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A STUDY ON WORKING CAPITAL MANAGEMENT AND PROFITABILITY ANALYSIS OF STEEL AUTHORITY OF INDIA LIMITED

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Abstract

Working capital management is one of the most important factors impacting the performance of the firm. Efficient management of working capital is crucial for sustaining the business in the long run. A study of working capital is of major importance to internal and external analysis because of its close relationship with the current day-to-day operations of a business. Every business needs funds for two purposes for its establishment and to carry out its day–to–day operations. Long-term funds are required to create production facilities through a purchase of fixed assets such as plant and machinery, land, building, furniture. Funds are also needed for the short-term purpose for the purchase of raw materials, payment of wages and other day-to-day expenses. Easy availability of low-cost manpower and preference of ample refers make India competitive in the global set up. Finance is needed for day to day operation. Working capital may be regarded as the lifeblood of a business. Its effective provision can do much to ensure the success of the business. Its inefficient management can lead not only to the loss of profits but also to the downfall of a business. In several units, there is adequate working capital but the mismanagement of working capital increases the costs and reduces the rate of return. The efficient management of working capital minimizes the cost and can do much more for the success of the business. Financial liquidity analysis of Steel Authority of India Limited (SAIL) is analyzed and it concludes that the financial liquidity management occupies a significant place in financial management.

Keywords: Working Capital Management, Current Assets, Current Liabilities, Current Ratio..

Introduction

The World economic recovery is on track and a pickup in global growth presents a healthy sign for industrial and manufacturing activities across the globe. With Global output, as projected by IMF, to grow by 3.5% in 2017 and 3.6% in 2018 on the back of better performing emerging economies, we expect more stability in the steel industry worldwide. Meanwhile, India is projected to become the world's fifth largest economy in 2017, surpassing UK and France and the world's third largest economy by 2023, surpassing Japan and Germany. India's GDP is projected to rise from

USD 2.2 trillion in 2016 to USD 3.6 trillion by 2020. This predicts well for businesses that are focused on domestic growth in the future. With suitable trade measures put in place by the Government of India for providing a level playing field to the domestic steel producers, the Indian steel industry could perform as per its potential and India became a net exporter of steel in FY 2016-17.

Given the current stage of development of the Indian economy and the likely growth path for the Country's economy in the next decade, the steel demand in India will witness significant growth in future. India with its stable government, strong reforms, rising infrastructure spend & robust consumption demand will provide a platform to reach per capita steel consumption of 160 kg & total steel capacity of 300 Million tonnes by 2030-31 as envisaged by National Steel Policy 2017.

SAIL achieved a turnover of ₹49,180 crore during 2016-17, which is higher by 14% over the previous year due to increase in both sales volumes (8%) as well as Net Sales Realization (NSR) of Saleable Steel of five Integrated Steel Plants by about 6%. The increase in NSR was partly due to an overall improvement in price levels and partly due to measures in enriching Company's product mix. Company's intensive focus on improving operational parameters resulted in positive EBITDA (Earnings before interest, tax, depreciation and amortization) in all four quarters of FY 2016-17 and Company trimmed losses by 30% by recording an overall improvement in production, sales and efficiency.

As far as production performance is concerned, SAIL achieved highest ever Hot Metal production at 15.73 Million Tonnes (MT), Crude Steel production at 14.50 MT and Saleable Steel production at 13.87 MT during FY 2016-17. There were all-around improvements in the major techno-economic parameters.

The unprecedented increase in coal prices during FY2016-17 however, adversely impacted the cost of production and overall margins. During the year, there was an additional impact of around 4,300 crores as compared to FY 2015-16 on account of increase in prices of both imported and domestic coal. This increase in coal prices neutralized the significant improvement in Net Sales Realization (NSR). Notwithstanding the increase in coal price, your Company could reduce its operational expenditure per ton of saleable steel by 2% during the fiscal.

SAIL has almost completed its Modernization and Expansion Programme (MEP). The state-of-the-art New Universal Rail Mill at Bhilai Steel Plant (BSP) was inaugurated by Hon'ble Steel Minister in January'17. This mill produces World's longest single piece rail of 130 meters length and supplies welded 260 mts rail panels to the Indian Railways. With this capacity addition, BSP has the record of being the single largest rail producing facility at one location in the World.

The already operational new facilities under the Modernization and Expansion plan were ramped up during the year. New Blast Furnace at Rourkela Steel Plant (RSP) achieved about 100% of its capacity, whereas, other facilities like the New Plate Mill also produced near to their rated capacities. The New 3 MTPA Hot Strip Mill at RSP is also scheduled to be installed by 2018 and this will enlarge the basket of the value-added products. The new facilities at IISCO (Indian Iron & Steel Company) Steel Plant (ISP) have also been ramped up significantly. The Wire Rod Mill of ISP will be soon producing world-class Wire rods in special grades to meet the requirement of the Indian and Global Steel industries.

There has been significant value addition in the product mix of the Company, with higher grades of steel like API X-70 from RSP's New Plate Mill for the oil & gas sector, SAIL HT-600 for the automotive sector and high strength LPG steel grade from Bokaro Steel Plant, etc. Continuous product development efforts are being made with intensive R&D efforts especially from the new state of the art mills commissioned under the Modernization and Expansion Plan. Amongst the Indian steel producers, SAIL continues to be in the forefront of R&D with the highest spending.

The products being manufactured by our new rolling mills have been received well by the customers and it is our constant endeavor to add more and more value-added grades from these mills. Products from the RSP NPM and BSL CRM-3 are being well received in export markets too. In conjunction with the increased production, the focus is being given to efficient and strategic marketing for improving sales and realizations. More emphasis is being given on last mile connectivity with the end users, marketing in regions where we have natural freight advantage, increasing retail & rural sales and leveraging the brand image of SAIL.SAIL launched a Companywide initiative with the help of Boston Consulting Group (BCG) named 'SAIL Uday' for improving our all-around performance. Cross-functional teams across plants, units and marketing have been formed and both short and long-term action plans have been formulated. Implementation of various initiatives is already underway and many benefits are expected to come in this fiscal itself.

SAIL continued its efforts of conducting operations in an environmentally responsible manner. These have resulted in a reduction of emissions and discharge levels, increase in utilization of solid wastes and green cover.

REVIEW OF THE LITERATURE

Many researchers have considered working capital from different interpretations and in different situations. The following studies were very stimulating and useful for research:

Jyoti Nair (2018) A Study on Working Capital Management in Distressed and Non – Distressed Companies in Indian Steel Sector for the period of 2012 to 2017. This study attempted to find out whether these ratios are different for distressed and non-distressed companies. Discriminant Analysis has identified three ratios which are very significant in differentiating a distressed company from a non –distressed one. Debtors Turnover Ratio (DTO), Current Ratio (CR) and the Quick ratio (QR) are strong discriminators. Current ratio and Quick ratio shows the total investment in current assets in relation to current liabilities. It means that if a company has adequate current assets in relation to its current liabilities, it has more short-term solvency. Though Inventory turnover is not observed to be a significant variable, the fact that quick ratio is a significant variable indicates the relevance of inventory levels. The higher level of inventory reduces the quick ratio. Hence distressed firms are reportedly carrying a larger amount of inventories as compared to non-distressed firms. This is also seen by the mean Inventory turnover ratio. The average inventory turnover of distressed firms is very low as compared to non-distressed firms. Also receivable turnover in distressed firms is very low, indicating slow recovery from debtors. Thus debtors and inventory management have emerged as important factors to prevent distress in companies. Managers should focus on debtors' management as it can reduce the probability of distress. Also, the inventory levels should be optimized to keep the company solvent. Lenders can continuously review and monitor debtors and inventory levels of borrowers and determine the solvency position and thereby determine the probability of financial distress. These early warning signals can help them devise strategies to mitigate distress and thereby reduce losses on account of bad loans.

Simranjeet Singh and Harwinder Kaur (2017) this study enquired the relationship between Working Capital Management and the profitability of steel manufacturing companies during the tenure, 2004-2016. From the findings, it was inferred that working capital variables have a significant impact on both the dependent variables, namely Net Profit (NP) and Return on Assets (ROA). The outcome of study is being supported by literature such as (Deloof, 2003), (Raheman& Nasr, 2007) who had found a strong intense negative relationship between the components of Working Capital Management including the number of days' accounts receivables, number of days' inventories and Cash Conversion Cycle with organizations profitability. So it is recommended that steel manufacturing companies should reduce their Cash Conversion Cycle keeping working capital components at an optimum level since cash conversion has a significant negative relationship with net profit. This can be done by shortening the receivable collection period and expediting the process of converting the inventory into a sale.

Anil K. Bhatt, Nirmala Shrotriya (2016) Study on Does Working Capital has an Implication on Profitability of Indian Steel Industry 2009 - 10 to 2013 - 2014. It was found in the study that there is a significant and high degree of positive correlation between the profitability and working capital. Thus it is essential for the steel companies to maintain the desired level of the working capital. Maximum respondents revealed that their company has adopted an aggressive policy for WC management thus their WC was found to be desired or less than the desired level of the company. From the findings, it is also clear that The Company's financial officers and top management are aware of the desired level of working capital and satisfied with the level Cash management of their company. The satisfactions were majorly significant in case of Centralization of cash management decisions. Thus it is important for the companies to manage their WC in a better way.

S. Pramila& K. Kumar A Study on "Working Capital Management in Tata Steel Limited" for the period from 2010-2011to2014-2015. The study concludes that the Lower fixed assets ratio of Tata Steel Limited is satisfactory. But, Cash ratio is less than the standard and not encouraging for the entire study period i.e. 2010-11 to 2014-15. Though the additional funds raised are invested in fixed assets instead of providing necessary working capital, the Working Capital turnover ratio is not satisfactory. Accordingly, the management may resort to effective utilization of cash and bank balances in attractive investments or to pay back in short-term liabilities (current ratio).

T.Venkatesan and S.K.Nagarajan (2013) "A Study on Working Capital Management and Profitability Analysis of Select Steel Companies in India" covering period of 2008 – 2012.After the analysis of various data, related to selected steel companies in India founded in theoretical statement, it clear that working capital and profitability more or less depends upon the better utilization of resources, cut-off expenses and quality of management function in the products, customer services and to manpower and goodwill and market share. It is worthwhile to increase production capacity and use advanced technology to cut down the cost of production and wage cost in order to increase profitability, not only against the investment but also for investor's return point of view. These programs are helpful to increase profitability of selected steel companies in India in future prospects. If the management or government does not look into it seriously, it can result in loss of jobs and the company will become a sick unit.

OBJECTIVES OF THE STUDY

- To study the liquidity position of the Steel Authority of India Limited.
- To review the profitability position of the Steel Authority of India Limited.
- To compare the financial performance and find the growth trend of the Steel Authority of India Limited.
- To evaluate profitability related to sales of Steel Authority of India Limited.

METHODOLOGY

In this present study, the secondary data has been collected wherever required; the secondary data has been collected from various sources like internet, journals, books and industries report. The following are the sources of collecting information and methodology used in this study.

- ➢ Obtaining material from the various reports available by the company specifically related to the Steel Authority of India Limited.
- ➢ Collecting material from the internet.
- ➢ Relevant books and business journals.

SCOPE OF THE STUDY

In this study an attempt is made of choosing the sources of funds, dividend policy, capital budgeting, cost of volume profit analysis of the Steel Authority of India Limited for the period of 2012 – 2013 to 2016 -2017 as relevant from annual reports and balance sheets of the companies.

LIMITATIONS OF THE STUDY

This study mainly depends on the secondary data i.e., a balance sheet of Steel Authority of India Limited. Operating and financial performance of the companies is analyzed using 5years data alone. The validity of analysis and suggestion depends on the financial statements and reports alone, provided by the company.

Ratio Analysis

Ratio Analysis is a powerful tool of financial analysis. Analysis of financial statements with the assistance of ratios helps the management in decision making and control.Ratio analysis is used by creditors, banks, financial institutions investors and shareholders. It helps them in making a decision concerning the granting of credit and making investments in the firm. Thus, ratio analysis is of enormous use and has wide application.

Current Ratio

The statistical data relating to calculation of current ratio was computed through the financial statements referred in their respective annual reports of Steel Authority of India Limited for the study period from 2012-13to 2016-17 is depicted in table 1.

Table 1
Current Assets of Steel Authority of India Limited (Rs. In Crore)

Years	2012-13	2013-14	2014-15	2015-16	2016-17
Current Investments	-	-	-	48.31	-
Inventories	16008.21	15200.82	17736.37	15363.61	15711.35
Trade Receivables	4424.18	5481.98	3192.00	2825.21	2921.69
Cash and Bank Balances	3850.35	2855.95	2305.24	692.76	289.09
Short – Term Loans and Advances	990.69	1160.51	3056.33	2113.85	61.47
Other Current Assets	2342.55	2191.49	2192.35	1839.24	6578.95
Total	**27597.98**	**26890.75**	**28482.29**	**22882.98**	**25562.55**

* Source: Annual Reports of SAIL

Current liabilities of Steel Authority of India Limited are presented in table 2.

Table 2
Current Liabilities of Steel Authority of India Limited (Rs. In Crore)

Years	2012-13	2013-14	2014-15	2015-16	2016-17
Short-Term Borrowings	8015.02	10634.48	14195.16	15891.76	19813.04
Trade Payables	3322.04	3205.34	3606.38	4301.57	5219.20
Other Current Liabilities	8654.70	12478.51	14016.53	16006.79	18372.88
Short-Term Provision	2512.70	2021.95	2638.71	2604.54	2914.77
Current Tax Liabilities	-	-	-	-	4.52
Total	**22504.46**	**28340.28**	**34456.78**	**38804.66**	**46324.41**

* Source: Annual Reports of SAIL

The above two tables show that the current assets decreased from ₹ 27597.98 crores in 2012-13 to ₹ 26890.75 crores in 2013-14, it is gradually increased with ₹ 28482.29 crores in 2014-15, after it was decreased continued from ₹ 22882.98 crores in 2015-16 & ₹ 25562.55 crore in 2016-17. When coming to current liabilities continuously five years it is increased form ₹ 22504.46 crores in 2012-13 to ₹ 46324.41. Current assets and current liabilities of SAIL are presented in table 3.

Table 3
Current Assets and Current Liabilities of Steel Authority of India Limited (Rs. In Crore)

Year	Current Assets	Current Liabilities	Current Ratio
2012-13	27597.98	22504.46	1.22:1
2013-14	26890.75	28340.28	0.95:1
2014-15	28482.29	34456.78	0.83:1
2015-16	22882.98	38804.66	0.59:1
2016-17	25562.55	46324.41	0.55:1

* Source: Annual Reports of SAIL

As a conventional rule, a current ratio of 2:1 is considered satisfactory. This ratio is below the accepted standard norm in Steel Authority of India Limited in the entire study period. It clearly indicates, the normal general accepted solvency to meet their current obligations in time is not satisfactory during 2012-13 to 2016-17. The management of Steel Authority of India limited must initiate necessary steps to utilize its idle cash and bank balances in attractive investments or to pay back its short-term liabilities.

Quick Ratio or Liquid Ratio

The quick ratio is also called Acid-test ratio because it is the acid test of a concern`s financial soundness. It is the relationship between quick assets and quick liabilities. Quick assets are those assets which are readily converted into cash.They include cash and bank balances, bills receivable, debtors, and short-term investments. Quick liabilities include creditors, bills payable, outstanding expenses. It is used as a complementary ratio to the current ratio. Quick assets and current liabilities of SAIL is presented in table 4.

Table 4
Quick Assets and Current Liabilities of Steel Authority of India Limited (Rs. In Crore)

Year	Quick Assets	Current Liabilities	Quick Ratio
2012-13	11589.77	22504.46	0.51
2013-14	11689.93	28340.28	0.41
2014-15	10745.92	34456.78	0.31
2015-16	15363.61	38804.66	0.40
2016-17	9851.20	46324.41	0.21

* Source: Annual Reports of SAIL

A quick ratio of 1:1 is considered to represent a satisfactory current financial condition. A quick ratio of 1:1 doesnot necessarily mean satisfactory liquidity position if all debtors cannot be realized and cash is needed immediately to meet current obligations. A low quick ratio does not necessarily mean a bad liquidity position as inventories is not an absolutely non-liquid. It is observed from the above data the quick ratio is less than the accepted norm from 2012-13 to 2016-17.The quick ratio is very poor so it will increase their liquidity position, it will help to meet day to day expenses.

Cash Ratio (Absolute Liquid Ratio)

Cash is the most liquid asset. The relationship between cash including cash at bank and short-term marketable securities with current liabilities is examined to know the immediate solvency. Cash & Bank Balance and current liabilities of SAIL is presented in table 5.

Table 5
Cash & Bank Balanceand Current Liabilities of Steel Authority of India Limited (Rs. In Crore)

Year	Cash & Bank Balance	Current Liabilities	Quick Ratio
2012-13	3850.35	22504.46	0.17
2013-14	2855.95	28340.28	0.10
2014-15	2305.24	34456.78	0.06
2015-16	692.76	38804.66	0.02
2016-17	289.09	46324.41	0.00

* Source: Annual Reports of SAIL

The acceptable norm for cash ratio is 1:2 or 0.5 or 50 percent. This ratio is less than the standard and not heartening for the entire study period i.e. 2012-13 to 2016-17.

Working Capital Turnover Ratio

This ratio indicates whether or not working capital has been efficiently utilized in making sales. It can be calculated by Net sales/Net Working capital.

Net Working Capital = Current Assets - Current Liabilities

Current assets and current liabilities and Net Working capital of SAIL are presented in table 6.

Table 6
Current Assets, Current Liabilities and Net Working Capital of Steel Authority of India Limited (Rs. In Crore)

Year	Current Assets	Current Liabilities	Net Sales	Net Working Capital	Working Turnover Ratio
2012-13	27597.98	22504.46	49350	5093.52	9.69
2013-14	26890.75	28340.28	51866	-1449.53	-35.78
2014-15	28482.29	34456.78	50627	-5974.49	-8.47
2015-16	22882.98	38804.66	43294	-15921.68	-2.72
2016-17	25562.55	46324.41	49180	-20761.86	-2.37

* Source: Annual Reports of SAIL

Working Capital turnover ratio indicates the velocity of the utilization of net working capital. This ratio indicates the number of times the working capital is turned over in the course of a year. A higher ratio indicates the efficient utilization of working capital and a low ratio indicates otherwise. But a very high working capital turnover ratio is not a good situation for any firm and hence care must be taken while interpreting the ratio.Working Capital turnover ratio is not satisfactory. Additional funds raised are invested in fixed asset instead of providing necessary working capital. The company may not be in a position to meet its obligations on time.

CONCLUSION

The current ratio, Cash ratio of Steel Authority of India Limited is less than the standard norm and not encouraging for the entire study period i.e. 2012-13 to 2016-17. Working Capital turnover ratio is not satisfactory. Though the additional funds raised are invested in fixed assets instead of providing necessary working capital, the management may resort to the operative utilization of cash and bank balances in attractive investments or to pay back in short-term liabilities. Proper control over various expenses like Labour cost, material cost and other overheads are reduced so as to improve the profitability of the company. The purchase of raw material at lower cost will reduce the cost of material. The company can reduce the cost of production and try to improve its profitability. The company has to give importance to maintenance and consumption of raw materials which would otherwise result in the overstocking and leads to obsolescence.

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A STUDY ON CITIZEN'S AWARENESS ON E-GOVERNANCE SERVICES AND CONVERGENCE OF GOVERNMENT SERVICE DELIVERY SYSTEMS MYSORE DISTRICT, KARNATAKA

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Abstract

The present government service models through tele centres unable to fulfill the requirements and aspirations of rural citizen in improving service delivery system. The existing telecetre model failed in sustainability, The study is to suggest better model of service delivery through Common Service Centres (CSC) convergence and reducing the cost of service delivery. The process involved in service delivery has to be reengineered and identify and propose the cost effective departmental organization. Re-engineering of the Government processes leading to "electronic governance". Brief discussion about e-Governance in general and convergence of CSCs across the state and Mysore District in particular has to be setup in a world where IT and its usages are restricted to urban mass and less effectively used to rural bunch this sincere attempt is to find one of the avenues to reach out in an efficient and adding up to the existing research. The state has been making its unrest efforts in this vision being a part of the system The findings of the Research add value to the team through this research. An attempt is made to analyse the existing Government Service delivery mechanism through e-governance and its administrative legal impediments of convergence, To identify the convergence of inter-departmental government service delivery systems in one stop-shop model delivery systems, the impact of e-governance on main stakeholders, viz, citizen, and Government in terms of enhancing public delivery system, and the citizen's awareness regarding e-Governance services in the study area.

Keywords: e-Governance, Convergence, Rural Mysore District, Citizens Awareness.

Introduction

Karnataka is the first state to announce IT Policy in the year 1997. This Policy has acted as an important catalyst for the growth of IT Industry in the State. Karnataka is in the forefront of Information Technology and is called the Silicon State of India. In addition, the state capital Bangalore has shown tremendous growth in the IT Sector and is the IT Capital of India. The Tenth Plan Approach Paper of the Planning Commission calls for an emphasis on second generation reforms, reduction in subsidies and hard economic decisions to raise resources for increased investment and prune non-plan expenditure, in the context of the changing global circumstances and growing aspirations of the People.

