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## **CHAPTER - V**

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## CHAPTER 5

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### ANALYSIS AND INTERPRETATION

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**C H A P T E R 5**

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**ANALYSIS AND INTERPRETATION**

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**5.1 INTRODUCTION**

This chapter examines the data collected on the business operations of the Co-operative Sangh from Miraj taluka based on the analysis of its Annual Report of last decade.

The Krishna Khore Dudha Utpadak and Purvatha Sangh was established in 1963 for the procurement and supply of milk from five talukas of Sangli district, out of eight talukas. The operations of the Sangh were however, restricted to only one taluka namely, Miraj from 1986-87 as per the directive of Maharashtra Government. The Sangh at present collects milk from 78 Primary Milk Societies out of its 220 member societies. The milk is collected twice in the day, morning and evening, by the Sangh through vans. It is then pasteurized at its Miraj unit and supplied to Miraj Government Dairy. Most of the milk collected is supplied to this dairy at Government fixed rate while only little portion is sold in private at the market price.

## 5.2 BUSINESS PROFILE OF THE SANGH

The Sangh started with its main activity of milk collection from Primary Milk Societies and supply of milk to the Government Dairy. The Sangh however, started its Ice Factory in 1972-73 for chilling and pasteurization of milk. Subsequently, due to increasing demand from its Primary Milk Societies, the Sangh started its Cattle Feed Unit for manufacturing cattle feed. The Sangh has planned to start in 1993 its fourth unit namely, Bakery.

The business profile of the Sangh in terms of its turnover of milk, cattle feed and ice is displayed in TABLE 5.1.

It is noticed from the table that the milk sales have been steadily increasing from 1981-82 to 1984-85. However, except in the year 1987-88, the milk sales have been steadily declining. The major reasons attributed to this are low procured price fixed by the Maharashtra Government, large number of competitors from private dairies, competitive rates in the market, and large demand for milk not only in the villages but in the urban areas as well. In addition to these it is revealed from the survey of Primary Milk Societies and farmers that the irregularities in the payment by the Sangh as well as the

**TABLE 5.1 BUSINESS PROFILE OF THE SANGH**

(Rs. in Lac)

YEAR	MILK	SALES CATTLE FEED	ICE	TOTAL SALES	GROSS PROFIT	PROFIT/ LOSS
1981-82	471.59	0.50	5.06	477.15	23.24	+ 0.76
1982-83	484.95	-	5.25	490.20	27.37	+ 0.77
1983-84	598.72	5.26	4.94	608.92	30.53	+ 0.53
1984-85	675.99	47.28	5.48	728.75	42.27	- 2.46
1985-86	645.02	34.22	5.48	684.72	37.34	- 10.71
1986-87	567.21	29.33	4.29	600.83	30.12	- 12.97
1987-88	610.22	25.00	5.78	641.00	41.91	- 1.92
1988-89	552.19	41.54	4.83	598.56	41.37	+ 0.53
1989-90	480.60	38.44	4.06	523.10	27.17	- 2.24
1990-1991	411.51	23.51	1.06	436.08	21.91	- 11.55

Primary Milk Societies, adoption of payment strictly based on the fat and SNF content of the milk, abandoning the milk business due to high maintenance cost, and at times behavioural problems.

The Sangh produces ice at its ice factory. This has helped the Sangh to get its own ice and be independent. It is also claimed by the authorities that this has saved lot of money due to fluctuations in the local market. Though, the ice factory was started by the Sangh, it is observed from the table that the ice sales are also declining in the last decade. The Annual Reports clearly reveal that at times the Sangh purchases ice from local market inspite of having large production capacity unutilised. On probing further, the authorities reported that there is fluctuation in power supply besides high power tariff and less demand in the local market. The sales of ice has reduced four times in the last year.

As regards the cattle feed sales, it is noticed that there is no trend in the sales pattern in last ten years. The sales have been maximum to the extent of Rs. 47.28 lacs in 1984-85 followed by Rs. 41.54 lacs in 1988-89. On analysing this data based on the survey of Primary Milk Societies and the farmers, it can be concluded that though



the price of the Sangh's cattle feed is less by Rs. 10 per bag, the demand is declining. According to the farmers, it is alleged that the nutritional value of the cattle feed is less as compared to the other brands available in the market. The Sangh not only has any marketing net-work nor undertakes any promotional efforts. There is only one man who looks of the sales, purchases and other activities of the cattle feed unit. He gets practically no time to look after sales promotional measures and look after any complaints, if any. The cattle feed business in the initial stage got good lift, mainly due to the novelty item. But subsequently, it reduced drastically due to customer awareness of quality of the cattle feed. The marketing of the cattle feed consists of handing over the cattle feed to the member Primary Milk societies. The societies inturn, handover the bags to the farmers depending on their demand. It is alleged that the credit period for this is less and the amount for the cattle feed is deducted from the milk bill itself.

Taking into consideration the total business, the total sales show increasing trend during the period from 1981-82 to 1984-85. Thereafter, with the exception of 1987-88, the total sales or the turnover of the Sangh have been steadily decreasing. and the least in the year 1990-91.

The gross profit, on the other hand, shows different trend. The gross profits have increased steadily from 1981-82 to 1984-85 from Rs. 23.24 lacs to Rs. 42.27 lacs. The gross profits have increased in 1987-88 and 1988-89 followed by a substantial decline.

The net profit/loss shows all together different picture. The Sangh had net profit during 1981-82 to 1983-84 and in 1988-89. Whereas, it experienced net loss of varying magnitude during the other financial years. The maximum net loss was in the year 1986-87 to the tune of Rs. 12.97 lacs followed by Rs. 11.55 in the year 1990-91.

