

C H A P T E R - V

DATA ANALYSIS

- 5.1 COMPOSITION OF CURRENT ASSETS AND CURRENT LIABILITIES
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- 5.3 COMPUTATION OF GROSS AND NET WORKING CAPITAL.
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CHAPTER - V
DATA ANALYSIS

INTRODUCTION :

In this chapter the data obtained from annual reports and from the inspection record of Shri. Panchaynga Sahakari Sekhar Karkhana Ltd. Ganganagar, Ichalkaranji, have been analysed. The analysis is based on the following aspect relating to management of current assets and current liabilities.

5.1 COMPOSITION OF CURRENT ASSETS AND CURRENT LIABILITIES :

- 5.2 Borrowing i.e. other sources of working capital.
- 5.3 Computation of working capital i.e. Gross and Net.
- 5.4 Assessment of working capital management.
- 5.4.a Current ratios of P.S.S.K.G.
- 5.4.b Quick ratios of P.S.S.K.G.
- 5.5.c Inventory turn over ratios of P.S.S.K.G.
- 5.4.d Working capital turn over ratios of P.S.S.K.G.
- 5.4.e Cash turnover ratios of P.S.S.K.G.
- 5.4.f Proportion of cash in total current assets.
- 5.4.g Current ratio to net working capital.
- 5.4.h Stock holding and Bank Borrowings.

5.2 COMPOSITION OF CURRENT ASSETS AND CURRENT LIABILITIES :

Here, total current assets and current liabilities of P.S.S.K.G. have been presented in the following table and the relationship between different components has been established in percentage.

TABLE NO. 5, 1

**TABLE SHOWING COMPOSITION OF CURRENT ASSETS AND CURRENT LIABILITIES
IN PERCENTAGE (1982 to 1986)**

Above table shows composition of current assets to current liabilities. It is seen that stock in trade has occupied a major portion of total current assets varying between 74% to 90% as a result investment in other current assets is relatively minimum. At the same time investment in current assets shows declined trend during the period of study. Total current assets has varied widely over these four years.

As regards to current liabilities short term loans occupy major proportion in total current liabilities in the initial period of study but in the latter period current liabilities occupy major proportion in total liabilities which indicates that the firm depend on short term loans to large extent for financing current assets i.e., for working capital.

5.2 DEDUCTIONS FROM BILLS: A SOURCE OF FINANCE :

Now a days cooperative factories engaged in sugar production deduct some amount from the bills of sugarcane supplied. This becomes a huge amount and can be used as a source of financing the operations of the factories. During the study period P.S.S.K. G. has also exploited the same source which is presented in following table.

Above table shows the deduction made from the bills of sugar cane supplied by the members which remained a source of financing for the factory under study. During the period of study in the year 1985-86 the organisation has collected highest amount i.e. Rs. 269.8 lakhs whereas the rate of deduction was highest in the year 1984-85 i.e. 56. On fixed deposits the organisation pays 12.5% interest p.a.

5.3 COMPUTATION OF WORKING CAPITAL i.e. C.R.C. AND R.C.F. :

Here, working capital means current assets minus Current Liabilities i.e. C.A. - C.L. During the period 1981-82 to 1985-86, working capital position of P.S.K.J. is satisfactory as shown in the following table.

5.4 ASSESSMENT OF WORKING CAPITAL MANAGEMENT :a. CURRENT RATIO :

Here, relationship, between current assets and current liabilities is established. following table supports the fact :

TABLE NO. 5.4

TABLE SHOWING CURRENT RATIOS OF P.S.S.K.G

Year	Current Assets (Rs. in lakhs)	Current Liabilities (Rs. in lakhs)	Ratios (times)
1981-82	2156.07	1600.99	1.34 :1
1982-83	2589.88	1964.73	1.31 :1
1983-84	1561.38	994.23	1.58 :1
1984-85	1415.23	784.20	1.80 :1
1985-86	1480.50	1036.34	1.42 :1

SOURCE : Annual Reports 1981 to 1986.

This ratio is calculated by the following formula

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Above table shows current ratio in respect of the Panchganga Sahakari Sakhar Karkhana Ltd. Ganganagar Ichalkaranji. Usually 2:1 current ratio is considered satisfactory. But in this firm, the current ratios for study period are 1.34:1, 1.31:1, 1.58:1, 1.80:1 and 1.42:1 in the year 1981-82, 1982-83, 1983-84, 1984-85 and 1985-86 respectively. which indicate that the factory has

been managing their short term obligations with minimum current current assets. Therefore it may be concluded that though current ratio is not 2:1 the organisation is not suffering from any kind of shortage of working capital.

