6.1 Introduction:

India is a country mainly based on agriculture. Agriculture is the backbone of India. More than 70% population is dependent on agriculture. The Growth of agriculture still holds the key for economic and social upliftment of the rural people. Dairy Industry is one of the key industries in India. The Indian dairy sector contributes a large share in the agricultural gross domestic product (GDP). Since there is a good export market for dairy products, the Indian dairy industry is showing favorable signs for the future development and its growth is as high as there is abundant domestic demand and good opportunity for exports of milk and its products. Persistent economic progression and proliferation in per capital income are expected to enhance demand for milk and milk products considerably. According to a consumer study conducted by the NSSO, the consumption of livestock products, particularly milk has increased the attractiveness in the last two decades both in the rustic as well as urban regions. Domestic consumption demands, to some extent growth and export, and therefore, poses a particular challenge for the Indian Dairy Sector. As a result in the early 1990s important trade policy reforms were commenced by the Government of India, which sanctioned growing liberalization and privatization of all areas of the economy and dairy sector, was one of them included in it. The processing, handling and marketing of milk was reserved mainly for the co-operative sector. So the dairy industry was reauthorized in 1991. The
first consequence was that the private sector business establishments including multi-nationals were permitted to establish milk processing and product manufacturing plans. Secondly the India became a member of the WTO. Both these advancements point toward the fact that sooner or later, the Indian dairy industry will have to encounter the international markets of dairy. In the time of changing situation Gujarat State is experiencing sizeable modernization with latest equipment of technology. The dairy industry of North Gujarat bears the evidence to this. So it will be right to study and analyse the financial health of the district co-operative milk unions of North Gujarat and to suggest measure to cost control and improve their profitability.

The present study deals with financial analysis of the co-operative dairy industry in the North Gujarat which are engaged in processing and selling of milk and milk products. For these purpose three leading co-operative dairy units of North Gujarat are associated with GCMMF. For analyzing the financial health of dairy units of North Gujarat, the data related to all the three district co-operative dairy units for the past ten years viz. 2002-03 to 2011-12 have been collected and various techniques of measuring financial health like Ratio analysis, CSS and several statistical procedures have been applied to analyze and drew deductions. The present study has been divided in six chapters and chapter wise findings have been discussed here as under.

6.2 Summary:

The first chapter namely ‘History and Dairy Development in Gujarat’ deals with how the present advanced and flourishing dairy industry came into existence. The Co-operative movement started in India in the last decade of the 19th century with two objects in view, i.e. to protect the farmers’ from the hands of the private money lenders and to improve their economic condition. The history of dairy development
movement in India is a new one. During the pre-independence period this movement was limited to a few pockets of Bangalore, Gujarat, Madras, and Calcutta. In 1946 Khaira District organized the first producer-oriented dairy. The most outstanding of this venture was the Khaira District co-operative milk producers Union Limited of Anand. In 2012-13, there were 16914 village level co-operative societies and 318000 members engaged in milk production in co-operative in Gujarat. There were 16 district level unions. Gujarat stands the first in acquiring the milk and marketing of liquid milk. The diary industry made a considerable progress during last 10 years. The Co-operative dairy industry, in spite of constructing a comprehensive progress during the last 10 years, is still confronting several difficulties like financial problems, labour problems, infrastructural problems, under-utilization of capacity, etc. and as result it has not developed as compared to other industry. In the last 10 years, the government has taken several major steps like pull decontrol of dairy industry, liberalization and several tax relaxations to improve the financial position of the industry as a whole.

The second chapter is entitled ‘Research Methodology and Conceptual Framework’. The subject of the present study is “Financial Analysis of the Co-operative Dairy Industry in the North Gujarat” which undertakes the period of the ten years from 2002-03 to 2011-12. This study covers the District Co-operative Milk Producers’ Unions which are associated with the GCMMF. The study is based on secondary data published by DCMPUs in their annual reports. The main objective of the present study is to measure financial health of the district co-operative milk producers unions and to find out the various factors which affect the profitability. Accounting techniques common size income statement and value added statement are used to measure performance of the units, various statistical measures like mean and index regression, analysis, etc. has been based on chi-square test and “F” test have been applied to
test the validity of two hypotheses namely (i) Null Hypothesis (ii) Alternate Hypothesis. Finally, a survey of the existing literature on the subject has been made and the limitations of the present study have also been shown. There are various concepts of profit like the economic profit, accounting profit, the value added concept and economic value added.