### 5.3 COMPOSITION OF BUSINESS

Before going into the details of the operational aspects of the Sangh, it is necessary to understand the composition of the Sangh's business. TABLE 5.2 shows the composition of the Sangh's business in terms of its three activities namely, milk collection and supply, ice factory and cattle feed. The composition was worked on the basis of the sales of these individual activities.

It is observed from the table that the milk sales assume the major proportion in the range of 92.2 percent to 99 percent. Taking this into consideration, the milk





**TABLE 5.2 COMPOSITION OF SANGH'S BUSINESS**

<b>YEAR</b>	<b>MILK</b>	<b>CATTLE FEED</b>	<b>ICE</b>
1981-82	98.00	1.00	1.00
1982-83	99.00	-	1.00
1983-84	98.00	1.00	1.00
1984-85	93.30	6.00	0.70
1985-86	94.20	5.00	0.80
1986-87	95.30	4.00	0.70
1987-88	95.10	4.00	0.90
1988-89	92.20	7.00	0.80
1989-90	92.80	7.00	0.20
1990-91	94.80	5.00	0.20

business of the Sangh was analysed in details in the following sections. The cattle feed business ranks the second while, the ice as the last. The composition of ice sales have been declining from 1 percent to 0.2 percent over the last ten years. On the other hand, the cattle feed business with few exceptions show increasing trend in the sales composition.

#### 5.4 PROCUREMENT AND DISTRIBUTION OF MILK

TABLE 5.3 gives a bird's eye view of the procurement and the distribution of the milk by the Sangh in last ten years. The milk procurement has been found to be increasing from 1981-82 to 1985-86. Whereas, thereafter there is continuous decline upto 1990-91. The milk collected in the year 1990-91 is the least in last ten years.

The increasing trend in the milk collection is due to the fact that the Sangh was operating during the period 1981-82 to 1984-85 in five talukas of Sangli district. Whereas, the sales are declining from 1985-86 due to the restriction of the Sangh's operation to only Miraj taluka. The progressive decline in the milk procurement from 1986-87 is mainly attributed to less rates given by the Sangh (the rates are fixed by the Maharashtra Government) and more competitive rates being given by the competitors and other clients. As a result, not only the farmer members but also the Primary Milk Societies prefer to sell total or part of their milk to private dairy or customers (as discussed in the next chapter).

The distribution of the milk is related to the milk procurement. It is not mandatory on the part of the Sangh to supply the entire milk to the Government Dairy at the

**TABLE 5.3**      **PROCUREMENT AND DISTRIBUTION OF MILK BY SANGH**

(Figures in litres)

<b>YEAR</b>	<b>PROCUREMENT</b>	<b>DISTRIBUTION</b>	<b>DISTRIBUTED TO PVT+DAIRY</b>	<b>DISTRIBUTED PRIVATE</b>	<b>PERCENT PVT SALE</b>
1981-82	1,58,04,335	1,57,60,735	1,57,60,735	-	-
1982-83	1,58,29,377	1,57,32,877	1,57,32,877	-	-
1983-84	1,65,93,330	1,64,84,800	1,61,16,465	3,68,335	0.02
1984-85	1,87,98,871	1,86,39,091	1,78,98,647	7,40,444	0.03
1985-86	1,85,48,277	1,83,37,376	1,77,66,849	5,70,527	0.03
1986-87	1,63,34,940	1,60,89,939	1,52,64,875	8,25,064	0.05
1987-88	1,62,02,968	1,59,76,736	1,35,38,054	24,38,682	0.15
1988-89	1,29,70,478	1,28,76,934	1,22,85,357	5,91,577	0.04
1989-90	1,12,58,906	1,11,59,132	1,09,92,764	1,66,308	0.01
1990-91	91,56,204	90,80,027	87,96,632	2,83,395	0.03

controlled rates fixed by the State Government. The Government has allowed the Sangh to sell not more than 15 from 1987-88. However, the Sangh as observed from the table has not attempted to sell milk privately except in the year 1987-88.

The Sangh started distributing milk in polyethylene bags in Miraj, Sangli, Madhavnagar, Jayasingpur and Ichalkaranji areas. From 1989-90, the Sangh has decided to stop selling milk in bags due to increased distribution<sup>cost</sup>. It should be noted here that due to persistent complaints of lower profitability from Milk Sanghs, the Maharashtra Government has permitted to sell as high as 25 percent of milk procurement in local market at higher price. Unfortunately, the Sangh is not taking the advantage of this sanction.

#### 5.5 MILK RECEIPTS AND PAYMENTS

TABLE 5.4 displays the total milk receipts and payments of the Sangh in terms of amount as well as per litre receipts and payments.

As observed in the previous table the Sangh sells milk to the Government dairy and in private local market. The total receipts from the dairy and private sale have been

increasing during the period 1981-82 to 1984-85. Subsequently, due to less collections, the receipts have also declined accordingly.

The per litre receipt from dairy has been found to be increasing from Rs. 2.95 in 1981-82 to Rs. 4.46 in 1990-91. This shows that the rate given by the Government dairy has been rising continuously due to inflation and increased cost of milk production. The receipts from the dairy and private sale have also been increasing from Rs. 2.95 in 1981-82 to Rs. 4.27 in 1989-90.

The trend in the private sale of milk however is irregular. As regards the per litre receipt from the private sale is concerned, the receipts are approximately 150 percent of the rates given by the Government dairy. This shows that the private selling of milk is highly profitable. In spite of knowing this fact, and the permission given by the Government to sell 25 percent of procured milk, the Sangh is not prudent to earn more profits. This clearly shows that the management of the Sangh is not professional.