B) QUICK RATIOS :

These ratios shows liquidity position of the firm during the study period, which is shown in the following table.

TABLE NO. 5.5

TABLE SHOWING QUICK RATIOS OF P.S.S.K.G.

Year	Quick Assets (Rs. in lakhs)	Quick Liabilities (Rs. in lakhs)	Ratios (Times)
1981-82	224.89	1600.99	0.14 : 1
1982-83	372.43	1964.73	0.19 : 1
1983-84	391.08	984.18	0.39 : 1
1984-85	356.33	784.20	0.45 : 1
1985-86	391.71	1036.54	0.37 : 1

SOURCE : Annual Reports 1981 to 1986.

This ratio is computed with the following formula

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Quick Or Current Liabilities}}$$

Quick Assets include cash and Bank balance, debtors after providing for doubtful debts, receivable and short term marketable securities. Inventories are not included in current

assets for the purpose of calculation of ^{this} ratio. Therefore, Quick Asset = Current Assets minus Inventories. liquid or Quick Liabilities included creditors, Bills payable etc. But Bank overdraft is not considered.

Generally, 1:1 Quick Ratio has been considered as favourable. But in this firm Quick ratios in study period are 0.14:1, 0.18:1, 0.39:1, 0.45:1 and 0.37:1 in the year 1981-82, 1982-83, 1983-84, 1984-85 and 1985-86 respectively. This is because the high amount of inventory of finished goods i.e. sugar. In this regards sugar factory is helpless as sugar stock is sealed as per Government directives and this policy compels PSEKG to hold high amount of inventory affecting on quick ratios and blocking capital in stock.

C) INVENTORY TURNOVER RATIOS :

These ratios highlights the efficiency of inventory management and establishes relationship between inventory hold and turnover of the firm. High ratio is an indication of efficient management. Inventory turnover ratios of the PSEKG are shown below.

TABLE NO. 5.6TABLE SHOWING INVENTORY TURNOVER RATIOS OF P.G.S.K.C.

Year	Net sales (Rs. in lakhs)	Average inventory (Rs. in lakhs)	Ratios (Times)
1981-1982	2774.40	1172.62	2 times 2.36:1
1982-1983	3807.95	1821.62	2 times 2.09:1
1983-1984	4545.31	1413.45	3 times 3.21:1
1984-1985	4915.97	832.38	6 times 5.90:1
1985-1986	4677.77	740.62	6 times 6.31:1

SOURCE : Annual Reports 1981 to 1986.

A) calculation of Average inventory (Rs.in Lakhs)

Year	Average inventory	=	Opening inventory + Closing inventory 2
1981-1982	1172.62	=	<u>482.26 + 1697.19</u> 2
1982-1983	1821.62	=	<u>1700.23 + 1943.01</u> 2
1983-1984	1413.45	=	<u>1943.01 + 804.00</u>
1984-1985	832.38		<u>804.00 + 779.88</u> 2
1985-1986	740.64		<u>758.15 + 723.16</u> 2

B) Calculation of Turnover ratio

$$\text{Turnover ratio} = \frac{\text{Inventory}}{\text{Average inventory}} \times \frac{\text{Net Sales}}{\text{Average inventory}}$$

$$1981 - 1982 \quad \frac{2774.40}{1172.62} \quad 2.36$$

1982 - 1983	<u>3807.95</u> 1021.62	2.09
1983 - 1984	<u>4545.31</u> 1413.45	3.21
1984 - 1985	<u>4915.97</u> 832.38	5.90
1985 - 1986	<u>4577.77</u> 740.64	6.31

This ratio is calculated by the following formula :

$$\text{Stock turnover ratio} = \frac{\text{Net Sales}}{\text{Average inventory}}$$

$$\text{Average inventory} = \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$$

The velocity of stock turnover indicates the progress and performance of business. It also indicates that how many times the stock is turned over during the period covered under study.

In this firm stock turnover ratio is 2.09:1; 3.21:1; 5.90:1 and 6.31:1 in the year 1981-82, 1982-83, 1983-84, 1984-85, 1985-86 respectively. So this ratio is considered to be satisfactory because the velocity of stock turnover is increasing year by year, which is a good indication highlighting company's better prospectus.

