# THE MINOR RESEARCH PROJECT

# on

"An in depth study of Financial Performance of Selected Co-operative Milk Producers' Unions of Gujarat State"

> Submitted To U.G.C-PUNE By

# Dr. Shivubhai Chamanbhai Vala

**Assistant Professor** 

M. P. Shah Municipal College of Commerce,

Near Saat Rasta,

Jamnagar (Gujarat)

Saurashtra University - Rajkot.



### SUMMARY OF FINDING AND SUGGESTIONS

#### **INTRODUCTION : (OVERALL VIEW)**

For a Country like India the co-operative activities were and still are quite natural because Indian people had often become victim to capitalist exploitation. In India co-operation first started for financing agricultural producers as well as small scale industries. In milk dairies the aim was of creating co-operation for collecting, storing and marketing milk from milk producers to relieve them from wasting time and energy in finding customers who could give reasonable price and purchase milk earlier before it gets spoiled. Typically milk is a perishable commodity so it requires special treatment like pasteurization, cooling and then storing and packing to save it from getting spoiled. All this work of saving milk from getting spoiled can be done by only milk dairies by the co-operation of milk producers. As the co-operative milk dairies also do the work of marketing the stored milk the milk producers are completely relieved from such works and so they could fully concentrate in cattle rearing and producing milk. Co-operative milk dairy which was started in 1946 in Anand of Gujarat served as a model to be followed and adopted all over India.

Any co-operative movement can only be successful if it is economically sound and viable. To ensure such viability in co-operative milk dairies the research was done regarding their profitability and liquidity. This research has revealed several realities to be studied. All the co-operative dairies are not equally efficient in profitability and liquidity. In spite of greater sales volume, some co-operative dairies lag behind in profitability. On the contrary there are some dairies which have high profitability in spite of smaller sales volume. Some dairies have high sales related profitability but low return on net worth or vice versa. Some dairies have maintained a balance between profitability and liquidity but in other cases when profitability is high liquidity is low and vice versa. Some dairies even have net working capital crisis where current liabilities are more than current assets.

In co-operative dairies higher profitability is not the result of higher price of milk or milk products because co-operative dairies are functioning in a monopolistic competition market condition so they can not charge higher prices moreover the aim of co-operative dairies is to safeguard the interest of both the milk producers and the milk consumers so charging higher prices would go against the interests of consumers. Higher profitability in co-operative dairies is mainly due to efficient use of funds and also due to cost control and cost reduction. So we can say that profitability is the result of capable management plus favourable external circumstances plus absence of political interference.

As far as higher milk procurement, cooling, storing and processing cost are concerned, it should be clarified that, if such higher costs are due to higher price to milk producers, they are not objectionable because the main aim of co-operative milk dairies is to save milk producers from exploitation; but if such higher costs are due to higher transport charges for fetching milk or higher cost for boiling, cooling and processing milk then such higher costs are objectionable. In the above matter milk storing and processing expenses are more or less fixed costs so higher sales volume indicates decrease in per units fixed cost leading to better profitability.

# (1) DAIRIES HAVING BOTH HIGHER AVERAGE SALES VOLUME AND BETTER PROFITABILITY:

- (A) Dudhasagar Dairy . (Mehsana)
- (B) Amul Dairy. (Anand)

# (A) Dudhasagar Dairy.(Mehsana)

Dudhsagar dairy ranks first in average sales volume in Gujarat which means it has the highest sales volume and its sales related profitability is high ranking fourth among selected dairies.(see table no and table no)

# (B) Amul Dairy. (Anand)

Amul Dairy is second highest in average sales volume compared to other selected dairies and its sales related profitability is high ranking third among selected dairies.(see table no and table no )

# (2) DAIRIES HAVING HIGHER AVERAGE SALES VOLUME BUT LOWER PROFITABILITY:

- (A) Sumul Dairy. (Surat)
- (B) Vasudhara Dairy. (Valsad Dist.)

#### (A) Sumul Dairy. (Surat)

Sumul Dairy is third highest in average sales volume compared to other selected dairies and its sales related profitability is low ranking sixth among selected dairies.

(see table no 6.1 and table no 6.3)

## (B) Vasudhara Dairy. (Valsad Dist.)

Vasudhara Dairy is fourth highest in average sales volume compared to other selected dairies and its sales related profitability is low ranking seventh among selected dairies.

(see table no 6.1 and table no 6.3)

# (3) DAIRIES HAVING LOWER AVERAGE SALES VOL UME BUT HIGHER PROFITABILITY:

- (A) Uttam Dairy. (Ahmedabad)
- (B) Gopal Dairy. (Rajkot)

# (A) Uttam Dairy. (Ahmedabad)

Uttam Dairy is sixth highest in average sales volume compared to other selected dairies and its sales related profitability is high ranking first among selected dairies. (see table no 6.1 and table no 6.3)

# (B) Gopal Dairy. (Rajkot)

Gopal Dairy is seventh highest in average sales volume compared to other selected dairies and its sales related profitability is high ranking second among selected dairies. (see table no 6.1 and table no 6.3)

# (4) DAIRIES HAVING LOWER AVERAGE SALES AND LOWER PROFITABILITY :

## (A) Sugam Dairy. (Baroda)

Sugam Dairy is fifth highest in average sales volume compared to other selected dairies and its sales related profitability is low ranking fifth among selected dairies.

(see table no 6.1 and table no 6.3)

# (5) DAIRIES HAVING BOTH HIGHER SALES RELATED PROFITABILITY AND ALSO HIGHER RETURN ON NET WORTH :

- (A) Dudhsagar Dairy : (Mehsana)
- (B) Uttam Dairy : (Ahmedaba)
- (C) Gopal Dairy : (Rajkot)

# (A) Dudhsagar Dairy : (Mehsana)

In average sale related profitability this dairy ranks fourth (4th) and in average return on net worth its ranks second (2nd).

# (B) Uttam Dairy : (Ahmedaba)

In average sale related profitability this dairy ranks first

(1st) and in average return on net worth its ranks third (3rd).

# (C) Gopal Dairy : (Rajkot)

In average sale related profitability this dairy ranks second (2nd) and in average return on net worth its ranks first (1st).

# (6) DAIRIES HAVING HIGHER SALES RELATED PROFITABILITY BUT LOWER RETURN ON NET WORTH :

# (A) Amul Dairy : (Anand)

In average sale related profitability this dairy ranks third

(3rd) but in average return on net worth it is low ranking sixth(6th).

# (7) DAIRIES HAVING LOWER SALES RELATED PROFITABILITY BUT HIGHER RETURN ON NET WORTH :

## (A) Sumul Dairy : (Surat)

In average sale related profitability this dairy ranks sixth (6th) which is low but in average return on net worth it is some what high ranking fourth (4th).

