

A Study on Financial Performance Evaluation of Selected Agro- Based Industries in Chittoor district of Andhra Pradesh

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1. Introduction:

Agriculture forms are the foundation of the Indian Economy. Farming possesses essential position in the economy. The commitment of farming is 17.8% in the Gross domestic product, 52.00 % in business and 12.20% in fare, in the year 2007-08. The rural segment goes about as rampart in keeping up sustenance security and furthermore supplies feed to continue the domesticated animals. It animates modern improvement and furthermore lifts transport, banking and different administrations. More or less, its position is a comprehensive one. It can be said that the very existence of economic activities of the entire people is bound with the state and the nature of this sector. Any change in the agricultural sector, positive or negative, has a multiplier effect on the entire economy. The all-pervading influence of agriculture underlines the fact that development of agriculture is an essential condition for the economic development of the country.

Though the notable progress has happened in agricultural sector in last six decades its present status is still backward. It is suffering from many weaknesses like slow and uneven growth, unsatisfactory land reforms, inadequate capital, overcrowding, vast underemployment, inadequate irrigation, insufficient modernization, low productivity etc. Attempts to rejuvenate it were made so many times in so many different forms but without any spectacular success. The agriculture strategy, which goes by the name of green revolution, was hailed to have solved India's agriculture problems, but this hope was only short lived. Despite ten five year plans and three annual plans India is still unable to solve its agricultural problems.

2. TITLE OF THE PROBLEM

A Study on financial performance evaluation of selected agro based industries in Chittoor district of Andhra Pradesh.

3. STATEMENT OF THE PROBLEM

Agro-Based industry refers to the subset of manufacturing that processes raw materials and intermediate products derived from the agricultural sector. The agricultural sector includes agricultural farm, livestock, forestry and fisheries. Agro- processing industry has multidimensional effect on upliftment of agricultural and rural sector. Agro-Based on one hand can act as panacea for the agricultural problems and on the other stimulates industrial development. It can act as a symbiotic link between agriculture and industry. Agro-Based can play a role of catalyst in the overall development of the economy. Therefore Agro-Based industry occupies a significant position in the development of Indian economy

The failure of the **Agro-Based** industry in the maintenance of liquidity is the direct result of imbalanced capital structure and inadequate liquidity in turn is leading to low profitability. Since the industry has been incurring losses, the payment of dividend, interest and the repayment of principal amounts is becoming a big problem. Thus, the **Agro-Based** industry is caught in a vicious circle. To discharge the complicated duties, the financial manager must know how to solve the above problems that affect the fixed assets management, inventory management and cash management in the **Agro-Based** industry to be increased. These questions about financial management arise in **Agro-Based** industry also. The said questions call for a scientific study in select **Agro-Based** factories in Chittoor Dist.

On this backdrop, a need was felt to study Agro-Based industry especially small scale in operation in the Chittoor district with a focus on the financial functions of the management.

4. RESEARCH PROBLEMS:

The research is undertaken to study Agro-Based industry in Chittoor district. The research questions are as follows.

- How is the financial performance of the Agro-Based industry in the Chittoor district?
- What are the financial problems faced by the Agro-Based industry in the Chittoor district?

5. OBJECTIVES OF THE STUDY

The present investigation essentially highlights the financial performance of Agro based industries in Chittoor district of Andhra Pradesh. In more precise terms the following are the objectives of the research.

The specific objectives of the study are;

1. To study the financial management practices used by the Agro-Based Industry in the Chittoor district.
2. To estimate the extent of sickness in the Small Scale Agro-Based Industry in the Chittoor district and the causes behind the same.
3. To examine the Liquidity Position of the Agro-Based Industry in Chittoor.
4. To analyze the Long-Term Solvency Position of the Agro-Based Industry in Chittoor District.
5. To evaluate the Profitability Position of the Agro-Based Industry in Chittoor District.
6. to analyze the Efficiency Position of the Agro-Based Industry in Chittoor District.
7. To offer some suggestions for improving the financial performance of agro based industries in Chittoor.