D) WORKING CAPITAL TURNOVER RATIO :

Here an attempt is made to establish relationship between working capital and turnover. High turnover indicates efficient utilisation of working capital.

TABLE NO. 5.7TABLE SHOWING WORKING CAPITAL TURNOVER RATIOS OF P.S.B.K.G

<u>Year</u>	<u>Cost of Sales</u> <u>(in lakhs)</u>	<u>Net working capital</u> <u>(in lakhs)</u>	<u>Ratios</u> <u>(Times)</u>
1981 - 1982	2774.40	555.08	5 times 4.99:1
1982 - 1983	3807.95	625.15	6 times 6.09:1
1983 - 1984	4545.31	577.20	7 times 7.87:1
1984 - 1985	4915.97	631.03	7 times 7.79:1
1985 - 1986	4577.77	443.96	10 times 10.53:1

SOURCE : Annual Reports 1981 to 1986.

TABLE SHOWING NET WORKING CAPITAL

<u>Net working capital</u> <u>(Rs. in lakhs)</u>	<u>Current Assets</u> <u>(Rs. in lakhs)</u>	<u>Minus</u>	<u>Current</u> <u>liabilities</u> <u>(Rs. in lakhs)</u>
555.08	2156.07	-	1600.99
577.20	2589.06	-	1964.73
631.03	1415.23	-	784.20
443.96	1486.50	-	1036.54

The above table shows the relation between working capital employed and the turnover registered by the unit under study. It is observed during the period that the sales are increasing year by year and there is corresponding increase in working capital employed. At the same ratio shows an increasing trend



indicating efficient utilisation of working capital.

CASH INFLOWS :

Here an attempt is made to show daily inflow of the organisation under study,

TABLE NO. 5.G

TABLE SHOWING DAILY CASH FLOW OF P.G.S.R.G.

Year	Net profit depreciation (Rs. in Lakhs)	No of working day in year (Gross working days)	Daily cash flow in Rs.
1981-82	28.51	206	505152.88
1982-83	62.73	210	018903.06
1983-84	42.56	158	09831.89
1984-85	16.06	162	03220.88
1985-86	13.40	160	03036.67

Source : Annual Reports 1981 to 1986 (Rs. in Lakhs)

Year	Net profit	+	Depreciation	=
1981-82	11.69	+	16.82	= 28.51
1982-83	42.59	+	20.14	= 62.73
1983-84	20.96	+	21.70	= 42.56
1984-85	-	+	16.06	= 16.06
1985-86	8.91	+	04.49	= 13.40

The above table shows the daily cash flow in the factory. In the period of the study the daily cash flow was Rs. 505, 152, = 03; 10905 = 06; 9331 = 89; in the year 1981-82; 1982-83 and 1983-84 respectively. But in the year 1984-85 and 1985-86 the daily cash is Rs. 3220 = 88; 3056 = 67 respectively, thus the above table shows the, daily cash flow is showing decreasing trend. While is indicating the firm has extended the credit period for their customers.

b) CASH TURNOVER RATIOS :

Here relationship between cash and sales is established. Following table shows the same.

TABLE NO.5.9

TABLE SHOWING CASH TURNOVER RATIOS OF P.S.B.K.G.

Year	Sales (Rs. in lakhs)	Cash Balance (Rs. in lakhs)	Ratios (Time)
1981-82	2774.40	3241	85.60 : 1
1982-83	3807.95	50.13	75.95 : 1
1983-84	4545.31	85.45	53.19 : 1
1984-85	4915.97	101.18	48.58 : 1
1985-86	4677.77	124.14	37.68 : 1

SOURCE : Annual Reports 1981 to 1986.

Here an attempt is made to establish relationship between liquid cash holding and sales. For this purpose the assessment of utilisation of cash for effecting sales has been done. The ratios computed for this purpose are fluctuating year to year from 85.60 to 37.63. At the same time ratios for the year 1982-83, 1983-84 indicate that inspite of spectacular growth in sales organisation has managed its affairs with minimum liquid cash as compare to rest of the years covered under study.

F) PROPORTION OF CASH IN TOTAL CURRENT ASSETS :

Here, attempt is made to show the proportion of cash in total current assets during the period covered under study.