# (8) DAIRIES HAVING LOWER SALES RELATED PROFITABILITY AND ALSO LOWER RETURN ON NET WORTH :

- (A) Vasudhara Dairy : (Valsad Dist.)
- (B) SugamDairy(Baroda)

# (A) Vasudhara Dairy : (Valsad Dist.)

In average sale related profitability this dairy ranks seventh (7th) which is very low and in average return on net worth it is also very low ranking seventh (7th) again.

#### (B) SugamDairy(Baroda)

In average sale related profitability this dairy ranks fifth (5th) which is low and in average return on net worth it is also low ranking fifth (5th) again.

# (9) DAIRIES HAVING BOTH HIGHER PROFITABILITY AND BETTER LIQUIDITY :

- (A) Dudhsagar Dairy : (Mehsana)
- (B) Gopal Dairy : (Rajkot)
- (C) Amul Dairy : (Anand)

## (A) Dudhsagar Dairy : (Mehsana)

Among all the co-operative dairies of Gujarat this dairy has the highest total yearly sales yet it ranks fourth (4th) compared to other selected dairies in average profitability. Lesser sale related profitability is mostly due to higher milk procurement, cooling, pasteurizing and processing cost and also owing to some what higher interest expenditure. Compared to other dairies the average figure of this dairy regarding the return on net worth is 9.14 ranking second (2nd) which indicates efficient use of funds.

Mehsana dairy has also maintained proper liquidity successfully and its current ratio ranks third (3rd) among selected dairies. Its liquid ratio ranks fourth (4th) among selected dairies. Its Acid Test Ratio ranks second (2nd) among selected dairies. The lower rank of liquid ratio as compared to current ratio indicates some what over stocking and lower acid test ratio compared to ideal acid test ratio indicates arrears in collecting from debtors and loan takers. Mehsana dairy's average acid test ratio is 0.34 but the ideal acid test ratio should be 0.67 : 1.Thus the damage to immediate liquidity (acid test ratio) can be controlled by strict policy of collecting arrears. To some extent higher profitability has created rather slightly lower liquidity.

#### (B) Gopal Dairy : ( Rajkot )

On the over all study it is found that Rajkot dairy has maintained high profitability from sales point of view and also return on net worth point of view with only the slight damage to liquidity position. Thus Rajkot dairy has successfully maintained the balance between profitability and liquidity. In sales related profitability Rajkot ranks second among selected dairies. But Rajkot ranks first in return on net worth among all the dairies under study. This has been found out by comparing average figures. Administrative expenses of Rajkot Dairy are some what high and need to be controlled. Even Salary & wage expense besides milk procurement, cooling, storing & processing expenses are slightly high, both ranking third so they also need to be controlled.

As far as liquidity is concerned, in current ratio Rajkot Dairy ranks fourth comparing the average figures. In liquid ratio its ranks third (3rd) and its Acid Test ratio ranks fifth (5th). Its current ratio is 1.41 and is slightly less than the ideal ratio of 2 : 1. Its liquid ratio is 0.986 which is very near to the ideal ratio of 1 : 1. But its Acid Test ratio is 0.258 which is much less than the ideal ratio of 0.67 : 1 indicating existence of arrears in receivable. Thus we can say that there is slight set back in liquidity due to higher profitability.

#### (C) Amul Dairy: (Anand)

Among all the co-operative dairies of Gujarat this dairy has second highest total yearly sales yet it ranks third (3rd) compared to other selected dairies in average profitability. Some what less sale related profitability is mostly due to higher interest expenditure. Compared to other dairies the average figure of this dairy regarding the return on net worth is 4.31 ranking sixth (6th) which is much lower in profitability which indicates inefficient use of funds and under trading.

In Amul dairy profitability in the form of return on net worth is much lower but its liquidity is much higher and its current ratio ranks first (1st) among selected dairies. Its liquid ratio ranks second (2nd) among selected dairies. Its Acid Test Ratio ranks first (1st) among selected dairies. The lower rank of liquid ratio as compared to current ratio indicates some what over stocking and lower acid test ratio compared to ideal acid test ratio indicates arrears in collecting from debtors and loan takers. Amul dairy's average acid test ratio is 0.40 but the ideal acid test ratio should be 0.67 : 1. Thus the damage to immediate liquidity (acid test ratio) can be controlled by strict policy of collecting arrears. To some extent lower profitability as regards return on net worth is due to rather higher liquidity.

# (10) DAIRIES HAVING HIGHER PROFITABILITY BUT LOWER LIQUIDITY :

#### (A) Uttam Dairy : (Ahmedabad)

On the over all study it is found that Ahmedabad dairy has maintained high profitability from sales point of view and also return on net worth point of view but in doing so it has greatly damaged its liquidity position. Thus Ahmedabad dairy has not successfully maintained the balance between profitability and liquidity. In sales related profitability Ahmedabad ranks first (1st) among selected dairies. But Ahmedabad ranks third (3rd) in return on net worth among all the dairies under study. This has been found out by comparing average figures. Administrative expenses as well as interest payment expenses of Ahmedabad Dairy are some what high and need to be controlled.

As far as liquidity is concerned, in current ratio Ahmedabad Dairy ranks sixth (6th) comparing the average figures. In liquid ratio it also ranks sixth (6th) and its Acid Test ratio ranks seventh (7th). Its current ratio is 0.99 and is less than the ideal ratio of 2 : 1. Its liquid ratio is 0.70 which is also less than its ideal ratio of 1 : 1. Its Acid Test ratio is 0.225 which is much less than the ideal ratio of 0.67 : 1 indicating existence of arrears in receivable. Thus we can say that there is great set back in liquidity while gaining higher profitability. For four years from 2000-01 to 2003-04 Ahmedabad Dairy had lack of net working capital. During these four years current liabilities were greater than current assets indicating negative net working capital. For Ahmedabad Dairy there is an urgent need to improve its worse liquidity position.

# (11) DAIRIES HAVING LOWER PROFITABILITY BUT HIGHER LIQUIDITY:

#### (A) Vasudhara Dairy : (Valsad Dist.)

Among all the co-operative dairies of Gujarat this dairy has fourth highest total yearly sales yet it ranks seventh (7th) compared to other selected dairies in average profitability. Lesser sale related profitability is mostly due to higher administrative and marketing expenses and also owing to higher interest expenditure. Compared to other dairies the average figure of this dairy regarding the return on net worth is minus 2.11 (Negative 2.11) ranking seventh (7th) that is last which indicates inefficient use of funds.

Vasudhara dairy has very high liquidity which indicates insufficient and inefficient use of funds resulting in lowest profitability. Its current ratio ranks second (2nd) among selected dairies. Its liquid ratio ranks first (1st) among selected dairies. Its Acid Test Ratio ranks fourth (4th) among selected dairies. The higher rank of liquid ratio as compared to current ratio indicates no problem of over stocking and lower acid test ratio compared to ideal acid test ratio indicates arrears in collecting from debtors and loan takers. Vasudhara dairy's average acid test ratio is 0.27 but the ideal acid test ratio should be 0.67 : 1. Thus the damage to immediate liquidity (acid test ratio) can be controlled by strict policy of collecting arrears. To some extent lowest profitability has created rather much higher liquidity.