As regards the payments made by the Sangh to the Primary Milk Societies, it is noticed that the payments are less than the receipts of the Sangh. Same is observed in

**TABLE 5.4 MILK RECEIPTS AND PAYMENTS OF SANGH**  
(Figures in Rs.)

YEAR	TOTAL RECEIPTS OF SANGH FROM PVT+DAIRY	DAIRY	PVT. SALE	PAYMENTS TO SOCIETIES
1981-82	4,65,00,169 (2.95)	4,65,00,169 (2.95)	-	433,89,065 (2.75)
1982-83	4,80,02,686 (3.05)	4,80,02,686 (3.05)	-	445,47,477 (2.81)
1983-84	5,61,90,673 (3.40)	5,44,10,245 (3.30)	17,80,428 (4.83)	5,41,90,742 (3.26)
1984-85	6,67,64,638 (3.58)	6,29,97,978 (3.51)	37,66,660 (5.08)	6,20,42,178 (3.30)
1985-86	6,36,12,540 (3.46)	6,07,33,031 (3.41)	28,79,509 (5.04)	5,89,22,244 (3.17)
1986-87	5,60,87,055 (3.48)	N. A. -	N. A. -	5,19,76,049 (3.18)
1987-88	6,00,63,564 (3.75)	N. A. -	N. A. -	5,49,89,606 (3.39)
1988-89	5,48,60,269 (4.26)	5,12,85,598 (4.17)	35,74,671 (6.04)	5,03,04,531 (3.87)
1989-90	4,77,40,199 (4.27)	4,65,92,685 (4.23)	11,47,514 (6.89)	4,37,20,448 (3.88)
1990-91	3,75,41,047 <sup>\$</sup> (4.13)	3,92,97,739 (4.46)	N. A. -	3,66,77,002 (4.00)

Figures in parentheses indicate receipt or payment per lt.

\$ Total receipts from pvt + dairy are less (from Annual Report) than actual receipts from the dairy.

the payments per litre and the receipt per litre. It is further noticed that the difference between the per litre payment and receipt is Rs. 0.20 during the period 1981-82 to 1984-85. During the next three years, that is 1985-86 to 1987-88 the difference is Rs. 0.30. Whereas, from 1988-89 the difference or the margin has increased to Rs. 0.40. It was therefore, intended to examine whether this margin is profitable to the Sangh or not. This is done by analysing in depth the Annual Reports of the Sangh in the following sections.

#### **5.6 COST ANALYSIS OF MILK BUSINESS**

The costs are basically divided into Fixed Costs and Variable Costs. The fixed costs are further divided into four major types namely, labour, management expenses, other expenses and depreciation. Whereas, the variable costs are divided into five major categories namely, raw material, transportation, pasteurization, production overheads, and establishment expenses.

It was difficult to segregate fixed costs of milk business due to varieties of cost items which are related to all the three activities namely, milk, cattle feed and ice production. Since, the milk business assumes 93 to 99

**TABLE 5.5 TYPES OF FIXED AND VARIABLE COSTS**

**FIXED COSTS**

**1) LABOUR COST**

- Salary
- Provident Fund
- Bonus, gratuity

**2) MANAGEMENT EXPENSES**

- Director fees
- Travelling expenses
- Taxes
- Other fees

**3) OTHER EXPENSES**

- Interest paid
- Advertisement, Promotion expenses
- Insurance
- Bank commission
- Miscellaneous expenses

**4) DEPRECIATION**

- Depreciation on plant and machinery
- Cans repair expenses
- Vehicles expenses
- Condenser repair expenses



VARIABLE COSTS

1] RAW MATERIAL COST

- Milk cost

2] TRANSPORTATION CHARGES

- Transport expenses

- Transport fare paid

3] PASTEURISATION CHARGES

- Chilling expenses

- Salt expenses

- Ammonia gas

- Temperature control expenses

4] MANUFACTURING EXPENSES

- Factory overheads

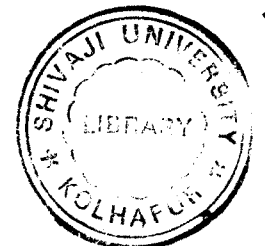
**TABLE 5.6 COST AND SALE PRICE PER LITRE OF MILK**

YEAR	FIXED COST	VARIABLE COST	TOTAL COST	TOTAL SALES	MILK SOLD (LAC LTS)	F.C./LT	V.C./LT	T.C./LT	S.P./LT	COMMISSION PER LT
1981-82	24.25	447.05	471.30	465	157	0.15	2.82	2.97	2.96	0.22
1982-83	27.87	457.26	485.13	480	157	0.17	2.89	3.06	3.05	0.22
1983-84	31.08	566.71	597.79	544	164	0.18	3.43	3.61	3.31	0.22
1984-85	42.63	639.18	681.81	667	186	0.22	3.41	3.63	3.58	0.22
1985-86	46.04	610.43	656.47	636	183	0.24	3.29	3.53	3.47	0.22
1986-87	41.84	538.21	580.13	560	160	0.25	3.30	3.55	3.50	0.22
1987-88	42.32	568.56	610.88	600	159	0.26	3.50	3.76	3.77	0.22
1988-89	38.22	513.55	551.77	548	128	0.29	3.98	4.27	4.28	0.28
1989-90	27.71	458.33	486.04	477	111	0.24	4.09	4.33	4.29	0.28
1990-91	28.61	390.96	419.57	375	90	0.31	4.29	4.60	4.16	0.42

**NOTE** 1) Figures of fixed cost, variable cost and total cost in Rs. in Lacs and respective per litre

figures are in Rs.)

2) Total sales exclude spoilage but inclusive of commission, From 1.5.92 the commission/lt is 0.55 Ps)



percent of the Sangh's business, the total costs are categorised into four types and are apportioned to milk business based on the sales proportion. The various types of fixed costs and variable costs classified for the present analysis are shown in TABLE 5.5.