6. HYPOTHESES OF THE STUDY

In order to formulate hypothesis 'Exploratory Research' is conducted. An 'Experience Survey' was conducted of experts especially top government officials of 'District Industries Centre (DIC)', 'Khadi Village Industries Board (KVIB)' and Maharashtra Centre for Entrepreneurship Development (MCED)', Chittoor. The seven hypotheses are formulated and are given below.

- 1) The financial performance of the Agro-Based Industry in the Chittoor district is satisfactory.
- 2) The food sector dominates in the sales of the Agro-Based Industry in the Chittoor district.
- 3) The proportion of closure in the Agro-Based Industry is less than that in the other Sector in the Chittoor district.
- 4) The proportion of closure in the food sector is less than that in the non-food sector of the Agro-Based Industry in the Chittoor district.

7. RESEARCH METHODOLOGY

The research design is as follows.

7.1 Type of Data:

A combination of primary & secondary data is used in this research. Primary data is the data which is collected afresh and for the first time by the researcher. The secondary data is the data which already exist in some or the other form and is collected already by someone else.

The **secondary data** is collected in this research to fulfill the information requirements of few objectives - to portray the demographic profile, to ascertain the role of various government organizations in the development and to identify the prospects of the Agro-Based industry in the Chittoor district.

The **primary data** is collected in this research in order to fulfill the information requirements of certain objectives - to portray the demographic profile, to ascertain the impact of various government organizations on the development, to study the financial management practices, to assess the financial performance, to identify the financial problems, to estimate the extent of sickness and closure and the causes behind the same and to identify the prospects of the Agro-Based industry in the Chittoor district.

7.2 Sources of Data:

The data is collected from following sources.

□ **Secondary Data Source:** Secondary data is collected from sources like – Reports and Database of Government Departments/Organizations, Newspapers, Magazines, Books, Research Journals, Internet etc.

□ **Primary Data Source:** Primary data is collected from management of the Agro-Based enterprises in the Chittoor district. The primary data is collected from entrepreneurs of the enterprises but in case the entrepreneur is not available the data is collected from the manager.

7.3 Method of Data Collection:

A survey of small scale Agro-Based enterprises in the Chittoor district is carried out to collect primary data. The 'Schedule Method' is used to collect data. A schedule is similar to questionnaire and consists of set of questions related to the research topic. The researcher has personally met respondents along with the schedule and asked questions as per the schedule and recorded the responses.

7.3.1 Research Instrument:

A 'Schedule' is used as a research instrument to collect the primary data. A preliminary schedule was drafted keeping in mind the objectives of research. A *pilot survey* of 20 respondents was carried out to test the schedule. The errors identified in the pilot survey were removed and the final schedule was drafted.

7.3.2 Sampling Design:

Sampling design is prepared so as to draw a representative sample from the population and reach reliable conclusions.

Population/Universe:

The population/ universe is considered as: 'Manufacturing Agro- Based Enterprises in Chittoor district permanently registered till 31st March 2020'. The population is 'finite population' and the population size is 702.

Sampling Unit:

The sampling unit is considered as a 'manufacturing Agro-Based enterprise'.

Sampling Frame:

The sampling frame consists of list of all the sampling units in the population. The sampling frame is collected from District Industries Centre (DIC), Chittoor.

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7.4 Tools for Data Analysis:

Both Statistical and Financial tools are used for data analysis. The computer software is used for data analysis. The tools used for data analysis are given below.

The following ratios are used to analyze the financial performance of the enterprises.

○ **Liquidity Ratios:**

- Current Ratio

- Quick Ratio

○ **Leverage Ratios:**

- Debt/Equity Ratio

- Interest Coverage Ratio

○ **Profitability Ratios:**

- Gross Profit Ratio

- Operating Profit Ratio

- Return on Investment

○ **Efficiency Ratios:**

- Capital Turnover Ratio

- Inventory Holding Period

- Debtors' Collection Period

8. Review of Literature

Nilsson and Dijk (1997)² work to bridge the gap between cooperatives and publicly-traded firms in their book on strategies and structures in the agro-food industries. They examine the impacts of mergers and acquisitions in the performance of the U.S. food industries and the strategic behaviour that leads to firm success. Other authors have looked at the impact of agribusinesses on the global economy.