# (12) DAIRIES HAVING LOWER PROFITABILITY AND ALSO LOWER LIQUIDITY:

- (A) Sumul Dairy : (Surat)
- (B) Sugam Dairy : (Baroda)
- (A) Sumul Dairy: (Surat)

Among all the co-operative dairies of Gujarat this dairy has third highest total yearly sales yet it ranks sixth (6th) compared to other selected dairies in average profitability. Less sale related profitability is mostly due to higher milk procurement, cooling, storing and processing expenses and also higher marketing expenses. Compared to other dairies the average figure of this dairy regarding the return on net worth is 4.98 ranking fourth (4th) which is some what lower in profitability which indicates inefficient management of expenses.

In Sumul dairy profitability in the form of return on net worth is mediocre but its liquidity is lower and its current ratio ranks fifth (5th) among selected dairies. Its liquid ratio ranks seventh (7th) among selected dairies. Its Acid Test Ratio ranks third (3rd) among selected dairies. The lower rank of liquid ratio as compared to current ratio indicates some what over stocking and lower acid test ratio compared to ideal acid test ratio indicates arrears in collecting from debtors and loan takers. Sumul dairy's average acid test ratio is 0.271 but the ideal acid test ratio should be 0.67: 1. Thus the damage to immediate liquidity (acid test ratio) can be controlled by strict policy of collecting arrears. To some extent higher profitability as regards return on net worth has created rather lower liquidity. In Sumul Dairy there was lack of net working capital for four years from 2003-04 to 2006-07 where in net working capital was negative. The crisis of net working capital requires immediate attention and treatment. On the over all we can say that in Sumul dairy profitability as well as liquidity, both are unsatisfactory.

#### (B) Sugam Dairy : (Baroda)

Among all the co-operative dairies of Gujarat this dairy has fifth highest total yearly sales and it also ranks fifth (5th) compared to other selected dairies in average profitability. Less sale related profitability is mostly due to highest cost of salaries and wages and also due to higher marketing expenses. Compared to other dairies the average figure of this dairy regarding the return on net worth is 4.54 ranking fifth (5th) which is some what lower in profitability which indicates inefficient management of expenses.

In Sugam dairy profitability in the form of return on net worth is some what low but its liquidity is much lower and its current ratio ranks seventh (7th) among selected dairies. Its liquid ratio ranks fifth (5th) among selected dairies. Its Acid Test Ratio ranks sixth (6th) among selected dairies. The higher rank of liquid ratio as compared to current ratio indicates no problem of over stocking and very low acid test ratio compared to ideal acid test ratio indicates existence of arrears in collecting from debtors and loan takers. Sugam dairy's average acid test ratio is 0.257 but the ideal acid test ratio should be 0.67 : 1. Thus the damage to immediate liquidity (acid test ratio) can be controlled by strict policy of collecting arrears. In Sugam Dairy there was lack of net working capital for six years from 2002-03 to 2007-08 where in net working capital was negative. The crisis of net working capital requires immediate attention and treatment. On the over all we can say that in Sugam dairy profitability as well as liquidity, both are unsatisfactory.

# NET PROFIT TO SALES : (SALES RELATED PROFITABILITY)

#### (1) Dudhsagar Dairy : (Mehsana)

Average yearly sales of this dairy is the highest among the cooperative dairies of Gujarat State. It ranks first (1<sup>st</sup>) in sales. It can be seen from table no-11. From 2000-01 to 2007-08 every year there is increase in sales. Only in 20004-05 the sales figure was slightly less than 2003-04. But from 2005-06 onwards the yearly sale has regained the increasing trend. Average yearly profit of this dairy is also highest among the selected dairies followed by Anand (Amul Dairy).

But as far as sale related profitability is concerned, mehsana dairy ranks fourth (4<sup>th</sup>) among the selected dairies. There has been descending (decreasing) trend of profitability in mehsana Dairy during the eight years from 2000-01 to 2007-08.

The first three years 2000-01 to 2002-03 the decline of profitability was quite steep. The study of other cost factors show that lesser profitability compared to higher sales is mostly due to higher milk procurement cost (see table no-6.5) and must be also owing to some what higher interest expenditure where there is some scope for cost control or cost reduction which will be studied in detail later on.

#### (2) Amul Dairy : (Anand)

Amul co-operative dairy's average yearly sales ranks second after mehsana dairy among the selected co-operative dairies considering from 2000-01 to 2007-08.

Page No. 16

In yearly average of profit also it is at second rank. In sales from 2000-01 to 2002-03 there was slightly decline in total sales. But from year 2003-04 the sales gained momentum and went on increasing year by year quite steeply.(see table no-6.1) During eight years the profit trend is of ever increasing performance.

In sales related profitability Amul Dairy ranks third (3<sup>rd</sup>) on the average of the selected dairies.(see table no-6.3) This is a satisfactory figure. The trend of profitability from 2000-01 to 2006-07 is found to be increasing every year but in the year 2007-08 there is some decline compared with its previous years.(see table no-6.3)

In Amul Dairy milk procurement, storing, processing expenses are quite under control also salary and wage cost are under control among all dairies under study. Salary and wage costs of Anand are the lowest.(see table no-6.6)Therefore the slightly setback in profitability must be owing to higher interest expenditure so there is scope of cost control and cost reduction in interest expenditure which we shall discuss in detail later.

#### (3) Sumul Dairy : (Surat)

As per the average figures of eight years from 2000-01 to2007-08 Sumul Dairy ranks third (3<sup>rd</sup>) in total sales after Mehsana Dairy and Anand Dairy respectively from the dairies selected for study.

In Surat Dairy every year there was considerable increase in sales. Thus Surat Dairy has ever increasing trend of sales from 2000-01 to 200708. Even in the average yearly profit Surat Dairy ranks third (3<sup>rd</sup>) with ever increasing trend during the eight years. (see table no-6.3).

But as far as sales related profitability is concerned Surat Dairy lags much behind. Surata Dairy ranks sixth (6<sup>th</sup>) in comparison with other dairies in profitability. Of course Surat Dairy experienced increasing trend of profitability every year. The major increase started from 2002-03 and continued till 2006-07. In 2007-08 the pace of increase was slightly diluted.(please refer table 6.1 for total sales and table 6.3 for profitability. The low profitability of Sumul Dairy is mainly due to high milk procurement expenses. In Sumul Dairy salary and wage costs are well under control.(see table no-6.6) So the scope for cost control lies in milk procurement cost and marketing expenses. This matter we shall discuss in detail later on.