TABLE 5.6 displays the distribution of fixed costs and variable costs, total cost, total sales and respective cost and sale per litre for the last ten years.

It is noticed that the total fixed costs have been steadily increasing from Rs. 24.25 lacs from 1981-82 to Rs. 46.04 lacs in 1985-86. The fixed costs subsequently decrease except in the year 1987-88.

The variable costs of the milk business too increase from Rs. 447.05 lacs in 1981-82 to Rs. 639.18 lacs in 1985-86. Subsequently, the variable costs have declined from Rs. 538.21 lacs in 1986-87 to Rs. 390.96 lacs in 1990-91 except in the year 1987-88.

The total costs incurred in the milk business have been steadily increasing from Rs. 471.30 lacs in 1981-82 to Rs. 681.81 lacs in 1984-85 and subsequently show declining trend from Rs. 656.47 lacs in 1985-86 to Rs. 419.57 lacs in 1990-91 except in the year 1987-88.

The total sales of milk supplied to the dairy and private sale have increased from Rs. 465 lacs in 1981-82 to Rs. 667 lacs in 1984-85. Thereafter, the sales have declined from Rs. 636 lacs in 1985-86 to Rs. 375 lacs in 1990-91, except in the year 1987-88.

It is noticed from the table that though the fixed costs, variable costs and total costs show increase during the period 1981-82 to 1983-84 followed by a decline, the respective cost per litre show steady increasing trend.

The fixed cost per litre of milk sold varies from Rs. 0.15 in 1981-82 to Rs. 0.30 in 1990-91. The fixed cost per litre during the last decade has almost doubled. This is not only attributed to decreased milk collection and supply but also due to the inflation.

The variable cost per litre of milk processed and supplied varies from Rs. 2.82 in 1981-82 to Rs. 4.29 in 1990-91. The variable cost includes the raw material that is milk cost. The variable costs have increased approximately by 50 percent during the last ten years. This also is due to increased level of inflation and cost of milk procurement. It should be noted here that the cost of milk in addition to these factors depends on the fat and SNF content of the milk.

The total cost per litre is computed as Rs. 2.97 in 1981-82, which has increased to Rs. 4.60 in 1990-91. Interestingly, it is noticed that the total cost per litre computed for all the years is marginally more than the sale price of the milk. The difference ranges between Rs. 0.01 to Rs. 0.44 in 1990-91. Thus, it is clear from the table that the Sangh sells milk at marginal loss. This is due to the fact that though the operational cost is more than the sales price, the Sangh is constrained not to raise the price of milk. This is because the selling price is fixed and determined by the Maharashtra Government.

For the procurement and supply of milk the Sangh gets commission from the Government Dairy. The commission per litre, as observed from the table, was Rs. 0.22 during the period 1981-82 to 1987-88. It has increased to Rs. 0.28 in 1988-89 and 1989-90. Subsequently, the commission was raised to Rs. 0.42 in 1990-91. The Maharashtra Government due to hue and cry of the Milk Sanghs, has increased the commission to Rs. 0.55 from 1.5.92. Thus, low commission coupled with increased cost of operations due to decreased milk collection has resulted into operational loss to the Krishna Khore Dudha Utpadak and Purvatha Sangh during the last ten years period. As discussed earlier, though the Sangh has made gross profit, it has reported net loss for seven years during the last ten years.

## 5.7 COMPOSITION OF FIXED COST PER LITRE

It was intended to study the composition of the fixed costs and the variable costs of the milk operations for the Sangh to understand which component has been increasing during the last decade. TABLE 5.7 displays the breakup of fixed and variable cost over last ten years period.

It is noticed from the table that the labour cost and other expenses assume almost equal and major proportion. Most significantly, the labour cost has almost quadrupled during ten years, from Rs. 0.051 per litre in 1981-82 to Rs. 0.20 in 1990-91. It needs to be mentioned that the Sangh has a total work force of 100 workers. Furthermore, the Sangh has been progressively decreasing the employment during this period. The main reason for increased per litre labour cost is the decreased milk collection besides the increased standard of living and inflation.

The other expenses on the other hand, have also been increasing from Rs. 0.047 per litre in 1981-82 to Rs. 0.108 in 1988-89. Subsequently, these have decreased substantially to Rs. 0.035 in 1989-90, followed by again upward increase to Rs. 0.053 in 1990-91. The other expenses include fuel expenses, interest paid, water charges, insurance, transportation charges, etc. The main reason for decreased other expenses in last two years is that the Sangh has purchased two trucks for milk collection in 1986-87, which were sold in 1989-90. This has resulted in

