better, the bank needs not incur losses nor could it be liberal with business growth rate acceleration. Considering the current inflationary circumstances, it is crucial that APGVB focus more on contemplating strategies and the necessary stipulations for attaining a uniform growth rate of business in order to survive on the market.

The study reveals that the APGVB has been profitable for over a decade, but there is no consistency in its growth rate, perhaps because certain provisions have been made in the gross profit to meet some contingencies. For example, the gross profit registered in 2018-19 is Rs. 958.17 Cr. Rs. 807.57 crore was earmarked for provisions and contingencies. As a result, the net profit was reduced. It is suggested that APGVB minimize such provisions, which affect financial ratios and performance indicators. In addition, APGVB is advised to minimize writing-off of bad debts accumulated over time by realizing them as soon as possible and focus more on deriving profits at a constant increase year after year.

There has been a phenomenal increase in interest on income over the years and a corresponding increase in interest expenses, but the income and expenditure are out of proportion, possibly due to budget adjustments or special provisions. Although the growth of income is conspicuous, consistency and steadiness are vital to the success of the Bank. The study further concludes that there is ample scope for earning interest on income, maintaining its growth rate, and minimizing interest expenditure. To address the above, APGVB is suggested to enhance its mechanism properly.

A uniform growth of deposits and borrowings is observed for the 10 year study period. Deposit interest is growing at an escalating pace, but there are fluctuations in the growth rate. As an example, the growth registered in 2018-19 was Rs.97.88 Cr compared to Rs.451.78 Cr. during 2017-18. The highest interest rate on borrowings, Rs. 1343.62 crore in 2018-19, also reflects a growth rate of 39.84 percent (vs. 7.89 percent in 2017-18). Nevertheless, the Bank is able to control the large fluctuations. However, APGVB should explore additional methods and means for increasing deposits and controlling borrowings.

While there has been continuous growth in reserves over the years, there is also a large variation observed from time to time. The highest amount of cash reserves was reported as Rs. 5030.15 Cr. during 2017-18, but the corresponding growth rate has fallen dramatically to 5.93 per cent (2018-19) from 30.38 per cent (2017-18). Cash reserves should be monitored carefully by APGVB to make sure they do not deplete beyond a certain point as they reflect the bank's financial strength.

There is a constant rise in Tier-1 capital every year for the past 10 years, whereas Tier-2 capital is usually fluctuating, but the total capital deployed is constantly on the rise, but not proportionally. The highest growth was registered during 2017-18 (Rs. 509.25 Cr. ), but declined to Rs. 125.04 Cr. during 2018-19. Thus, the corresponding growth rate is also found to fluctuate, being highest in 2017-18 (28.36%) and falling to 5.42 % in the succeeding year. This imbalance is controllable. Additionally, the total risk-weighted assets have increased each year as well. In order to achieve financial soundness, APGVB needs to pay more attention to Tier-2 capital and balance the operating capital proportionately. It should also think about proper mechanisms to manage the risk-weighted assets.

The study revealed a continuous increase in Statutory Assets over time, however there has been a variation in Non-Statutory Assets. The APGVB should keep an eye on the non-statutory assets, which can add to profits if properly handled.

APGVB has been able to maintain a low level of NPAs, but there is a lot of scope for further reduction, which can be planned strategically and the corresponding ratios of gross & net NPAs-to-advances are maintained well.

Despite the relatively small amount of advances sanctioned in the priority sector, the Gross NPA ratio has been higher over the past five years (25.81percent to 11.35percent) due to the higher Gross NPA ratio. In view of achieving efficiency in the financial performance, APGVB is suggested to exercise greater control in such sector-wise NPAs emerged from industrial advances, personal loans, etc, which are a bit higher, in spite of the overall low number of NPAs.

There is a lot of scope of lowering the costs of deposits, loans, yield on investments, income, funds, return on funds, management, handling risks, etc. APGVB may make a sincere effort to reduce these costs in a planned manner by imposing strictures regarding repayment, handling bad debts intelligently, and minimizing borrowings whenever possible.

APGVB maintains a sufficient Capital Adequacy Ratio, but the study envisages that it could be further enhanced (up to 14%). As a result, APGVB needs to explore various ways to bloat this ratio, such as by increasing deposit mobilization, enhancing cash reserves to the optimum, and reducing costs & expenditures for a more efficient and productive functioning of the bank.