#### (4) Sugam Dairy : (Baroda)

As per the average figures of eight years from 2000-01 to 2007-08 of selected co-operative dairies of Gujarat, Baroda Dairy ranks fifth (5<sup>th</sup>) in total sales. (see table no-6.3) In Baroda Dairy every year the sales go on increasing during the eight years of study. (see table no-6.1)

In average profit of eight years from 2000-01 to 2007-08, Baroda Dairy ranks fourth (4<sup>th</sup>) in profit also, during the eight years Baroda Dairy experience an increasing trend of profit. (see table no-6.2)

But as far as sales related profitability is concerned, Baroda Dairy ranks fifth (5<sup>th</sup>) among the selected dairies. Thus Baroda Dairy is fifth (5<sup>th</sup>) not only is average sales but is 5<sup>th</sup> also in profitability. **Page No. 18**  Although the trend of profitability during the eight years is of increasing nature yet this increase is not very impressive (see table no-6.3) because every year the increase is much less.

Comparatively less profitability of Baroda Dairy cannot be accounted to lower total sales because the average total yearly sales figure of Ahmedabad and Rajkot co-operative dairies are the lowest. In sales Ahmedabad ranks 6<sup>th</sup> & Rajkot ranks 7<sup>th</sup> on the average. Even then Ahmedabad ranks 1<sup>st</sup> (first) and Rajkot ranks second (2<sup>nd</sup>) in profitability among the selected dairies.(see table no-6.1 and table no-6.3).

In milk procuring, storing and processing expenses, Baroda Dairy ranks sixth (6<sup>th</sup>) which means that such expenses are very less. (see table no-13) But the salary and wage cost of Baroda Dairy are comparatively the highest. (see table no-6.6) among the selected dairies Baroda Dairy ranks first (1<sup>st</sup>) in salary and wage expenses.

Thus the lower sales related profitability of Baroda Dairy is due to comparatively higher costs of salary and wages. The marketing expense is also higher. Further profitability related study will be done in details later on.

#### (5) Gopal Dairy : (Rajkot)

As per the average figures of eight years from 2000-01 to 2007-08 average yearly sales of Rajkot dairy are the lowest among all the dairies under study. It ranks 7<sup>th</sup> (seventh) (last) in sales. From 2000-01 to 2007-08 there has been a trend of increase in sales. Vast increase in sales starts from 2005-06 and continues its progress. (see table no-6.1) As far as profit figures are concerned average profit of seven years ranks 6<sup>th</sup> (sixth) among dairies under study. The profit figures of the year 2001-02 and 2007-08 are larger compared to other years. In profits there is some what a fluctuating trend. (see table no-6.2)

In profitability there is a vast contrast. Although Rajkot stands last in sales performance, in profitability it stands much ahead of many dairies. Rajkot Dairy stands second  $(2^{nd})$  in profitability which points out the able management of affairs.

Inspite of some what higher milk procurement, cooling, storing and processing expenses and inspite of some what higher salary and wage expenses(see table no-6.5) Rajkot Dairy has maintained higher profitability which means that the management is done very nicely controlling marketing and interest and other expenses properly what ever be the past history. Administrative expenses of Rajkot Dairy are somewhat high and so there is still scope to further reduce them. (see table no-6.7)

With a vast population of Rajkot city and Rajkot District, Rajkot Dairy can still improve its performance by proper marketing strategy. Let more discussion be done later on.

#### (6) Uttam Dairy : (Ahemadabad)

Sales figure of Ahmedabad Co-operative Dairy are much lower like Rajkot Dairy when compared with other dairies under study. In average yearly sales of eight years from 2000-01 to 2007-08, Ahmedabad Dairy ranks sixth (6<sup>th</sup>) among other dairies which is slightly better then Rajkot Dairy but less than the sales performance of the remaining five Page No. 20 dairies. Sales figures of Ahmedabad Dairy show an increasing trend every year.(see table no-6.1)

Profit figures like Rajkot Dairy show a fluctuating trend with highest performance in the year 2002-03. But as far as profitability is concerned Ahmedabad Dairy ranks first (1<sup>st</sup>) among all the dairies under study. Milk procurement, cooling, storing and processing expenses of Ahmedabad Dairy are quite low. It ranks fifth (5<sup>th</sup>) in these expenses indicating able control over such expenses.(see table no-6.5) Salary and wage expenses are comparatively higher (see table no-6.6) and need to be controlled to some extent.

Thus due to successful management Ahmedabad has come first in profitability by controlling marketing expenses besides milk procurement, cooling, storing and processing expenses.

Ahmedabad Dairy has achieved highest profitability and canfurther improve its performance by increasing the yearly sales by proper marketing strategy. Ahmedabad's administrative expenses are much higher so also are interest payment expenses which need to be reduced to further improve the profitability. Let further discussing in this matter be done later on.

#### (7) Vasudhara Dairy : (Valsad)

Comparative sale figures of Vasudhara Dairy are quite impressive with increasing trend every year and standing fourth (4<sup>th</sup>) among selected dairies in average yearly sales of eight years from 2000-01 to 2007-08. But the respective profit figures are highly fluctuating with heavy losses in two years 2001-02 and 2003-04. Besides these two years of loss, the profit **Page No. 21** 

was minimum in the year 2007-08 and maximum in the year 2006-07. Comparatively Valsad Dairy stands seventh (7<sup>th</sup>) in average yearly profit.

As far as profitability is concerned, Valsad Dairy stands last (7<sup>th</sup>) and its profitability is less than zero. It is in negative. This is the average result of eight years.

Inspite of impressive figures of yearly sales, the profitability does not exist in some years and on the over all average profitability shows the figure less than zero. Milk procurement, cooling, storing and processing costs are not so high.(see table no-6.5) Even expenses after salary and wages are not so high.(see table no-6.6) The major set back must be due to mis-management resulting in higher administrative and marketing costs and also higher interest expenditure. We shall discuss this matter later on in details.

# **RETURN ON NET WORTH OR RETURN ON EQUITY SHAREHOLDERS' FUND :**

# Return on Equity Shareholders' Fund = Net Profit / Equity Share Capital + Reserves & Other Fund

#### (1) Dudhasagar Dairy : (Mehsana)

As per the average figure of eight years 2000-01 to 2007-08 the return on Net Worth Of Mehsana Dairy's yearly average is 9.14 which ranks second indicating sound profitability.

The figures of net worth related profitability are much fluctuating and there is no clear-cut increasing trend. The highest profitability is on 2000-01 and the lowest profitability is on 2002-03. As the average return on net worth of this dairy ranks second  $(2^{nd})$ , its profitability is comparatively much high. Milk procurement, cooling, storing and processing expenses are on the average very high because mehsana dairy ranks first in milk procurement expenses ratio.(see table no-6.5)The salary and wages expenses are quite under control. (see table no-6.6)

Thus Return on Net Worth can be much increased by controlling and reducing milk procurement, cooling, storing and processing expenses besides, marketing expenses.