**TABLE 5.7** **FIXED COST AND VARIABLE COST PER LITRE OF MILK BUSINESS**

<b>TYPE OF COST</b>	<b>1981-82</b>	<b>1982-83</b>	<b>1983-84</b>	<b>1984-85</b>	<b>1985-86</b>	<b>1986-87</b>	<b>1987-88</b>	<b>1988-89</b>	<b>1989-90</b>	<b>1990-91</b>
<b><u>FIXED COST</u></b>										
1. Labour	0.051	0.057	0.060	0.072	0.078	0.102	0.109	0.133	0.170	0.200
2. Mgt. Expenses	0.007	0.007	0.008	0.007	0.008	0.008	0.008	0.009	0.010	0.010
3. Other Expenses	0.047	0.053	0.060	0.071	0.086	0.080	0.103	0.108	0.035	0.053
4. Depreciation	0.045	0.053	0.052	0.070	0.078	0.060	0.040	0.040	0.025	0.047
<b>FIXED COST / LITRE</b>	<b>0.15</b>	<b>0.17</b>	<b>0.18</b>	<b>0.22</b>	<b>0.25</b>	<b>0.25</b>	<b>0.26</b>	<b>0.29</b>	<b>0.24</b>	<b>0.31</b>
<b><u>VARIABLE COST</u></b>										
1. Raw Material	2.740	2.82	3.28	3.30	3.18	3.18	3.39	3.88	3.88	4.00
2. Transportation	0.013	0.013	0.012	0.016	0.012	0.011	0.014	0.015	0.12	0.14
3. Pasteurization	0.033	0.033	0.035	0.049	0.049	0.060	0.054	0.040	0.043	0.029
4. Overheads	0.023	0.024	0.027	0.035	0.049	0.049	0.042	0.045	0.047	0.031
5. Establishment charges	-	-	0.076	-	-	-	-	-	-	0.090
<b>VARIABLE COST / LITRE</b>	<b>2.82</b>	<b>2.89</b>	<b>3.43</b>	<b>3.41</b>	<b>3.29</b>	<b>3.30</b>	<b>3.50</b>	<b>3.98</b>	<b>4.09</b>	<b>4.29</b>
<b>TOTAL COST PER LITRE</b>	<b>2.97</b>	<b>3.06</b>	<b>3.61</b>	<b>3.63</b>	<b>3.53</b>	<b>3.55</b>	<b>3.76</b>	<b>4.27</b>	<b>4.33</b>	<b>4.66</b>

significant decrease in insurance, petrol charges and transportation charges.

The depreciation has hovered between Rs. 0.025 per litre in 1989-90 to 1990-91. The Sangh adopts reducing balance method for calculation of depreciation on plant, machinery and other movable assets. The Sangh has purchased any plant and machinery during last ten years except the purchase of two trucks in 1986-87. There is no significant trend observed in the depreciation charge per litre of milk handled. The changes whatever are evident are mainly due to changes in milk collection during the period.

The management expenses of the Sangh include Director fees, travelling, audit and advocate fees, and different types of taxes. The management expenses have little contribution in the per litre fixed cost composition. However, it is noticed that these expenses are showing increasing trend though marginally from Rs. 0.007 in 1981-82 to Rs. 0.01 in 1990-91.

#### **5.8 COMPOSITION OF VARIABLE COST PER LITRE**

The composition of variable cost per litre in terms of raw material, transportation, pasteurization, overheads and establishment charges is shown in TABLE 5.7.



The raw material that is cost of milk assumes the majority of share of variable cost. The raw material cost is 90 percent of the total variable cost per litre of milk. The cost of milk has been steadily increasing from Rs. 2.74 in 1981-82 to Rs. 4.00 in 1990-91, except during 1985-86 and 1986-87. It should be noted here that the cost of milk largely depends on its fat and SNF content besides inflation. The rate of milk is low for cow milk than the buffalo milk.

It is worth mentioning here that in view of implementation of OPERATION FLOOD III programme in Maharashtra State, the Government from 1.5.92 has increased the purchase price of milk from the farmer. Accordingly, during the flash season, the cow milk is purchased at the rate of Rs. 5.70 instead of Rs. 4.50 and in the lean season, it is purchased at the rate of Rs. 6.70 instead of Rs. 5.50. The buffalo milk on the contrary is purchased at the rate of Rs. 6.80 instead of Rs. 5.16 in flash season and Rs. 8 instead of Rs. 6.27 in lean season.

With the upward revision of milk procurement price, the sale price of the milk has also been revised. The Government milk is sold at the rate of Rs. 8 instead of Rs. 6.50 for cow milk and Rs. 11 instead of Rs. 9 for buffalo milk.



With the upward revision of procurement and sale rates, it is expected that the Milk Sangh would certainly make its business profitable. As mentioned previously, the collection commission for the Primary Milk Society is raised from Rs.0.10 to Rs.0.20. Whereas, the commission of taluka and district Sangh is raised from Rs. 0.42 to Rs. 0.55. The Chairman of the Krishna Khore Dudha Utpadak and Purvatha Sangh, in his interview has highly appreciated the Government decision and is hopeful of earning sizeable net profits during 1992-93.

Since milk is perishable item, it is pasteurised at the Sangh's unit. The pasteurization charges have been increasing from Rs. 0.033 in 1981-82 to Rs. 0.06 during 1981-82 to 1986-87. These subsequently have reduced in next four years, mainly due to decreased milk collection.

The transportation charges on the other hand are not significantly increasing in last ten years with the milk collection. Though this is evident, it is not true when one considers the reduction in milk collection during the said period. Formerly, the Sangh had its own vehicles for collection of milk from villages. These were sold in 1989-90 and private transport vans were engaged to collect the milk. This it appears from the figures has no bearing on per litre transportation cost.

The overheads rank third in the variable cost per litre. The overheads include electricity, chilling charges, salt, ammonia gas, etc. The overheads per litre are increasing from Rs. 0.023 in 1981-82 to Rs. 0.049 in 1986-87. However, subsequently these are observed to be decreasing upto Rs. 0.031 per litre in 1990-91.

The establishment charges are charged only in two years Annual Reports namely, 1983-84 and 1990-91. The establishment charges per litre are significant to the extent of Rs. 0.076 in 1983-84 and Rs. 0.09 in 1990-91. The breakup of these are not reported.

Thus, the major cost items to be worth considering are labour, other expenses, depreciation, in fixed costs; and raw material, pasteurization and production overheads. In order to manage operations effectively, the Sangh has to lower down these cost and collect more milk to breakeven.

#### **5.9 OPERATIONAL PROFIT AND LOSS**

Having analysed the business profile in terms of sales, profit/loss, fixed costs, and variable costs, it was felt necessary to estimate and analyse the operational profit/loss of the Sangh. This was done with the view to

examine the unitwise performance namely, milk unit, cattle feed unit, and ice factory. The operational profit and loss of Sangh in these three units have been represented in TABLE 5.8. The unitwise total cost is computed based on composition of sales of these three products independently.