The study reveals that there is a possibility to raise the Government securities-to-total investment ratio, though this is a complicated ratio, and APGVB is therefore advised to work on enhancing government securities and to plan for total viable investments in lucrative projects.

As for the Gross NPA ratio of APGVB, it has gradually decreased from 2.28 per cent (2009-10) to 1.14 per cent (2018-19). The trend is highly favorable and well within the limits of the RBI. This is also a highly sensitive area and highly vulnerable to change. It is therefore recommended that APGVB maintain the existing trend in regard to gross NPA ratio and not relax or diverge from the current practices.

Return on Net Worth Ratio for APGVB was 15.95 per cent to 25.43 per cent between 2009-10 and 2017-18, but fell to 4.7 per cent in 2018-19. This is an unhealthy sign. A RoNW below 10% indicates poor performance for a bank. APGVB should review its current return-on-networth strategy and ensure that the same remains above 15 percent, but not below, as the drop directly impacts its profitability.

APGVB, though challenging, is advised to take measures to increase profit per employee, which calls for great motivation as well as strategic placement of employees based on skills & potentials and an orientation towards overall growth. In order to achieve this, they need appropriate training so they are excited about the work, eager to accept challenges as they come, able to resolve issues, and able to generate creative ideas, rather than looking at the job as a routine task.

According to the study results, the Net Profit Margin Ratio of APGVB fluctuates between 10.72 percent and 17.56 percent, and in the year 2018-19, a sudden decline (3.42 percent) is associated with the loss of net profit from Rs. 503 crores. (2017-18) to Rs. 112 crores. In 2018-19. The APGVB needs to maintain the minimum fluctuations and ensure constant increases in the above ratio in order to maintain adequate funds in case of exigencies and contingencies. \

While APGVB's Return on Equity ratio over the years has consistently been above 15 percent, it fell to 4.74 percent during 2018-19, which needs to be addressed from various perspectives as such a fall distorts financial performance. As patching up is difficult, it is suggested that the APGVB analyze the reasons for such occurrences and discourage them. It is an important indicator of profitability that must be maintained consistently.

Research indicates that the Cash to Deposit (CD) ratio of APGVB has been above 97 percent all through the decade. Commercial banks usually aim for CDRs of 70-80 percent, but RRBs may vary vertically due to limitations. The results of APGVB indicate a little pressure on resources. The APGVB should be aware of its cash to deposit ratio since it is under some pressure for resources. As much as possible, the bank should maintain liquidity for regular operations, including loans and advances, without resorting to borrowing.

The research discloses that the government securities-to-total assets ratio of APGVB for the past 10 years is in an incremental mode from 12.39 per cent to 22.46 percent, wherein the higher ratios are observed in the last three years (2016-17 to 2018-19). Though it is safe to invest in government securities, it is not that much lucrative, but it takes care of the preparedness for SLRs. APGVB is suggested to take a calculated risk and consider offering private equity, which will help in enhancing profitability.

#### SCOPE FOR FURTHER RESEARCH:

The current research visualizes multiple uses pertaining to handling banking operations in diversified situations. In general, the study is useful to banking professionals, research scholars of banking and banking practitioners. This gives an immense scope for the performance evaluators of banks via different models like CAMELS, BASEL accords etc., Though CAMELS record system largely helpful in classifying a bank's overall condition. BASEL defines adequate capital reforms and liquidity management. CAMELS model, which is a kind of ratio analysis for banks, measures the performance of bank from each of the important parameters like capital adequacy, asset quality, management efficiency, earning quality and liquidity and helps in anticipating the future and relative risk. As per a government directive, the Indian banking system has been implementing Basel-III standards in phases since April 1, 2013, to maintain global compatibility. Essentially, Basel III requires banks to have a much larger capital base, improve transparency, and provide greater liquidity so they will be more able to absorb shocks caused by financial and economic stress. BASEL III is a comprehensive set of reform measures, which have been developed by the committee to strengthen the regulation, supervision as well as the risk management of the banking sector across the world. Under the scenario mentioned above, there is need to switch-over to BASEL from CAMELS. The current thesis analyses the banking operations and ratios pertaining to financial performance compatible to both CAMELS & BASEL accords, which the researchers can make use of.