#### (2) Amul Dairy : (Anand)

As per the average figures of eight years from 2000-01 to 2007-08 the return on net worth of Amul dairy is yearly average is 4.31. It ranks sixth in return on net worth ratio and it is not a progressive figure. ( see table : 6.4 )

The profitability is also fluctuating. The poor return on net worth is neither due to high milk procurement, storing, cooling and processing costs nor due to salary and wages cost because both of them are under control and their average comparative figures rank seventh in both the cases. (see table no-6.5)

Thus lower return on net worth is due to much higher interest cost. There is a scope for controlling and reducing expenditure on interest.(see table no-6.6)

#### (3) Sumul Dairy : (Surat)

As per the average figures of eight years from 2000-01 to 2007-08 the return on net worth of sumul dairy's yearly average is 4.99 it's ranks fourth in return on net worth ratio comparatively ( see table : 6.4 ) compared to other dairies and it is not a very progressive figure. There is scope for improvement.

Of course return on net worth every year goes on increasing which signifies progressive efforts. Sumul dairy's salary expenses are quite under control, but milk procurement, cooling, storing and processing expenses of surat dairy are very high. The average of eight years of these expenses ranks second after mehsana dairy. (see table no-6.5) So there is scope for reducing these expenses. Marketing expenses can also be controlled.

#### (4) Sugam Dairy : (Baroda)

Average return on net wroth of eight years from 2000-01 to 2007-08 of Baroda Dairy is very low. (see table : 6.4) This dairy ranks fifth comparatively in average return on net worth. Baroda Dairy's milk procurement, cooling, storing and processing expenses are comparatively less. But salaries and wages expenses of Baroda Dairy are very high. On an average it ranks first in salary & wage expenses among the selected dairies under study. Thus we can say that low return on net worth of Baroda Dairy is due to higher salaries and wages expenses and also higher marketing expenses. Of course Baroda Dairy's return on net worth goes on increasing every year except on 2006-07 showing all most improving trend.

#### (5) Gopal Dairy : ( Rajkot )

In Rajkot Dairy not only sales related profitability is high but also return on net worth is high. In sales related profitability Rajkot ranks second among all selected dairies. But it ranks first in return on net worth among all the dairies under study.

In Rajkot Dairy highest return on net worth is in the year 2001-02 and the lowest was in the year 2005-06. (see table : 6.4) Thus increasing trend is not maintained. But overall performance is very nice.

In Rajkot Dairy average milk procurement, cooling, storing and processing expenses rank third and even the salaries and wages expenses ranks third thus there is scope for reducing these two types of expenses besides administrative expenses to some extent.

#### (6) Uttam Dairy : (Ahmedabad)

Ahmedabad Dairy which ranked first (1<sup>st</sup>) in sales related profitability, it ranks third (3<sup>rd</sup>) in return on net worth as per average result of eight years from 2000-01 to 2007-08 among dairies under study.

Every year return on investment does not show continuous progress from 2003-04 return on net worth goes on decreasing. This some what hindrance in progress is due to higher salary and wage expenses. In salary expenses it ranks second on an average. (see table no-6.6) Thus for improving return on net worth salaries and wages expenses have to be controlled, besides also controlling administrative and interest expenses.

### (7) Vasudhara Dairy : (Valsad)

Valsad Dairy ranks seventh  $(7^{th})$  not only in sales related profitability but also in return on net worth as per the average figures from 2000-01 to 2007-08. So we can say that the performance of Valsad Dairy is the worst among all the selected dairies under study in spite of considerable large sales figures. (see table : 6.1)

This very low performance is mainly due to mis-management. Milk procurement, cooling, storing and processing expenses and also salary and wage expenses are not very high, so we can say that lower performance is mainly due to higher marketing and administrative expenses and also interest expenditure needs to be properly managed.

Average return on net worth show a negative figures. In the year 2001-02 and 2003-04 valsad dairy has made heavy losses. The reasons of such heavy losses must be found out.

# MILK PROCUREMENT EXPENSES TO TOTAL EXPENSES :

# (1) Dudhsagar Dairy : (Mehsana)

Mehsana Dairy ranks first in total sales and also ranks first (1<sup>st</sup>) in milk procurement, storing and processing expenses. This can be seen from the average result of eight (8) year from 2000-01 to 2007-08. The average figure is 94.375 out of the eight years most of the time the milk procurement, storing and processing expenses were 94% of the total inputs. Only for three (3) years this expenses were 95%.

#### (2) Amul Dairy : (Anand)

Observing the average figures of eight years from 2000-01 to 2007-08 Anand Dairy's total sales are second highest among the daiaries under study. It is also second highest in average of eight years of milk procurement, storing and processing expenses. The average expenses are 91.13%.

#### (3) Sumul Dairy : (Surat)

Milk procurement, storing and processing expenses of sumul dairy are high ranking third  $(3^{rd})$  in the average. The average figure is 91%. In the year 2002-03 and also 2004-05 these expenses were slightly higher than the average. In the last two years 2006-07 and 2007-08, the expenses were slightly less than the average.

#### (4) Gopal dairy : (Rajakot)

In gopal dairy rajokt milk procurement, storing and processing expenses have an increasing trend every year except year 2006-07. On the average these expenses rank second just like anand dairy. The average figure is 91.13%

#### (5) Vasudhara dairy : (Valsad)

Milk procurement, storing and processing expenses of valsad dairy on the average rank fourth  $(4^{th})$ . The average figure is 86.13%, from 2001-02, to 2004-05 such expenses were some what below the average.

#### (6) Uttam Dairy : (Ahemadabad)

In milk procurement, storing and processing expenses Ahemadabad dairy ranks fifth (5<sup>th</sup>) on the average. Such expenses every year are slightly fluctuating. The average figure is 86%. In the year 2001-02 and 2003-04 the expenses are slightly below the average.

#### (7) Sugam dairy : (Baroda)

In Baroda dairy (sugam dairy) milk procuremet, storing and processing expenses are on the average 85.5% ranking sixth (6<sup>th</sup>) among dairies under study. In the year 2000-01, 2001-02, 2004-05 and also 2006-07 such expenses are slightly below the average. In the rest of the years the expenses are above the average.

#### SALARIES & WAGES TO TOTAL EXPENSES :

#### Introduction :

In the annual reports, the salaries and wages are given to-gether. But about 70% to 75% of these wages are related to purchasing, storing and processing of milk that is the general opinion of the experts.

It is necessary that fair amount of salaries and wages should be given to the employees, but over spending should be avoided to cut Short this type of expenses.