The Emergence Information Technology (IT) on the National Agenda and announcement of IT Policies by about 19 State Governments (e.g. Andhra Pradesh, Delhi, Goa, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, West Bengal, etc.) have strengthened India's position in the software-driven IT sector in the World. These IT Policies, more or less, **envision** : Re-engineering administrative processes, IT Budget, IT-initiative Fund, State-wide Area Network, Smart Cards, Department wise specific MIS, IT Literacy, and Promotion of IT Industry.

Importance of the Study

The present government service models through telecentres are unable to fulfill the requirements and aspirations of rural citizen in improving service delivery system. The existing telecetre model failed in sustaining its running cost thus increasing the cost of service. The proposed topic will suggest better model of service delivery through Common Service Centers (CSC) convergence and reducing the cost of service delivery. The process involved in service delivery has to be reengineered and proposed a model is cost effective departmental organization.

Objectives of the study

1. To examine the impact of e-governance on main stakeholders, viz, citizen, and Government in terms of enhancing public delivery system.
2. To analyse the citizen's awareness regarding e-Governance services in the study area.

Collection of Primary Data

The research study requires the collection of primary data. The Primary data has been collected by administering the structured questionnaires. A pre-tested questionnaire has been administered to the respondents (citizen) chosen while they visits the Nemmadi Kendra. The questionnaire includes questions on their profile, purposes of visiting the centers, opinion on quality of service delivery and factors that influenced them into using the services and levels of satisfaction in using the services. Suggestions were also sought for improving delivery of service. The primary data data collected during 2017, by adopting three methods namely, primary survey, focused group discussions (FGDs) and case study method.

Collection of Secondary Data

The secondary data has been collected from e-governance department, Government of Karnataka, Rural Digital Services Centers (Nemmadi) now renamed as Ajalji Janasnehi Kendra, Common Service Centers functioning in Mysore district and also from NGO's and other institutions/agencies engaged in e-governance services. In addition to this, the secondary source data has bee collected from published Government reports, Annual reports, seminar proceedings/reports, peer-reviewed journals, Business Magazines etc.,

Sampling Design

The sampling in this research consists of users the NEMMADI Kendra now it renamed as Ajalji Janasnhi Kendras, which are government owned ones. As the citizens could give better feedback regarding the impact of controversy of the change in the convergence it would give us a better perspective for the study. **A Convenient sampling technique** has resorted to get the questionnaires being personally administered to the respondents.

Sample Size

Every individual interviewed during this research constitute the sampling unit. These individuals constitute are all the stakeholders of the system. The Sampling proportion constitutes as shown in the table.

Sl. No.	Stake Holders	Locations	Sample size
1	Citizens	Periyapatna Taluk	240
2	Citizens	Hunsur Taluk	240
3	Citizens	K. R. Nagara Taluk	240
		Total	**720**

Statistical Tools and Techniques

The statistical techniques which were adopted in the study are simple tabular analysis and **Statistical Package for Social Sciences (SPSS)** – Frequency analysis. Chi-Square Test etc.

The systematic statistical tools and techniques adopted, to draw definite and precise conclusions on the study are the growth equation model, to determine the growth trends of the cotton marketed, the simple frequency and percentage analysis to facilitate the descriptive account and interpretation of the field survey data, from the farmers interviewed and the regression analysis to assess the trends and associations of the data variables. In addition, tables, graphs and charts have been generated from the analysis of both the primary and secondary data collected to draw appropriate inferences. The analysis has been done using the SPSS and SYSTAT packages, for convenience data handling and manipulation.

Results and Discussions

The study mainly concentrates on the opinion of the citizens in Rural Mysore District on awareness and impact of e-governance services. The three taluks viz. Hunsur, Periyapatna and K. R. Nagar were selected for the study for collection of Primary Data. The total sample size was 720 and 240 in each taluks. The primary data were collected by administering the questionnaire.

The statistical techniques like correlation, Chi-square Test were adopted to test the hypotheses. Brief discussion about e-Governance in general and convergence of CSCs across the state and Mysore District in particular has to be setup In a world where IT and its usages are restricted to urban mass and less effectively used to rural bunch this sincere attempt is to find one of the avenues to reach out in an efficient and adding up to the existing research. The state has been making its unrest efforts in this vision being a part of the system The findings of the Research add value to the team through this research. Intense policy reengineering, creating pro e-governance environment, enhanced citizen participation. Horizontal integration of systems shall enable vertical integration of systems for India's journey towards successful Service delivery systems through e-governance models. Extending and Expanding of service delivery of CSC with Mobile Seva shall cut down the cost and time involved and improve the quality in providing G2C, G2G and B2C services, there by enhancing the efficiency and economical growth of the Citizens.

Awareness on e – governance, CGS and E-Government in study area

Table: Awareness on Atalji Janasnehi Kendra among the respondents

Taluk	Awareness of Atalji Janasnehi Kendra					Total
	1 Years	2 Years	3 Years	4 Years	5 Years	
Hunsur	0 (0.00%)	84 (35.00%)	72 (30.00%)	62 (25.80%)	22 (9.20%)	240 (100.00%)
K. R. Nagar	20 (8.30%)	138 (57.50%)	42 (17.50%)	20 (8.30%)	20 (8.30%)	240 (100.00%)
Periyapatna	40 (16.70%)	174 (72.50%)	12 (5.00%)	8 (3.30%)	6 (2.50%)	240 (100.00%)
Total	**60 (8.30%)**	**396 (55.00%)**	**126 (17.50%)**	**90 (12.50%)**	**48 (6.70%)**	**720 (100.00%)**

Source: Primary Survey – 2017.

The table explains the awareness of the Atalji Janasnehi Kendra by years. In Hunsur taluk among 240 respondents 35% were of knowing from 2 years, 30% were of knowing from 3 years and 25.8% were of knowing from 4 years. In K. R. Nagar taluk among 240 respondents 138 respondents were of knowing Atalji Janasnehi Kendra from 2 years, while 42 respondents were of knowing from 3 years, in Periyapatna taluk 174 respondents were of knowing from 2 years. In overall in Mysore district majority of the respondents were of aware from 2 years. The study reveals that the respondents in all the three taluks were aware since 2 years with 55.00% and in Hunsur 35.00%, K. R. Nagar with 57.50% and in Periyapatna 16.70% followed by from three years with 17.50% in the study area.

Table: Source of awareness of Atalji Janasnehi Kendra

Taluk	Source of Awareness of Atalji Janasnehi Kendra						Total
	Newspaper	Television	Relatives	Other Government Employees	Other Department Payment Counters	Others	
Hunsur	48 (20.00%)	30 (12.50%)	60 (25.00%)	102 (42.50%)	0 (0.00%)	0 (0.00%)	240 (100.00%
K. R.Nagar	16 (6.70%)	64 (26.70%)	36 (15.00%)	116 (48.30%)	8 (3.30%)	0 (0.00%)	240 (100.00%
Periyapatna	12 (5.00%)	24 (10.00%)	62 (25.80%)	128 (53.30%)	10 (4.20%)	4 (1.70%)	240 (100.00%

Total	**76 (10.60%)**	**118 (16.40%)**	**158 (21.90%)**	**346 (48.10%)**	**18 (2.50%)**	**4 (0.60%)**	**(10**

Source: Primary Survey – 2017.

The above study show the source of awareness of the Atalji Janasnehi Kendra in the study area. In Hunsur among 240 respondents 42.5% of them were getting information from other government employees, and 25% were from relatives, in K. R. Nagar Taluk among 240 respondents 48.3% were of getting from other government employees and the 26.7% were of getting from television medium. In Periyapatna taluk among 240 respondents 53% were of getting information from other government employees and 23% were of getting from relatives.

Table: Neighborhood Citizen Aware on Atalji Janasnehi Centre

Taluk	Neighborhood People are Aware of the Atalji Janasnehi Kendra				
	Very Few	Few	Some	Most	All
Hunsur	46 (19.20%)	54 (22.50%)	8 (3.30%)	16 (6.70%)	116 (48.30%)
K. R. Nagar	28 (11.70%)	38 (15.80%)	0 (0.00%)	16 (6.70%)	158 (65.80%)
Periyapatna	20 (8.30%)	10 (4.20%)	8 (3.30%)	26 (10.80%)	176 (73.30%)
Total	**94 (13.10%)**	**102 (14.20%)**	**16 (2.20%)**	**58 (8.10%)**	**450 (62.50%)**

Source: Primary Survey – 2017.

The study shows how many of the neighborhood citizens are aware of the Atalji Janasnehi Kendra in study area. Among 720 respondents in Hunsur taluk among 240 respondents majority of the 48.30% of the neighbors were of knowing the Nemmdi Kendra. 22.5% were aware about the Atalji Janasnehi Kendra. In K. R. Nagara taluk among 240 respondents 65.80% of the respondents were all knowing the Atalji Janasnehi Kendra, In Periyapatna taluk among 240 respondents 73.30% were of all knowing the Atalji Janasnehi Kendra. In overall the majority of the respondents were of knowing the Atalji Janasnehi Kendra.

Satisfaction with the overall quality of service

Taluk	Satisfaction with the overall quality of service					Total
	Very dissatisfied	Somewhat dissatisfied	Neutral	Somewhat satisfied	Very satisfied	
Hunsur	16 (6.70%)	78 (32.50%)	14 (5.80%)	118 (49.20%)	14 (5.80%)	240 (100.00%)
K. R. Nagar	20 (8.30%)	126 (52.50%)	70 (29.20%)	8 (3.30%)	16 (6.70%)	240 (100.00%)
Periyapatna	20 (8.30%)	126 (52.50%)	50 (20.80%)	14 (5.80%)	30 (12.50%)	240 (100.00%)
Total	**56 (7.80%)**	**330 (45.80%)**	**134 (18.60%)**	**140 (19.40%)**	**60 (8.30%)**	**720 (100.00%)**

Source: Primary Survey – 2017.

The table 5.65 and figure 5.63 describe the respondent's satisfaction of service with the overall quality of service in the study area. Accordingly in Mysore district among 720 respondents, in Hunsur taluk among 240 respondents 49.20% were of somewhat satisfied while 32.50% were of somewhat dissatisfied. In K. R. Nagar taluk among 240 respondents 52.50% were of somewhat dissatisfied while 29.20% were of neutral in opinion. In Periyapatna taluk among 240 respondents 52.50% were of the opinion that they were somewhat dissatisfied, while 20.80% were of neutral in their opinion. In overall Mysore district among 720 respondents 45.80% respondents are of opinion that they are somewhat dissatisfied with overall quality of service.

Recommendations

1. The Nemmadi Kendras has to be made more people friendly, because as per the respondents opinion the people in this Kendras take people requests very casual, so this has to be controlled and the workers have to work towards the welfare of people. So the Nemmadi Kendra employees need to be trained and make them friendly in their approach.
2. The errors in the documents need to be decreased so that the people going and coming to the Nemmadi Kendra again and again is decreased. So for this any error in the document is found out by the people, this error needed to be rectified on priority basis.
3. Here the other issue we found out is that the corruption is rampant in Nemmadi Kendra, any work has to go through giving money or else no work goes in proper time format so this is causing unnecessary delay in work, so to this a panel should be set up and discussed in public should take suggestions from them how the problem can be curbed.
4. The services provided in the NemmdiKendras according to the respondents opinion the services are of very slower, so this has to be decreased so as to fast-track the work in the Kendras.

5. The services charges for services should be decreased so as to facilitate economical services to the people.
6. Middlemen's in the service center need to be eliminate in the centers so as to give the people with transparent services.
7. Quality of services provided needed to be improved so as to make peoples experience good atmosphere in a Nemmadi Kendra.
8. The rules and regulations related to the services needed to be properly displayed in the Nemmadi Kendra premises so that people are well known about the procedure of the works and the charges.
9. Timings of the NemmadiKendras needed to be adjusted to the convenience of the peoples time so that the Nemmadi Kendra can make efficient services to the people in the area.

Conclusion

Brief discussion about e-Governance in general and convergence of CSCs across the state in particular has to be setup and a frame work be proposed to my further study about the topic chosen. My approach to the chosen research topic is theoretical I am confident that it shall be more of empirical study by the end of the research. In a world where IT and its usages are restricted to urban mass and less effectively used to rural bunch this sincere attempt is to find one of the avenues to reach out in an efficient and adding up to the existing reasearch. The state has been making its unrest efforts in this vision being a part of the system I have chosen to add value to the team through this research. Hence the proposed topic for the registration of doctoral studies becomes relevant to all the stake holders and particularly to the state and citizens.

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IMPACT OF AGRICULTURAL FINANCE ON INCOME, EMPLOYMENT AND ASSET CREATION OF SAMPLE BENEFICIARIES OF SELECTED DISTRICT CO-OPERATIVE CENTRAL BANK BRANCHES IN CHITTOOR DISTRICT

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Abstract

Credit can play a pivotal role in increasing agricultural production and also in improving the level of living standard of the rural households. By credit one means, "ability to command the other's capital in return for a promise to pay at some specified time in the future". Thus it is a kind of resource, which provides the opportunity to use additional inputs and capital items especially to the farmers who intend to bring in improvement with their lot. Capital-intensive nature of modern agricultural technology and inadequate savings of the farmers have encouraged the common farmers to go for external finances from different sources, both institutional and non-institutional sources. The DCCB is to develop the agricultural farmers in rural areas and to improve the socio-economic status of the poor farmers in rural areas through providing credit for assets. Credit facilities extended by the DCCBs would enable the borrowers to engage themselves effectively in income generating activities during the post-loan period and the weaker sections in particular would improve their economic conditions. In this paper an attempt is made to analyse the impact of agricultural finance on income, employment and asset creation of sample beneficiaries in the pre-loan and post-loan periods of the DCCB branches in Chittoor district.

Keywords: Cooperative banks, Agriculture, Income and employment, Asset creation.

Introduction

Credit can play a pivotal role in increasing agricultural production and also in improving the level of living standard of the rural households. By credit one means, "ability to command the other's capital in return for a promise to pay at some specified time in the future". Thus it is a kind of resource, which provides the opportunity to use additional inputs and capital items especially to the farmers who intend to bring in improvement with their lot. Capital-intensive nature of modern agricultural technology and inadequate savings of the farmers have encouraged the common farmers to go for external finances from different sources, both institutional and non-institutional sources.

No one can survive without food which is in the hands of a farmer. But Indian farmers in general are still deprived of good quality of life. Farmers will get due share of honour only when they can lead a dignified life like other section of the society. Many farmers cannot withstand the consequence of crop failure and at times, commit suicide every year in different parts of the country. Most of the farmers are not economically sound enough to take up the benefits of the new technologies. The shortage of cash capital is considered to be one of the basic problems encountered by the farmers and under such situation, it has to be accepted that external finance is a must for any new investment proposal. The life of most farmers have become tougher over time because of increase in the prices of agricultural inputs and increased family expenditure on account of price hike of the essential commodities. Therefore, they are unable to invest on high cost technology in crop field from their own farm income. These are the main reasons for which most of the farmers are looking for alternative economic activities to support their families[1].

There is an ever increasing need to invest in agriculture due to a drastic rise in global population and changing dietary preferences of the growing middle class in emerging markets towards higher value agricultural products. In addition, climate risks increase the need for investments to make agriculture more resilient to such risks. Estimates suggest that demand for food will increase by 70 per cent by 2050 and at least $80 billion annual investments will be needed to meet this demand, most of which needs to come from the private sector. Financial sector institutions in developing countries lend a disproportionately lower share of their loan portfolios to agriculture compared to agriculture sector's share of GDP[2].

The DCCB is to develop the agricultural farmers in rural areas and to improve the socio-economic status of the poor farmers in rural areas through providing credit for assets. Credit facilities extended by the DCCBs would enable the borrowers to engage themselves effectively in income generating activities during the post-loan period and the weaker sections in particular would improve their economic conditions. In this paper an attempt is made to analyse the impact of agricultural finance on income, employment and asset creation of sample beneficiaries in the pre-loan and post-loan periods of the DCCB branches in Chittoor district.

Review of Literature

Gandhimathi's (2012), article entitled "Distribution of Agricultural Credit in the Pre-reform and Post-reform Period" showed that the co-operative banks dominated in the total agricultural credit society disbursement in the pre-reform period. The loan outstanding in the direct agricultural credit was higher in co-operatives than in the scheduled commercial banks in the pre-reform period. The dominance of the co-operatives in the agricultural loan disbursement was retained till the year 2004-05. In 2005-06, the direct loan disbursement from scheduled commercial banks was higher than co-operatives banks. The distribution of agricultural credit in the post reform period was significantly higher than in the pre-reform period. The economic reforms of 1991 had been significant on the distribution of agricultural credit.

G.Prakash and Dr.V.R.Palanivelu (2014) in their article "A Study on Role of Salem District Central Cooperative Bank in Agricultural Financing with Special Reference to Crop Loan in Salem District" analysed the agricultural financing which greatly contributed to fulfil the capital requirement of the farmers. The borrowers allocated more land to all types of crop compared with non borrowers. The borrowers of this bank were mainly given preference to kissan credit schemes compared with other schemes of crop loans. The bank was placed in a good position in loan distribution and recovery. Timely availability of loan is much important in agricultural financing. This agricultural credit not only to increase the productivity but it helps to expand the economy of the country[4].

Dr. Amiya Kumar Mohapatra (2016) studied on the issue of "Agricultural Credit support for inclusiveness. Agricultural growth depends upon various factors and among them credit is one of the most important. Availability and access to easy credit is indispensable to enhance agricultural production to meet the rising food demand for our growing population and for the supply of raw materials for the industry. Hence the provision of agricultural credit in the union budget is on a continuous rise over the years. It has increased from Rs. 3,75,000 crore (2010-11) to Rs 9,00,000 crore (2016-17), with an increasing rate of more than two times over the period of six years.

Government intends to infuse soft cash credit has increased farmers. Not only that the flow of far credit to considerable but also target interest rate has been reduced from time to time. Also to encourage those who are making timely payments and to reduce the interest burden on farmers, government has made a provision of Rs 15,000 crores as interest subvention[5].

Objective of the Study

The specific objective of the study is to analyse the impact of agricultural finance on income, employment and asset creation of sample beneficiaries in the pre-loan and post-loan periods of the DCCB branches in Chittoor district.

Sources of Data

This study is based on both primary data and secondary data. The required primary data for the study are collected through a house-to-house sample investigation on the farmers with the help of a structured schedule of questions and secondary data for the study are collected from DCCBs head office, Chittoor, Andhra Pradesh.

Sample Design

Chittoor District in Andhra Pradesh state has been selected as the research area for the present study. Chittoor district has been divided into three revenue divisions namely Chittoor, Madanapalli and Tirupati revenue divisions. It has been observed that there are 31 branches of District Co-operative Central Bank with 9 branches in Chittoor revenue division; 10 branches in Madanapalli revenue division and 12 branches in Tirupati revenue division. Among the 31 branches, 6 branches have been selected randomly by choosing 2 branches from each of three revenue divisions. There are totally 11698 borrowers in the selected 6 branches of Chittoor District Co-operative Central Bank. A sample of 5 per cent i.e., 585 borrowers has been selected randomly by using stratified random sampling with proportional allocation technique. The following table 1 shows the sample borrowers from six selected branches of Chittoor District Co-operative Central Bank in Chittoor District.

Sample Borrowers from Six Selected Branches of Chittoor District Co-operative Central Bank in Chittoor District

Revenue Division	Branches	Total No. of Borrowers in Branches	Sample No. of Borrowers	Total No. in Revenue Division	Sample No. in Revenue Division
Tirupati	Tirupati	2403	120	4568	228
	Srikalahasti	2165	108		
Madanapalli	Madanapalli	2274	114	4113	206
	Punganur	1839	92		
Chittoor	Chittoor	2071	104	3017	151
	P.S Gate	946	47		
Total		**11698**	**585**	**11698**	**585**

Source: Secondary Data (Chittoor DCCB)

Period of the Study

The period of study is for 10 years from 2007 to 2016. The primary data pertains to the field of study of the farmers of the three revenue divisions Tirupati, Madanapalli and Chittoor which was conducted in the year 2015-16.Income generation on the basis of education is presented in table 2.

Income Generation on the basis of Education

Revenue Division	Level of Education	Sample Size	Average net Income: Pre-loan Period	Average net Income: Post-loan Period	Incremental Income Rs.	Percentage of Incremental Income
Tirupati	Illiterate	61	199956	222754	22798	11.40
	Primary	22	95455	121575	26120	27.36
	Secondary	80	336940	425511	88571	22.64
	College Education	65	207089	243280	36191	17.47
Total		**228**	**839440**	**1013120**	**173680**	**20.68**
Madanapalli	Illiterate	51	208992	241623	32631	15.61

	Primary	27	118700	136568	17868	15.05
	Secondary	85	361869	441223	79354	21.92
	College Education	43	184519	231116	46597	25.25
Total		**206**	**874080**	**1050530**	**176450**	**20.18**
Chittoor	Illiterate	33	204818	238398	33580	16.39
	Primary	24	108170	134746	26576	24.56
	Secondary	63	355380	435334	79954	22.49
	College Education	31	191492	228032	36540	19.08
Total		**151**	**859860**	**1036510**	**176650**	**20.54**

Source: Primary data

Table 2 indicates that in the Tirupati revenue division the incremental income of the samples was Rs.22,798 among the illiterates, Rs.26,120 among those with primary education, Rs.88,571 among those with secondary education and Rs.36,191 among those with college education. The percentage of incremental income was 11.40 per cent among the illiterates, 27.36 per cent among those with primary education, 22.64 per cent among those with secondary education and 17.47 per cent among those with college education.In Madanapalli revenue division the incremental income was Rs.32,631 among the illiterates, Rs.17,868 among those with primary education, Rs.79,354 among those with secondary education and Rs.46,597 among those with college education. The percentage of incremental income was 15.61 per cent among the illiterates, 15.05 per cent among those with primary education, 21.92 per cent among those with college education and 25.25 per cent among those with college education. In Chittoor revenue division the incremental income was Rs.33,580 among the illiterates, Rs.26,576 among those with primary education, Rs.79,954 among those with secondary education and Rs.36,540 among those with college education. The percentage of incremental income was 16.39 per cent among the illiterates, 24.56 per cent among with primary education, 22.49 per cent along with the secondary education and 19.08 per cent among with the college education. The Percentage of incremental income on the basis of education was higher in Tirupati revenue division when compared to those of Madanapalli and Chittoor revenue divisions. Income generation on the basis of size of farmers is shown in table 3.