TABLE NO. 5.10

TABLE SHOWING PROPORTION OF CASH IN TOTAL CURRENT ASSETS

Year	Cash balance (Rs. in lakhs)	Current Assets (Rs. in lakhs)	Ratios (time)	Ratios (in %)
1981-82	32.41	2156.07	0.015:1	1.50
1982-83	50.13	2589.88	0.019:1	1.90
1983-84	85.44	1561.38	0.054:1	5.40
1984-85	101.18	1415.23	0.071:1	7.10
1985-86	124.14	1480.50	0.083:1	8.30

SOURCE : Annual Reports 1981 to 1986.

The purpose of this table is to show the availability of average amount of cash to meet the day to day requirements, in relation to the total current assets. It also shows the funds lying idle without contributing to the profit ability of the business.

The cash balance in current assets is very low because stock in trade occupying major portion in total current assets. so in the period 1981-82 to 1985-86 the portion of cash balance in current assets is 0.015; 0.019; 0.054; 0.071 and 0.083 respectively which is insignificant and indicates with low amount of cash holding, the organisation could manage its day to day affairs.

c) CURRENT RATIO TO NET WORKING CAPITAL :

TABLE NO.5.11

TABLE SHOWING CURRENT RATIO/NET WORKING CAPITAL

Year	Net Working Capital (in lakhs)	Current Ratios (in Times)
1981 - 1982	+ 555.08	1.34 : 1
1982 - 1983	+ 625.15	1.31 : 1
1983 - 1984	+ 577.20	1.58 : 1
1984 - 1985	+ 631.03	1.80 : 1
1985 - 1986	+ 443.96	1.42 : 1

SOURCE : Annual Reports 1981 to 1986.

The above table indicates the good liquidity position of the factory during the period covered under study. In the year 1984-85 the position was more sound and rest of the years included in study. The current assets were more than current liabilities which can be considered as good liquidity position.

In cooperative sugar factories it is observed that they carry large stock level as the stock of finished sugar is released as per Government directives so a result the funds are blocked and working capital requirement increases. As a solution some factories go for bank loan against stock which results in interest burden and affects the profit generation.

H) STOCK HOLDING AND BANK LOANS

Here, increase in stock holding has resulted into increase in borrowings which is shown in the following table.

TABLE NO. 5.12

TABLE SHOWING STOCK HOLDING AND BANK LOAN OF P.S.G.K.G.

Year	Stock in sugar trade at the end of the year (Rs. in lakhs)	Bank Loan outstanding as on the last day of the year (Rs. in lakhs)	Percentage of bank loan to stock.
1981 - 82	1931.18	0665.22	34.44
1982 - 83	2217.45	1203.59	54.27
1983 - 84	1170.30	0373.47	31.91
1984 - 85	1058.90	-	-
1985 - 86	1088.79	-	-

SOURCE : Annual Reports 1981 to 1986.

During the study period the organisation has consistently gone for bank borrowings or hypothecation of stock and equitable mortgage on the factories fixed assets always found in books. In this factory it is observed that the bank loan of the company is 34.44% in the year 1981-82. But in the year 1982-83 bank loan is increased by 19.83% as compared to 1981-82. Thus this year the factory used more bank borrowings for increasing the crushing.

In the year 1983-84 bank loan is decreased by 22.36% as factory used less bank loan than previous years. But in the year 1984-85 and 1985-86 the factory has repaid bank loan before the end of the year.

D) WORKING CAPITAL PER TONNE OF CRUSHING :

Here an attempt is made to know how much working capital is utilised for processing a tonne of sugar cane.

TABLE NO. 5.13

TABLE SHOWING WORKING CAPITAL PER TONNE OF CRUSHING(1981 to 1986)

Year	Total crushing in lakhs of M.T.	Working capital in lakhs of Rs.	Working capital per tonne of Rs.
1981 - 1982	9.64	553.08	57.58
1982 - 1983	9.87	625.15	63.33
1983 - 1984	7.11	577.20	81.18
1984 - 1985	8.43	631.03	74.85
1985 - 1986	7.49	443.96	59.35

SOURCE : Annual Reports of the factory.

The above table shows the utilisation of working capital per tonne, during the period 1981-82 to 1985-86. It is clear from table that highest working capital is used in the year 1983-84, i.e. Rs. 81.18 and minimum working capital was required in the year 1981-82 i.e., Rs. 57.58 per tonne of sugar cane crushed by the factory.

