

**CHAPTER V****FINANCIAL PERFORMANCE**

	Topics	Page No.
V . I	Sources Of Finance	50 to 53
V . II	Earning As A Percentage Of Sales	53 to 56
V . III	Assets Turnover	57 to 61
V . IV	Sales To Assets	62 to 64
V . V	Return On Assets	65 to 67
V . VI	Capital Structure	67 to 70
V . XII	Break Even Analysis Of WDP	71 to 72

## CHAPTER - V : FINANCIAL PERFORMANCE

### SOURCES OF FINANCE

Every business organization needs funds for its initial investment as well as for its working capital. They can raise such funds by adopting various ways. Warana Dairy Project's statement of sources and application of funds for the period 74 to 81 were studied and following observations have been derived.

WDP sources of finance consists of following components :

1. Share capital from members
2. Loans from Banks
3. Deposits from members
4. Govt. grants and NCDC Loans
5. Reserves and Surplus

Table No.V-1 reveals the following picture:

1. Every year, there is an increase in share capital except 1976-77. Present share capital class-A is 150% as compared to capital in the year 1972-73 and in case of B class share capital it went up by three times.
2. Company's second major source of funds is reserve.
3. Loans from banks is also a major source except for the year 1979-80. WDP has raised loans from banks and is paying large amount as interest.
4. In the year 1980-81 WDP could get loans from NCDC.

Table NO. V-1 : WAPDA Annual Accounts & Balance Sheet

(Figures are Rs. in thousands)

INFLOW (SOURCES)	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Capital	4.94	590.00	-	135.59	15.45	11.25	366.22
Reserve	475.05	472.64	1864.74	1706.43	1420.39	1542.52	2530.14
Loans	6878.61	2553.44	671.51	878.65	44.68	-	792.06
Deposits	214.69	-	1088.54	275.73	9.30	-	-
Sales of Investment	-	-	Rs	-	3.00	-	-
Trading profit	1.24	-	-	-	-	-	384.61
Working capital	1833.99	1600.08	1237.48	-	-	-	-
TOTAL	9408.52	3416.28	2369.31	2996.40	1492.82	2228.78	4073.03
OUTFLOW (APPLICATIONS)							
Purchases of Assets	9408.52	4889.49	703.55	1748.51	-	-	-
Purchases of investments	-	17.80	2.00	18.10	-	14.05	85.10
Refund of Deposits	-	101.89	565.31	-	-	-	-
Repayment of Loans	-	-	-	-	-	495.94	-
Trading Loss	-	7.18	1098.45	537.44	915.26	864.29	-
Working capital	-	-	-	692.35	357.16	-	1914.85
TOTAL	9408.52	5016.36	2369.31	2996.40	1492.82	2228.78	4073.03

Source : WDP Annual Accounts & Balance Sheet.

5. In the year 1976-77 dairy could accumulate Rs.10.88 lakhs as deposits.
6. Source of funds from operating profit except 1980-81 is nearly NIL.

OUTFLOWS OR UTILISATION OF FUND

1. Major part of funds raised over the years is utilised for acquisition of assets.
2. Deposits have been repaid in the year 1975,76 and 1976-77.
3. Much monetary strength has been used for adjusting losses.

The financial performance of Warana Dairy Project and Mehsana Dairy Project is studied on the basis of five years' annual financial reports published by the respective co-operative dairy organizations. Here an attempt is made to study the financial performance on the line of Du Pont Chart System.

The analysis has been done under four broad heads:

- A Darning as a percentage of sales
- B Sales as a percentage of total assets
- C Return on investment
- D Capital structure

A) Earning as a percentage of sales

It is calculated by dividing earning before interest and tax (EBIT) by sales. The following observations may be made :

1. In both the cases there has been positive profit margin for the period covered under study.
2. In case of Warana Dairy Project, earnings fluctuate more during the priod covered by the study than the earnings of Mahsana Dairy Project.
3. Average profit margin in case of ranges from 1.37% to 4.25%.