Asset Creation on the basis of level of Education

Revenue Division	Level of Education	Sample Size	Average net value		Incremental value Rs.	Percentage of Incremental value
			Pre- loan Period	Post- loan Period		
Tirupati	Illiterate	60	223712	274637	50925	22.76
	Primary	22	175669	218956	43287	24.64
	Secondary	80	262785	304753	41968	15.97
	College	66	231324	296434	65110	28.14
Total		**228**	**893490**	**1094780**	**201290**	**22.53**
Madanapalli	Illiterate	51	218587	259346	40759	18.46
	Primary	27	160492	201358	40866	25.46
	Secondary	85	293691	336793	43102	14.67
	College	43	176910	238673	61763	34.91
Total		**206**	**849680**	**1036170**	**186490**	**21.95**
Chittoor	Illiterate	33	206046	260013	53967	26.19
	Primary	24	159101	201510	42409	26.65
	Secondary	63	299467	354704	55237	18.44
	College	31	198316	242423	44107	22.24
Total		**151**	**862930**	**1058650**	**195720**	**22.68**

Source: Primary data

Table 3 shows that in Tirupati revenue division the incremental value of the assets of the illiterate was Rs.50,925, it was Rs.43,287 in the case of those with primary education, Rs.41,968 in the case of those with secondary education and Rs.65,110 in those with college education. In Madanapalli revenue division the incremental value of the assets of the illiterate was Rs.40,759, it was Rs.40,866 in the case of those with primary education, Rs.43,102 in the case of those with secondary education and Rs.61,763 in those with college education. In Chittoor revenue division the incremental value of the assets of the illiterate was Rs.53,967, it was Rs.42,409 in the case of those with primary education, Rs.55,237 in the case of those with secondary education and Rs.44,107 in those with college education.In Tirupati revenue division the percentage of incremental value of the assets was 22.76 per cent of illiterate, 24.64 per cent in the case of those with primary education, 15.97 per cent in the case those with secondary education and 28.14 per cent in the case of those with college education.In Madanapalli revenue division the percentage of incremental value of the assets was 18.46 per cent of illiterate, 25.46 per cent in the case of those with primary education, 14.67 per cent in the case those with secondary education and 34.91 per cent in the case of those with college education. In Chittoor revenue division the percentage of incremental value of the assets were 26.19 per cent of illiterates, 26.65 per cent in the case of those with primary education, 18.44 per cent in the case those with secondary education and 22.24 per cent in the case of those with college education. The percentage of incremental value of the asset among those with college education was higher in Madanapalli revenue division when compared to those of Tirupati and Chittoor revenue divisions. Asset creation on the basis of size of farmers is presented in table 9.

Asset Creation on the basis of size of Farmers

Revenue Division	Size of Farmers	Sample Size	Average net value		Incremental Value Rs.	% of Incremental value
			Pre- loan Period	Post- loan Period		
Tirupati	Marginal	31	148814	199603	50789	34.12
	Small	65	228376	274622	46246	20.25
	Medium	84	250747	302417	51670	20.60
	Large	48	265553	318138	52585	19.80
Total		**228**	**893490**	**1094780**	**201290**	**22.53**
Madanapalli	Marginal	25	128153	177182	49029	38.25
	Small	38	162801	210729	47928	29.43
	Medium	79	261026	315926	54900	21.03
	Large	64	297700	332333	34633	11.63
Total		**206**	**849680**	**1036170**	**186490**	**21.95**
Chittoor	Marginal	38	163763	214988	51225	31.27
	Small	35	181012	229019	48007	26.52
	Medium	49	242461	294134	51673	21.31
	Large	29	275694	320509	44815	16.26
Total		**151**	**862930**	**1058650**	**195720**	**22.68**

Source: Primary data

Table 4 shows that the Tirupati revenue division incremental value of the assets was Rs.50,789 in the case of marginal farmers, Rs.46,246 in the case of small farmers, Rs.51,670 in the case of the medium farmers and Rs.52,585 in the case of large farmers.In Madanapalli revenue division incremental value of the assets was Rs.49,029 in the case of marginal farmers, Rs.47,928 in the case of small farmers, Rs.54,900 in the case of the medium farmers and Rs.34,633 in the case of large farmers.In Chittoor revenue division incremental value of the assets was Rs.51,225 in the case of marginal farmers, Rs.48,007 in the case of small farmers, Rs.51,673 in the case of the medium farmers and Rs.44,815 in the case of large farmers.In Tirupati revenue division the percentage of incremental value of the assets was 34.12 per cent in the case of marginal farmers, 20.25 per cent in the case of small farmers, 20.60 per cent in the case of medium farmers and 19.80 per cent in the case of large farmers.In Madanapalli revenue division the percentage of incremental value of the assets was 38.25 per cent in the case of marginal farmers, 29.43 per cent in the case of small farmers, 21.03 per cent in the case of medium farmers and 11.63 per cent in the case of large farmers.In Chittoor revenue division the percentage of incremental value of the assets was 31.27 per cent in the case of marginal farmers 26.52 per cent in the case of small farmers, 21.31 per cent in the case of medium farmers and 16.26 per cent in the case of large farmers. The percentage of incremental value of the assets among marginal farmers was higher in the Madanapalli revenue division when compared to those of Chittoor and Tirupati revenue divisions. Asset creation on the basis of occupation is presented in table 10.

Asset Creation on the basis of Occupation

Revenue Division	Category of Occupation	Sample Size	Average net value		Incremental Value Rs.	Percentage of Incremental value
			Pre -loan Period	Post -loan Period		
Tirupati	Cultivation	99	144756	172310	27554	19.03
	Cultivation & wage earning	43	179927	209492	29565	16.43
	Cultivation & Allied Activities	36	187206	228019	40813	21.80
	Cultivation & Employment	31	188917	231407	42490	22.49
	Cultivation & Business	19	192684	253552	60868	31.58
Total		**228**	**893490**	**1094780**	**201290**	**22.53**
Madanapalli	Cultivation	69	129624	148516	18892	14.57
	Cultivation & wage earning	55	169862	188971	19109	11.25
	Cultivation & Allied Activities	28	178309	210897	32588	18.28
	Cultivation & Employment	33	190217	248693	58476	30.74
	Cultivation & Business	21	181668	239093	57425	31.61
Total		**206**	**849680**	**1036170**	**186490**	**21.95**
Chittoor	Cultivation	61	137468	165612	28144	20.47
	Cultivation & wage earning	23	171926	195653	23727	13.80
	Cultivation & Allied Activities	33	181411	199797	18386	10.13
	Cultivation & Employment	19	195715	258178	62463	31.91
	Cultivation & Business	15	176410	239410	63000	35.71
Total		**151**	**862930**	**1058650**	**195720**	**22.68**

Source: Primary data

Table 5 shows that in Tirupati revenue division the incremental value of the assets was Rs.27,554, in the case of those who pursued cultivation, Rs.29,565 in the case of those who pursued cultivation and wage earning, Rs.40,813 in the case of those who pursued cultivation and allied activities, Rs.42,490 in the case of those who pursued cultivation and employment and Rs.60,868 in the case of those who pursued cultivation and business.In Madanapalli revenue division the incremental value of the assets was Rs.18,892, in the case of those who pursued cultivation, Rs.19,109 in the case of those who pursued cultivation and wage earning, Rs.32,588 in the case of those who pursued cultivation and allied activities, Rs.58,476 in the case of those who pursued cultivation and employment and Rs.57,425 in the case of those who pursued cultivation and business. In Chittoor revenue division the incremental value of the assets was Rs.28,144, in the case of those who pursued cultivation, Rs.23,727 in the case of those who pursued cultivation and wage earning, Rs.18,386 in the case of those who pursued cultivation and allied activities, Rs.62,463 in the case of those who pursued cultivation and employment and Rs.63,000 in the case of those who pursued cultivation and business. In Tirupati revenue division the percentage of incremental value of the assets was 19.03 per cent for those in cultivation, 16.43 per cent for those in cultivation and wage earning, 21.80 per cent for those in cultivation and allied activities, 22.49 per cent for those in cultivation and employment and 31.58 per cent for those in cultivation and business as their occupation. In Madanapalli revenue division the percentage of incremental value of the assets was 14.57 per cent for those in cultivation, 11.25 per cent for those in cultivation and wage earning, 18.28 per cent for those in cultivation and allied activities, 30.74 per cent for those in cultivation and employment and 31.61 per cent for those in cultivation and business as their occupation. In Chittoor revenue division the percentage of incremental value of the assets was 20.47 per cent for those in cultivation, 13.80 per cent for those in cultivation and wage earning, 10.13 per cent for those in cultivation and allied activities 31.91 per cent for those in cultivation and employment and 35.71 per cent for those in cultivation and business as their occupation. The percentage of incremental value of asset among cultivation and business category was higher in the Chittoor revenue division when compared to those of Madanapalli and Tirupati revenue divisions.

Conclusion

Credit can play an important role in increasing agricultural production and also improving the living standards of farmers in any country. It is proved in this study that credit facilities extended by DCCBs would enable the farmer-borrowers to improve themselves effectively in income generating activities during the post-loan period and that the small farmers in particular would improve their economic conditions. From this study one can find that the percentage of incremental income was high among small size farmers in Chittoor revenue division when compared to those of Tirupati and Madanapalli revenue divisions and at the same time incremental income was high among the cultivation and business category in Madanapalli revenue division when compared to those of Tirupati and Chittoor revenue divisions.The percentage of incremental man days among illiterate category was higher in the Madanapalli revenue division when compared to those of Chittoor and Tirupati revenue divisions and the percentage of incremental man days among cultivation and business category was higher in Tirupati revenue division when compared to those of Chittoor and Madanapalli revenue divisions. The percentage of incremental value of asset among the farmers in the age group 25-50 years was higher in Chittoor revenue division when compared to those of Tirupati and Madanapalli revenue divisions and at the same time the asset creation on the basis of level of education and the percentage of incremental value of the asset among those with college education were higher in Madanapalli revenue division when compared to those of Tirupati and Chittoor revenue divisions. One can say from this study that DCCBs have been playing a significant role not only as an instrument of economic growth but also influence the people towards social changes by way of adopting new technologies.

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PROBLEMS OF MUSHROOM CUTIVATORS
(A STUDY WITH SPECIAL REFERENCE TO METTUR TALUK)

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Abstract

Mushrooms known as fleshy fungus have been used by human beings since times immemorial and have been mentioned in the classical writings of Hindus, Greeks and even Romans. Mushrooms have been considered one of the world's greatest natural resources since they have the ability to transform required input into nutritional substance and high protein food. In India, mushrooms are raised as a seasonal crop on a commercial scale round the year under the controlled environmental conditions. The finding of the study will be useful to the mushroom growers, researchers, extension workers, the agro industry people and policy makers. The study will give better understanding of cost of cultivation and marketing efficiency of mushroom crop. The main are the objectives of the study are as under to find out the socio- economic status of the mushroom cultivators in the study area, to study the reason for starting mushroom cultivation business and to point out the problems faced by the mushroom cultivators in the study area. Usually, small, marginal and landless farmers are engaged in mushroom cultivation mainly because small piece of land, and little amount of money are required as capital. Marketing costs and margins are relatively higher than those of other agricultural products in Mettur. A large number of small, marginal and landless poor farmers as well as women can earn a significant amount of money from mushroom cultivation that can help reduce poverty and create employment opportunity in Mettur.

Keywords: Mushroom, Cultivation, Marketing, Socio economic status.

Introduction

Mushrooms known as fleshy fungus have been used by human beings since times immemorial and have been mentioned in the classical writings of Hindus, Greeks and even Romans. Mushrooms have been considered one of the world's greatest natural resources since they have the ability to transform required input into nutritional substance and high protein food.

Global Scenario: Mushroom industry globally has expanded both horizontally and vertically, meaning that the expansion has been in production and addition of newer types of mushrooms for commercial cultivation, both edible and non-edible mushrooms. Today China is leading in global mushroom production both in cultivation of edible and non-edible types. China produces approximately 70 percent of world mushroom production and mushroom is their sixth economically important crop as far as country's revenue generation is concerned. The second highest mushroom producing country is USA, followed by some European countries. European production is confined to France, Germany, Holland, Italy and other countries in western-Europe.

Present status in India: Though mushroom cultivation, both in east and west started many centuries ago, yet its cultivation in India is of recent origin. Paddy straw mushroom cultivation was first attempted in India at Coimbatore in 1943 by Thomas and his associates. However, first systematic attempt in cultivating button mushroom was made in 1961, when a scheme entitles "Development of Mushroom Cultivation in Himachal Pradesh" was started at Solan by H.P. Government in collaboration with ICAR, New Delhi.

Mushroom cultivation in India: In India, mushrooms are raised as a seasonal crop on a commercial scale round the year under the controlled environmental conditions. About 2000 species of fungi are used as food by tribes and various communities, however, only a few are cultivated. Climatic conditions in India are favourable for natural occurrence of mushrooms.

Importance of the study: The finding of the study will be useful to the mushroom growers, researchers, extension workers, the agro industry people and policy makers. The study will give better understanding of cost of cultivation and marketing efficiency of mushroom crop. The estimate of the production, marketing system and surpluses of mushroom crop will be of specific interest to research. The study has also cited reasons why the people have not adopted mushroom cultivation so far despite getting mushroom training so many times.

Objectives of the study: The following are the objectives of the study are as under

➢ To find out the socio- economic status of the mushroom cultivators in the study area.
➢ To study the reason for starting mushroom cultivation business
➢ To point out the problems faced by the mushroom cultivators in the study area.
➢ To study the opinion about profit from mushroom business in the study area.
➢ To discover the level of satisfaction of the mushroom cultivators in the study area.
➢ To identify problems and constraints faced by the mushroom cultivators and to suggest ways and means to overcome them for the problems of mushroom cultivation.

HYPOTHESIS OF THE STUDY

❖ There is no significant relationship between age and level of satisfaction
❖ There is no significant relationship between education and yearly profit of mushroom business
❖ There is no significant relationship between age and reason starting mushroom business

Research Methodology

Research design: The research design of the project is descriptive as it describes data and characteristics associated with the population using mobile phones. Descriptive research is used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables in a given situation.

Method of data collection: To accomplish the objectives of the study, both primary and secondary data's were collected.

Sampling method: The sampling used for the study is convenient sampling. This sampling is selected by the researcher for the purpose of convenience to access.

Sample size: 100 questionnaires was distributed for the respondents, 2 questionnaires was rejected due to inadequate answers. Finally 98 questionnaires were taken into account for the study.

Statistical tools used for the study: The data collected were tabulated and analyzed by applying statistical tool are i. Simple percentage methods. ii. Chi-square test methods. iii. Correlation

Area of the study: The study was conducted in Mettur Taluk.

Period of the study: The study covers a period of one year from October 2017 to October 2018.

Limitations of the study: The survey was limited to Mettur region only, so it cannot be generalized to all the cities. The samples size is limited to 98 customers only. Time is one of the major constraints. At most care taken by the researches to choose the correct information from the respondents.

Review of literature: A comprehensive review of literature is essential in any research endeavour. The scientific investigations arrived at through systematic thinking, factual observations and past experience, become a sound base of knowledge for future research work to be undertaken. Before initiating any study, a critical and thorough insight of the studies already carried out relating to topic of the problem under investigation, therefore, becomes imperative for conceptual clarity and methodological improvement in the research work to be carried out. This chapter reviews the available literature and to document major findings of different studies, research gaps and the recent changes that have been taking place in problems of mushroom production and marketing in India and abroad.

Data analysis and interpretation of problems mushroom cultivators:

Table showing the age of the respondents

S.N	Age	No. of Sample	%
1	Below 20	4	4
2	20-30	58	59
3	30-40	26	27
4	Above 40	10	10
Total		98	100

Source: Primary Data

Interpretation: From the above analysis reveals that the majority of the respondents (**59%**) are belonging to the age group of 20-30 years followed by 27 percent of the respondents are belonging to the age group of 30-40 years next 10 percent of the respondents are belonging to the age group of above 40 years remaining 4 percent of the respondents are belonging to the age of below 20 years.

Conclusion: It is finished that the majority of the respondents (59%) are belonging to the age group of 30-40 years in the study area.

2. Chi- square test analysis:

1. Association between age and level of satisfaction

Ho = There is no significant relationship between age and level of satisfaction

ACTUAL FREQUENCY TABLE

Age	Level of Satisfaction	Total
4	22	**26**
58	54	**112**
26	20	**46**
10	2	**12**
0	0	**0**
98	**98**	**196**

Table value: Degree of freedom @ 5% level

d = (r-1) (c-1) = (5-1) (2-1) = (4) (1) =4 =9.49

Hypothesis testing: The calculated value is greater than the table value. Hence the hypothesis is rejected.

Conclusion: There is significant relationship between age and level of satisfaction in the study area.

3. Correlation analysis

3. 1. Association between annual income and experience

Annual income in mushroom cultivators be denoted by (x) experience by (y).

Annual income (x)	10	48	26	14	**0**
Experience (y)	40	38	20	0	**0**

$$\sum xy = \frac{\sum xy}{\sqrt{\sum x2 * \sum y2}} \quad \frac{343}{875 \times 1043}$$

$$\frac{343}{955.31.41} = 0.3590$$

Conclusion: There is a positive correlation between experience of mushroom cultivators and level of satisfaction of mushroom cultivators in the study area.

Findings of the study

Percentage analysis: The majority of the respondents (59%) are belonging to the age group of 30-40 years the study area. The majority of the respondents (**65%**) are male respondents in the study area. The most of the respondents (**39%**) are studied both to 12th std., and graduate level in the study area. **T**he majority of the respondents (55**%**) are business in the study area. The majority of the respondents (**73%**) are married category in study area. The most of the respondents (**76%**) are living in joint family in the study area. The majority of respondents **(49%)** have hot annual income 50,000-1,00,000 The concluded that (**71%**) of the respondents are having in the family between to 6 in the study area**.** The majority of the respondents (**41%**) are having experience between below 3 years in mushroom cultivation in the study area. The greater part of the respondents (**43%**) are getting source of awareness from the relatives in the study area. The most of respondents (**63%**) are doing mushroom cultivation in the own land in the study area. The majority of the respondents

(**43%**) are having wealth position below 5 lakhs in the study area. The majority of the respondents (**39%**) are doing as family business in the study area. The majority of the respondents (**49%**) are needed below 50,000 as capital for the mushroom cultivation in the study area. The best part of the respondents (**55%**) is having mushroom set between 3 to 6. The majority respondents (**47%**) are using own capital for the mushroom cultivation business in the study area. The majority of the respondents (**54%**) are getting yield of mushroom between 2 to 4 months in the study area. The three fourth majority of the respondents (**60%**) are selling the mushroom in the own market in the study area. The majority of the respondents (**43%**) are facing the problem of raise in price of seed. The majority of the respondents (**39%**) of profit from mushroom cultivation of 50000 to 100000 in the study area. The great majority of respondents (**65%**) are satisfied with profit from mushroom cultivation in the study area. The majority of respondents (**51%**) are satisfied with Expectation mushroom cultivation producers in the study area. The majority of respondents (**56%**) are satisfied with Overall level of satisfaction about mushroom cultivation in the study area.

Rank Analysis: The marketing problem of mushroom is getting first rank, Finance problem of mushroom is getting second rank, raw material of the mushroom is getting third rank, labour problems of the mushroom producers is getting fourth rank and finally managerial problem of the mushroom cultivation is getting fifth rank in the study area.

Chi-Square Test Analysis: There is no significant relationship between age and level of satisfaction in mushroom cultivators. There is no significant relationship between educational and yearly profit in mushroom cultivators. There is no significant relationship between age and reason starting mushroom in mushroom cultivators. There is no significant relationship between experience and level of satisfaction in mushroom cultivators. There is no significant relationship between gender and level of satisfaction in mushroom cultivators.