It is observed from the table that the milk unit shows operational profit during 1981-82, 1983-84 and 1988-89. Whereas, the operational loss was maximum to the extent of Rs. 12.92 lacs in 1986-87 and Rs. 11.45 lacs in 1985-86. It is worth noting here that though the milk sales were maximum during 1984-85 and 1985-86, the unit showed operational loss. This is due to the fact, as mentioned before, that per litre total cost is more than per litre price paid for the milk by the Government Dairy. This shows that the Sangh spends more than the commission it gets on milk sale. It is expected that with recent upwards revision by the Government of Maharashtra in the price paid to the Sangh, there will be both operational profit as well as net profit. It is worth noting here that the Sangh has also made net profit in 1981-82, 1982-83, 1983-84 and 1988-89.

As regards the performance of the cattle feed unit, there is operational profit in the years 1985-86, 1988-89, and 1990-91. Whereas there is operational loss for six

**TABLE 5.8 OPERATIONAL PROFIT AND LOSS OF SANGH**

(Figures in Lac Rs.)

YEAR	M I L K U N I T		C A T T L E F E E D U N I T		I C E U N I T		T O T A L		
	TOTAL COST	TOTAL SALES	TOTAL COST	TOTAL SALES	TOTAL COST	TOTAL SALES	PROFIT / LOSS	PROFIT / LOSS	
1981-82	471.30	471.59	2.03	0.50	5.42	5.06	- 1.53	- 0.36	- 1.6
1982-83	485.13	484.95	-	-	5.76	5.25	-	- 0.51	- 0.69
1983-84	597.79	598.72	8.70	5.26	6.29	4.94	- 3.44	- 1.35	- 3.86
1984-85	681.81	675.99	48.88	47.28	6.18	5.48	- 1.60	- 0.70	- 8.12
1985-86	656.47	645.02	30.31	34.22	5.94	5.48	+ 3.91	- 0.46	- 8.00
1986-87	580.13	567.21	29.43	29.33	5.79	4.29	- 0.10	- 1.50	- 14.52
1987-88	610.88	610.22	26.10	25.00	7.73	5.78	- 1.10	- 1.95	- 3.71
1988-89	551.77	552.19	37.79	41.54	5.14	4.83	+ 3.75	- 0.31	+ 3.86
1989-90	486.04	480.60	39.28	38.44	2.75	4.06	- 0.84	+ 1.31	- 4.97
1990-91	419.57	411.51	19.60	23.51	1.77	1.06	+ 3.91	- 0.71	- 4.83

years in the last decade. If one compares the three unit's operational profit and loss, it appears that the cattle feed unit has contributed to more operational profit.

As regards the operational profit and loss of the ice unit, there is Rs.1.31 lacs profit in the year 1989-90. Whereas, there is loss for the rest of the nine years. It is worth mentioning that the ice unit has an installed capacity of 37 tonnes. Of which 27 tonnes is used for ice manufacture, and 10 tonnes for pasteurization. The Sangh also has 5 tonnes additional capacity for cold storage. In spite of having this facility, the Sangh is utilizing it in an optimal manner. The capacity remains always unutilised. This is reported due to power shortage, no local market for ice in Miraj as well as less consumption in its own milk pasteurization unit. As a result of this the total cost is more than the sales.

The total operational profit and loss for the last ten years shows losses for the entire period. The maximum being Rs.14.52 lacs in 1986-87 and the minimum being Rs.0.69 lacs in 1982-83. When one compares the total operational profit and loss with the net profit and loss of the Sangh, there is no corroboration between the two.

**5.10 ASSETS AND LIABILITIES OF SANGH**

Having analysed the business operations for the last ten years, it was aimed to study the financial position of the Sangh. Since the operations of the Sangh have been restricted to only Miraj taluka instead of five talukas of Sangli district from 1986-87, the financial analysis was also restricted for last five years period. The assets and the liabilities of the Sangh have been shown in TABLE 5.9.

**5.10.1 Analysis of Assets** :- It is noticed from the table that the cash and the bank balance have been steadily decreasing in last five years, except during 1987-88 by three times.

The Sangh makes investments in the form of Government securities. The investments have also been observed to be declining during the same period except in the last two years.

The fixed assets on the other hand, were hovering around Rs. 84 to Rs. 87 lacs during 1986-87 to 1988-89. Subsequently, there was steep decline of Rs. 12 lacs in 1989-90. This is attributed to the sale of two trucks by the Sangh, since the Sangh felt that to operate own trucks was not beneficial.

**TABLE 5.9 ASSETS AND LIABILITIES OF SANGH**

<b>PARTICULARS</b>	<b>1986-87</b>	<b>1987-88</b>	<b>1988-89</b>	<b>1989-90</b>	<b>1990-91</b>
<b><u>ASSETS</u></b>					
Cash & Bank Balance	3,71,907	8,46,927	2,13,840	2,11,771	1,07,971
Investments	1,06,925	1,06,925	83,725	94,725	1,00,725
Fixed Assets	84,82,446	84,62,656	87,59,596	75,82,860	74,34,377
Advances	2,10,466	1,93,317	2,67,492	2,48,107	2,58,807
Loans	1,64,784	1,76,920	1,63,920	1,63,043	1,63,043
Bills Receivables	29,83,893	29,52,241	16,84,308	14,03,120	15,16,651
Closing Stock	8,34,271	9,19,068	4,99,556	6,91,296	3,55,599
<b><u>LIABILITIES</u></b>					
Share Capital	2,83,300	5,38,600	6,97,900	6,72,700	6,68,600
Reserves & Surplus	67,36,612	65,76,813	68,99,553	62,78,943	66,53,772
Deposits	15,59,159	15,71,388	15,35,162	14,31,008	14,13,243
Loans	24,19,729	22,04,729	9,12,729	12,17,103	14,35,844
Other Current Liabilities	47,71,452	55,74,339	43,81,174	37,83,398	38,99,077



The Sangh gives advances to its employees in one or the other form. The table reveals that there is no significant change in these advances. The advances are fluctuating between Rs.1.93 lacs to Rs.2.58 lacs.