#### (1) Sugam Dairy : (Baroda)

In the average baroda dairy incurs highest amount of salaries and wages expenses compared to other dairies under study. It ranks First (1<sup>st</sup>) in salaries and wages expenses on the average of eight years among the dairies under study. Such high expenses after Salaries and Wages should be reduced as far as possible.

### (2) Uttam Dairy : (Ahmedabad)

Salaries and wages expenses of Ahmedabad Dairy are also very high ranking second (2nd), on the average compared with other selected dairies.

The highest salary and wage expenses of Ahmedabad Dairy were in 2002-03. To increase profitability salary and wage expenses should be reduced as far as possible without harming the deserving employees.

# (3) Gopal Dairy : (Rajkot)

Salaries and wages expenses of Rajkot dairy are also high. Ranking third (3rd) on the average as compared with other selected dairies. But Rajkot Dairy is trying to reduce these expenses, because every year such expenses are decreasing. Thus, there is a decreasing trend in salary and wage expenses.

# (4) Vasudhara Dairy : (Valsad Dist.)

Salaries and wages expenses of Valsad Dairy are neither so high nor so low. Valsad Dairy on the average ranks fourth (4th) among other selected dairies. As far as salaries and wages expenses are concerned, there is some scope for reduction of such expenses without harming deserving employees.

# (5) Dudhsagar Dairy : (Mehsana Dist.)

Salary and wage expenses of Mehsana Dairy are well under control. On the average its ranks fifth (5th) compared to other selected dairies.

From 2002-03 on wards there is a decreasing trend of such expenses. We hope further efforts are made to reduce such expenses without harming deserving employees.

# (6) Sumul Dairy : (Surat)

Surat Dairy has successfully controlled its salary and wage expenses. Except for the year 2003-04 every year the ratio of salary and wage expenses remain same. That is 0.02.

In the year 2003-04 the ratio is 0.03. On the average Surat dairy ranks sixth (6th) in salary and wage expenses compared to other selected dairies.

# (7) Amul Dairy : (Anand)

Compared to other selected dairies the salary and wage expenses of Amul Dairy (Anand) are the lowest and on the average ranking seventh (7th). After 2001-02 there is a decreasing trend in salary and wage expenses. Amul Dairy (Anand) is the only dairy among all the dairies under study which has successfully controlled salary and wage expenses in spite of high total sales.

# ADMINISTRATION OR GENERAL EXPENSES TO TAL EXPENSES :

### Introduction:

Administrative or General Expenses can be controlled and reduced to some extent to increase profitability. We shall study the position of administration or general expenses of every dairy under study, so that how much scope is there of such cost reduction, that can be found out.

## (1) Dudhasagar Dairy : (Mehsana)

Dudhsagar Dairy of Mehsana has managed administrative expenses properly. On the average it ranks fifth (5<sup>th</sup>) among other selected dairies. In spite of large volume of business mehsana dairy has succeeded in keeping administrative expenses under control. From 2000-01 to 2003-04 there was a decreasing trend of administrative expenses of mehsana dairy. But from 2004-05 onwards there is increasing trend of administrative expenses.

#### (2) Amul Dairy : (Anand)

Amual Dairy of Anand ranks sixth (6<sup>th</sup>) on the average in administrative expenses compared to other selected dairies. Inspite of high volume of business Amual Dairy has succeeded considerably in curbing administrative expenses. In Amul Dairy administrative expenses of last four years are higher compared to those of first four years.

# (3) Gopal Dairy : (Rajkot)

There is much scope in Gopal Dairy of Rajkot for reducing administrative expenses. Compared to other selected dairies Gopal Dairy ranks third (3th) in administrative expenses. Although volume of Page No. 31 business of Rajkot dairy is comparatively less, its administrative expenses are very high and need to be controlled to some extent to increase profitability.

## (4) Uttam Dairy : (Ahemadabad)

Uttam Dairy of Ahemadabad ranks first (1<sup>st</sup>) on the average in administrative expenses compared to other selected dairies. Inspite of limited volume of business such high administrative expenses need to be controlled and reduced to increase profitability. There is ever increasing trend of administrative expenses in uttam dairy Ahemadabad which needs to be checked.

## (5) Vasudhara Dairy : (Valsad)

Vasudhara Dairy of Valsad District ranks second (2<sup>nd</sup>) on the average in administrative expenses compared to other selected dairies. This dairy needs to increase profitability, because inspite of high volume of business its profitability is very less and this is also due to administrative expenses which need to be curbed.

# (6) Sumul Dairy : (Surat)

Sumul Dairy of Surat has successfully controlled its administrative expenses inspite of high volume of business. Sumul dairy ranks seventh (7<sup>th</sup>) on the average in administrative expenses compared to other selected dairies.

#### (7) Sugam Dairy : (Baroda)

Sugam dairy of Baroda ranks fourth (4<sup>th</sup>) on the average compared to other selected dairies in administrative expenses. Thus there is scope for reducing administrative expenses to further improve its profitability. Page No. 32

# MARKETING & DISTRIBUTION EXPENSES TO TOTAL EXPENSES

## Introduction:

Marketing Expenses are not as high as those of multinational companies, because, Co-operative dairies are already popularr among the Indians. We shall discuss the marketing or distributing expenses of selected co-operaative dairies.

## (1) Dudhasagar Dairy : (Mehsana)

On the average marketing expenses of mehsana dairy are the lowest ranking seventh (7th). compared to other selected dairies. The average of eight years of marketing or distributing expenses of Mehsana Dairy is 0.002. The marketing or distributing expenses of mehsana dairy are quite under control.Lower marketing expenses lead to higher profitability.

# (2) Amul Dairy : (Anand)

Marketing or Distributing expenses of Amul Dairy's are quite under control. On the average compared to other selected dairies Amul Darity ranks sixth (6th) in marketing or distributing expenses. Thus in Amul Dairy there is a no problem regarding marketing or distributing expenses.

#### (3) Gopal Dairy : (Rajkot)

Gopal dairy also doesnot incur much marketing or distributing exspenses. Seeing the average figure of eight years, we find that gopal dairy ranks fifth (5) compared to other selected dairies. Thus in Gopal Dairy marketing or distributing expenses does not create any problem for profitability.

Page No. 33

# (4) Uttam Dairy : (Ahemadabad)

Ahemadabad 's Uttam Dairy incurs some what higher marketing or distributing expenses. This can be seen from the average figure of eight years, ranking fourth (4th) among selected dairies. Controling marketing expenses may lead to higher profitability for Ahemadabad's Uttam Dairy.

# (5) Vasudhara Dairy : (Valsad)

Vasidhara Dairy of Valsad has much higher marketing or distributing expenses. On the average Vasudhara Dairy ranks third (3rd) among selected dairies under the study. Lower profitability can be checked by controling marketing or distributing expenses.