Suggestions of the Study: Channels of marketing-There are large number of intermediaries in the marketing channels of mushroom industry. Therefore the mushroom cultivators do not receive a good price for their mushrooms. Thus the government should increase the market price of the mushrooms and reduce the number of intermediaries, so that the mushroom cultivators receive a larger benefit from their cultivation. Storage facility – The cultivated mushrooms are perishable in nature. There is a large need of proper storage facility for the mushroom cultivators. In Mettur there is a lack of storage facility. Therefore the government should take steps to provide storage facilities for the mushroom cultivators. Defaulters of mushroom cultivators- The wholesalers, retailers and distributors of mushrooms do not pay immediately to the mushroom cultivators. They buy on credit and delay the payments and sometimes do not pay at all. This affects the business of the small mushroom cultivators. This credit payment must be avoided by the buyers and the mushroom cultivators must be paid in cash so that they are able to reinvest in the business again and can continue producing without any financial problem. Advertisement- Mushroom cultivators produce on a small scale. Therefore they do not give importance to advertisement. But actually advertisement is a necessity. Advertisement will help many people to have an awareness in the society and improve their business on a larger scale. -Reduce market price of inputs - Government can provide incentives to mushroom cultivators - Availability of good mushroom spawn - Need more extension and training for producers - Provide easy loan program to the mushroom cultivators by the Government through the banks - Mushroom association should be formed by the mushroom cultivators

Conclusion: Mushroom is an economically profitable and promising agricultural enterprise in Mettur District. Usually, small, marginal and landless farmers are engaged in mushroom cultivation mainly because small piece of land, and little amount of money are required as capital. Marketing costs and margins are relatively higher than those of other agricultural products in Mettur. The marketing margins of mushroom from farm-gate to wholesalers and wholesalers to retailers were Rs. 90 and 110 per kilogram, respectively. Smooth marketing channels are required for optimal mushroom production. Three intermediaries – mushroom office, wholesalers and retailers are involved in the mushroom marketing channels. Mushroom cultivators are facing major problems like storage, defaulters, advertising and transport.

They are also facing problems relating to productions, which are high price of spawn, infestation of fly and cockroaches, and high temperature, marketing, technical and awareness problems. Economically solvent, rich and middle income group people are the main customers of mushroom in Mettur. A large number of small, marginal and landless poor farmers as well as women can earn a significant amount of money from mushroom cultivation that can help reduce poverty and create employment opportunity in Mettur.

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PERFORMANCE OF VEHICULAR MOBILITY MODEL IN VANETS USING REACTIVE ROUTING PROTOCOLS

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Abstract

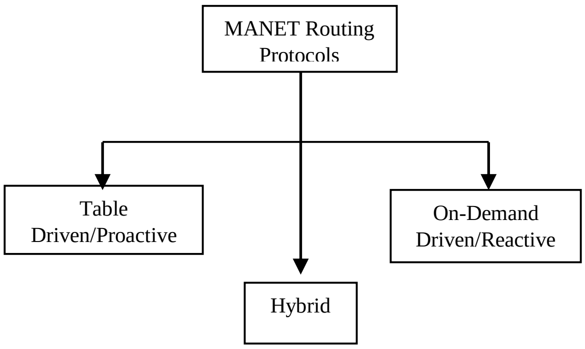
Vehicular Ad-hoc Networks have been magnetizing interest from research and industry. This technology is distinguished from mobile ad hoc networks and wireless sensor networks by large-scale deployed autonomous nodes with abundant exterior assisted information, high mobility with an organized but constrained pattern, frequently changed network topology leading to frequent network fragmentation, and varying drivers behavior factors. In this paper, we introduce a vehicular mobility model and assess the performance of routing protocols: AODV, DSR and TORA. A variety of highway scenario characterized by the mobility, load, and size of network. Our results signify the reactive routing protocols performance that it suitable for VANET scenarios in terms of end-to-end delay, packet delivery ratio and routing load.

Keywords: AODV, DSR, MANET, TORA and VANET.

Introduction

The large number of vehicles equipped with wireless transceivers to communicate with other vehicles to form an exceptional class of wireless networks, known as VANETs. It mostly resembles the operation technology of MANET that the process of self-organization, self-management, low bandwidth and shared radio transmission. The interference in operation of VANET comes from the high speed and uncertain mobility of the mobile nodes along the paths. This suggested that the design of efficient on-demand routing protocol demands upgradation of MANET architecture to accommodate the fast mobility of the VANET nodes in an efficient manner. This warranted various research challenges to design appropriate routing protocol. It is therefore important at this stage to say that the key characteristics of VANET that may be accounted for the design of various routing protocols. As a special type of network, Vehicular Ad hoc Networks (VANETs) have received increasing research attention in recent years. Vehicular ad hoc networks are wireless networks that use multi-hop routing instead of static networks infrastructure to provide network connectivity.

VANETs have applications in rapidly deployed and dynamic military & civilian systems. The network topology in VANETs usually changes with time. So there are new challenges for routing protocols in VANETs since traditional routing protocols may not be suitable for VANETs. Researchers are designing new VANETs routing protocols, comparing and improving existing ones by using simulations. This work is an attempt towards a comprehensive performance evaluation of commonly used mobile ad hoc routing protocols.



DSDV, WRP, CGSR, etc.,
DSR, AODV, TORA, etc.,

Fig. 1 Taxonomy of various routing protocols in VANET

Fig. 1 shows that VANET routing protocols which can be classified as topology-based and geographic (position-based). Topology-based routing uses the information about links that exist in the network to perform packet forwarding. Geographic routing uses neighbouring location information to perform packet forwarding. Since link information changes in a regular basis, topology-based routing suffers from routing route breaks.

Related Work

In recent years, there are several open-source tools are utilized for the generation of vehicular mobility patterns. Most of these tools are capable of producing traces for network simulators such as NS-2, Qual-Net. Recent efforts are the most related to our work, as they also use simulation-based methodology i.e. NS-2 is the first to provide a realistic, quantitative analysis comparing the relative performance of the four mobile ad hoc network routing protocols AODV, DSDV, DSR, and TORA. They simulated 50 wireless nodes, moving according to the random waypoint (RWP) model over a rectangular (1500m ×300m) flat space for 900 seconds. The mobility patterns were generated with 7 different pause time (0, 30, 60, 120, 300, 600, and 900 sec) and with 2 different maximum node speed (1 & 20 mps). The type of communication patterns was chosen to be constant bit rate, and the parameters experimented with 3 different communication pairs (10, 20, 30 traffic sources), each sending 1, 4, and 8 packets/sec. Packet delivery fraction, number of routing packets transmitted, and distributions of path lengths were chosen as the performance metrics. Simulation results demonstrated that DSR and AODV performed significantly better than DSDV, and TORA acted the worst in terms of routing packet overhead.

Mobility Models with Simulator

Mobility Model defines the movement pattern of nodes. Network simulators can then, by using this information, create random topologies based on nodes position and perform some tasks between the nodes. Using VANET create a challenge and that is how to separate a mobility model at Macroscopic and Microscopic level. Mobility Model includes some constraints like streets, lights, roads, buildings, cars, vehicular movements and inter-vehicle behaviour. These constraints are divided into two parts that are dealt with separately. The node mobility includes streets, lights, roads, buildings etc and is classified as Macroscopic, whereas the movement of vehicles and their behaviours are classified as Microscopic. We can also analyze mobility model as Traffic generator and Motion generator. Motion constraints are designed by car driver habits, cars and pedestrians and describe each vehicle movement. The Traffic generator creates random topologies from maps and defines the vehicular behaviour under environment.

The mobility model is described by the framework that includes lanes, roads, streets, obstacles in mobility & communication model, car velocities, the attraction and repulsion points, based on traffic densities relating to how the simulation time could vary, vehicular distribution on roads and intelligent driving pattern. Vehicular communication is expected to contribute to safer and more efficient traffic by providing timely information to drivers, and also to make travel more convenient. The illustration of this framework is given in the fig. below.

There are various models, which can generate mobility patterns based on certain criteria. While it is hard to present real world traffic scenarios in a single simulation model, ways can be adopted to develop a protocol suite which can support the implementation. The mobility patterns can be generated from various models. Since real-life implementation of protocols for these mobility models are not easily feasible, a common way of performance evaluation is through simulation. A different choice is the supposed ns-2 which is among the most widely accepted network simulation tools in the scientific community. Its software architecture is prepared for extensions and enables attaching software modules for data exchange with other programs.

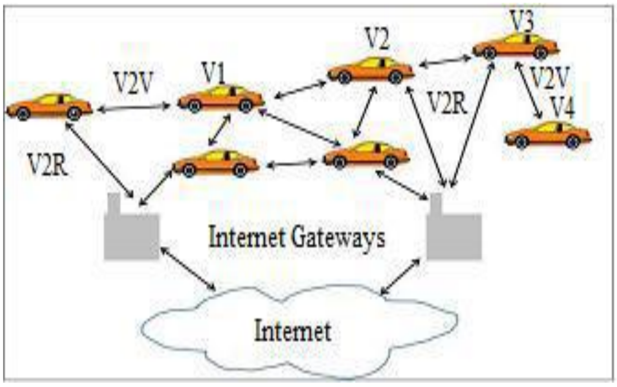


Fig. 2 The framework of VANETs

NS-2 features a comprehensive model for simulating multihop wireless networks and includes an implementation of the IEEE 802.11 MAC-protocol. As radio wave propagation models, NS-2 basically provides the free space model and that supposed Two Ray Ground model, which takes into account both the direct communication path between two vehicles and an additional path due to reflections on the ground. This model is very well applicable to the VANET domain.

Simulation with Results

The experimental setup is used for performance evaluation of the AODV, DSR and TORA. It measures the ability of protocols to adapt the dynamic network topology changes while continuing to successfully deliver data packets from source to their destinations. In order to measure this ability, different scenarios are generated by varying the number of nodes. We are using the following scenario generation commands for generating scenario file for 20, 40, 60, 80 and 100 nodes:

./setdest –v 1 –n 20 –p 2.0 –M 10.0 -t 100 -x 200 -y 200;
./setdest –v 1 –n 40 –p 2.0 –M 10.0 -t 100 -x 200 -y 200;
./setdest –v 1 –n 60 –p 2.0 –M 10.0 -t 100 -x 200 -y 200;
./setdest –v 1 –n 80 –p 2.0 –M 10.0 -t 100 -x 200 -y 200;
./setdest –v 1 –n 100 –p 2.0 –M 10.0 -t 100 -x 200 -y 200.

The following commands used to generate the connection pattern that we use cbrgen.tcl file.

ns cbrgen.tcl -type cbr -nn 20 -seed 1.0 -mc 10 –rate 4.0;
ns cbrgen.tcl -type cbr -nn 40 -seed 1.0 -mc 10 –rate 4.0;
ns cbrgen.tcl -type cbr -nn 60 -seed 1.0 -mc 10 –rate 4.0;
ns cbrgen.tcl -type cbr -nn 80 -seed 1.0 -mc 10 –rate 4.0;
ns cbrgen.tcl -type cbr -nn 100 -seed 1.0 -mc 10 –rate 4.0;

The trace file is created by each run and is analyzed using a variety of scripts, particularly one called file *.tr that counts the number of successfully delivered packets and the length of the paths taken by the packets, as well as additional information about the internal functioning of each scripts executed. This trace file is further analyzed with AWK file and Microsoft Excel is used to produce the graphs. Simulations are run by considering AODV, DSR and TORA routing protocol. Simulation parameters are appended in Table-1.

Parameters	Specifications
Antenna Model	Omnidirectional
Channel Type	Wireless Channel
Connections	10
Data Payload	512 Bytes / Packet
Data Rate	4 Mbps
Maximum Speed	10 m/s
Network Simulator	NS-2.34
No. of Vehicles	20, 40, 60, 80, 100
Pause Time	2.0
Propagation Model	2-ray ground reflection model
Protocols	AODV, DSR, TORA & IEEE 802.11
Simulation Area	200m X 200m
Simulation Time	100 s
Traffic Type	Constant Bit Rate

Table 1: Parameters for Simulation

We measure the protocols performance on a particular terrain area of 200m x 200m at a speed of 10 m/s. The simulation time was taken to be of 100s for CBR traffic type with a packet size of 512 Byte and also considered nodes with Omni-Antenna & 2 Ray Ground Radio

Propagation method. Initially, we will compare 3 protocols under the above simulation environment. Fig. 3 shows the behaviour by throughput of AODV, DSR and TORA. In certain time, the total sizes of received packets at all the destination nodes known as throughput.

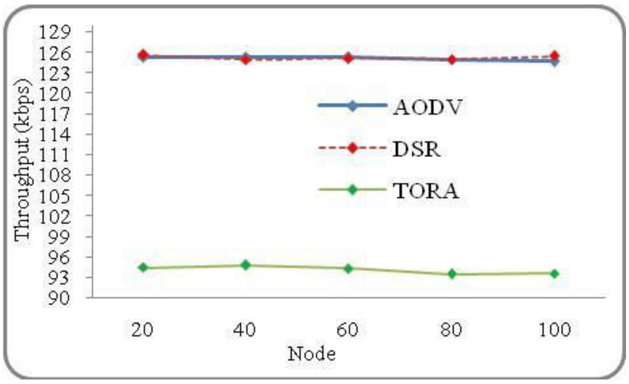


Fig. 3 Throughput of AODV, DSR and TORA

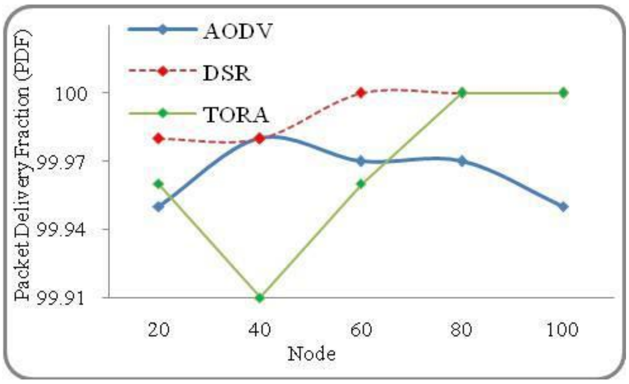


Fig. 4 Packet Delivery Fraction (PDF) of AODV & DSR

The above fig. 4 shows that packet delivery fraction for the same movement models are used, the no. of traffic sources is increasing at 20, 40, 60, 80 and 100. The maximum speed of nodes is set to 10m/s & the pause time is fixed 2. The average end-to-end delay in packet delivery is higher in TORA as compared to AODV and DSR, fig. 5. AODV and DSR are little and similar in the case of decreasing order of nodes. When the nodes increase 80 to 100, the transmission delay of data packet is slightly similar. The DSR becomes better rather than to AODV and TORA when nodes becomes 20 to 80. DSR execute a little better load-wise and can possibly do even better with some fine-tuning of this timeout period by making it a function of node mobility. TORA has the worst delay characteristics because of the loss of distance information with progress.

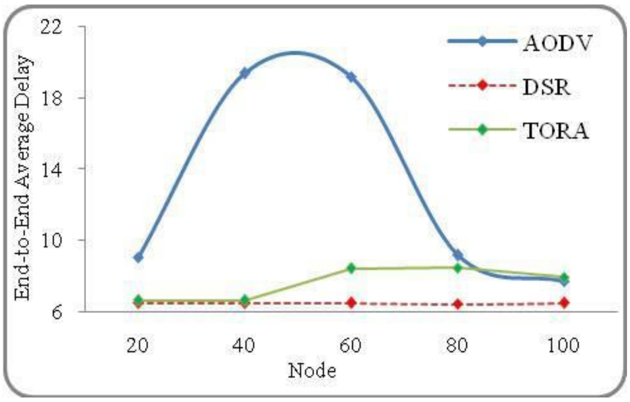


Fig. 5 End-to-End average Delay of AODV, DSR &TORA

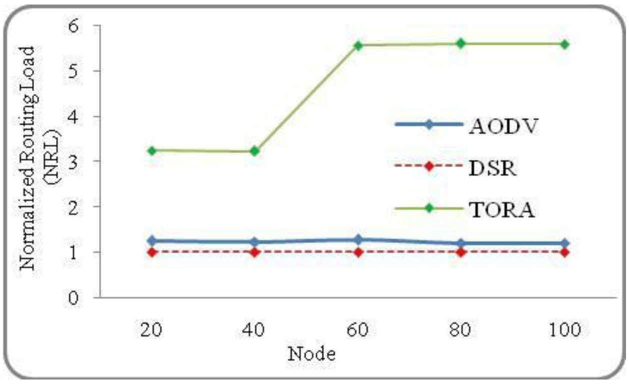


Fig. 6 Normalized Routing Load (NRL) of AODV, DSR and TORA.

Conclusion

This paper indicates a vehicular mobility models with network simulator and evaluate the benefits for traffic safety with throughput. The simulation environment set up is focus on the routing performance in VANETs and also provides different scenarios. We present an extensive simulation studies to compare the AODV, DSR and TORA, using a variety of highway scenarios, characterized by the mobility, load, and size of the networks. Our results indicate the reactive routing protocols performance, which is suitable for VANET scenarios in terms of end-to-end delay, packet delivery ratio and routing load. The goal of this performance evaluation is a comparison of VANETs routing protocols between AODV, DSR and TORA. In DSR, our simulation experiment shows the overall best performance. TORA performs better at maximum number of nodes/ high mobility.

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PERFORMANCE EVALUATION OF THE KRISHNA DISTRICT CO-OPERATIVE CENTRAL BANK LTD., KRISHNA DISTRICT OF ANDHRA PRADESH

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Abstract

Co-operative banks are often created by persons belonging to the same local or professional community or sharing a common interest. Cooperative banks generally provide their members with a wide range of banking and financial services (loans, deposits, banking accounts etc.). Co-operative banks differ from stockholder banks by their organization, their goals, their values and their governance. Present paper attempts to Performance Evaluation of The Krishna District Cooperative Central Bank Ltd., through selective indicators, it analyses the Deposits, Credits, and C/D Ratios.

Keywords: Deposits, Capital, Borrowings, Credit, Investment.

Introduction

The Krishna District Co-operative Central Bank Ltd., (Krishna DCCB) started functioning with Machilipatnam as Head Quarters and regional office at vijayawada. Krishna DCCB is the biggest DCCB in the State of A.P. not only in terms of no. of Branches (55 Brs.), no. of PACS (425 PACS after restructuring). (As on 31.03.2018)

Objective of the Study

- To evaluate the growth of Capital, Reserves and Borrowings of the Krishna DCCB Ltd.
- To analyse the Deposits, Credits and C/D Ratios of the Krishna DCCB Ltd.
- To examine the growth of investment by The Krishna DCCB Ltd.
- To understand the profitability position in The Krishna DCCB Ltd.

Methodology of the Study

The study is mainly based on secondary data, which has been gathered from annual reports of The Krishna DCCB Ltd., mainly from the last eight years reports. The secondary data is also collected from NABARD, RBI bulletins, Government of India reports and online sources like apcob.org, krishnadccb.com etc.

Sample of the Study

The present study is mainly based on secondary sources drawn from National Federation of State Cooperative Banks Ltd (NFSCOB) reports, and other web sites, papers, books and journals relating to Co-operative banking sector.