The loans given by the Sangh also do not show any significant change. The amount varies from Rs.1.63 lacs to Rs.1.76 lacs during the last five years of its operation.

Bills receivable on the other hand happen to be the major constituent of assets. These are showing a steady decline from Rs.29.83 lacs in 1986-87 to Rs.14.03 lacs in 1989-90. These have marginally increased to Rs.15.16 lacs during 1990-91.

Closing stock has also been showing a declining trend except in the years 1987-88 and 1989-90. The closing stock of the Sangh in the last five years is observed to be in the range of Rs.3.55 lacs to Rs. 9.19 lacs.

**5.10.2 Analysis of Liabilities** :- The share capital of the Sangh is found to be ever increasing from its inception. During the past five years it has almost trebled from Rs. 2.83 lacs in 1986-87 to Rs.6.68 lacs in 1990-91. However, during the last two years there is a declining trend.

It is noticed that the Sangh is conscious about its reserves and surplus. The reserves and the surplus of the Sangh are sizeable and change marginally from Rs. 67.36 lacs to Rs. 66.53 lacs in 1990-91.

The deposits of the Sangh are also showing a decreasing trend, though marginally from Rs. 15.59 lacs in 1986-87 to Rs. 14.13 lacs in 1990-91.

The amount of loans taken from the other parties have shown a drastic decrease from Rs. 24.19 lacs in 1986-87 to Rs. 9.12 lacs in 1988-89. Due to impaired profitability of the Sangh in the next three years, it appears that the loans have increased from Rs. 9.12 lacs to Rs. 14.35 lacs in 1990-91.

The other current liabilities of the Sangh are sizeable and fluctuate in a wide range from Rs. 55.74 lacs to Rs. 37.83 lacs. These liabilities have increased from Rs. 47.71 lacs to Rs. 55.74 lacs in the first two years and subsequently decreased to Rs. 38.99 lacs.

#### **5.11 WORKING CAPITAL OF THE SANGH**

The working capital of the Sangh is shown in Table 5.10 along with current assets and liabilities .

**TABLE 5.10 CURRENT ASSETS, LIABILITIES & WORKING CAPITAL**

<b>YEAR</b>	<b>CURRENT ASSETS</b>	<b>CURRENT LIABILITIES</b>	<b>WORKING CAPITAL</b>	
1985-86	49,83,555	47,37,398	2,46,157	(+)
1986-87	42,60,656	46,12,103	3,51,538	(-)
1987-88	45,65,319	64,83,496	19,18,177	(-)
1988-89	28,29,114	49,68,153	21,39,039	(-)
1989-90	27,27,337	44,91,332	17,63,995	(-)
1990-91	24,02,078	48,07,011	24,04,933	(-)

It is noticed from the Table that the current assets of the Sangh have been almost halved from Rs. 49.83 lacs in 1985-86 to Rs. 24.02 lacs in 1990-91. The current liabilities on the other hand, did not change significantly except in the year 1987-88. The extent of current liabilities have been hovering around Rs. 45 lacs. It is noticed from the Table that the working capital of the Sangh during the period 1986-87 to 1990-91 is showing excess of current liabilities over current assets. This is a very undesirable trend..

## 5.12 BASIC ACCOUNTING RATIO ANALYSIS

The fixed assets ratio in the Table 5.11 shows an increasing trend from 0.138 in 1986-87 to 0.16 in 1990-91. This shows that the fixed assets are acquired by using short term funds like bank overdraft, or amounts due to suppliers (Primary Milk Societies).

The current ratio from the Table is observed to be showing a declining trend from 0.73 : 1 in 1986-87 to 0.42 : 1 in 1990-91. This shows that current assets are half the current liabilities which is a very undesirable balance for an organisation. The reasons for this may be as follows.

1. The Sangh did not have a better coverage of its current liabilities by maintaining insufficient current assets.
2. The position of the working capital during the last five years was unsatisfactory.
3. This did not provide adequate margin of safety and failed to give protection to the creditors of the Sangh.
4. The liquid ratio from the Table is observed to be marginally changing in 1986-87 to 1987-88. Thereafter, it has reduced significantly and remained constant for the

**TABLE 5.11 BASIC ACCOUNTING RATIOS OF THE SANGH**

TYPE OF RATIO	1986-87	1987-88	1988-89	1989-90	1990-91
[1] Fixed Assets Ratio	0.138	0.182	0.117	0.156	0.160
[2] Current Ratio	0.73 : 1	0.57 : 1	0.47 : 1	0.45 : 1	0.42 : 1
[3] Liquid Ratio	0.73 : 1	0.75 : 1	0.49 : 1	0.49 : 1	0.48 : 1
[4] Fixed Assets to Current Assets Ratio	2.35	2.27	3.76	3.72	3.63
[5] Proprietary Ratio	0.46 : 1	0.43 : 1	0.65 : 1	0.64 : 1	0.62 : 1
[6] Debt-Equity Ratio	0.22	0.42	0.12	0.18	0.23
[7] Reserve to Capital Ratio	4.3	4.2	10.1	10.7	10.0

next three years. The liquid or the quick ratio indicates the immediate liquidity of current assets for the purpose of analysis. The ideal ratio should be 1 : 1. The decline in the current ratio and liquidity ratio indicated *OVERTRADING*, which is serious and may land the organisation in difficulties. A very big increase in the current liabilities without corresponding increase in the current assets and liquid resources is like "coagulation of blood". The ratio implies progressive decline in inventory and the extent of risk taken by the management.