#### CONCLUSION:

The study on Andhra Pradesh Grameena Vikas Bank" from different functional perspectives to investigate its financial performance and evaluation using CAMELS model and ascertain how the model can improvise the efficiency of individual employee and system as a whole reveal that the APGVB is well poised in maintaining consistency in financial growth, image building and earning public respect while meeting the objectives for which it was established. The bank had made an excellent headway in the path of progress by virtue of its well-formulated policies in respect of the credit & fair practice, privacy, NPA, DEAF, KYC, customer rights, compensation, dishonor of cheques and mobile banking. Despite the above progress, the research unleashes that APGVB has lot more potential to be tapped. The research results emanated from the data analysis have envisaged

an ample scope for further improvement in all its operations and functions by refining their applications of skills & efficiencies, effective utilisation of resources & capacity, taking calculated risks wherever needed and thus can achieve excellence in all the fronts in terms of higher revenue generation, customer loyalty and fame. For evaluation of financial performance, CAMELS model has been found to be more apt, especially in analyzing the ratios and adopted in the study, which has yielded results.

#### REFERENCES

- [1]. Rosi Pranitha, C. Sneha (2018), "Performance of Regional Rural Banks In India: A Study On Andhra Pragathi Grameena Bank In Andhra Pradesh". International Journal of Engineering Technology Science and Research, vOL. 5(3), PP. 1463-1469.
- [2]. Aguenauou, S, Lahrech, A, Bounakaya, S (2017), "Analyzing Banks' Efficiency as a Measurement of Performance in the Moroccan Context: Application of CAMEL Framework". International Review of Research in Emerging Markets and the Global Economy (IRREM), Vol. 3(1), pp. 1105-1105.
- [3]. Venkata Rao, Dr. G. Sudarsana Rao (2014), "Performance of Regional Rural Banks in India A study on Andhra Pradesh Grameena Vikas Bank in Andhra Pradesh". International Journal of Advance Research in Computer Science and Management Studies, Vol. 2(4), pp. 1-9.
- [4]. Baliji Lova, T.V.V. Phani Kumar (2016), "A Critical Appraisal Of Agricultural Cash Credit (Crop Loans) At Andhra Pradesh Grameena Vikas Bank (Apgvb) - A Case Study of K Agraharam Branch, Narsipatnam, Visakhapatnam District", EPRA International Journal of Economic and Business Review, Vol. 4(11), pp. 53-59
- [5]. Barr R.S., Seiford L. M. and Siems T.F. (1993), "An Envelopment - Analysis Approach To Measuring The Managerial Efficiency Of Banks". Annals Of Operations Research, Vol. 45, pp. 1-19.
- [6]. Bhatt, K.A. (2013), "Profitability Analysis of Regional Rural Banks in India: with Special Reference to Western Region", International Journal of Research in Computer, Vol. 3(08).
- [7]. Bikker, J. A.; Bos, J. W. B. 2008. Bank performance: a theoretical and empirical framework for the analysis of profitability, competition and efficiency. New York: Routledge.
- [8]. Biswa Swarup Misra (2006). "The Performance of Regional Rural Banks (RRBs) in India: Has Past Anything to Suggest for Future?". Reserve Bank of India occasional papers, Vol. 27(1 and 2), pp. 89-118.
- [9]. Chakraborty K. C. (2005), "Management of NPAs: Trends and Challenges". Chartered Financial Analyst, Vol. 10, p 30.
- [10]. Chaudhry, Sahila, Singh, Sultan (2012), "Impact of Reforms on the Asset Quality in Indian Banking". International Journal of Multidisciplinary, Vol. 5(2), pp. 17-24.
- [11]. Dharmaraj Hazarika (2019), "Non-Performing Assets In Indian Banking Sector: An Analysis Of Magnitude, Trend And Recovery". International Journal of Scientific & Technology Research, Vol. 8(9), pp. 1748-1753.
- [12]. Dr. A.R. Rihana Banu, Dr. G. Santhiyavalli (2019), "A TOPSIS Approach to Evaluate the Financial Performance of Scheduled Commercial Banks in India". IOSR Journal of Business and Management, Vol. 21(1), pp. 24-33.
- [13]. Dr. Jasvir S. Sura (2008), "Efficacy of Regional Rural Banks (RRBs) in India: A Conventional Analysis". The Journal of Indian Management and Strategy, Vol. 11(4), pp. 4-12.
- [14]. Girish K Nair, R Thirumal (2012). "Profitability and Growth of Regional Rural Banks (RRBs) in India (With reference to the profit making RRBs)". International Journal of Management, IT and Engineering, Vol. 2(9), pp. 146-167.
- [15]. Hays, F., Lurgio, S., Gilbert, A. (2008), "Efficiency Ratios and Community Bank Performance". Journal of Finance and Accountancy, Vol. 5(2), pp. 1-15.
- [16]. Ibrahim, M.S. (2010). "Performance Evaluation of Regional Rural Banks in India." International Business Research CCSE, 3 (4), pp. 203-211.
- [17]. Jaynal Uddin Ahmed (2014). The Efficacy and Working of Regional Rural Banks: An Implication in Indian Context. International Journal of Banking, Risk and Insurance, Volume 2 (1), pp.18-29.
- [18]. K.Venkatalakshmi, M. Chandraiah (2016), "The Current position of RRBs in India - A Review". BIMS International Journal of Social Science Research. ISBN: 2455-4839.
- [19]. Kapil, S & Kapil, KN (2005), "CAMEL's Rating and its Correlation to Pricing Stocks - An Analysis of Indian Banks's". University Journal of Bank Management, vol. 4(1), pp. 64-78.
- [20]. Lall, M., Agarwal R. (2017), "A CAMEL model analysis for select public sector banks in India". EPRA International Journal of Economic and Business Review, Vol. 5(4), pp. 153-162.