Data in Tools

Data were collected for period of ten years from 2008-09 to 2017-18. For analysis of the data, various statistical tools (Mean, S.D, C.V, Trend analysis) has been used to arrive at conclusion in a scientific way

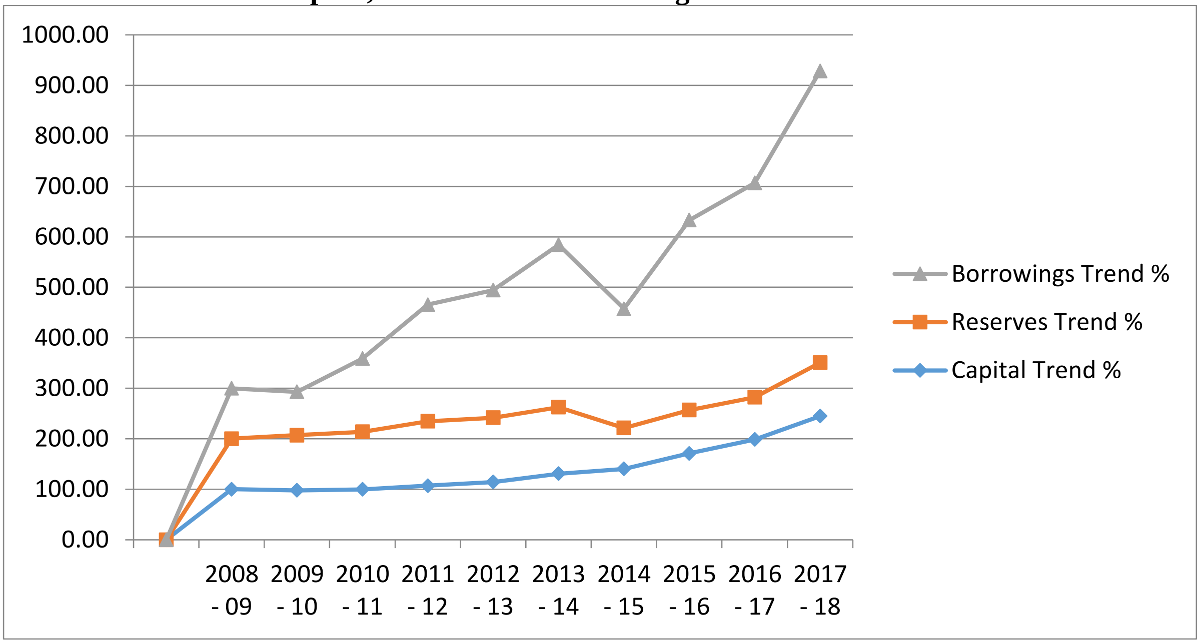
Analysis of the Study

Trend of Capital, Reserves and Borrowings of the Krishna DCCB LTD. *(Rs. In lakhs)*

Year	Capital		Reserves		Borrowings	
	Amount	Trend %	Amount	Trend %	Amount	Trend %
2008 - 09	5684	100	12886	100	26211	100
2009 - 10	5565	97.91	14058	109.10	22517	85.91
2010 - 11	5667	99.70	14714	114.19	37981	144.90
2011 - 12	6089	107.13	16454	127.69	60536	230.96
2012 - 13	6491	114.20	16405	127.31	66336	253.08
2013 - 14	7429	130.70	16986	131.82	84411	322.04
2014 - 15	7964	140.11	10480	81.33	61870	236.05
2015 - 16	9716	170.94	11072	85.92	98676	376.47
2016 - 17	11292	198.66	10777	83.63	111247	424.43
2017 - 18	13918	244.86	13609	105.61	151524	578.09
Mean	7981.50	140.42	13744.10	106.66	72130.90	275.19
S.D	2824.37	49.69	2434.15	18.89	40412.43	154.18
C.V	35.39	35.39	17.71	17.71	56.03	56.03

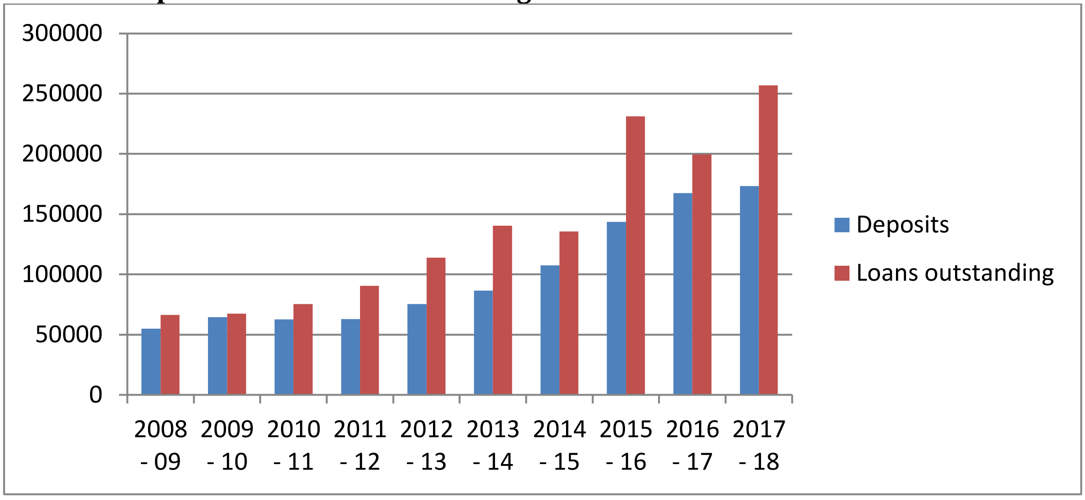
Source: www.krishnadccb.com

Trend of Capital, Reserves and Borrowings of the Krishna DCCB LTD.

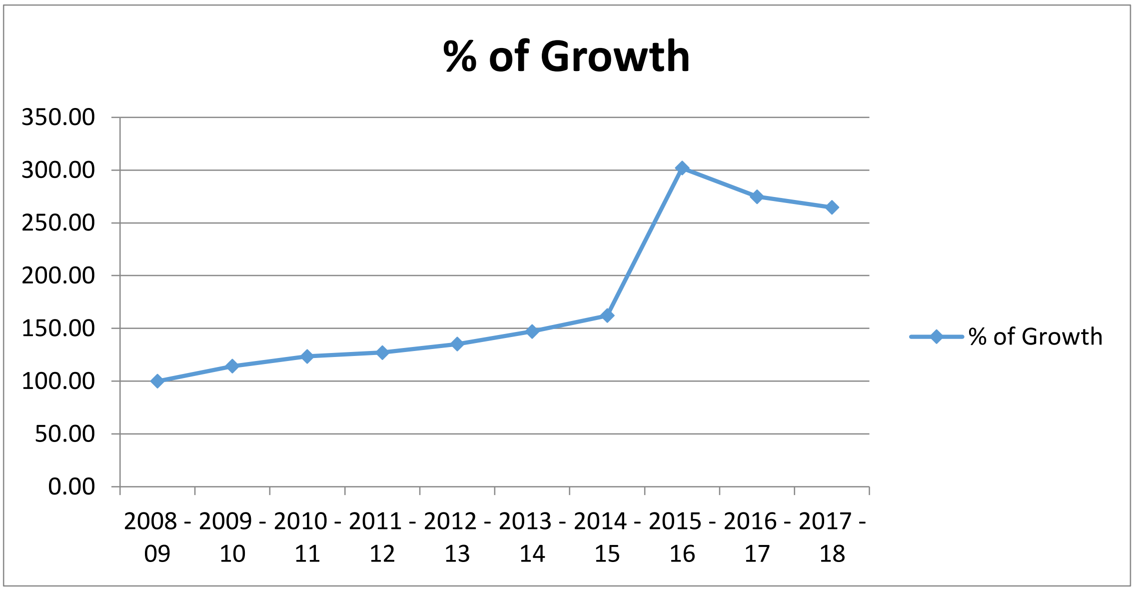


The above table 1analysed the funds of The Krishna DCCB Ltd. and their trend in terms of Capital, Reserves and Borrowings. The amount of capital is 5,684 lakhs in 2008-09, it has been gradually increased (except in the year 2009-10) and reached 13,918 lakhs in 2017-18, with a percentage of 144.86 (244.86 -100). In case of reserves, they are 12,886 lakhs in 2008-09 where as in 2017-18 it was recorded 13,609 lakhs with 5.61% (105.61-100) growth trend. The borrowings of The Krishna DCCB Ltd. during the year 2008-09 are 26,211 lakhs, it has been fluctuating and finally the borrowings are recorded 1,51,524 lakhs in the year 2017-18 with 478.09 % (578.09-100) growth. The average growth of Capital, Reserves and Borrowings of The Krishna DCCB Ltd. is 140.42%, 106.66% and 275.19% respectively. The S.D of capital is 49.69%, Reserves are 18.89%, and borrowings are 154.18%. When compare to the Standard deviation of capital, reserves and borrowings, Reserves have more consistent than Capital and borrowings.

Deposits and Loans Outstanding Position in the Krishna DCCB LTD.



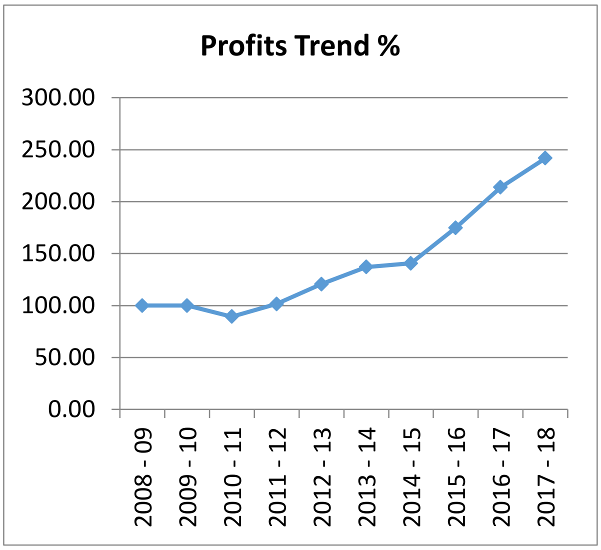
The above table 2 has been depicted that during the year 2008-09 the Deposits are registered Rs.54, 972 lakhs it has been increased to Rs.1, 73,214 lakhs in 2017-18. The mobilization of deposits has been increased gradually during the study period, and the average deposits mobilized by bank is 99,902.70. Whereas Loans Outstanding of Krishna DCCBs is just Rs.66,343 lakhs in 2008-09, it has been increased to 4 times with an amount of 2,56,783 lakhs in the year 2017-08. The average credit issued by the banks is Rs.1,37,707.60 lakhs. The Credit Deposit Ratio of The Krishna DCCB Ltd. from 2007-08 to 2017-18 is shown a fluctuating trend. The highest C/D Ratio of the banks estimated with 162.29% in 2013-14 and the lowest C/D Ratio 104.22% is recorded in the year 2009-10. The average C/D ratio during the study period 135.70%, with a variance of 14.81%. The S.D is 20.10 which is less it indicates high degree of uniformity of observations as well as homogeneity of the series.



Growth of Investments by the Krishna DCCB LTD.

The table-3 depicted growth pattern of investment by The Krishna DCCB Ltd., the investment in 2008-09 is Rs. 32,614 lakhs and it has been increased gradually year by year and recorded Rs. 86,317 lakhs in the year 2017-18 with a growth rate 164.66 (264.66-100). The average investment of the bank is 57,095.40 lakhs during the study period. The Standard Deviation is 24,529.80 lakhs and the C.V is 42.96 which is less, it indicates high degree of uniformity of observations as well as homogeneity of the series.

Trends of Profits in the Krishna DCCB LTD.



The table-4 revealed the growth pattern of profits in The Krishna DCCB Ltd., the profit in 2008-09 is Rs. 582 lakhs and it has suddenly increased to Rs. 1407 lakhs in 2017-18, with a growth rate 141.75 (241.75-100), The average profit of the bank is Rs. 826.10 lakhs during the study period. The Standard Deviation is 304.22 lakhs and the C.V is 36.83 which is higher it indicates low degree of homogeneity as well as heterogeneity of the series.

Suggestions and Recommendations

The Krishna DCCB Ltd. should also provide loans such as education loans, vehicle loans on par with commercial banks.

- The Bank should start deposit schemes such as kiddy banks, Weekly saving schemes, daily saving schemes, Women Deposit schemes, Student deposit schemes, Marriage deposit schemes, Pension deposit schemes, Reinvestment deposit scheme
- The Bank should try to upgrade technology. It should adopt the modern methods of banking like internet banking, credit cards, ATM, etc.

Conclusion

The DCCBs have been showing maximum growth in investment. It is suggested that government should formulate specific policies and they should be implemented for the upliftment of the Krishna District Central Cooperative Banks. DCCBs should try to upgrade technology and should formulate customer friendly policies to face competition with commercial banks.Finally profits of the Krishna DCCB Ltd., has been increased almost three and half times during the study period.

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POVERTY ALLEVIATION PROGRAMMES AND POLICIES IN INDIA

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Abstract

In the underdeveloped countries, the per capita income is very low and the income inequality has resulted in a number of problems of which poverty is certainly the most serious one. It affects human health, efficiency and productivity which in turn affect their income. It deprives a segment of society necessities of life like food, clothing, housing, education and health. Poverty is more of social marginalization of an individual, household or group in the society. To alleviate this many poverty alleviation programmes are implemented. The goal of poverty alleviation programme aims at increasing the income level of individual, household or group but mainstreaming marginalized in the development process of the country. The rapid economic growth process should accelerate the access to services like education and health services for all especially the marginalized citizens. In India, even now in spite of all the development initiatives done over the year only 21.9 percent of the population gets less than $ 1.25 (PPP) a day. This is low as per the criterion suggested by the World Development Report. So this paper is an attempt to study plans and programs implemented for poverty eradication.

Keywords: Poverty, Plans, Poverty Eradication programmes.

Introduction

Poverty is a socio-economic phenomenon in which a section of society is unable to fulfill even its basic necessities of life. The minimum needs are food, clothing, housing, education and other basic minimum human needs. No society can surely be affluent and happy, of which the far greater part of the members are poor and miserable. Poverty is about denunciation of opportunities and fulfillment of human prospective. Poverty and inequality are closely related and inequality exists worldwide. Poverty has two elements: narrowly defined “income” poverty and a broader concept of “human” poverty. Income poverty is defined as the lack of necessities for minimum material wellbeing determined by the national poverty line. Human poverty means the denial of choices and opportunities for a tolerable life in all economic and social aspects recognizing the problem. Poverty is widespread in India and occupies third position among the world’s poor. The World Bank estimated that 41.6 percent of the total Indian population lived under the international poverty line of US $1.25 per day. Ac-cording to the Planning Commission of India, 21.9 percent of the population was living below the poverty line in 2011 – 2012, down from 27.5 percent in 2004 – 2005.

Review of Literature

Sen (1999) defines poverty as the failure to achieve basic capabilities such as being ad-equately nourished, living a healthy life, pos-session of skills to participate in economic social life, permission to take part in community activities to mention a few. This conceptualization forms the basis for the belief that 'poverty is multidimensional'. Although, the capabilities framework offers many advantages over the income consumption conceptualization, yet it is argued that it requires a greater variety of data and that no consensus exists on how capability deprivation at the household level is to be computed.

The World Development Report (2000) ex-tends the concept of poverty beyond in-come and consumption plus education and health, to include risk and vulnerability, as well as voicelessness and powerlessness. It is not necessarily the case that shocks affect the poor disproportionately, but it is clearly the case that they are more vulnerable, since their economic margin is slim. The poor are often exposed to highly fluctuating incomes, and, particularly, in rural areas, it is common for households to move in and out of poverty.

Tollens (2002) observes that poverty is not an intrinsic attribute of people, but a prod-uct of livelihood systems and the socio–political forces that shape them. Thus, poverty reduction is highly desirable. However, some reduction in rural poverty is sometimes ac-companied by increased urban poverty as rural poor choose to move to cities, without finding employment and income there. In contrast, successful rural poverty reduction usually works by raising the productivity of the poor, while most urban poverty alleviation efforts are welfare–oriented. Moreover, rural poverty alleviation may reduce migration, thus helping to reduce urban poverty. Poverty is multidimensional. This suggests that poverty reduction efforts must be multi– targeted and are expected to show wide and diverse dimensions. Solutions to rural poverty have to straddle different disciplines and must encompass economic, social, political and institutional factors.

Definition of Poverty

India is the first country to define poverty with the total per capita expenditure of the lowest expenditure class which consumes 2400 kcal /day in rural and 2100 kcal/day in urban areas. Poverty is the state of one who lacks a usual or socially acceptable amount of money or material possession.

Measurement of Poverty

Poverty line is a cutoff point on the income distribution, which divides the population as poor and non-poor. People below poverty line are poor and above that line are average or rich. Poverty line is therefore a derivation from inequality of income distribution. However, the cut-off level of income or ex-penditure is determined differently in different countries and regions.

Poverty Alleviation Pro-Grammes in India

Alleviation of poverty is the major challenge before the Government. Several programmes were introduced to alleviate poverty and to accelerate economic growth with a focus in the long run. However, this strategy needs to be complemented with a focus laid on provision of basic services for improving the quality of life of the people and direct State intervention in the form of targeted anti-poverty programmes. In this paper, the major programmes of its kind are discussed below.

Swarnjayanti Gram Swarozgar Yojana (SGSY)

The single self-employment programme of Swarnjayanti Gram Swarozgar Yojana (SGSY), launched with effect from 1.4.1999, has been conceived keeping in view the strengths and weaknesses of the earlier schemes of Integrated Rural Development Programme (IRDP) and Allied Programmes along with Million Wells Scheme (MWS). The objective of restructuring was to make the programme more effective in providing sustainable in-comes through micro enterprises. The SGSY lays emphasis on the following:

- Focused approach to poverty alleviation.
- Capitalizing advantages of group lending.
- Overcoming the problems associated with multiplicity of programmes.

SGSY is conceived as a holistic programme of micro enterprises covering all aspects of self employment and organization of the rural poor into self help groups (SHGs) and their capacity building, planning of activity clusters, infrastructure build up, technology, credit and marketing. Micro enterprises in the rural areas are sought to be established by building on the potential of the rural poor. The objective of the programme is to bring the existing poor families above the poverty line.

Under the SGSY, the focus is on vulnerable sections among the rural poor with SCs/STs accounting for 50 per cent, women 40 per cent and the disabled 3 per cent of the beneficiaries.

District Rural Development Agencies (DRDAs)

Through the Panchayat Samitis however, the process of planning, implementation and monitoring involves coordination with banks and other financial institutions, the PRIs, the NGOs as well as technical institutions in the district. Hence, the implementation of SGSY calls for integration of various agencies - DRDAs, banks, line departments, Panchayati Raj Institutions (PRIs), Non-Governmental Organizations (NGOs) and other semi-government organizations. Funds under the SGSY are shared by the Centre and the States in the ratio of 75:25. The Central allocation is distributed in relation to the incidence of poverty in the States. However, additional parameters like absorption capacity and special requirements can also be considered. In 1999-2000 an expenditure of Rs.804.23 crore was incurred under the scheme as against the total allocation of Rs.1467.73 crore. During this period, more than 3.40 lakh self help groups were assisted. A Central outlay of Rs.1000.00 crore has been provided for the scheme in 2000-01.

Jawahar Gram Samridhi Yojana (JGSY)

The Jawahar Rozgar Yojana (JRY) has been recast as the Jawahar Gram Samridhi Yojana (JGSY) with effect from 1.4.1999 to impart a thrust to creation of rural infrastructure. The Gram Panchayats can effectively determine their infrastructure needs and the responsibility of implementing the programme has been entrusted to the Gram Panchayats. The JGSY is implemented as a CSS with funding in the ratio of 75:25 between the Centre and the States. The primary objective of JGSY is creation of demand driven community village infrastructure including durable assets at the village level and assets to enable the rural poor to increase the opportunities for sustained employment. The secondary objective is generation of supplementary employment for the unemployed poor in the rural areas. The wage employment under the programme is given to Below Poverty Lines (BPL) families. However, efforts may be made to ensure that labour intensive works are taken up with sustainable low cost technology. The primary objective of the JGSY has undergone a change from employment generation to rural infrastructure. During 1999-2000, 5.84 lakh works were competed as against a target of 8.57 lakh works. An expenditure of Rs.1841.80 crore was incurred during 1999-2000 as against a total allocation of Rs.2209.24 crore. A Central outlay of Rs.1650.00 crore has been earmarked for JGSY for the year 2000-01.

Employment Assurance Scheme (EAS)

The Employment Assurance Scheme (EAS) was launched on 2nd October, 1993 in 1772 identified backward blocks of 257 districts situated in drought prone, desert and tribal and hill areas where the Revamped Public Distribution System (RPDS) was in operation. It is, presently, being implemented in all the 5448 rural blocks of the country. The EAS was restructured 1999-2000 to make it the single wage employment programme. While the basic parameters have been retained, the scheme has become Allocative scheme in-stead of demand driven and a fixed annual outlay is to be provided to the States. The primary objective of the EAS is creation of additional wage employment opportunities during the period of acute shortage of wage employment through manual work for the rural poor living below the poverty line. The secondary objective is the creation of durable community, social and economic assets for sustained employment and development. EAS is open to all the needy rural poor living below the poverty line. A maximum of two adults per family are provided wage employment. While providing employment, preferin45ence is given to SCs/STs and parents of child labour withdrawn from hazardous occupations who are below the poverty line. During 1999-2000, a total allocation of Rs.2431.46 crore was made under EAS and an expenditure of Rs.1998.26 crore was incurred. As against the target of 4091.63 lakh man-days, 2566.39 lakh man days were generated. A Central outlay of Rs.1300.00 crore has been provided for EAS for 2000-01.

National Social Assistance Pro-Gramme (NSAP)

The NSAP was launched with effect from 15thAugust, 1995 as a 100 per cent Centrally Sponsored scheme with the aim to provide social assistance benefit to poor households in the case of old age, death of primary breadwinner and maternity. The provision of Central assistance seeks to ensure that social protection to beneficiaries is uniformly avail-able. The main features of the three components of the NSAP namely; (i) National Old Age Pension Scheme (NOAPS), (ii) National Family Benefit Scheme (NFBS) and (iii) National Maternity Benefit Scheme (NMBS).

Annapurna

In 1999-2000, the Government had announced the launching of a new scheme 'Annapurna' to provide food security to those indigent senior citizens who are not covered under the Targeted Public Distribution Sys-tem (TPDS) and who have no income of their own and none to take care of them in the village. 'Annapurna' will provide 10 kg. of food grains per month free of cost to all such persons who are eligible for old age pensions but are presently not receiving it and whose children are not residing in the same village. The Gram Panchayats would be required to identify, prepare and display a list of such persons after giving wide publicity. A Central allocation of Rs.100.00 crore has been ear-marked for the scheme in 2000-01.

DRDA Administration

The District Rural Development Agencies (DRDAs) have traditionally been the principal organ at the district level to oversee the implementation of different anti-poverty programmes. Since its inception in 1980, the administrative costs of the DRDAs were met by way of setting apart a share of the al-location for each programme. On the basis of recommendations of the Inter-Ministerial Committee constituted to review the sup-port for administrative costs permitted under various programmes and keeping in view the need for an effective agency at the district level to co-ordinate the anti-poverty efforts, a new CSS for 'Strengthening of DRDA Ad-ministration' was launched with effect from April 1, 1999 with funding on a 75:25 basis between the Centre and States. During the year 2000-01, an outlay of Rs.220.00 crore has been allocated for the Strengthening of DRDA Administration.

Rural Housing – Indira Awaas Yojana (IAY)

It aims at providing 'Housing for All' and facilitates construction of 20 lakh additional dwelling units, of which 13 lakh dwelling units are to be constructed in rural areas. The composite housing strategy for the Ninth Plan is a multi-pronged strategy which has been operationalised1999-2000. The salient features of the strategy under Action Plan are given below.