Common size income statement has been analysed in the third chapter ‘Common Size Income Statement’. For the measurement of profitability different component of financial statements are measured to a particular component. In this chapter definition, advantages and limitations of CSS have been given. Moreover, for the present study framework of analysis of CSS has been shown. A detail analysis of CSS of units under study has been discussed and after making interfirm comparison of units under study certain outcomes based on CSS of the units under study has been narrated.

The forth chapter ‘Analysis of Value Added Statement’ analyses the value added statement. It has rightly been supposed that a firm can survive for a certain period without making profit but cannot survive without adding value. Here meaning and definition of Value Added, Gross Value Added and Net Value Added have been discussed. The meaning of Value Added Statement and merits and demerits of VAS has also been discussed. The various methods of preparing VAS and some basic concepts have also presented in the chapter. Finally, the analysis of generation and application of VA has been analysed for the units under study.

In the fifth chapter entitled ‘Analysis of Profitability’, profitability of units under study has been expounded. Here meanings of profitability, various measurement of profitability and framework of analysis of profitability have been discussed. Finally, analysis of
profitability with the help of various ratios based on financial statements has been given. Here various statements of gross profit margin ratio and net profit margin ratios on regression base chi-square test have been applied to test the validity of hypothesis. Moreover various statements of profitability have been tested with the help of F-Test.

6.3 Findings:

Common Size Income Statement:

A comparative study of the common size income statement of dairy units under study demonstrated the following evidences.

- The procurement cost during 2011-12 was the highest in Dudhsagar leaving Banas and Sabar behind the percentage of average procurement in Dudhsagar, Banas and Sabar were 94.24, 87.93, and 87.59 percent of sales respectively. The reasons for high procurement cost were higher payment of milk per litre to milk producers and higher transportation expenses.

- In Banas dairy the percentage of miscellaneous income was the highest of 2.62 percent in 2010-11.

- The processing expenses takes share the second largest portion in the total cost of sales of the dairy unit. It was the highest in Banas diary of 11.88 percent in 2002-03 as compared to other units. It was due to higher power & fuel expenses as compared to the previous year. The consolidated average of processing expenses of Banas is the highest of 8.44 percent of sales and in Sabar it was the 6.66 percent of sales while it was always less than 6 percent of sales in the other dairy units under study.

- The marketing expenses take the third place in the total cost of sales. It was the highest of 7.01 percent of sales in 2004-05 in
Sabar and the lowest in Dudhsagar of 0.32 percent in 2004-05. Dudhsagar dairy was paid null amount of in form or packaging expenses during the period under study except 2002-03 and 2003-04.

- The percentage of administrative expenses was the highest in Banas which was 0.64 percent in 2011-12. However, the percentage of administrative expenses always less than 0.50 percentage in all other dairy units under study.

- The personnel expenses share the third largest proportion in the total cost of sales. It was the highest of 3.88 percent of sales in 2004-05 in Sabar and the lowest in Banas in 1.37 percent in 2011-12. Banas dairy was paid lower amount of in form of salary and wages to employees during the period under study. The Sabar and Dudhsagar dairy were paid the higher amount to employees in the form of salaries and wages throughout the study period.

- The amount paid to financiers in the form of interest was the highest of 2.10 percent of sales in 2011-12 in Dudhsagar dairy and the lowest in Sabar of 0.06 percent in 2006.07. Sabar dairy was paid lower amount of in form of Interest & Bank commission to bank during the period under study. The Dudhsagar and Banas dairy were paid the higher amount to Bank in the form of interest and Bank commission during the period under study.

- On analysing the taxation front dairy units spared amount throughout the study period for taxation except Sabar dairy first three years and Banas dairy first year.

- In 2011-12 all the dairy units were in profitable position. It showed good indication of performance.
Analysis of Profitability:

(i) The accounting profitability was analyzed and interpreted with the help of profit margin ratio. The Gross profit ratio and Net profit margin ratio are calculated and analysed. A study of above ratio revealed the following observations.

- The highest average gross profit margin ratio was registered by Banas dairy with 16.05 percent of sales which was higher than the average of 13.72 percent of sales in all the three units in combined position due to lower procurement cost. The ratio of gross profit margin was the highest in Banas dairy in 2002-03 when it stood at 21.86 percent of sales during the study period of all dairy units under. The year wise average of gross profit margin ratio has been decreased during the study period due to higher procurement cost as compared to previous years.

- Regression analysis of gross profit margin based on the use of chi-square ($x^2$) test makes it evident that the difference between the dairies and gross profit ratio were significant in all dairy units which show that the result in these units were not as per expectations.

- The ratio of net profit margin was the highest in Banas dairy in 2006-07 when it stood at 0.73 percent of sales. All the dairy units were recorded positive net profit throughout the study period.