There are two important factors which have bearing on the profit margin and sales of the two projects:

1. Earning of the firm during a particular period and
2. Sales.

Table No.V-2 : Earning as a percentage of sales - MDP

Year	EBIT in 000 Rs.	Sales in 000 Rs	EBIT ---- x 100 SALES (Percent)	O.P.Exp. OP Exp. -----x 100 SALES (Percent)
1976-77	4781	263427	1.81	258646 98.18
1977-78	8057	365478	2.20	356521 97.54
1978-79	4879	390348	1.25	385469 98.75
1979-80	5947	437687	1.35	431.740 98.64
1980-81	7135	556153	1.28	549018 98.71

Table No.V-3 : Earning as a percentage of sales - WDP

Year	EBIT in lakhs Rs	Sales in lakhs Rs	$\frac{\text{EBIT}}{\text{SALES}} \times 100$ (Percent)	OP Exp. (Rs. lakhs)	$\frac{\text{OP Exp.}}{\text{SALES}} \times 100$ (Percent)
1976-77					
1977-78	15.05	388	3.88	372.95	96.12
1978-79	6.88	371	1.86	364.12	98.14
1979-80	7.61	553	1.37	546.12	98.75
1980-81	22.06	591	4.25	568.94	96.26

Operating cost plays a dominant role in earnings of an organisation. If the operating cost of the firm increases the earning will come down and if the operating cost goes down the earning will increase, other things remaining the same.

From the Table No.V-2 it is seen that in the year 1977-78 profit margin of the MDP has improved to 2.20% as compared to 1.81% in 1976-77. If we examine, for the above years, the total operating cost to sales we find that it has gone down by 0.64%. That is why dairy could get profit. In the next three years MDP's earnings show that whenever there is decrease in operating cost, profit is more.

From table No.V-3 we observe that in case of Warana Project, earning upon sales ratio is fluctuating from 1.37% to 4.25% during the period of 1977 to 1981. Earning is affected only due to operating cost when there is decrease in profit.

### Earning of the firm

For the purpose of this study earning is defined as earning before interest and tax (EBIT). If earnings for a particular period is high, other things remaining the same, profit margin would improve and vice versa.

Tables No.V-4 and 5 show the incremental yearly increase/decrease of Warana and Mehasana Dairy Units.

Table No.V-4 : Percentage incremental change in total sales (MDP)

Year	Sales in lakh Rs.	Increase (Over the <del>same</del> previous year)	
		Rs.	%
1976-77	261750	-	-
1977-78	365478	103728	39.63
1978-79	390348	24870	6.80
1979-80	437687	47339	12.33
1980-81	556153	118466	27.07

Table No.V-5 : Percentage incremental change in total sales (WDP)

Year	Sales (Lakh)	Increase (Over the previous yr.	
		Rs. (in Lakhs)	%
1976-77	257.69	-	-
1977-78	387.72	130.03	50.45
1978-79	370.79	(16.93)*	(4.36)*
1979-80	552.59	181.80	49.03
1980-81	591.13	38.54	6.97

\*Figures in parenthesis indicate negative values

Impact of sales on profit

Profit is also affected by changes in sales. If sales increase without change in EBIT, EBIT/Sales ratio will go down and vice-versa.

There are two critical factors i.e. sales volume and sales.

Following observations have been made in this study as shown in Table No. V-4.

1. In case of Mehasana Dairy the increase was from 261.75 lakhs in 1976-77 to Rs.556.15 lakhs in 1980-81 which show two fold increase during five years covered under study.
2. Every year there is a growth, but percentage of growth differs.
3. There is a decrease in the rate of growth in the year 1978-79 as compared to that in 1979-80 and 1980-81.
4. Though in the year 1980-81 turnover is double the amount of 1976-77, the profit margin does not show proportionate increase. Main cause of this may be the policy of co-operative dairy organisation to give better price to the dairy-farmers and to provide them with the maximum possible marketing facilities for the milk. Though the milk supply has increase, price of milk has no adverse effects.



5. As observed from Table No.V-5, in case of Warana Dairy Project Sales show increasing trend from 1976-77 to 1980-81 except in the year 1978-79.
6. In case of the WDP though there is a growth in sales, profit margin does not show proportionate increases. This may be because of the policy of giving better price to milk supplied by the dairy farmers and give the maximum possible marketing facilities. Further, it is observed that the major portion of total cost has been the cost of milk purchased.