Indira Awaas Yojana (IAY)

The scheme intends to provide Houses to BPL families (SC/ST/Minorities) living in rural areas. Under the IAY programme, in all, a total amount of Rs. 4344.28 crores has been spent during the 11th Five Year Plan. The amounts include the state contribution besides the Central allocation. Under the IAY scheme, Further, 9,45,428 houses to SC/STs and 164753 houses to Minorities have been sanctioned under and centrally sponsored IAY programme during last 6 years.

Samagra Awaas Yojana (SAY)

The underlying philosophy is to provide for convergence of the existing rural housing, sanitation and water supply schemes with special emphasis on technology transfer, human resource development and habitat improvement with people's participation. The existing schemes of housing, drinking water and sanitation will follow the normal funding pattern. In 1999-2000, Rs.1438.39 crore has been spent and 7.98 lakh dwelling units have been built under the IAY. In the Annual Plan 2000-01, the Central outlay of Rs.1710.00 crore has been provided for Rural Housing.

Area Development Programmes:

The Drought Prone Area Programme (DPAP), Desert Development Programme (DDP) and Integrated Wastelands Development Programme (IWDP) are being implemented with effect from 1.4.1995 on a watershed basis, as per the recommendations of the Technical Committee on DPAP and DDP headed by Dr. C.H. Hanumantha Rao. The common guidelines for Watershed Development provide for a uniform strategy in the implementation of all area development programmes. The main features of this strategy are: Area development programmes to be implemented exclusively on watershed basis. Programmes and activities to be confined to the identified watershed of about 500 hectares and are to be executed on a project basis spanning over a period of four to five years.

Drought Prone Area Programme (DPAP)

DPAP aims at to minimize the adverse effects of drought on production of crops and livestock and productivity of land, water and human resources ultimately leading to the drought proofing of the affected areas. It also aims at promoting overall economic development and improving the socio-economic conditions of the resource poor and disadvantaged sections inhabiting the programme in47areas. The DPAP is in operation in 947 blocks of 161 districts in 13 States. Under DPAP, Rs.89.44 crore has been spent during 1999-2000. For 2000-01, the Central outlay of Rs.190.00 crore has been provided for DPAP as against Rs.95.00 crore in 1999-2000.

Desert Development Programme (DDP)

DDP has been envisaged as an essentially land based activity and conceived as a long term measure for restoration of ecological balance by conserving, developing and harnessing land, water, livestock and human resources. The main objectives of this programme are: (i) combating drought and desertification; (ii) encouraging restoration of ecological balance; (iii) mitigating the adverse effects of drought and adverse edapho climatic conditions on crops and livestock and productivity of land, water and human resources; (iv) promoting economic development of village community; and (v) improving socio economic conditions of the resource poor and disadvantaged sections of village community asset less and women. Under DDP, Rs.49.22 crore has been spent during 1999-2000. In the Annual Plan 2000-01, the Central out-lay of Rs.135.00 crore has been provided for DDP Rs.85.00 crore in 1999-2000.

Integrated Wastelands Devel-Opment Programme (IWDP)

IWDP has been under implementation since 1989-90 wherein wastelands are being developed with the active participation of stakeholders user groups, self help groups and PRIs. Here, the projects are sanctioned in favour of DRDAs for the period of five years. The programme is implemented all over the country. IWDP is a 100 per cent Central Sec-tor scheme. The cost norm is Rs.4000 per hectare. The basic objective of this scheme is to take up integrated wastelands development based on village or micro watershed plans. The scheme also helps in generation of employment in rural areas besides enhancing people’s participation in the wastelands development programmes at all stages. The major activities taken up under the scheme are:

(i) soil and moisture conservation measures like terracing, bunding, trenching, vegetative barriers etc; (ii) planting and sowing of multi-purpose trees, shrubs, grasses, legumes and pasture land development; (iii) encouraging natural regeneration; (iv) pro-motion of agro-forestry and horticulture; (v) wood substitution and fuel wood conservation measures; (vi) measures needed to disseminate technology; training, extension and creation of greater degree of awareness among the participants; and (vii) encouraging people’s participation.

Integrated Rural Development Programme (IRDP)

Integrated a rural development program of the Government of India launched in financial year 1978 and extended throughout in48India by 1980. It is a self-employment pro-gram intended to raise the income-generation capacity of target groups among the poor. The target group consists largely of small and marginal farmers, agricultural labourers and rural artisans living below the poverty line. Priority in assistance is also given to the families belonging to the assignees of ceiling surplus land, Green Card holders covered under the Family Welfare Programme and freed bonded labourers. IRDP is a major self-employment programme for poverty alleviation. The objective of IRDP is to provide suit-able income-generating assets through a mix of subsidy and credit to below-poverty-line families with a view to bring them above the poverty line. A family with an annual income of Rs. 20,000/- and below per annum is considered to be below the poverty line based on the 1998 below Poverty Line Census.

The aim is to raise recipients above the poverty line by providing substantial opportunities for self-employment. During the 7th five-year plan, the total expenditure under the program was Rs 33.2 million, and Rs 53.7 million of term credit was mobilized. The objective of IRDP is to enable identified rural poor families to cross the poverty line by providing productive assets and inputs to the target groups. The assets, which could be in primary, secondary or tertiary sectors, are provided through financial assistance in the form of subsidy by the government and term credit advanced by financial institutions.

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

MGNREGA refers to the world’s largest welfare program, run by the Government of India. It is a job guarantee scheme for rural Indians. It was enacted by legislation on 25 August 2005. The scheme provides a legal guarantee for at least 100 days of paid employment in every financial year to adult members of any household willing to do unskilled manual work related to public work at the statutory minimum wage of 120 (US$1.80) per day in 2009 prices. If they fail to do so the government has to pay the salary at their homes. The central government out-lay for the scheme was 4000 billion Financial Year 2010–11. This act was introduced with the aim of improving the purchasing power of semi- or un-skilled rural people of India, irrespective of whether or not they fell be-low the poverty line. Around one-third of the stipulated work force is women. The law was initially called the National Rural Employment Guarantee Act (NREGA) and was renamed with the prefix “Mahatma Gandhi” on 2 October 2009, Gandhi’s birth anniversary. In 2011, the program was widely criticized as no more effective than other poverty reduction programs in India. Despite its best intentions, MGNREGA is beset with controversy about corrupt officials, deficit financing as the source of funds, poor quality of infrastructure built under this program, and unintended counter-productive destructive effects on the rural economy and inflation. The amount of Rs.17342.40 crores during the 11th plan 2007-08 to 2011-12 had been spent.

Policy Required for Poverty Alleviation in India

1. To promote growth in agricultural productivity and non-farm rural activities.
2. Public investment in rural infrastructure and agricultural research. Agricultural research benefits the poor directly through an increase in farm production, greater employment opportunities and growth in the rural non-farm economy.
3. Credit policies to promote farm in-vestment and rural micro enterprises Policies to promote human capital to expand the capabilities of the poor Development of rural financial markets.
4. Self-Help Group Approach to be strengthened as it is a proven method of empowerment of the poor.
5. Involvement of local communities and people’s participation in NRLM and MGNREGS.
6. Decentralization of the programmes by strengthening the panchayati raj institutions.
7. Public Distribution System (PDS) needs to be reformed and better targeted.
8. Provision of safety nets like targeted food subsidies, nutrition programmes and health.
9. Targeted poverty alleviation programmes to continue as the poor of the developing world may not have the patience to wait for the trickle-down effect
10. The main objective of Indian planning is to alleviate poverty. In this regard government has launched many poverty alleviation programmes. Even then in50no radical change has been undergone in the ownership of assets, process of production and basic amenities to the poor.

Remedial Measures Suggested for Poverty Alleviation

1. Small scale and cottage industries should be set up to provide employment to the rural youth. Credit and tax incentives need to be channelized more intensely to the neglected areas. Credit disbursing agencies should be strengthened.
2. Laws should be so enacted and implemented that the rich do not escape the paying of taxes, and the land in villages may be protected from became transfers and deals.
3. High technology should be used to in-crease productivity.
4. Population should be controlled.
5. Planning and its execution should be decentralized.
6. For removing rural poverty it is necessary to ensure full participation and involvement of the ruralites in development programmes. While formulating programmes and projects their attitudes, opinions and interests should be taken into account.
7. The Panchayati raj institutions should be strengthened so that they can become institutions of democratic management of rural development both at the district and block levels. Panchayats should be activated to focus on adult education programme, road construction and maintaining tree plantations.
8. The help of non-government organizations should be taken in the administrative arrangements for the implementation of

rural development programmes. They should be activated in role-play like digging of tanks, tree plantations, training of youth etc.

9. Comprehensive social security measures should be adopted by the government to enable the ruralites to earn their livelihood instead of being parasites on society.
10. Land redistribution, elimination of industrial monopolies, efficient and democratic management of public sector enterprises are some of the measures which will also help in reducing the magnitude of rural poverty.
11. Social awareness should be created to arrest increasing debt growth among the poor.
12. Education should be made vocational oriented.

Conclusion

Debate on poverty in India has remained mostly in the domain of economists. Poverty is defined in terms of income, expenditure in51and nutritional value (calorie intake). Poverty gives birth to many other problems. The link between ignorance and poverty and ill health and poverty are well-established. Poverty therefore is a complex phenomenon of many dimensions. The government should provide better medical facilities, drinking water facilities and education so that people living below poverty line can improve their lives. The poverty alleviation programmes should address the issue of poverty from broader social and economic perspective. The government has to promote employment opportunities, good education, self employment, micro finance assistance, social awareness, etc., to eradicate poverty.

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THE HISTORY OF ECONOMIC DEVELOPMENT IN INDIA SINCE INDEPENDENCE

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Abstract

The task that the democratically elected leaders of newly independent India embarked on in the early 1950s was not for the faint of heart. It was to lift living standards of a people accounting for one-seventh of the world's population who earned an average income that was one-fifteenth of the average American income of the time.1 Three-fourths of the Indian people were engaged in agriculture working with primitive tools and techniques, as either destitute landless laborers, highly insecure tenants-at-will, or small-plot holders eking out subsistence living from their meager plots. The literacy rate stood at 14 percent, and the average life expectancy was thirty-two years. How successful has the country been in fulfilling the task over sixty years later? The charts in this article, using World Bank data, show how some of the country's development indicators have changed in the last half-century. The country has experienced an increase in per capita income especially since the 1980s—as well as reductions in poverty and infant mortality rates. These improvements are not insignificant and mark a sharp break from the near stagnation that the country experienced during British rule. But a comparison with the later superior performance of China and South Korea, countries with a comparable level of development in the 1950s, reveals that India's performance remains below its potential. How did that come about? This essay provides an account of India's strategy of economic development, its achievements, shortfalls, and future challenges.

Keywords: Economic development, Indian economy, Inflation, GDP.

Introduction

The government in the 1950s adopted a very particular strategy of economic development: rapid industrialization by implementing centrally prepared five-year plans that involved raising a massive amount of resources and investing them in the creation of large industrial state-owned enterprises (SOEs). The industries chosen were those producing basic and heavy industrial goods such as steel, chemicals, machines and tools, locomotives, and power. Industrialization was pursued because leaders believed, based in part on the beliefs of some economists, that the industrial sector offers the greatest scope of growth in production. It was not that the Indian agricultural sector offered no scope for growth. Crop yields in India were quite low compared to other countries, and the recent famine in 1943 had underscored the need to increase food production. Still, Indian leaders did not want to make agriculture the mainstay of their strategy. The pre-eminence of agriculture they believed was characteristic of a backward economy, and growth in agriculture eventually runs up against the problem of insufficient demand.

There is only so much, after all, that people are willing to eat. Investments in the creation of public enterprises were chosen because one goal of the government was to establish a "socialistic pattern of society," i.e., using democratic methods to bring large swathes of the country's productive resources under public ownership. Industries producing basic and heavy goods were chosen for investment over consumer goods because the government wanted to reduce the country's reliance on imports of basic and heavy industrial goods in line with their belief in the goodness of national self-reliance. "To import from abroad is to be slaves of foreign countries," the first Prime Minister, Jawaharlal Nehru, once declared. The production of consumer goods such as clothing, furniture, personal care products, and similar goods was left to small privately run cottage industry firms that had the added advantage of being labor-intensive and therefore a potential generator of mass employment.

The particular nature of the chosen strategy of development can be understood by comparing it to the alternative strategies that could have been adopted. One such strategy would have been to prioritize public investments in not industry but agriculture, which was the source of livelihood for more than three-fourths of its people. Investments in agriculture take the form of irrigation projects, education of farmers in scientific methods of farming, construction of rural roads and storage facilities, and agricultural research and development. Once the agricultural sector was relatively healthy and the poverty of its participants somewhat reduced, rising incomes could have been used to finance industrial development. The planners rejected such a strategy because putting off industrialization meant that the country would have to continue to rely on imports for needed industrial goods, while the leaders were impatient for the industrialization they identified with progress. People who argued for the priority of agriculture over industry were dismissed as being reactionaries and possibly stooges of the Central Intelligence Agency (CIA).

Another strategy could have been to rely on private enterprise for industrial development while the government focused its resources on investments in infrastructure, public health, and education sectors that are not served well by the private sector. Though leaders were cognizant of the dynamism of the private sector and the existence of India's vibrant entrepreneurial class, they rejected the strategy that involved a prominent role for the private sector out of a commitment to establishing the socialistic pattern of society that they believed was morally superior. As things eventually turned out, the country came around in the 1990s to adopting this previously rejected strategy.

In order to assure the success of the government's chosen strategy in the 1950s, complementary measures were put in place. Most industries were given significant trade protection so that their growth was not hampered by competition from more efficient foreign producers. An industrial licensing system was set up to ensure that private enterprises would not expand beyond the bounds that national planners had set for them. The system required all private firms beyond a certain small size to obtain a license whenever they wanted to expand capacity, produce new products, change their input mix, import inputs, or relocate plants. The system put the activities of the private sector under significant control of the government. Pundits and students of political economy who were not socialists derisively nicknamed this stifling system "the license Raj," comparing this economic format of oppression to the political control of the imperialist British Raj.

Their strategy of increasing agricultural production was based on plans to reform agrarian institutions. According to the thinking of the planners, the poor performance of Indian agriculture was due to the fact that tillers did not own the land they worked, so they had little incentive to make land improvements that would increase long-term productivity. The government planned to implement legislation to redistribute land from large landlords to actual tillers and improve the terms under which tenant cultivators leased land from the landowners. The government also planned to organize small farmers into cooperative societies so that their resources could be pooled in order to buy modern tools and implements and the strength of their numbers could be used to obtain higher crop prices. In addition to increasing agricultural production, such reforms were also expected to alleviate the poverty of the huge class of peasants.

The Initial Results

Industrialization was a moderate success. The newly created public enterprises, albeit after major cost overruns and several delays, turned out steel, chemicals, and other products that were generally associated with developed countries. A British colonial official in the early twentieth century once scoffed that he would be willing to eat all the steel than the Indians would produce. If alive in 1960, he would have eaten 6,300 tons of steel.

Still, by the late 1950s several problems resulting from the planners' chosen strategy of economic development were coming to the fore, and such problems intensified in the 1960s and the 1970s. Many SOEs were run on political rather than economic considerations, so they produced losses that drained government resources rather than as the planners had hoped augmenting them. The SOEs could also not be counted on to generate mass employment due to their capital and skill rather than labor-intensive character. Several enterprises were overstaffed and faced insufficient demand for what they produced, forcing them to render idle some of their capacity. The case of the Haldia fertilizer plant is an extreme but illustrative example. The plant was set up in the 1970s and employed 1,500 people. The workers and managers showed up regularly, kept the machine facilities clean and in working condition, and often received annual bonuses and overtime. They lived in a nearby spanking- new township built specially for them, one that had excellent roads, schools, and homes. There was only one thing missing. Because of numerous problems, the plant never produced even an ounce of fertilizer. Yet the government kept Haldia's lights on for twenty-one years.

The expenditures necessitated by the massive investments in SOEs generated new problems. One government method for financing expenditures was the creation of new money, which resulted in significant inflation. The government feared the political backlash that the rising prices could generate. Consequently, it resorted to price controls of essential commodities, which caused black markets to flourish, and the government found itself resorting to increasingly intrusive regulations and engaging in cat-and-mouse games with traders. At one point, the government even attempted to nationalize wholesale trade in grains without much success. The efforts at price controls generally failed while consuming much public and private attention.

The plans for the reform of agrarian institutions did not pan out. The push for land redistribution ran into political opposition and clashed with the requirements of due process, so as little as 5 percent of the land was actually redistributed. The creation of agricultural cooperatives also did One government method for financing expenditures was the creation of new money, which resulted in significant inflation not materialize due to difficulties of organization and lack of enthusiasm on the ground. Agricultural production barely kept pace with population growth, and the country's food security remained precarious. The drawback of prioritizing industry over agriculture for public investments became glaringly apparent when the country experienced a food crisis in the mid-1960s, necessitating urgent large-scale imports of subsidized grain from the United States. The crisis undermined the government's claim that its strategy of prioritizing industry over agriculture for public investment would increase national self-reliance.

Under the fixed exchange rate regime that existed in the country, high inflation in the

1960s reduced the country's exports while increasing its imports, resulting in a shortage of foreign exchange. The shortage was exacerbated by the food imports made necessary by a drought and a war with Pakistan. Foreign exchange became one of the items the government had to resort to rationing. The reverberations were felt throughout the economy. Several new factories lay idle for want of foreign exchange to import some necessary inputs, while others hoarded foreign exchange to starve their competitors or earn a premium in the black market. Holding foreign exchange without a license became an offense punishable by jail time. Ultimately, the rupee had to be devalued, which generated further disruptions in the economic lives of most people.

Meanwhile, the industrial licensing system, designed to ensure that the private sector operated according to the five-year plans, became a source of much inefficiency and corruption. The micromanagement of the private sector called for much more knowledge and technical ability than government bureaucrats possessed. The system descended into a mechanism for rewarding political supporters of the rulers, which undermined the confidence of the people in the integrity of their governmental institutions. Perhaps the most unfortunate legacy of prioritizing industry at the expense of other alternatives for investment was that scarce public resources were diverted away from health and education. The meager resources expended on these in India stand in marked contrast to the plentiful attention paid to them in China and other Asian countries. Seventy years after independence, India has still to catch up on these fronts; one-half of its children are malnourished, one-half of women are illiterate, and twothirds of its people lack basic sanitation. As a result, a large fraction of Indians today are unable to directly take advantage of the opportunities pened up by the country's recent tilt toward a market economy and globalization.

The Change in Strategies

In response to the food crisis of the mid-1960s, the government changed its agricultural strategy. Rather than holding out for the reform of agrarian institutions, it began to guarantee higher crop prices to farmers and utilize subsidies to promote use of modern inputs such as chemical fertilizers and high-yielding varieties of grain developed in other parts of the world. The resulting surge of production the so-called "green revolution" of the late 1960s made the country self-sufficient in food grains. The strategy was controversial because it increased economic disparities among the farmers. For the greatest chance of success, the government had to focus its strategy on the irrigated sections the very parts of the country that were already doing relatively well. The uptake of subsidized inputs was also the highest among large landowners, owing to their greater education, creditworthiness, and the ability to bear the risk posed by adopting new methods. The strategy did not do much to alleviate the economic condition of the agrarian poor, other than providing the indirect benefit of living in a country with better overall food security that has not since experienced famine.

Micronutrient deficiencies (not caloric) such as anemia are today a bigger problem among the poor, and the country's health indicators lag behind those of other countries with comparable levels of income. The strategy toward industry, however, turned more interventionist after 1965. Elaboration of all the reasons for this need not detain us here; there is a strong case that the interventionist turn was a cynical ploy by new Prime Minister Indira Gandhi for consolidating her power in response to certain political developments. The new policy stance displayed a suspicion of large firms and a preference for the small. The licensing system imposed additional restrictions on the activities of large firms, curtailing their growth. Under a policy that was one of a kind, consumer goods such as apparel, footwear, furniture, sporting goods, office supplies, leather goods, and kitchen appliances were reserved by law for production by small firms. Foreign firms were asked to dilute their ownership stake in their Indian subsidiaries and in response, multinationals such as IBM and Coca-Cola closed their operations and left the country.

To the extent that the success of the large firms was due to their superior technical or organizational capacity, the curtailment of their growth meant that such capacity remained underutilized. Delays and arbitrariness in the issuing of industrial licenses resulted in supply bottlenecks and shortages of many consumer goods. For example, in the 1970s, there was an eight-year waiting list for people wanting to buy a scooter, the preferred vehicle for middle-class Indians.

The reservation of consumer goods for small enterprises meant that the benefits of economies of scale were forgone, resulting in the production of poor-quality and high-priced goods that foreigners shunned and domestic consumers had no choice but to accept. Meanwhile, countries such as South Korea and Taiwan were growing rich by exporting this very category of goods. It was during this time that Indians developed a craze for foreign products, the imports of which were restricted, and the term "imported" became synonymous with "high-quality." The result of such policies was economic stagnation. The country's per capita income grew by an average of less than 1 percent a year between 1966 and 1980, a rate that was too low to make a dent in the country's massive poverty. Thirty-five years after independence, India's leadership had yet to achieve, to any significant degree, its pledge of lifting living standards.