TABLE NO. 5.14

TABLE SHOWING INCREASE AND DECREASE IN NET WORKING CAPITAL
DURING THE PERIOD (1981 to 1986)

Year	Net working capital (Rs. in lakhs)	Increase/ Decrease (Rs. in lakhs)	Total Crushing in M/T lakhs	Increase/ Decrease in M/T. lakhs
1981-82	555.08	-	9.64	
1982-83	625.15	+ 70.07	9.67	+ 0.23
1983-84	577.20	- 44.95	7.11	- 2.76
1984-85	631.03	+ 53.83	8.43	+ 1.32
1985-86	443.96	-187.07	7.48	- 0.95

SOURCE : Annual Reports 1981 to 1986,

From the above table it is clear that working capital utilised during the period under study has registered a fluctuating trend and highest increase in working capital has observed in the year 1982-83 i.e. Rs. 70.07 lakhs and highest decrease in net working capital observed in the year 1985-86 i.e. Rs. 187.07 lakhs.

J) INVESTMENT IN FIXED ASSETS :

Here an attempt is made to show the investment of the factory in different fixed assets during the period covered under study.

TABLE NO. 5.15

TABLE SHOWING INCREASING IN FIXED ASSETS DURING THE
PERIOD (1981 to 1986)

<u>- Year -</u>	<u>Amount of Fixed Asset (in lakhs)</u>	<u>Increase/Decrease (Rs. in lakhs)</u>	<u>% change over previous years</u>
1981 - 1982	1414.56	-	-
1982 - 1983	1553.97	139.41	9.85
1983 - 1984	1684.32	130.35	8.38
1984 - 1985	1767.61	83.29	4.94
1985 - 1986	1894.72	127.11	7.19

SOURCE : Annual Report 1981 to 1986.

The factory is successful in increasing its fixed assets along with increasing business operations. There is constant increase in the fixed assets over the previous year.

In the year 1981-82 factory could register increase in fixed assets to the extent of 9.85% in the year 1985-86 7.19%. This picture is the indication of using owned funds for acquiring fixed assets which result in to low interest burden.

Whatever funds required for above purpose are obtained by accepting more members i.e. sale of shares. Following table supports the fact.

TABLE NO. 5.16TABLE SHOWING INCREASE IN CAPITAL (1981 to 1986)

<u>Year</u>	<u>Paid up capital</u> <u>(Rs. in lakhs)</u>	<u>Increase in paid up capital</u> <u>(Rs. in lakhs)</u>	<u>% change over previous year.</u>
1981 - 1982	214.48	-	-
1982 - 1983	219.21	4.73	2.20
1983 - 1984	222.63	3.53	1.61
1984 - 1985	247.82	25.19	11.31
1985 - 1986	356.70	108.88	43.93

SOURCE : Annual Report 1981 to 1986.

The above table shows that every year factory has exploited internal source of financing and maximum issue of share capital was made in the year 1985-1986 to the extent of Rs. 108.88 lakhs (43.93%).

TABLE NO.5.12TABLE SHOWING BORROWING OF P.C.S.K.G.

<u>Year</u>	<u>From State Govt.</u> <u>(Long term)</u> <u>(Rs. in lakhs)</u>	<u>From Cooperative Banks</u> <u>(Short term)</u> <u>(Rs. in lakhs)</u>	<u>Total</u> <u>(Rs. in lakhs)</u>
1981 - 1982	13.45	665.22	678.67
%	(2.00)	(98.00)	(100.0)
1982 - 1983	42.07	1203.59	1245.66
%	(3.38)	(96.22)	(100.0)
1983 - 1984	45.86	373.47	419.33
%	(11.00)	(89.00)	(100.0)
1984 - 1985	47.30	-	47.30
%	(100.0)		(100.0)
1985 - 1986	70.36	-	70.36
%	(100.0)		(100.0)

SOURCE : Annual Report 1981 to 1986.

The above table shows the use of borrowings as source of financing by the organisation under study. It seen that long term borrowing from Government shows increasing trend in total borrowing and short term borrowing from cooperative bank shows decline trend upto 1983-1984. After 1984-1985 the factory has stopped their practice to depend cooperative bank for short term borrowing.

In the conclusion it can be stated that the factory utilises both types of funds i.e. borrowed funds and owned funds.)

In case of borrowing, company go for short term borrowing to finance working capital requirements and uses long term loans for financing fixed assets. Further fixed assets are also being financed in issuing more shares. The conclusions relating to working capital management are mentioned in next chapter of the study.