#### ASSETS TURNOVER

Here an attempt is made to examine the utilisation of assets in relation to sales.

1. Table No.V-6 shows the constant increase in assets of Mehsana Dairy from Rs.1377.31 lakhs in 1976-77 to Rs.2172.16 lakhs in the year 1980-81 (64% increase in five years).
2. In 1978-79 assets increased sharply by nearly 22% over the previous year. However, the rate of growth starts declining from the immediate next year.

Table No.V-7 reveals the percentage incremental change in total assets.

1757.51  
1940.60  
386.91

Table No.V-6 : Percentage incremental change in total assets (MDP)

Year	Total Assets (Rs.in lakhs)	Increase/Decrease (Rs.in lakhs)	% increase
1976-77	1377.31	-	-
1977-78	1440.60	63.29	4.59
1978-79	1757.51	316.91	21.99
1979-80	1985.55	228.04	12.97
1980-81	2172.16	186.61	9.39

Table No.V-7 : Percentage in incremental change in total assets (WDP)

Year	Total Assets (Rs.in lakhs)	Increase/Decrease (Rs.in lakhs)	% increase
1976-77	236.80	-	-
1977-78	265.87	29.07	12.27
1978-79	305.87	40.00	15.04
1979-80	351.46	45.59	14.90
1980-81	405.34	53.88	15.33

1. ~~It~~ It is further observed that Warana Dairy's assets also increased significantly from Rs.236.8 in lakhs in 1976-77 to Rs.405.34 in lakhs in 1980-81 (58% increase in five years).
2. In 1980-81 assets increased significantly by Rs. 54 lakhs. The rate of growth in the assets has been maintained almost at a constant rate except the year 1979-80 (which shows a marginal decline).

In this study pattern of assets utilization of Mehsana Dairy in relation to sales is studied and following observation have been made as from the Table No.V-8 showing sales in relation to total assets.

1. Over the period of time the number of times of assets utilisation has increased in case of Mehsana Dairy. In 1976-77, the MDP has utilised its assets 1.90 times to generate sales while in the year 1980-81, the turnover has gone upto 2.56 times. This shows better asset utilisation which may have contributed to its higher profit margin.
2. In 1977-78 assets have been utilised 2.53 times but in 1978-79 it has decreased by 0.31 times and in 1979-80 0.33 times.
3. Though there is increase, there is no uniformity.

Table No.V-8 : Sales in Relation to Total Assets (MDP)

Year	Sales (000 Rs.)	Total assets (000 Rs.)	<u>Sales</u> Total assets
1976-77	261750	137731	1.90
1977-78	365478	144061	2.53
1978-79	390348	175771	2.22
1979-80	437687	198555	2.20
1980-81	556153	217216	2.56

Table No.V-9 : Sales in Relation to Total Assets (WDP)

Year	Sales (Rs.in lakhs)	Total assets (Rs.in lakhs)	<u>Sales</u> Total assets
1976-77	257.69	236.80	1.09
1977-78	387.72	265.87	1.45
1978-79	370.79	305.87	1.21
1979-80	552.59	351.46	1.57
1980-81	519.13	405.34	1.28

4. Average figure of assets utilisation ~~of~~ for Mehsana Dairy is 2.28 times.

Table No.V-9 shows the sales in relation to total assets as in case of WDP. The following observations have been made :

1. During the period of 5 years of the study, Warana Dairy has been showing ups and downs in the asset turnover.
2. In the year 1976-77 the WDP has utilized its assets 1.09 times to generate its sales while in 1980-81 it is 1.28 times though it shows increasing trend though there were fluctuations during this period.
3. In the year 1979-80 firm has utilized its assets 1.57 times to generate sales which shows efficient utilisation of assets.

But taking into account the plant of WDP which has constantly been underutilised right from its inception the above mentioned position is not that bad. Therefore the management of the WDP should concentrate its efforts on increasing collection of milk.

A. SALES/FIXED ASSETS

Here the assets are classified into three parts:

- i. Fixed Assets
- ii. Current Assets
- iii. Inventory

and tried to see the pattern of asset utilization over the five years to generate sales to see the rate of turnover of different assets.