The About Turn

When a foreign exchange shortage threatened a crisis again in 1991, the government made a clear break with past policies. By then, the intellectual consensus in favor of state-led, import-substituting development strategies had greatly weakened. The breakup of the Soviet Union had substantially discredited central planning, and the export-led success of East Asian countries had thrown into light the drawbacks of an inward-looking model of development. Also, cultural changes in India, consisting of a deemphasis of asceticism and a greater acceptance of the pursuit of material gain, had made extensive economic controls untenable.7 At the behest of the International Monetary Fund (IMF), which provided rescue during the foreign exchange crisis, but also of its own accord, the government announced major economic reforms. It dismantled the license Raj almost overnight, slashed tax rates and import duties, removed controls on prices and entry of new firms, put up several SOEs for sale, and rolled out the welcome mat for foreign investors. Rather than socialism, the guiding principles of policy now were liberalization, privatization, and globalization.

The economy responded with a surge in growth, which averaged 6.3 percent annually in the 1990s and the early 2000s, a rate double that of earlier time frames. Shortages disappeared. On the eve of the reforms, the public telecom monopoly had installed five million landlines in the entire country and there was a seven-year waiting list to get a new line. In 2004, private cellular companies were signing up new customers at the rate of five million per month. The number of people who lived below the poverty line decreased between 1993 and 2009 from 50 percent of total population to 34 percent. The exact estimates vary depending on the poverty line used, but even alternative estimates indicate a post-1991 decline of poverty that is more rapid than at any other time since independence. The country's share in world trade increased from 0.4 percent on the eve of the reforms to 1.5 percent in 2006, and foreign exchange shortages, once a chronic headache for policymakers, have now been replaced by reserves upward of US $350 billion prompting debates about what to do with the "excess reserves."

Several significant economic challenges remain for India. The economy has polarized into a highly productive, modern, and globally integrated formal sector, employing about 10 percent of the labor force, and a low-productivity sector consisting of agriculture and urban informal activities, engaging 90 percent of the labor force. The sectors that have experienced the most growth are services and capital-intensive manufacturing. It is illustrative that IT and pharmaceuticals are the two sectors of the economy with international renown. Such industries tend to be urban and employ mainly skilled workers. Yet to come India's way are millions of low-skill manufacturing jobs that have allowed the poor in East Asian countries to climb into the middle class. Companies are loath to set up labor-intensive manufacturing because Indian labor laws are some of the most restrictive in the world. For example, a manufacturing unit hiring more than 100 workers cannot lay off any of them without seeking government permission, which is rarely granted. Liberalization of labor laws tends to run into fierce political opposition. The second reason for the dearth of manufacturing jobs is that the country's infrastructure is relatively deficient, and so companies increasingly practicing just-in-time inventory management do not find it cost-effective to include India in their global supply chains.

The provision of public services in India is appallingly poor. Government schools and clinics are underfunded and inadequately supervised, and their workers display low morale and high absenteeism. Yet such public institutions are rarely held accountable for their performance. The middle class has largely opted out of the system in favor of private health care, schools, and transportation so there is little political pressure from them to improve the system. Most middle-class Indians now even own a power generator to cope with everyday power cuts. The poor take the brunt of the derelict public services. Two million children die in India every year from easily preventable diseases, according to the United Nations Children's Fund (UNICEF), and immunization rates in India are amongst the lowest in the world. Air pollution levels in urban areas pose a severe public health crisis. According to a survey by the World Health Organization (WHO), thirteen out of the twenty most polluted cities in the world are Indian.12

The country still relies heavily on inexpensive coal to generate power and has shown very little willingness to move toward alternative energy sources. Given the current policies and state of governance in India, it is hard to see an obvious path into the middle class for the multitudes still remaining in poverty. Global demand for low-wage, low-skill labor to sew T-shirts or assemble TVs is not what it used to be, because production is now becoming increasingly mechanized and some of it is being "reshored" back to the rich countries. For several hundred million poor people in delicate health and with little education, the country will have to find a way to overcome the technical, institutional, and economic barriers to developing the capabilities necessary for functioning in a twenty-first-century economy. It is not a task for the faint-hearted.

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SHIFT IN ONLINE BUYING BEHAVIOUR OF RURAL CONSUMERS IN TAMILNADU, INDIA

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Abstract

Rural consumers purchasing behavior is changing over a decade. They are doing online purchase. This article focuses on Rural consumers shift in buying behavior in Tamil Nadu, India. This descriptive research is mainly based on primary data from 8 Districts of Tamil Nadu. An interview schedule has prepared to collect the primary data from 120 villagers belong to 40 Revenue villages of 8 Districts of Tamil Nadu based on stratified random sampling while the secondary data was collected from books, magazines and the internet. Statistical Package for the Social Sciences (SPSS) version 17.0 was religiously used for the analysis. The results showing that irrespective of the district, there presents a shift in the buying behaviour of rural consumers in the 8 Districts of Tamilnadu. This study helps the marketers to position their products through online by targeting the rural community because they are actively involved themselves in the decision-making process to buy products in online.

Keywords: Rural consumers, Buying Behaviour, Online Buying, Rural market.

Introduction

Rural consumers are different in buying of various kinds of products from urban consumers. Online buying pave way for shift in the buying behaviour of the rural consumers. Online shopping is the growing area of Technology. Rural consumers are started buying the product such as meat, fruits and vegetables, dairy products and baked goods which are highly perishable and the other products such as Car, bike, DTH, alcohol, toiletries, clothes, soft drinks, toys, mobiles, gift items, kitchen utensils, beauty products and cleaning products have high turnover rates. The Indian rural market sector is the largest sector in the economy with an estimated size of Rs.1, 600 billion. The sector has shown an average annual growth of about 11% per annum over the last decade. Rural India is having 31million internet users.

India's rural market is highly uneven and a substantial part of the market comprises of unorganized players selling unbranded and unpackaged products. There are approximately 12-13 million retail stores in India. Indian rural sectors have its significant characteristics such as strong MNC presence, well established distribution network, intense competition between the organized and unorganized players and low operational cost. Easy availability of important raw materials, cheaper labor costs and presence across the entire value chain gives India a competitive advantage.

Review of Literature

According to **"**The national Sample Survey Organization (NSSO)" rural markets is defined as, the zones with less than 5,000 inhabitants, a population concentration less than 400 people per square kilometer and at least 75 percent of male working population employed in agriculture. The rural population of Tamilnadu in 2011 census was 37.19 million and which is higher than the urban population of 34.95 million.

Anderson (2005) stated that "Information obtained on consumer behaviour is having a direct impact on marketing strategy". Pavleen (2006) stated that "role structure is the main element of a buying decision making process". Verma (1982) found that "Father and Mother plays a role of initiator and influencer and the children plays a pivotal role". He also stated that, important roles are played by head of the family.

R.Sureshkumar (2007) pointed out in his article that, 75%of the rural internet users are using internet for Entertainment purpose, 56% are using for Communication purpose, 50% are using for educational purpose and 34% are making use of e-commerce portals. Vellidoet (2000) conducted a research and found that nine factors are associated with user's perception in online buying.

Objectives of the Study

- To analyze the rural consumers attitude towards Online purchase behaviour.
- To examine how rural parents, argue with their family members during online buying decision making process.
- To identify the role played by rural Respondents in online buying of products.

Limitations of the Study

The study was conducted among 120 respondents only in the 8 Districts of Tamilnadu.

Research Methodology

The research design is descriptive type. This study is mainly based on the primary data using Interview schedule, while the secondary data was collected from books, articles and the internet. The sampling involves 120 villagers belong to 8 districts of Tamil Nadu such as Ariyalur, Perambalur, Namakkal, Villuppuram, Kanchipuram, Thiruvallur, Thirunelveli and Thoothukudi. Statistical Package for the Social Sciences (SPSS) version 17.0 was consistently used for the statistical analyses.

The respondent's involvement in online purchase among the selected Districts of Tamilnadu

Respondents Involved			
Districts	**Yes**	**No**	**Total**
Ariyalur	15	0	15
Perambalur	15	0	15
Namakkal	15	0	15
Villuppuram	15	0	15
Kanchipuram	15	0	15
Thiruvallur	15	0	15
Thirunelveli	15	0	15
Thoothukudi	15	0	15
Total	**120**	**0**	**120**

Source: Primary Data

Table 2 shows the respondents District wise information about who are all doing online purchase. The results clearly reveal parents are involving much and they are giving way for their children.

The respondent's District wise parent and children –who is doing Online purchase

District	Parent	Children	Total
Ariyalur	10	5	15
Perambalur	7	8	15
Namakkal	9	6	15
Villuppuram	8	7	15
Kanchipuram	11	4	15
Thiruvallur	10	5	15
Thirunelveli	9	6	15
Thoothukudi	8	7	15
Total	**72**	**48**	**120**

Source: Primary Data

The respondent's income and involved in online purchase

Income of the respondents	No. of Respondents
Less Than 5000	3
5001-10000	11
10001-15000	32
15001-20000	34
20001 & Above	40
Total	**120**

Source: Primary Data

Table 3 shows that income wise involvement of respondents in online buying of products reveals that a greater number of respondents belongs to the income category of 20000 and above.

The occupation of father & involvement of family in online purchase

Occupation	Children	Parents	Total
Agriculture	5	0	5
Business	5	9	14
Government	6	30	36
Private salaried	4	13	17
Professional	19	29	48
Total	**39**	**81**	**120**

Source: Primary Data

Table 4 shows that irrespective of the Occupation of the father, Children and their Parent are doing online purchase. Based on their occupation the number of respondents involved is getting varied. Professional managers are doing online purchase more when compared with the other occupation people. It is inferred that parents are getting the help from their children while doing online purchase.

The respondent's kinds of products buying online.

District	Kinds of products				Total
	Food	Faces	Mobile	Ticket	
Ariyalur	3	4	6	2	15
Perambalur	4	2	5	4	15
Namakkal	5	3	2	5	15
Villuppuram	4	5	3	3	15
Kanchipuram	2	5	4	4	15
Thiruvallur	3	5	3	4	15
Thirunelveli	2	3	4	6	15
Thoothukudi	2	3	6	4	15
Total	**25**	**30**	**33**	**32**	**120**

Source: Primary Data

Table 5 shows that rural buyer is giving least preference to buy food items through online and giving more preferences to Mobile buying then to Ticket booking for their travels and cinema ticket booking. Their final preference to buy cosmetics and toiletries through online.

Table 6 shows the statement used by respondents while buying product online to their family members district wise. It is found that, respondents dominated in the Statements like "I kept repeating or arguing my point of view", "I pointed out that he or she has no right to disagree with me on this issue, very less respondents are stating their needs and giving choices for their children preferences. Remaining all try to dominate others.

Table 7 shows that the respondents play a role of influencer in 29 Families, As an Initiator in 27 families, as an informer in 28 families, and as a buyer in 36 families which shows that there is a shift in the buying behaviour of rural respondents. To analyse the relation between the District and the role played by respondents while buying the products through online using Correlation analysis.

Ho: There is no relation between District and role played by sample while buying online.

H1: There is relation between District and role played by sample while buying online.

The correlations of district and the role played by respondents while buying online.

CORRELATIONS			
		District	Role played by respondents
Pearson Correlation	District	1.000	.053
	Role played by respondents in buying online	.053	1.000
Sig. (1-tailed)	District	.	.030
	Role played by respondents in buying online	.030	.
N	District	**120**	**120**
	Role played by respondents in buying online	**120**	**120**

The variables entered /Removed & R value of District and the Role played by respondents in buying online based on Pearson Correlation.

Variables Entered/ Removed [b]			
Model	Variables Entered	Variables Removed	Method
1	Role played by respondents in buying online [a]	.	Enter
a. All requested variables entered.			
b. Dependent Variable: District			

Model Summary				
Model	R	R Square	ADJUSTED R Square	Std. Error of the Estimate
1	.053[a]	.003	.002	2.327
a. Predictors: (Constant), Role played by respondents in buying online				

The ANOVA value of District and the Role played by respondents in buying online based on Pearson Correlation.

ANOVA[b]						
Model		**Sum of Squares**	**DF**	**Mean Square**	**F**	**Sig.**
1	Regression	9.302	1	9.302	3.564	.009[a]
	Residual	632.574	119	5.416		
	Total	651.876	120			

The BETA value of District and Role played by respondents in buying online based on Pearson Correlation.

Model		**Unstandardized coefficients**		**Standardized coefficients**	**T**	**Sig.**	**95% confidence interval for b**	
		B	**SE**	**Beta**			**Lower**	**Upper**
1	(Constant)	4.246	.170		24.846	.000	3.912	4.582
	The Role played by respondents in buying online	.147	.078	.053	1.887	.009	-.006	.300

Table above table indicates that the Significant value is 0.009 which is lesser than the P value ($P<0.05$). So, we have to reject the null hypothesis at 5% significance level and conclude that, there is an association between District in which they reside and the role played by rural respondents in buying online products.

Findings of the Study

The results clearly depict that irrespective of the district, there presents a shift in the buying behaviour of rural consumers in the 8 Districts of Tamil Nadu and there is an association between District in which they reside and the role played by rural respondents in buying online products. Online buying penetrates into all the selected districts of Tamil Nadu. The results reveal that parents are involving much in online buying and they are giving way for their children. That income wise involvement of respondents in online buying of products reveals that a greater number of respondents belongs to the income category of Rs.20000 and above. Irrespective of the Occupation of the father, Children and their Parent are doing online purchase. Based on their occupation the number of respondents involved is getting varied. Professional managers are doing online purchase more when compared with the other occupation people.

It is inferred that parents are getting the help from their children while doing online purchase. Rural buyer is giving least preference to buy food items through online and giving more preferences to Mobile buying then to Ticket booking for their travels and cinema ticket booking. Their final preference to buy cosmetics and toiletries through online. Very less respondents are stating their needs and giving choices for their children preferences. Remaining all try to dominate others. The respondents play a role of influencer in 29 Families, As an Initiator in 27 families, as an informer in 28 families, and as a buyer in 36 families which shows that there is a shift in the buying behaviour of rural respondents.

Conclusion

An understanding of the consumer online buying behaviour enables a seller to take marketing decisions which are well-suited with its shopper needs. To ensure that a product finds a place in the minds of customers, the manufacturers should position their products through sales promotional activities such as online advertisement by targeting rural buyers. The Indian market has witnessed, tremendous social changes and trends, with rural areas, to a great extent, being actively involved in the decision-making process. Rural online buyers have emerged as a probable customer for the marketers in this era. This study helps the marketers to position their products through online by targeting the rural community because they are actively involved themselves in the decision-making process to buy products in online.

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TAX INCENTIVES FOR THE INCLUSIVE INVESTORS AND ENTREPRENEURS BELONGING TO LISTED SMES

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Abstract

Choosing a right mode of business fitting the scale of operations to cater the scaling and to create right markets with brand image is a key decision to make for any entrepreneur. While different modes of business are legally and technically possible like sole proprietor, joint venture, partnership, LLP, OPC, Private company, public company both listed and unlisted etc., taxation laws are not the same for all. India's has been a progressive taxation system offering something for everyone. A keen study on the taxation modes and relief mechanisms reveal tremendous saving opportunities to the market players in a listed corporate form. This research paper seeks to bring out the tax advantages and drawbacks of different significant modes of business namely Sole proprietor, HUF, Partnership firms, LLPs and unlisted companies vis-à-vis listed companies. Seven categories have been chosen to bring out the differences viz., Slab rates, Surcharge, Tax on sale of ownership interest, Tax on distribution of profits, Managerial Remuneration, Tax on fresh equity infusion, Tax on distressed business purchase and so on.

Keywords: SME, MSME, Sole proprietor, Hindu Undivided Family, LLP, OPC.

Introduction

Ever since the onset of the global financial crisis, the global economy has been struggling to revive itself and achieve a healthy growth rate. The global growth rate has been recorded at 3.4% and is projected below 4% whereas India's GDP is projected to grow around 7%-8%. This has been possible only because of the key driving force of the Indian economy – the MSMEs. This sector comprising manufacturing, infrastructure, service industry, food processing, packaging, chemicals, and IT has emerged as the most vibrant and dynamic engine of growth of Indian economy over the past few decades[1].

Choosing a right mode of business fitting the scale of operations to cater the scaling and to create right markets with brand image is a very key decision to make for any entrepreneur. While different modes of business are legally and technically possible like sole proprietor, joint ventures, partnerships, LLPs, OPCs, Private companies, public companies both listed and unlisted etc, taxation laws are not the same for all. India's has been following a progressive taxations system offering something for everyone. A keen study on the taxation modes and relief mechanisms reveals tremendous saving opportunities to the market players in a listed corporate form.

This research paper seeks to bring out the tax advantages and drawbacks of different significant modes of business namely Sole proprietor, HUF, Partnership firms, LLPs and unlisted companies vis-à-vis listed companies. Seven categories have been chosen to bring out the differences viz., Slab rates, Surcharge, Tax on sale of ownership interest, Tax on distribution of profits, Managerial Remuneration, Tax on fresh equity infusion, Tax on distressed business purchase.

Objective

This study mainly focuses on bringing out the taxation implications on the listed SMEs examining the various parameters of investor's concerns and value creation

Methodology

All the information required for this study has been collected and compiled from secondary sources (Registrar of Companies and BSE-SME platform) as the subject matter comprises only listed SME companies. BSE SME is a trading platform floated by The Bombay Stock Exchange under the guidelines of SEBI. Further operation of various frameworks like SEBI Guidelines, ROC (Registrar of Companies) filings, application of SCRA (Securities Contracts Regulation Act) Companies Act 2013 etc., make the secondary data most reliable and accurate fit for research purposes.

DEFINITION OF MSME

The landscape of MSME took a major turn on Wednesday, the 07th of February 2018, with the Union Cabinet approving a proposal to redefine Micro, Small and Medium Enterprises, or MSMEs, based on their annual revenue, replacing the current definition that relies on self-declared investment on plant and machinery. According to the government's new definition, businesses with revenue of as much as Rs 5 crore will be called a micro enterprise, those with sales between Rs 5 crore and Rs 75 crore will be deemed as small and those with revenue between Rs 75 crore and Rs 250 crore will be classified as medium-sized enterprises. Finance minister Arun Jaitley proposed a 25% corporate tax rate for entities with sales of up to Rs 250 crore in the budget.

Under the earlier definition, manufacturers with Rs 25 lakh investment in plant and machinery were termed micro enterprises and those with investments between Rs 25 lakh and Rs 5 crore were regarded as small enterprises. Firms with investments of up to Rs 10 crore are classified as medium.[2]

With the whole economy focusing the attention on strengthening the life business blood of Indian economy, the SME sector, providing opportunities and growth prospects for feasible business models and innovation has seen a meteoric rise in the recent times.

Business Models

Traditionally SMEs have been operating under more conventional forms of business like sole proprietor and partnership. However, other modes of business like LLP, companies etc. are also an option left to the SME entrepreneurs to execute possible business ideas and ventures. Forms of business modes available to the entrepreneurs are;

- Sole proprietor
- Hindu Undivided Family
- Partnership firm
- Limited Liability Partnership
- Private Company
- Unlisted Public Company
- Listed Public Company

While taxation remains the same for sole proprietor (considered individual assessee in Income tax terms) and Hindu

Undivided Family (herein after referred to as HUF), partnership firms and Limited liability partnerships (hereafter referred to as LLP) have the same taxation laws. Listed and Unlisted companies have different tax implications which are discussed at length below.

SLAB Rates

Income tax is charged based on the slab rates which are decided upon in every union budget. Income tax rates applicable to individuals and HUFs are presented in Table.

Income Tax rates applicable to Individuals and HUFs

Up to ₹ 2,50,000	Nil
>₹2,50,000 but ≤₹ 5,00,000	5%
>₹5,00,000 but ≤₹ 10,00,000	20% plus ₹12500
> ₹ 10,00,000	30% plus ₹ 1,12,500

Source: The Income Tax Act 1961 & The Finance Act 2018

While partnership firms and LLPs are charged a flat 30% as income tax on the profit earned, the same differ to a major extent in case of companies termed as domestic companies. The rates are as follows[4];

Income Tax rates applicable to Companies

Gross turnover upto 250 Cr. in the previous year	25%
Gross turnover exceeding 250 Cr. in the previous year	29%

Source: The Income Tax Act 1961 & The Finance Act 2018

The study of slab rates revealed the following issues

1. Running a business under traditional modes of individual, and HUFs offers a very little relaxation as far as tax burden is concerned i.e., up to ₹ 10,00,000/-.
2. Beyond ₹10,00,000/- as both partnership firms/LLP and individual/HUF end up paying at 30%.
3. Registered companies are charged at 25% up to a turnover of 250 Cr and 29% up to a turnover of 29%.
4. Company mode of business scores instantly over partnership because of the obvious numbers advantage as far as tax payment is concerned.
5. The indifference level as calculated in terms of tax is ₹32,50,000/-.
6. Hence it can be stated that any income beyond the stated indifference level, companies end up paying lower than the individuals and HUFs.
7. However, this advantage is available only to high earning companies and businesses which stand to earn in excess of ₹32,50,000/-. But up to that level, more attractive business models are Individual and HUFs.
8. Despite having a sizeable advantage in business mode, business sector education activity on the advantage is still negligible considering the number of companies listed. More activities on educating will definitely lead to the economy gaining more leverage by the strengthening of the SME sector.
9. A closer look at the scenario below income of ₹32,50,000/-, businesses reveals that people are more motivated to operate on the more traditional ways of business than going corporate. Hence there is need for revising tax rates applicable to companies to make them more attractive even below the indifference point of ₹32,50,000/-.
10. Efforts should be made to bring the taxation uniformity if not incentivizing below the indifference level of ₹32,50,000/-.