- Regression analysis of net profit margin based on the use of chi-square ($x^2$) test makes it evident that the difference between the dairies and gross profit ratios were significant in all dairy units which shows that the result in these units were not as per expectations.
Return on investment is one of the most successful techniques for evaluation of financial health and for future improvement. It measures efficiency of assets management and efficiency of expenses control. The return on investment of various dairy units under study was analysed and findings are as follows.

- The return on gross capital employed in all dairy units was positive during the study period. The year wise average of ROI on gross capital increased in all dairies under study during the last year of the study as compared previous year which shows good for the in the year to come.

- The result shown by “F” test reveals that the difference in ROI in gross capital is significant at 5% level of significance in years and the difference in ROI in gross capital is insignificant at 5% level of significance in dairies.

- The return on net capital employed in all dairy units was positive during the study period. The year wise average of ROI on net capital decreased up to 2009-10 except 2003-04 compared previous year. It decreased in last two years. The dairy wise average of ROI on net capital is the highest in Sabar dairy and the lowest ratio in Dudhsagar dairy.

- The result shown by “F” test reveals that the difference ROI in net capital is significant at 5% level of significance in years and the difference ROI in net capital is insignificant at 5% level of significance in dairies.

- The return on shareholders fund was in 2011-12 all the units under study registered the return on shareholders fund in which the highest of 15.03 percent in Sabar dairy and the lowest of 2.45
percent in Dudhsagar dairy. The consolidated ratio on shareholders fund of all dairy units was 7.42 percent in 2011-12.

- The result shown by “F” test reveals that the difference in ROI in shareholders fund is insignificant at 5% level of significance in years and the difference ROI in shareholders fund is significant at 5% level of significance in dairies.

(iii) Turnover ratios point toward how efficiently the unit is managing its resources. This ratio shows the relationship between sales and the investment in various assets. Turnover ratios mirror the overall profitability of a unit to large extent. A study of various ratios of turnover revealed the following observations.

- The total assets turnover ratio which indicates the effectiveness of utilization of assets registered a fluctuating trend in all the dairy units under the study period.

- The result shown by “F” test reveals that the difference in total assets turnover is significant at 5% level of significance in years and among the dairies.

- The fixed assets turnover ratio which indicates the effectiveness of the utilization of fixed assets recorded a fluctuating trend in all the dairy units under study period. The ratio was the lowest 3.54 times in Dudhsagar in 2010-11 while it was the highest 43.40 times in Sabar in 2008-09 the consolidated average ratio of Sabar is the highest as compared to other dairy units. The average ratio of all dairy units of last ten years was more than 13 times. They utilized its fixed assets properly.

- The result shown by “F” test reveals that the difference in fixed assets turnover is insignificant at 5% level of significance in
years and difference in fixed assets turnover is significant at 5% level of significance in dairies.

- The working capital turnover ratio in almost all the dairy units. In Sabar the average ratio is the highest which was 16.05 times and the lowest which was 7.56 times in Banas as compared to other units. The Banas dairy was not able to manage its working capital properly.

- The result shown by “F” test reveals that the difference in working capital turnover is insignificant at 5% level of significance in years and among the dairies.

6.4 Suggestions:

To make co-operative dairy industry more financially sound following suggestions can be made which are as under:

- The average procurement cost of units under study period is 86.38 percent. In Dudhsagar dairy the average cost is higher. They are required to reduce procurement cost by reducing transportation expenses.

- Processing expenses of Banas and Sabar dairy is required to reduce by controlling depreciation and processing expenses.

- Marketing expenses of Sabar and Banas dairy is higher. These units are required to reduce by reducing packaging expenses.

- Administrative expenses of Dudhsagar dairy is higher than the average. They are required to reduce by controlling co-operative development expenses.

- Personnel expenses of Dudhsagar dairy and Sabar dairy is higher than the average. This situation is because of overstaffing in most
of the units under study. Likewise, Banking industry, this industry required to introduce VRS for their employees which will result in reduction in the personnel expenses.

- Financial expenses of Dudhsagar dairy and Banas dairy is higher. These units are required to reduce it by reducing loans and creating capital from equity.

- The gross profit was not as per our expectation in Dudhsagar dairy. These units are required to increase by increasing sales of various products and reducing the procurement cost.

- To create sufficient funds from its members. They should be given attractive return on shareholders funds.

- To achieve the required rate of return, tools of financial management have to be brought in to play and relevant management techniques are required to adopt. One of the powerful management tools is the budget which should be properly implemented in the co-operative dairy units.

- The capital structure of the units should be re-organized by converting part of the loan into equity.

- Co-operative dairies should be given maximum autonomy and there should be minimum government interference in a day to day working for that self reliance and self management are required.