Following observations have been made from Table No.V-10 of MDP:

1. Fixed assets turnover ratio has increased from 4.12 (1976-77) to 5.61 (1980-81).
2. Except in the year 1978-79, every year there is constant increase in fixed assets turnover ratio.

B. SALES TO CURRENT ASSETS

Behaviour of Mehsana Dairy's current asset turnover ratio as observed from Table No.V-10 is as under:

1. This ratio is fluctuating in the range of 3.52 (1976-77) to 4.70 (1980-81).
2. Highest current assets to turnover ratio is in the year 1977-78 which is 4.89.
3. If we compare the current assets turnover with total assets turnover given in Table No.V-10 we find that it has followed the same pattern.

Table No.V-10 : MEHSANA DAIRY

Year	<u>Sales</u> Fixed Assets	<u>Sales</u> Current Assets	<u>Sales</u> Inventory
1976-77	4.12	3.52	6.79
1977-78	5.26	4.89	14.5
1978-79	5.17	3.89	10.5
1979-80	5.30	3.77	7.4
1980-81	5.61	4.70	14.2

Table No.V-11 : WARANA DAIRY

Year	<u>Sales</u> Fixed Assets	<u>Sales</u> Current Assets	<u>Sales</u> Inventory
1976-77	16.11	3.91	232
1977-78	21.48	5.96	270
1978-79	20.63	4.11	153
1979-80	29.36	4.41	101
1980-81	28.28	3.62	105

C. SALES/INVENTORY

1. This ratio in case of Mehsana Dairy ranges from 6.79 to 14.2. We observe wide range of fluctuations in this case. And also the percentage of inventory turnover ratio to current assets turnover ratio is not constant. This shows fluctuations in the composition of current assets mainly may be due to inventory. Therefore consistent inventory policy is demanded.
2. During 1978-79 and 1979-80 sales/inventory ratio has gone down as compared to the previous year.

The following observations have been made from Table No.V-11 of WDP:

A. SALES/FIXED ASSETS

1. Fixed Assets turnover ratio has increased over a period of time except in the year 1978-79
2. The highest fixed asset-turnover was 29.36 in the year 1979-80.

B. SALES/CURRENT ASSETS

1. Current Assets turnover ratio in case of Warana is quite fluctuating. It ranges from 3.91 to 5.96 times.



2. In the year 1977-78 it is the highest went upto 5.9 times.
3. In the year 1980-81, it is 3.62 times.

C. SALES/INVENTORY

As compared to Mehsana Dairy, Warana Dairy's sales inventory ratio is quite high because of nature of business. Warana's main business is selling the milk to government, milk being the perishable commodity, ~~as~~ stock is always negligible hence it shows high ratio. But when they started manufacturing milk product, ratio has come down considerably.

RETURN ON INVESTMENT (ROI)

The profitability of the firm is also measured in relation to investment. The term ROI used in this study is related to total assets. Improvement can be made through bettering relationship between sales and costs measured by profit margin or through more effective use of available assets.

MEHSANA DAIRY

The ROI calculated for the MDP is shown in Table No.V-12. Following observations have been made:

1. There has been a positive return on the total investments made by Mehsana Dairy.
2. Percentage of ROI is changing every year.

Table No.V-12 : Return on Investment (MDP)

Year	EBIT in 000 Rs.	TOTAL ASSETS in 000 Rs.	$\frac{\text{EBIT} \times 100}{\text{ASSETS}}$
1976-77	4781	137731	3.41
1977-78	8057	144060	5.59
1978-79	4879	175751	2.77
1979-80	5947	198555	2.99
1980-81	7135	217216	3.28

Table No.V-13 : Return on Investment (WDP)

Year	EBIT in 000 Rs.	TOTAL ASSETS in 000 Rs.	$\frac{\text{EBIT} \times 100}{\text{ASSETS}}$
1976-77	N A	23680	-
1977-78	1505	26587	5.66
1978-79	688	30587	2.44
1979-80	761	35146	2.16
1980-81	2206	40534	5.44

3. The highest percentage of ROI was 5.59% in the year 1977-78 and the lowest was 2.77% in 1978-79.
4. No steady increase or decrease is observed in this study

#### WARANA DAIRY

The ROI calculated for the WDP is shown in Table No.V-13. Following observations have been made:

1. ROI figures show positive returns.
2. The highest figure of ROI is 5.66% in the year 1977-78 and the lowest in 1979-80 which is 2.16%.