Cook and Chaddad (2000)³ provide a referential framework on the global economy; their work focuses on providing an overview of the issues related to agro-industrialization and the role of agribusiness management in bridging the gap between agribusiness and foreign development. Cook and Chaddad (2000) also note a shift in the early 1970's from intra-firm to inter-firm analysis in agribusiness management literature.

Anil Kumar (2000)³¹ in his study on "Financial Performance of Hindustan Motors Limited, Cochin", in his study found that the sales of the company were showing an upward trend which reflected a growth in its profit. The tools use by him were ratio analysis, the company's financial position is favourable

Pardeep S. Shehrawat(2010)⁹⁶ in a study "Agro Processing Industries – A Challenging Entrepreneurship for Rural Development" examines the problems encountered by Agro-Based industries regarding finance, marketing, technological and export in four industrially leading districts of Haryana. The study also points out the specific training needs of the entrepreneurs.

Some studies have been undertaken with country or state as a unit for the measurement of regional imbalances in agricultural productivity. However, a few of the researchers have analysed the variations in agricultural growth at the level of districts also. But in these studies the emphasis was laid more on the aggregate picture, and variations at the disaggregated district level were observed in a cursory manner.

9. Analysis of Financial Performance of The Agro-Based Industry in The Chittoor District

The financial performance of the Agro-Based industry in the Chittoor district is analyzed with a view to understand the level of performance of the industry. The data analysis is based on the primary data collected from management of the Agro-Based enterprises in the Chittoor district. The financial performance is assessed using 'ratio analysis'. In order to have consistency, reliability and validity in the findings, the financial analysis is based on the financial information of 107 working enterprises of the Agro-Based industry in the Chittoor district which maintain books of accounts and use mercantile system for maintenance of accounts.

9.1 OVERALL FINANCIAL PERFORMANCE OF THE AGRO-BASED INDUSTRY:

The overall financial performance is assessed for industry as well as for business sectors and product categories. The overall financial performance is assessed on four dimensions viz.

- Liquidity Position
- Long Term Solvency Position
- Profitability Position
- Efficiency Position

In order to assess the overall financial performance of the Agro-Based industry in the CHITTOOR district all the ratios are presented together in Table 1.

Table 1: Overall Financial Performance of the Agro-Based Industry in the Chittoor District

Sr. No.	Product Category/ Business Sector	Liquidity Ratios		Solvency Ratios		Profitability Ratios			Turnover Ratios		
		Current Ratio	Quick Ratio	Debt Equity Ratio	Interest Coverage Ratio	Gross Profit Ratio	Operating Profit Ratio	Return on Investment Ratio	Capital Turnover Ratio	Inventory Holding Period	Debtors' Collection Period
1	Processing of Fr. & Veg.	1.43	0.85	0.40	9.30	25.01	12.35	34.03	2.79	46.95	46.90
2	Vegetable Oil	1.61	0.86	0.83	2.99	22.89	10.04	33.54	3.30	58.68	48.68
3	Milk & Milk Products	1.14	1.03	0.87	11.02	10.78	2.95	25.24	16.80	0.85	20.97
4	Grain Mill Products	1.41	0.78	0.64	5.72	19.21	7.41	27.83	3.72	61.13	57.87
5	Animal Feed	1.40	0.66	0.71	5.96	23.06	8.25	29.33	3.16	53.24	27.09
6	Bakery Products	1.51	1.01	0.33	15.47	25.03	10.88	28.25	2.60	12.17	16.34

7	Confectionary	1.51	0.96	0.00	N/A	22.50	10.19	37.89	3.62	30.84	38.42
8	Spices	1.53	0.89	0.80	6.99	21.20	8.00	24.85	2.92	72.90	80.79
9	Tobacco related Products	1.86	0.93	0.00	N/A	21.33	9.81	46.08	4.81	49.07	26.59
10	Other Food Products	1.65	1.04	0.14	21.28	28.87	13.93	46.21	3.32	16.86	22.68
	Food Sector	1.38	0.94	0.71	10.03	18.19	7.22	29.56	8.61	28.82	34.11
11	Textiles	1.44	0.78	0.58	6.92	18.51	7.85	30.58	3.95	82.34	81.20
12	Wood & Wood Products	1.81	0.85	0.38	13.31	17.99	9.04	37.51	4.12	90.51	83.33
13	Paper & Paper Products	1.53	0.88	1.01	11.06	23.78	9.97	32.11	3.12	77.66	72.75
14	Ayurvedic Products	1.74	0.90	0.00	N/A	25.24	11.99	42.64	3.58	46.78	39.50
	Non Food Sector	1.69	0.85	0.67	10.53	19.99	9.30	35.62	3.82	83.59	77.81
	Industry	1.49	0.90	0.70	10.16	18.86	7.99	31.80	6.82	49.68	50.45