- [21]. Lonja Bhavigna, Syed H Mazhar, Jahanara (2018), "Impact of Andhra Pradesh Grameena Vikas Bank (APGVB) on Agriculture Development of Beneficiaries in Paderu Block of Visakhapatnam District, Andhra Pradesh, Vol. 10(13), pp. 6644-6645.
- [22]. Majumder, M. T. H., & Rahman, M. M. (2016). A CAMEL Model Analysis of Selected Banks in Bangladesh. *International Journal of Business and Technopreneurship*, Vol. 6(2), pp. 233-266.
- [23]. Mohanty, B. (2017), "Financial Performance Measurement of Selected Commercial Banks Based on CAMEL Rating System". *Journal of Management Sciences and Technology*, Vol. 4(3), pp. 10-24.
- [24]. Nitin Bhatt, Thorat, Y.S.P. (2001). "India's Regional Rural Banks: The Institutional Dimension of Reforms." *Journal of Microfinance*, 3 (1), pp. 65-88.
- [25]. P. Muralidhara, Chokka Lingam (2017). "CAMEL Model as an Effective Measure of Financial Performance of Nationalised Banks". *International Journal of Pure and Applied Mathematics*, Vol. 117(7), pp. 255-262.
- [26]. R. Mittal (2017), "The problem of Rising Non-performing Assets in Banking Sector in India: Comparative Analysis of Public and Private Sector Banks". *International Journal of Management, IT & Engineering*, Vol. 7(7), pp- 384-398.
- [27]. Rajesh P Khatri, Mayuri Farmer (2015), "Financial Performance Analysis of RRBs of Gujarat State - An Application of CAMEL model". *Academic: An International Multidisciplinary Research Journal*, Vol. 5(4), pp. 326-341.
- [28]. Sangmi MD, Nazir T (2010). "Analyzing financial performance of commercial banks in India: Application of CAMEL model". *Pakistan Journal of Commerce and Social Sciences*, Vol. 4(1), pp. 40-55.
- [29]. Sushendra Kumar Misra and Parvesh Kumar Aspal (2013), A Camel Model Analysis of State Bank Group, *World Journal of Social Sciences*, Vol. 3. No. 4. July, Issue. Pp.36-55.
- [30]. Titko, Jelena & Stankeviciene, Jelena & Lace, Natalja. (2014), "Measuring Bank Efficiency: DEA Application". *Technological and Economic Development of Economy*, Vol. 20(4), pp. 739-757.
- [31]. Uyen, D. (2011), "The CAMEL rating system in banking supervision". *Journal of International Business Studies*. pp. 37-40.