Fixed assets to current assets ratio on the other hand, is showing an increasing trend during the last five years. The ratio differs from industry to industry and even from company to company. However, an increase in the ratio may mean (a) slack trading, and (b) increased mechanisation.

Proprietary ratio, the ratio of funds belonging to the share holders to the total assets of the company is observed to be increasing from 0.46 : 1 in 1986-87 to 0.62 : 1 in 1990-91. This is a test of long term financial position and capitalisation. This shows insufficient use of external equities to finance the business.

It is noticed from the Table that the debt equity ratio has been showing a fluctuating trend during the last five years. It varies from 0.12 in 1988-89 to 0.42 in 1987-88. The creditors of the Sangh have been suffering significantly.

The ratio of reserve to capital has more than doubled from 1987-88 to 1988-89. Thereafter, there is slight variation. The higher the ratio better it is for the organisation to absorb future losses. The Sangh has been running in a loss as has been analysed in the preceding chapters. The reserves act as a guard against the losses of the organisation and helped the organisation to run smoothly without interruptions during its bad times.

### 5.13 ANALYSIS OF FINANCIAL POLICIES

An indepth analysis of the business operations of the Sangh and the annual reports leads to the following conclusions about the financial policies of the Sangh.

(1) RAISING OF FUNDS :- The operations of the Sangh can<sup>be</sup><sub>Λ</sub> termed as trading, i.e. procurement of milk and supplying to the clientele, with marginal processing. The sangh therefore raises funds through the share capital from

Primary Milk Societies. The Sangh has been successful in mobilising the share capital manyfolds from its inception, though the membership is voluntary. The operational funds required for working capital management are procured from co-operative banks from cash credit and overdraft facilities.

(2) USES OF FUNDS :- It is observed that the Sangh follows an imprudent policy of using short term funds like bank overdraft or amounts due to suppliers for acquiring fixed assets. The Sangh has purchased two trucks for the transport of milk and surprisingly sold them just after two years. This shows that the Sangh works with a short term vision rather than a long term view.

(3) WORKING CAPITAL MANAGEMENT :- The financial analysis reveals a non-professional policy regarding working capital management. The current liabilities are two fold the current assets in the last five years, resulting in negative working capital.

(4) CREDIT AND COLLECTION POLICY :- Due to paucity of funds the Sangh does not give any credit to its customers for the purchase of cattle feed. The credit in the form of loans given to the farmers for the purchase of



milch animals through NDDB has been stopped long ago. No efforts have been made thereafter. This has resulted in less growth in number of purchase of milch animals and in turn significant decrease in milk collection. Subsequently this impaired the profitability of the Sangh. The Sangh gets money from the Government Dairy. The collection of receipts are fortnightly, at times delayed and disrupt the operations of the Sangh.

(5) PRICING POLICY :- The Sangh has no say in the pricing policy of the milk since the prices are fixed by the Government of Maharashtra. These prices are far below the market price of milk and compels the Sangh to operate at a loss. The Sangh gets a commission for collection and supply of milk, which remained the same despite inflation. However, from 1992 onwards the commission is hiked by a reasonable margin. It is hoped that the Sangh will make a net profit in the years to come.

(6) DIVIDEND POLICY :- The Sangh in its thirty years of existence has not given any dividends to its member societies. However, consciously it is increasing its reserves and surplus funds.

(7) COSTING POLICY :- Due to the price fixed by the Government, the Sangh has no options left to decide

costing policy. There is plenty scope for allocating and apportioning overheads. This has to be done by increasing the milk collection which subsequently will reduce the cost per litre of milk.

(8) DISTRIBUTION POLICY :- The Sangh is at a liberty to sell 25 percent of the milk procured in private market at a higher rate. Despite this the Sangh sells hardly any milk in private market. This appears illogical because this is the only opportunity to make the business a profitable one. Thus the market segmentation policy is not at all adopted by the Sangh.

(9) PRODUCTION POLICIES :- The Sangh has three operations namely, milk procurement and supply, cattle feed manufacture and ice factory. All the operations have been progressively contracting over the last decade. As regards the cattle feed, though the price per bag is Rs. 10 less, there is no demand due to poor nutrition value as compared to its competitors. On the other hand, the operations of the ice factory have always been under utilised due to one or the other reason.

(10) LONG TERM POLICY :- It appears from the foregoing analysis that the Sangh lacks long term vision

and concentrates on short term gains. This is evident from the expansion of its business from milk procurement and supply to cattle feed and ice manufacture, which have been running in losses. In addition to this the Sangh's bread factory is in the offing. It is necessary to carry out SWOT analysis and projection of market demand before venturing into new business.

(11) DEPRECIATION POLICY :- The Sangh is adopting declining balance method for charging depreciation on plant, machinery and fixtures. It was not possible to understand and analyse the uses of depreciation funds maintained by the Sangh.

(12) INVENTORY POLICY :- Since the Sangh is in the trading activity of milk, which is a perishable item, the question of an inventory policy does not arise. However, its cattle feed business is concerned the Sangh maintains a constant inventory over the period. There is no need to maintain an inventory for ice.

(13) INVESTMENT POLICY :- Though the Sangh is making losses for the last decade, the investment in the form of Government securities have remained static. This is mainly because the Sangh does not possess surplus money.

(14) MISCELLANEOUS POLICIES :- It is worth noting that inspite of continuous losses during the last decade, the Sangh has been actively engaged in various activities like conducting Shibirs / Melas of farmers, prize distribution for maximum milk production and milk collection, supply of high yielding fodder seeds, veterinary facilities and medicines for cattle at marginal cost, supply of testing material free of cost to the societies, etc.