Interpretation:

□ **Liquidity Position:** The current ratio (1.49) and quick ratio (0.90) of the Agro-Based industry in the Chittoor district are lower than the respective standards (2.00 and 1.00 respectively), but they are higher than the practical standards recommended by bankers (1.33 and 0.66 respectively). Therefore, liquidity position of the industry is satisfactory.

□ **Long Term Solvency Position:** The leverage ratios of the small scale agro- processing industry in the Chittoor district are satisfactory as the average debt equity ratio (0.70) is very less than standard (2.00) and the average interest coverage ratio (10.16) is very high than (1.00). Therefore, the long-term solvency position of the industry is satisfactory as the risk is less. But at the same time it may be noted that the industry is relying more on the owner's funds than debt funds. Further the capacity of the industry to pay the interest on loan is also more. These two facts indicate that the industry is not taking much benefit of the financial leverage.

□ **Profitability Position:** The profitability ratios of the Agro-Based industry in the Chittoor district are satisfactory as the average gross profit ratio (18.86%), average operating profit ratio (7.99%) are moderate and average return on investment ratio (31.80) is high. The profitability ratios indicate the fact that the production efficiency and operating efficiency of the industry is moderate. Further the average return on investment ratio is high indicating good overall performance. Therefore, the overall profitability position of the industry is satisfactory.

□ **Efficiency Position:** The efficiency ratios of the Agro-Based industry in the Chittoor district are satisfactory as the average capital turnover ratio is high (6.82), average inventory holding period is moderate (49.68) and average debtors' collection period is moderate (50.45). The efficiency ratios indicate the fact that the efficiency of capital utilization is high, efficiency of inventory management is moderate and efficiency of trade credit management of the industry is moderate. Since the average capital turnover ratio of the industry is high, the overall efficiency of the industry is satisfactory.

□ **Overall Financial Performance:** Since the liquidity, long term solvency, profitability and efficiency position of the Agro-Based industry in the Chittoor district is satisfactory for the time period from financial year 2014-15 to 2019-20; its overall financial performance is satisfactory.

10. Findings:

The financial performance of the Agro-Based industry in the Ahmednagar district on the basis of the ratio analysis of the working enterprises during the financial year 2014-15 to 2019-20 is as follows.

10.1 Liquidity Position:

➤ The current ratio (1.49) and quick ratio (0.90) of the industry are lower than the respective standards (2.00 and 1.00 respectively), but are higher than the practical standards recommended by bankers (1.33 and 0.66 respectively). Therefore, liquidity position of the industry is satisfactory.

➤ The liquidity position of both the business sectors is satisfactory.

➤ The liquidity position of the food sector is better than that of the non food sector.

➤ The liquidity position of all the product categories is satisfactory.

➤ The trend analysis shows improvement in the liquidity position of the industry.

➤ The trend analysis shows improvement in the liquidity position of both the business sectors of the industry.

10.2 Long Term Solvency Position:

- The leverage ratios of the industry are satisfactory as the average debt equity ratio (0.70) is very less than standard (2.00) and the average interest coverage ratio (10.16) is very high than (1.00). Therefore, the long term solvency position of the industry is satisfactory.
- The long term solvency position of both the business sectors is satisfactory.
- The long term solvency position of the non food sector is better than the food sector.
- The long term solvency position of all the product categories is satisfactory.
- The trend analysis of the average debt equity ratio of the seven product categories namely – ‘Vegetable Oil’, ‘Milk and Milk Products’, ‘Grain Mill Products’, ‘Animal Feed’, ‘Other Food Products’, ‘Textiles’ and ‘Paper and Paper Products’ - shows slight weakening in their long term solvency position.
- The trend analysis of the average interest coverage ratio of the eight product categories namely – ‘Processing of Fruits and Vegetables’, ‘Milk and Milk Products’, ‘Grain Mill Products’, ‘Animal Feed’, ‘Bakery Products’, ‘Spices’, ‘Wood and Wood Products’ and ‘Paper and Paper Products’ - shows improvement in the long term solvency position.
- The trend analysis of the average interest coverage ratio of the three product categories namely – ‘Vegetable Oil’, ‘Textiles’ and ‘Paper and Paper Products’ - shows weakening in the long term solvency position.