# (6) Sumul Dairy : (Surat)

Sumul Dairy inspite of very high sales volume, it ranks sixth (6th) in sales related profitability. One of the reason of low profitability is higher marketing or distributing expenses, where in Sumul Dairy ranks second (2nd) on the average compared with other selected dairies.

Controling marketing or distributing expenses of Sumul Dairy may improve its profitability.

# (7) Sugam Dairy : (Baroda)

Baroda's Sugam Dairy ranks fifth (5th) in sales related profitability on the average compared with other selected dairies. Such low profitability is also due to very high marketing or distributing expenses. In marketing or distributing expenses on the average Baroda's Sugam Dairy ranks first (1) among selected dairies. Considerable reduction in marketing or distributing expenses is urgently needed to improve profitability of Baroda' Sugam Dairy.

### **INTERESTS TO TOTAL EXPENSES :**

# Introduction :

Existence of interest expenses denotes use of unavoidable borrowed fund to carry on the business. The larger the borrowed fund the more will be the expenditures after interest and lower will be the profitability. So some sort of control is necessary over interest expenditure to increase profitability. Now we shall see the position of interest expenditures of each dairy out of the selected dairies.

# (1) Dudhasagar Dairy : (Mehsana)

For Dudhsagar dairy of Mehsana interest expenditure is unavoidable due to higher business volume. Therefore it is but natural that mehsana dairy ranks fourth (4<sup>th</sup>) on the average in interest expenditure as compared to other selected dairies. There is scope for reduction of interest expenditure to improve profitability. In the first five years there is a decreasing trend in the interest expenditure then there is again slightly increasing trend in interest expenditure.

# (2) Amul Dairy : (Anand)

Amul Dairy of Anand has higher business volume therefore need for fund for the investment will also be high. Compared to other selected dairies Amul Dairy ranks first on an average in interest expenditure. But its return on net worth is very low ranking sixth on the average. This suggests that Amul Dairy's marginal efficiency of capital is very low. This denotes over capitalization, resulting in high interest expenditure and injuring the profitability. Amul Dairy needs efficient use of capital to improve profitability. Economic use of borrowed fund will reduce interest expenditure and there by improve profitability.

#### (3) Gopal Dairy : (Rajkot)

Interest expenditure of Gopal Dairy of Rajkot is well under control compared to other selected dairies ranking fifth (5<sup>th</sup>) on the average in interest expenditure. In Rajkot Dairy there is a decreasing trend in interest expenditure every year.

## (4) Uttam Dairy : (Ahemadabad)

Uttam Dairy of Ahemadabad is on the average second highest in interest expenditure. This denotes dominance of borrowed fund. There is enough scope for reduction in borrowed fund and efficient use of capital which would also result in reduction of interest expenditure.

#### (5) Vasudhara Dairy : (Valsad)

Vasudhara Dairy's profitability is the lowest among the selected dairies and yet it's interest expenditure is out of control ranking third (3<sup>rd</sup>) on the average among other selected dairies. To improve profitability vasudhra dairy should reduce borrowed fund and also make efficient use of this fund and there by curb interest expenditure and make progress in profitability.

# (6) Sumul Dairy : (Surat)

Sumul Dairy of Surat has low profitability but which is not due to interest expenditure because sumul dairy ranks seventh (7<sup>th</sup>) in interest expenditure on an average as compared to other selected dairies. So sumul dairy's low profitability is due to other reasons.

#### (7) Sugam Dairy : (Baroda)

Sugam Dairy of Baroda lags behind in sales related profitability as well as return on net worth. But interest expenditure is not responsible for lower profitability because sugam dairy of Baroda ranks sixth (6<sup>th</sup>) in interest expenditure on an average compared to other selected dairies. Baroda dairy's interest expenditure has all most decreasing trend since 20002-03.

#### TOTAL ASSETS TURNOVER RATIO:

#### (1) Dudhsagar Dairy: (Mehesana)

Mehesana dairy ranks fifth (5th) on the average in total assets turnover ratio. Inspite of highest sales figure every year total assets are of much higher value every year so the ratio suffers.

#### (2) Amul Dairy : (Anand)

Total assets turnover ratio of amul dairy on the average ranks seventh (7th) among other selected dairies. Inspite of such high sales figures of every year this position suggests less marginal efficiency of capital and a situation of over capitalisation which requires to be checked.

#### (3) Gopal Dairy : (Rajkot)

Gopal Dairy (Rajkot) Ranks first (1st) on the average on total assets turnover ratio. Sales figure of rajkot dairy are low compared to other selected dairies yet due to low total assets the high total assets turnovers ratio is possible. This ratio is improving every year. And it suggests better marginal efficiency of capital.

Page No. 37

### (4) Sugam dairy : (Baroda)

Total assets turnover Rajkot of Baroda dairy is also highs ranking first (1<sup>st</sup>) on the average, compared to other selected dairies.

Total sales of Baroda dairy are not very high so such a high total assets turnover ratio has been achieved due to much lower total assets indicating higher marginal efficiency of capital.

# (5) Sumul Dairy : (Surat)

Surat dairy ranks third on the average in total assets turnover ratio compared to other dairies. Such position of Surat dairy is possible due to higher sales. It ranks third (3rd) even in net sales.(see table no : 6.1) There is no considerable increase in total assets.

# (6) Vasudhara Dairy : (Valsad Dist.)

Total Assets Turnover Ratio of Valsad Dairy is neither so high nor so low. On the average its ranks fourth (4<sup>th</sup>) compared to other selected dairies. Valsad Dairy ranks fourth (4<sup>th</sup>) even in average total sales. ( see table no : 6.1 ) Thus, the ratio is maintained only due to sales. Valsad Dairy has maintained higher sales figures.

# (7) Uttam Dairy : (Ahmedabad )

Uttam Dairy's position regarding total assets turnover ratio is not at all good. The total assets turnover ratio is very low ranking sixth (6th) among selected dairies under the study, even in average total sales Ahmedabad Dairy ranks sixth (6th). The average total sales figures of Ahmedabad Dairy is very low. Then on the other hand total assets figures are very high resulting in very low total assets turnover ratio. Ahmedabad Dairy's position is of over capitalization which requires some correction.

# SIGNIFICANCE REGARDING CO-RELATION BETWEEN PROFITABILITY AND LIQUIDITY OF ALL THE CO-OPERATIVE MILK DAIRIES UNDER STUDY.

(see table No : 8.1 to 8.14 of chapter No: 8)

The overall observation of co-relation between profitability and liquidity of all the co-operative milk dairies under study shows us that in almost all cases the co-relation between profitability and liquidity is negative. This is so because the general opinion that when profitability increase, liquidity suffers a setback and when liquidity increases, profitability suffers a setback holds true either more significantly in some dairies or less significantly in some other dairies.