Surcharge

Surcharge can be stated as the additional amount of tax chargeable on a progressive basis on the income tax payable at the rates on the applicable criteria as specified or modified via the Finance Act through the union budget from time to time. While low earning traditional business forms enjoy exemption from surcharge at times of minimal earnings, higher earning ones attract surcharge.[5] The Surcharge rates applicable to Individuals and HUFs as detailed in table 3.

In case of Individuals and HUFs, applicable surcharge is

Surcharge rates applicable to Individuals and HUFs

Total income >₹ 50 lakh but is ≤₹1 Crore	10 %
Total income >₹ 1 Crore	15%

Source: The Income Tax Act 1961 & The Finance Act 2018

In case of partnership firms, applicable surcharge is payable at a flat rate of 12% if income is more than ₹1 Crore. Whereas a company has to pay surcharge on the following basis as detailed in table 4.

Surcharge rates applicable to Individuals and HUFs

Total income >₹1 Crore but is ≤₹10 Crore	7 %
Total income >₹ 10 Crore	12%

Source: The Income Tax Act 1961 & The Finance Act 2018

In this category of comparison, income tax payable has to be invariably factored as surcharge is calculated on tax payable. Having already concluded that companies offer higher tax savings for earnings beyond the indifference points, the gap further widens by a significant margin because of operation of differential surcharge.

Following are the key issues with respect to surcharge

1. From the bird's eye view, there is a blanket saving of 5% on income tax payable on ₹9 Crores of income for a company form of business as compared to partnership.
2. Companies score at a higher level as compared to individuals and HUFs as the latter end up paying surcharge of 10% on income tax from taxable income from ₹50 lakhs to ₹1 Crore.
3. This gap increases exponentially as companies have to pay only 7 % on tax on further ₹9 Crores of income while the individuals and HUFs end up paying 15% which is an additional saving of 8% for the companies form of business.
4. This gap further deepens by 3% as companies end up paying 12% of income tax as surcharge while the same stands still at 15% of income tax in case of income beyond ₹10 Crores.
5. It is pertinent to note that though the surcharge is being charged at a very low rate on the income tax as compared to other forms of business, such fact is not often given the primary consideration due to lack of investor and tax payer education.
6. Incentivizing surcharge payments is not a suggestible measure to incentivize SMEs as surcharge is payable by the individuals and HUFs only after the cut off limit as may be specified.
7. Lower surcharge will apply only in cases where income is booming beyond the indifference levels. Hence in order to incentivize corporatization of SMEs, exempting surcharge levy below the indifference levels on par with the Individuals and HUFs is a very much suggestible measure.

Tax on Sale of Ownership Interest

The most unique distinguishing factor between a company form of business and the traditional forms of business is the possibility to sell ownership interest partly. The advantage is multifold as it offers significant leverage both from the financial perspectives and taxation perspective.

While it is legally not possible to sell part ownership in case of individual or HUF or partnership or LLP, a company's controlling interest or non-controlling interest can be transferred in any whole number and in any proportion to voting power in the form of shares.

In case of sale of ownership interest in full in conventional business modes, the same is treated as profits or gains of business or profession as slump sale of business and is taxed accordingly as per the rates set forth in this comparison where as there is significant portion of exemptions for listed companies form of business.

To operate a company on a full scale, absolute ownership of 100% is not needed as controlling interest of either the management or voting rights in excess of 50% is enough as per The Companies Act 2013. This can be done by transfer of shares to the requisite extent. While capital gains arise on sale of shares of a company, tax implications change in case of listed and unlisted companies. In both the cases, profit on sale of shares held for less than 12 months are qualified as short term capital gains and they attract tax at 30% flat rate subject to relaxation available in un expired concessional slab rates as specified above.[6]

In case of shares held for more than a year (12 months), profits on sale are termed Long Term Capital Gains (LTCG) and are taxed at 20% only in case of unlisted companies. LTCG on sale o listed shares was exempt from tax completely until the previous year. Now the same exemption has been restricted to LTCG of ₹1,00,000/- through the Union Budget 2018. Beyond the stated limit it is taxed at 20% after indexation benefit is awarded. However, the savings in tax are still subject to meticulous tax planning and scope for availing full exemptions by deferment of sale of controlling interest is not unplugged. Further slump sale has got all the probability to get taxed at 30% in case of individuals and HUFs beyond the slab rates and partnerships and LLPs at flat 30% and the same remains at 20% in case of listed companies after indexation being awarded. Hence the indifference leveraged advantage of 10% in comparison of listed MSME vs individual and HUF and flat advantage of 10% in comparison of listed MSME vs partnership and LLP is always a definite quantifiable take away for sale of business.

The study revealed the following observations.

1. Though saleability of ownership interest in part is in itself a unique advantage, taking away the taxation advantage partially is not a recommendable course of action.
2. Through the Union Budget 2018, the erstwhile available exemption of 100% on LTCG has been taken away and only exemption of up to ₹10,00,000/- is now available.
3. This will go on to cause unnecessary hardship in tax planning to the investors.
4. Also the same measure will act as an indirect exit barrier beyond taxable LTCG of ₹1,00,000/-.
5. The Union Govt needs to reconsider the decision of de-incentivizing the investors from investing by placing exit restrictions.
6. A measure to exempt LTCG on investments in listed SMEs on the BSE is a more suggestible action to promote active growth of the listed SMEs.

Tax on Distribution of Profits

Take home profit in case of the traditional form of businesses has always been an advantage as drawings are not a subject matter of taxation. But the same has been a hardship for the companies as distribution of profits by a company attracts dividend distribution tax (DDT) at the rate of 15% plus a surcharge of 12% together with education cess of 3% totaling to 20.36%.[8]

Since this is only a repatriation and investors in receipt of the income are set to avail an exemption of up to ₹10,00,000/- in form of receipt of dividend income per year, a wide range of indifference points emerge depending on the comparison criterion. Following are the detailed observations noted in the study.

1. Taxation of profit distribution, though is subject to operation of different indifference issues, operates as a demerit from the macro perspective as the earner ends up paying two-fold tax to the framework.
2. Companies end up paying at either 25% or 29% based on the slab rates as applicable in the first instance and then

at the rate of 20.36% on the same tax - paid profits in case of distribution of profits as dividend.

3. This will disincentivize the companies from paying dividend on a full-fledged scale as value erosion happens towards payment to taxes.
4. Companies tend to re-invest the profits earned instead of dividend pay out and the same measure disincentivizes individual and small scale investors from investing in shares and securities as periodic return is neither guaranteed nor expected in general from all companies.
5. Such regressive measures will tend to take away the attractiveness of the listed company form of business.
6. Though the Government may have policy of getting more taxes from corporate houses, bringing listed SMEs also under the same net is definitely a demerit to the most happening sector in Indian context to go the corporate way.
7. Exempting listed SMEs from payment of Dividend Distribution Tax (DDT) would be a very much long awaited welcome change to beam up the growth of listing activity amongst SMEs in India.

Managerial Remuneration

While there is no scope for the proprietor or the kartha to act as an employee to the business and claim remuneration from the business, other forms of business offer such scope.[9] In case of partnership firms, allowable remuneration to the working partners as per Sec 40(b) is noted as under in table 5.

Managerial remuneration allowable to Partnership firms for the purpose of tax computation

On first ₹3,00,000/- of profits or in case of loss	Higher of ₹1,50,000 or 90% of book profits
On the balance of book profits	At the rate of 60%

Source: The Income Tax Act 1961 & The Finance Act 2018

It has to be noted that such deducted remuneration add up to the individual incomes of the drawee and would contribute in progression to utilization/exhaustion of slab rates leading up to 30%.

Sec 197 of The Companies Act 2013, regulates the managerial remuneration in case of registered companies which lays out a restriction of maximum of 11% as managerial remuneration to the Managing Director or Whole Time Director or Manager with various other allied restrictions. The raider of this income going to add to the individual incomes of the drawee applies equally good in this case also as is applied in case of partnership firms. Though it appears partnership firms score on a higher ground theoretically, in the case of operation of scale and various indifference points along with diversified tax governance procedures, comparison becomes futile.

The observations made in this regard are briefed hereunder.

1. Option to pay managerial remuneration and deductibility of the same as an expenditure is a highlight of the company form of business compared to individual and HUF forms of business.
2. But, on a deeper examination, operation of DDT and limits on managerial remuneration without linkage to shareholding ultimately decrease the attractiveness of the unique feature.
3. While partnership allows up to 90% up to ₹3,00,000/- and 60% beyond ₹3,00,000/-, companies are not restricted by The Income Tax Act. But The Companies Act, 2013 restricts the same to 11%.
4. Raising the managerial remuneration to promote the management's interest will add on to reducing the possibility of management frauds and scalability of the business as well.
5. Raising the managerial remuneration without linkage with shareholding is not suggestible as the real investor may lose

out on the profits earned from the share capital invested.

6. Hence a method of aligning managerial remuneration with the percentage of shareholding in place of existing 11% restriction is a suggestible measure.

Tax on Fresh Equity Infusion

While fresh capital infusion in to the business bears no tax consequence in individual, HUF or Partnership, listing status of the company makes a difference in case of companies. The Finance Act, 2012 imposed a tax liability on fresh issuance of equity shares by an unlisted company to investors other than "Registered Venture Fund", if the issuance is made at a value more than the fair value. This could make SMEs subject to heavy tax outgo, since they often go for fund raising through equity issuance to investors. Such a tax liability, however, does not attract if the shares of the company are listed on recognized stock exchanges, including SME Exchange. Hence it can be concluded that listed MSMEs can bring in fresh capital from angel investors or venture capital financiers or raise fresh capital from the public at zero tax burden whereas unlisted companies have to suffer the tax wrath. In sum, with regard to the tax on fresh equity infusion, the following observations have been made and solutions are offered for certain issues.

1. The measure of taxing unlisted companies for capital infusion will go a long way in companies showing interest to get listed than operating in the semi regulated sector of unlisted companies.
2. But the same is not sufficient to channelize the investment or to shift business models from individuals, HUFs and Partnership firms to listed companies.
3. Capital infusion restrictions are not in place for traditional business models like individuals, HUFs and Partnership firms.
4. However placing such restrictions with out proper thought will have a catastrophic effect on the trade sector and investment channelizing.
5. Working out a model for mandatory conversion of business form beyond a scale of operations to listed SMEs and then to main boarding is a more feasible and suggestible measure for better channelization of investment and control.

Tax on Distressed Business Purchase

While the provisions applicable to slump sale in case of individuals, HUFs and Partnership firms, govern sale and purchase of business the same differ from unlisted companies to listed companies. Income-tax Act levies a tax inter alia on the buyer of shares of an unlisted company, if the transaction is conducted at a value less than its book value. Hence acquisition of distressed assets could attract heavy tax. Such a tax liability, however, does not attract if the shares of the company are listed on recognized stock exchanges, including SME Exchange. Hence listed SMEs stand a greater chance of implementing turn around strategies for sick companies that operate on a feasible business opportunity and lopsided management techniques and/or scale disadvantages. In this regard, the following have been noticed.

1. Having in place asset acquisition restrictions for unlisted companies definitely encourage companies to get listed to reap benefits.
2. But the same measure alone will not be enough to bring investment from individual investors in own business ventures or to go corporate.
3. Sec 50C of The Income Tax Act, 1961 operates on similar lines which seeks to tax real estate transactions below the market value as “Other Income”. But the same is not in place for acquisition of other business assets from an erstwhile business.
4. Similar restrictions shall also be made applicable to individuals, HUFs as well

as to make listed SME segment more attractive as a business model.

Conclusion

While business is an art of extracting money out of the opportunities available or created, seeking the best available mode of business and gauging the scale and scalability of commercial operations is equally a matter of skill and meticulous comprehension of various business models and regulatory frameworks. Following the laws of land is a mandate for any business while taking advantage and reaping the benefits set forth in the same framework is a matter of trade acceleration and market scaling.

Given the tax advantages alone listing an SME offers a handful for scaling businesses. This is evident to this extent that quite a few SEBI registered merchant bankers like Sarthi Capital Advisors Private Limited have now started recommending listing to take advantage of tax savings and market placement.

If given proper reach to the MSME business community, major issues in the SME sector like global market identity and appeal, scalability, credit availability, branding, funding business ideas, tax and compliance burdens etc., are set to ease out for better and accelerated trade and service growths.

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COMPARATIVE ANALYSIS BHARATH SANCHAR NIGAM LIMITED, TUMKUR

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Abstract

The study was conducted on "Comparative analysis" at Bharath Sanchar Nigam Limited Tumkur this study has been undertaken to study an organization and to make factual observation about the functioning of an organisation. The study is organization specific and is to be conducted on overall basis. The report can be a study of the whole organisation or a wing of the organisation. The secondary data was collected through various books and journals, website, other documents of the company. To compare the financial statement performance of BSNL with AIRTEL and IDEA. To know about the financial statement performance of BSNL in the Telecom sector. The study also helps to forecast the future growth of the companies and also the developments need to be made to increase its financial performance. This helps to investors to forecast the future growth of the company.

Keywords: Comparative analysis, BSNL, AIRTEL & IDEA, Financial statement analysis.

Introduction

In telecom industry Bharath Sanchar Nigam Limited stands 7th.BSNL provides a wide variety of services. BSNL is governed by central government and New Delhi as headquarters. BSNL was integrated on 15thSeptember 2000 and acquired the industry as long as telecommunication services and system administration from the earlier DTS and DTO of central government was on profitable concerned.

Comparative financial statements

Comparative financial statements These are the statements used to compare previous year statements with specific financial statements.

Ratio analysis

Ratio refers to the proportion of two mathematical terms. "The link between two or more things". Ratio helps to analyse large amount of data to take appropriate decision.

Following are the uses of ratio analysis:

- The capability of a firm to meet its obligations.
- Represents the efficiency of the firm in using assets to increase sales.
- Operational efficiency of the firm.
- Performance of the firm

Review Of Literature

Subramanyam, K.R.(2014), He says that "comparative analysis is one of the most important concept of an internal factors of company analysis and its module analysis. It helps to know the scope of comparative analysis.

Rajangupta, Nasibsingh gill (2013), The study entitled in international journal of advance laptop science and application data processing techniques are used hugely by the researcher's community in detective work plan fraud. Most of the analysis during this direction has number (quantitative information) i.e. monetary ratios gift within the monetary statements for detect.

Objectives of the Study:

The main objectives of the present study is follows:

- To study the financial statement performance of BSNL.
- To understand financial statement performance by using ratios.
- To compare the performance of BSNL with Airteland Idea.
- To suggest the company to increase its overall financial performance.

Data Collection

1) The study is completely based on the secondary data.

2) It is basedonBalance sheet and profit and loss account

3) The study includes the annual reportof five years that is from 2013 to 2017.

History of Indian Telecommunication sector:

Today India's telecommunication network is second largest in the world because of large number of user i.e. both landline and mobile phones with the 1.053billon users as per now,

India's telecommunication network offer low call tariffs in the small telecom operators and huge competition and also India as second largest internet users in the world with the 342.65 million users in the country. India, Telecommunication originated with the introduction of telegraph. In 1850, the first electric telegraph line was started between Calcutta and Diamond Harbour.

History of BSNL

BSNL isthe better provider of surviving telephony and ample bandagecasework with added than 60% marketplace allotment and fifth capital adaptable telephone service. Butstillthe income and marketplace allotment accept fallen into abundant lossbecause of critical attempt in telecommunication.

Services offered by BSNL Tumkur:

Universal Telecom services:

BSNL provides wired also wireless services with the help of CDMA technology

1. Types of landline services of BSNL they are as follows:
   - New landline collection services.
   - Permanent and Temporary connection services.
   - Different plans for landline users.
2. Mobile Telephone services
3. Internet services
4. Video conferencing services
5. Intelligent Network services.

Year	BSNL			AIRTEL			IDEA		
	Current assets	Current liabilities	Ratio	Current assets	Current liabilities	Ratio	Current assets	Current liabilities	Ratio
2012-13	33175125.94	89471078.08	0.3707	34038295.91	76191647.07	0.4467	22676500.3	19293630.1	1.1753
2013-14	31116018.61	23116120.61	1.3461	32562038.45	221942570.10	0.1467	16431540.8	19804432.4	0.8296
2014-15	1512589.69	522133.47	2.8969	1153890.86	191080.41	6.0387	21223334.1	19943395.2	1.0641
2015-16	5855218.91	48934383.55	0.1196	54147564.29	38230515.00	1.4163	17052408.6	22603566.6	0.7544
2016-17	5280687.15	2490527.61	2.1203	8842100.51	2784680.27	3.1752	19688898.9	18523004.7	1.0629
Total	76939640.3	164535243.3	6.8536	130753890.01	339340492.85	11.2236	97072682.7	82168029	4.8863
Average	15387928.06	32907048.66	1.37072	26150778.002	67868098.57	2.24472	19414536.54	16433605.8	0.9773

Analysis

The above table shows that average current ratio of BSNL is 1.37072, Airtel is 2.24472, Ideais 0.9773 from 2012-13 to 2016-17.

Interpretation

Current ratio standard is 2:1.The graph shows that the average current ratio of BSNL is fluctuating from year to it shows that the company is facing the shortage of current assets to meet its short term obligations. But in 2016-17 BSNL‟s ratio has been increased compared to 2015-16 it shows that the company has increased current assets to meet its short term obligations.

Year	BSNL			AIRTEL			IDEA		
	Quick assets	Current liabilities	Ratio	Quick assets	Current liabilities	Ratio	Quick assets	Current liabilities	Ratio
2012-13	30746511.82	89471078.08	0.3436	20000086.91	76191647.07	0.2625	20288187.3	19293630.1	1.0515
2013-14	26759096.01	23116120.61	1.1575	26358163.45	221942570.10	0.1187	13426437.8	19804432.4	0.6779
2014-15	1446141.46	522133.47	2.7696	480004.86	191080.41	2.5121	19091652.1	19943395.2	0.9572
2015-16	2576492.17	48934383.55	0.0526	52671917.29	38230515.00	1.3777	15557887.6	22603566.6	0.6882
2016-17	3558493.15	2490527.61	1.4288	7699995.51	2784680.27	2.7651	15910822.9	18523004.7	0.8589
Total	65086734.61	164535243.3	5.7521	117596168.02	339340492.85	7.0361	84274987.7	82168029	4.2337
Average	13017346.92	32907048.66	1.1504	23519233.60	67868098.57	1.40722	16854997.54	16433605.8	0.8467

Analysis

The above table shows that on an average quick ratio of BSNL is 1.1504, Airtel is 1.40722 and Idea is 0.8467 from 2012-2013 to 2016-2017.

Interpretation

The standard quick ratio is 1:1. The above graph shows that the acid test ratio of BSNL is fluctuating from year to year but in 2016-17 company has raised its quick assets to pay off its liabilities.

Year	BSNL			AIRTEL			IDEA		
	Cash+ invest	Current liabilities	Ratio	Cash+ invest	Current liabilities	Ratio	Cash+ invest	Current liabilities	Ratio
2012-13	28070243.7	89471078.08	0.3137	10490790	76191647.07	0.1376	13415330.9	19293630.1	0.6953
2013-14	31771009.00	23116120.61	1.3744	14427237	221942570.10	0.0650	20853750.4	19804432.4	1.0529
2014-15	1786486.1	522133.47	3.4215	232773	191080.41	1.2182	23954598.3	19943395.2	1.2011
2015-16	759001.25	48934383.55	0.0155	51098998	38230515.00	1.3367	22709478.4	22603566.6	1.0046
2016-17	1245706.85	2490527.61	0.5002	2902155	2784680.27	1.0423	25897687.6	18523004.7	1.3981
Total	63632446.9	164535243.3	5.6253	79151953	339340492.85	3.7998	106830845.6	82168029	5.352
Average	12726489.38	32907048.66	1.1251	15830390.6	67868098.57	0.7598	21366169.12	16433605.8	1.0704

Analysis

The above table 4.3 shows that average cash ratio of BSNL is 1.1251, Airtel is 1.4926 and Idea is 1.0704 from 2012-2013 to2016-2017.

Interpretation

Cash ratio should be 1:1.The above graph shows that cash ratio of BSNL is fluctuating compared to airtel and idea, BSNL has less cash ratio than Airtel and Idea. Indicates that the company is facing shortage of cash and bank balance.

Findings:

1. Current ratio standard is 2:1. Current ratio of BSNL is1.37:1which is higher than Idea and less than Airtel. BSNL has not met with the standards it shows that the company has to increase its current assets to meet its short term obligations.
2. Acid test ratio should be 1:1. Acid test ratio of BSNL is 1.15:1 which is higher than the standards and also higher than Idea in all five years, shows that the company has maintained good liquidity.
3. Cash ratio should be greater than 1. Cash ratio of BSNL is greater than 1 and also higher than Idea but less than Airtel. Greater than 1 shows that the company has the ability to cover its liabilities.

Conclusion

The comparative study based on last five years from 2012-13 to 2016-17, BSNL with its competitors Airtel and Idea. By computing various ratios, it can be concluded that Airtel Company is performing well when compared to BSNL and Idea. The most popular telecom industries in India are Airtel, BSNL and Idea. Here study has been made on these companies, which helps to know the past and present performance of these companies. The study also helps to forecast the future growth of the companies and also the developments need to be made to increase its financial performance. This helps to investors to forecast the future growth of the company.

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