10.3 Profitability Position:

- The profitability ratios of the industry are satisfactory as the average gross profit ratio (18.86%), average operating profit ratio (7.99%) are moderate and average return on investment ratio (31.80) is high.
- The profitability ratios indicate the fact that the production and operating efficiency of the industry is moderate. Further the average return on investment ratio is high indicating good overall performance. Therefore, the overall profitability position of the industry is satisfactory.
- The profitability position of both the business sectors is satisfactory.
- The profitability position of the non food sector is better than the food sector.
- The profitability position of all the product categories is satisfactory.
- The overall profitability position of eleven product categories namely - ‘Vegetable Oil’, ‘Milk and Milk Products’, ‘Grain Mill Products’, ‘Animal Feed’, ‘Tobacco related Products’, ‘Other Food Products’ ‘Confectionary’, ‘Spices’, ‘Textiles’, ‘Paper and Paper Products’ and ‘Ayurvedic Products’ - has declined whereas that of the three product categories namely – ‘Processing of Fruits and Vegetables’, ‘Bakery Products’, and ‘Textiles’ - has improved.

10.4 Efficiency Position:

- The efficiency ratios of the industry are satisfactory as the average capital turnover ratio is high (6.82), average inventory holding period is moderate (49.68) and average debtors’ collection period is moderate (50.45).
- The efficiency ratios indicate the fact that the efficiency of capital utilization is high, efficiency of inventory management and efficiency of trade credit management of the industry is moderate. Since the average capital turnover ratio of the industry is high, the overall efficiency of the industry is satisfactory.
- The efficiency position of both the business sectors is satisfactory.
- The efficiency position of the food sector is better than that of the non food sector.
- The efficiency position of all the product categories is satisfactory.

11. Recommendations:

- 1) The enterprises need to tap multiple and specialized sources for cheaper finance.
- 2) The enterprises should maintain the books of accounts.
- 3) The enterprises should use mercantile system for maintaining books of accounts.
- 4) The enterprises should improve banking practices.
- 5) The enterprises should use appropriate method and techniques of the costing to estimate the cost properly.
- 6) The enterprises should focus on cost management and control to increase profitability.
- 7) The enterprises should improve the working capital management.
- 8) The enterprises should improve the inventory management and the trade credit management efficiency.
- 9) The enterprises should acquire knowledge about the taxation and regulatory measures by way of training.
- 10) The enterprises should use budgetary control for financial planning.

Conclusion:

The financial performance of the industry is satisfactory as its liquidity, long term solvency, profitability and efficiency positions

are satisfactory. The liquidity and efficiency position of the food sector is better than that of the non food sector whereas the long term solvency and profitability position of the non food sector is better than that of the food sector. The liquidity and long term solvency position of the industry has improved over a period of time. The profitability of the industry has declined over a period of time. The capital utilization efficiency of the industry has improved whereas efficiency of inventory management and trade credit management has declined.

The industry faces starting problems and is currently suffering from some marketing, financial and other problems. The marketing current problems are related to - Product, Pricing, Promotion, Distribution, Market Coverage, Marketing Information, Marketing Planning and Intense Competition. The financial current problems are related to Long Term Finance, Working Capital Management, Cost Control, Accounting Practices, Taxes and Financial Planning. The other current problems are related to Manufacturing, Raw Material, Human Resource, Infrastructure and Others. The industry has low extent of sickness and closure than small scale sector. The extent of closure in the food sector is lower than that in the non food sector. There are marketing, financial and other problems behind the sickness and closure in the industry. The Government organizations are playing an important role as the assistance provided by them has been effective in checking the extent of closure in the industry.

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