In the following dairies the negative co-relation between profitability and liquidity is less significant :

- (1) Rajkot Co-operative Milk Dairy (Gopal Dairy)
- (2) Valsad Co-operative Milk Dairy (Vasudhara Dairy)
- (3) Mehsana Co-operative Milk Dairy (Dudhsagar Dairy)
- (4) Surat Co-operative Milk Dairy (Sumul Dairy)
- (5) Anand Co-operative Milk Dairy (Amul Dairy)

(only for profitability based on sales related profitability as compared with liquidity.)

But the following diaries bear more significance regarding negative co-relation between profitability and liquidity.

(1) Baroda Co-operative Milk Dairy (Sugam Dairy)

(2) Ahmedabad Co-operative Milk Dairy (Uttam Dairy)

(3) Anand Co-operative Milk Dairy (Amul Dairy) (only for profitability based on Return on net worth as compared with liquidity.)

Co-relation of profitability ratios (both sales related profitability & Return on net worth related profitability) with Net working capital Turnover Ratios, of course shows positive relation in almost all cooperative dairies except the dairies of Rajkot, Ahmedabad and Surat.

Net Working Capital Turnover Ratio denotes marketing efficiency of an enterprise. Bigger the ratio, more is the profitability. Thus the positive co-relation signifies that if the marketing efficiency is more, profitability will be more and vice versa. But inspite of less marketing efficiency if profitability is more, due to control over expenses, there will be negative correlation to some extent. Negative co-relation will also exist when in spite of more marketing efficiency; there is less profitability due to failure in controlling extra expenses.

In Rajkot and Ahmedabad co-operative milk dairies, negative co-relation of Net Working Capital Turnover Ratio with profitability ratios signify more profitability in spite of less marketing ( or selling ) efficiency.

In Surat co-operative milk dairy negative co-relation of Net Working Capital Turnover Ratio with profitability ratios signify less profitability in spite of more marketing (selling) efficiency.

#### FINDINGS FROM ANNOVA TEST

(For Annova Test see chapter no: 6 & 7)

Annova Test shows that as far as sales Related or Return on Net Worth related profitability is concerned there is no much difference among different co-operative milk dairies as thay have limited scope of profitability. Profitability can only be gained either by offering very low price of milk to milk producers or by charging very high price of milk to customers. Both these factors are not relevant to co-operative milk dairies because their aim is not to exploit milk producers by procuring milk at lower price nor are their aim of exploiting customers by charging more price. Moreover, charging higher price is not possible under monopolistic completion position of market.

Same is the case with different liquidity measures because most of the dairies sales milk on cash basis and payment to milk producers is done in cash immediately or in cash after a small interval period. So there is no much difference in liquidity position of different co-operative milk dairies under study as per the Annova Test.

Now as far as Net Working Capital Turnover Ratio is concerned the Annova Test shows that among the co-operative milk dairies under study there does exist differences. This is due to the fact that some cooperative dairies are running more efficiently with more profitability and some co-operative are running less efficiently with less profitability. Here efficiency denotes only marketing or selling efficiency which please note.

#### **OVER ALL SUGGESTIONS :**

In the present scenario of new economic policy of Liberalization, Privatization and Globalization, co-operative dairies have to be alert against competitions from corporate level private dairies within India and outside India. Those dairies having less profitability should control and reduce unnecessary expenses, and should improve marketing to increase sales.

Co-operative dairies which have liquidity crisis or net working capital crisis should manage their affairs efficiently so that stock of goods does not remain unsold and arrears are cleared at the earliest to avoid bad-debts.

Those persons handling the management of the co-operative milk dairies should bear in mind that no fund or accounts is misused for selfish purpose at the cost of interest of the dairies. They are not the owners of the dairies, but they are in the role of the trustees. If this spirit is not followed, the very aim of co-operative movement will fail.

Profitability is much linked with productivity. So dairy machines with latest technology should be installed to improve productivity milk products. To improve milk productivity of milk giving animals, whatever is possible must be done or encouraged, like better feeding, Artificial Insemination, Embryo Pransfer Technology, Experiment with cows of Gir Origin etc.

#### **DAIRY WISE SUGGESTIONS:**

# (1) DUDHSAGAR DAIRY : (MEHSANA)

In spite of highest yearly sales of this dairy in comparison with other co-operative milk dairies of Gujarat, its net working capital turnover ratio is low ranking 6th among the selected dairies under study indicating under trading with comparatively less efficiency of liquid fund.

This dairy's profitability can further be improved by controlling interest expenses besides milk procurement, cooling, storing, and processing expenses.

# (2) GOPAL DAIRY : (RAJKOT)

In spite of lower yearly sales, higher profitability is due to trading efficiency and capable management. To further improve profitability it should check higher milk procurement, cooling, storing and wage expenses. It should also expand sales by proper marketing strategy.

# (3) UTTAM DAIRY : (AHMEDABAD)

In spite of lower yearly sales, higher profitability is possible due to efficient management and marketing efficiently as related in Net Working Capital Turnover Ratio.

Ahmedabad suffers from low liquidity and from current assets crisis with negative net working capital. Ahmedabad Dairy needs urgent steps to improve its liquidity. Ahmedabad Dairy also needs to control administrative and interest payment expenses. Ahmedabad Dairy also needs to expand yearly sales volume by proper marketing strategy.

# (4) AMUL DAIRY: (ANAND)

In spite of second highest sales volume among the selected co-operative dairies the net working capital turnover ratio of this dairy is lowest (seventh) among the selected dairies indicating under trading with higher liquidity (less marketing efficiency comparatively). Amul Dairy can further improve its performance by controlling higher interest expenditure and by controlling higher liquidity by more efficient use of funds.

# (5) SUGAM DAIRY : (BARODA)

Sugam Dairy of Baroda has to improve both profitability as well as liquidity. In this dairy for six years (from 2002-03 to 2007-08) there was lack of net working capital. So this crisis of net working capital requires immediate attention.

Baroda co-operative milk dairy should control salary and wage expenses and also marketing expenses to improve its profitability.

## (6) SUMUL DAIRY : (SURAT)

This dairy suffers from lower profitability plus lower liquidity.

In spite of higher ratio of net working capital turnover ratio(marketing & sales efficiency) its profitability is less due to lack of control on certain expenses. In Sumul Dairy there was lack of net working capital for four years (from 2003-04 to 2006-07). Thus the crisis of net working capital requires immediate attention.

This dairy should control higher milk procurement, cooling, storing and processing expenses and also higher marketing expenses to improve its profitability.

# (7) VASUNDHARA DAIRY : (VALSAD DIST.)

This dairy has lowest profitability as compared with other dairies but very high liquidity, which indicates insufficient and inefficient use of funds. Its net working capital turnover ratio is much low in spite of high total sales volume indicating under trading with higher liquidity. It should control its liquidity and also control higher administrative and marketing expenses and also higher interest expenses to improve its profitability.