3. ~~As per~~

#### CAPITAL STRUCTURE

#### MEHSANA DAIRY

As regards capital structure following observations have been made regarding Mehasana Dairy as shown in Table No.V-14:

1. The paid up share capital ranges 5% to 6% during last five years. Average paid up capital is 5.4% of total liabilities.
2. Reserve fund and other funds including subsidies ranges from 37% to 40% of total liabilities. Average proportion is 38.6%.

Table No.V-14 : CAPITAL STRUCTURE (MDP)

(Figures in 000 Rs.)

Year	Paidup capital	%	Reserve fund & other fund & subsidy	%	Loans	%	Current liab. & prov.	%	Profit	%	Total
1976-77	7783	6	51220	37	42807	31	34894	25	1027	1	137731
1977-78	8520	6	57769	40	33079	23	43656	30	1037	1	144061
1978-79	9277	5	67257	38	44538	26	53196	30	1503	1	175771
1979-80	9976	5	75404	38	53554	27	58220	29	1401	1	198555
1980-81	9993	5	86851	40	38828	18	79888	36	1656	1	217216
Average %		5.4		38.5		25		30		1	

Table No.V-15 : CAPITAL STRUCTURE (WDP)

( Figures in 000 Rs.)

Year	Paidup capital	%	Reserve fund & other fund & subsidy	%	Loans	%	Current liab. & prov	%	Profit	%	Total
1976-77	1278	5	3156	14	12657	53	6589	28	0	0	23680
1977-78	1414	5	4862	18	13812	52	6500	25	0	0	26588
1978-79	1429	5	6283	21	13865	45	9010	29	0	0	30587
1979-80	1441	5	7825	22	13355	39	12525	36	0	0	35146
1980-81	1807	5	10355	26	14062	34	14310	35	0	0	40534
Average %		5		20.2		44.6		30.6			

3. The proportion of total loans ranges from 18% to 31%. MDP has been found reducing this proportion in the year 1977. It was 31% but in the year 1980-81 it is 18% and average proportion of loans is 25%.
4. The proportion of current liabilities ranges from 25% to 36%. It is the highest in 1980-81. On the whole average proportion is 30%.
5. Proportion of surplus is constant to 1% only.

WARANA DAIRY PROJECT

The study of capital structure (See Table No.V-15) of Warana Dairy projects has revealed the following important points of observations:

1. Paid up capital of Warana Dairy is 5% of the total liabilities which remained constant over the period of time.
2. Reserves and surplus over the period of time went on increasing from 14% to 26% straight-away.
3. Proportion of loans ranges from 34% to 53% WDP has been found trying to decrease the loan burden which is 44.6%.
4. The current liabilities proportion ranges from 25% to 36% which shows increasing trend and its average comes to 30.6%.

5. Loans and current liabilities put together show 75% of the capital in case of Warana Dairy. The borrowed capital on which the interest is paid has affected adversely the profits of the WDP.

...

# BREAK EVEN ANALYSIS OF WDP

Break even analysis establishes a relationship between revenues and costs with respect to volume. It indicates the level of at which costs and revenues are in equilibrium. The equilibrium point is commonly known as the breakeven point. The break even point means sales volume of the firm at which the total revenue is equal to total cost.

In case of Warana Dairy Project breakeven sales in value Rs.631.14 lakhs which is calculated as under:  
(Annexure - 4).

	Lakhs Rs.
Total Sales (1980-81)	592.39
Less Variable Cost	545.05
Contribution	47.34
Less Fixed Cost	49.86
	- 2.52

$$B.E.Sales = \frac{FC}{P V Ratio}$$

$$P V Ratio = \frac{Contribution}{Sales} = \frac{47.34}{592.39} = 0.079$$

$$\therefore \frac{Fixed Cost}{P V Ratio} = \frac{49.86}{0.079}$$

BE SALES = Rs.631.14 lakhs  $\div$  Price per litre of milk  
Breakeven requirement of milk in litres  $\times$  350 days  
= Daily milk required = 75135 litres of milk

