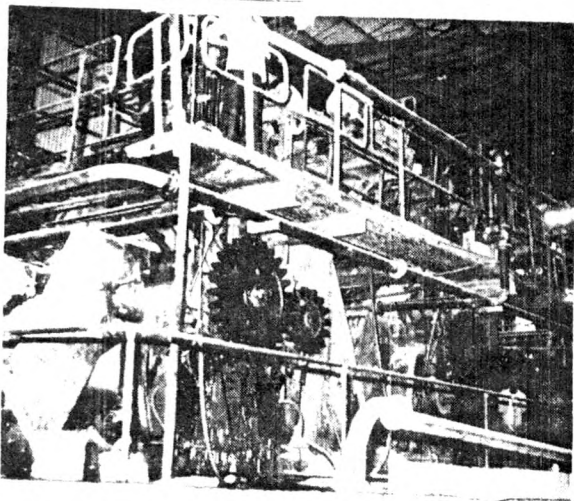
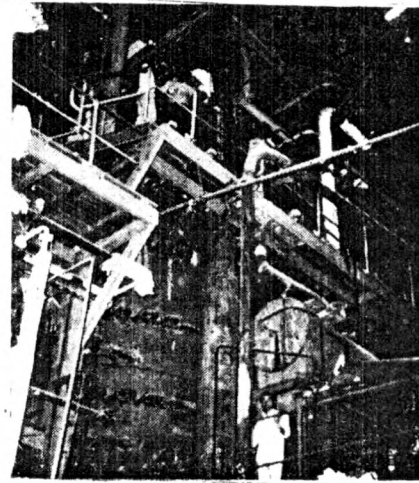


CHAPTER

IV



MILL NO. 5 & 6 of
EXPANSION



VERTICAL CRYSTALIZER

CHAPTER IV

MANAGEMENT OF EXPANSION AND

POST - EXPANSION OPERATIONS

Management of expansion by a Sugar Factory means carrying out the expansion plans in time by utilising the minimum scarce resources. Management of post - expansion operations requires an efficient and effective adjustments for the changes that take place on account of expansion carried out.

In case of both the expansion projects of Gadhinglaj Karkhana, it is observed that the Karkhana has managed both the expansion and the post - expansion operations well. Facts and figures with necessary analysis presented below would support the above statement. This presentation is done, for the sake of simplicity and understanding, in three parts, Part I is about the expansion of crushing capacity, Part II about the distillery and Part III deals with the points applicable to both the expansions.

PART I : EXPANSION OF CRUSHING CAPACITY :

Gadhinglaj Karkhana had submitted the expansion proposal for raising crushing capacity to 2500 MTD on

20/04/1983. The Government gave its approval for expansion upto 2000 MTD on 22/09/1984. The Karkhana authorities must be after the Government and they got the Government approval in less than one and half years.

While giving this approval, the Government had put a condition that the Karkhana should place order for machinery before September, 1985 and start executing the expansion plan. Gadhinglaj Karkhana completed this procedure well in time and with the approval of the State Level Purchase Committee placed the order for machinery with the three suppliers mentioned earlier on 19/08/1985.

RAISING CAPITAL :

The expansion of the plant capacity required a capital expenditure of Rs. 350/- lakhs. The Government allowed 50% of this amount to be raised in the form of loan and 50% was to be the contribution of Gadhinglaj Karkhana from out of its resources. These funds were raised through following sources :

(i)	M. T. Loan from Maharashtra State Co-op. Bank	Rs. 175	Lakhs
(ii)	Owned funds :		
	1) Raised by increasing Share price from Rs.1000 to Rs.2000 per share		
	2) From members in the form of deposits	Rs. 175	Lakhs
	Total funds raised	Rs. 350	Lakhs
		=====	

The Karkhana raised funds from members even in 1986-1987.

The loan was sanctioned on 4/4/1986. The fact to be noted here is that Gadhinglaj Karkhana could raise the required funds in time.

PROJECT IMPLEMENTATION :

As seen in the previous chapter the Karkhana could complete the project in the estimated time period. Gadhinglaj Karkhana could take trial season with the expanded crushing capacity on 14/03/1987. In 1987-1988 season and onwards, the Karkhana has operated at the expanded crushing capacity of 2000 MTD.

POST - EXPANSION OPERATIONS :

Sugarcane crushed in the last year of the expansion and the subsequent years is presented in a Table below.

Table 4.1 :STATEMENT SHOWING SUGARCANE CRUSHED

Year	Sugarcane Crushed in Lakh M. T.	Recovery Percentage
1986-87 (Expansion Year)	2.60	10.62 %
1987-88	3.80	11.43 %
1988-89	2.78	11.54 %
1989-90	3.72	11.88 %
1990-91	4.03	11.89 %
1991-92	4.11	12.75 %

Source : Compiled from The Annual Reports.

Sugarcane purchased from members and non-members in the area of jurisdiction of the Karkhana, before and after expansion, is given in the following Table.



SHOWING SUGARCANE CRUSHED & RECOVERY.

X

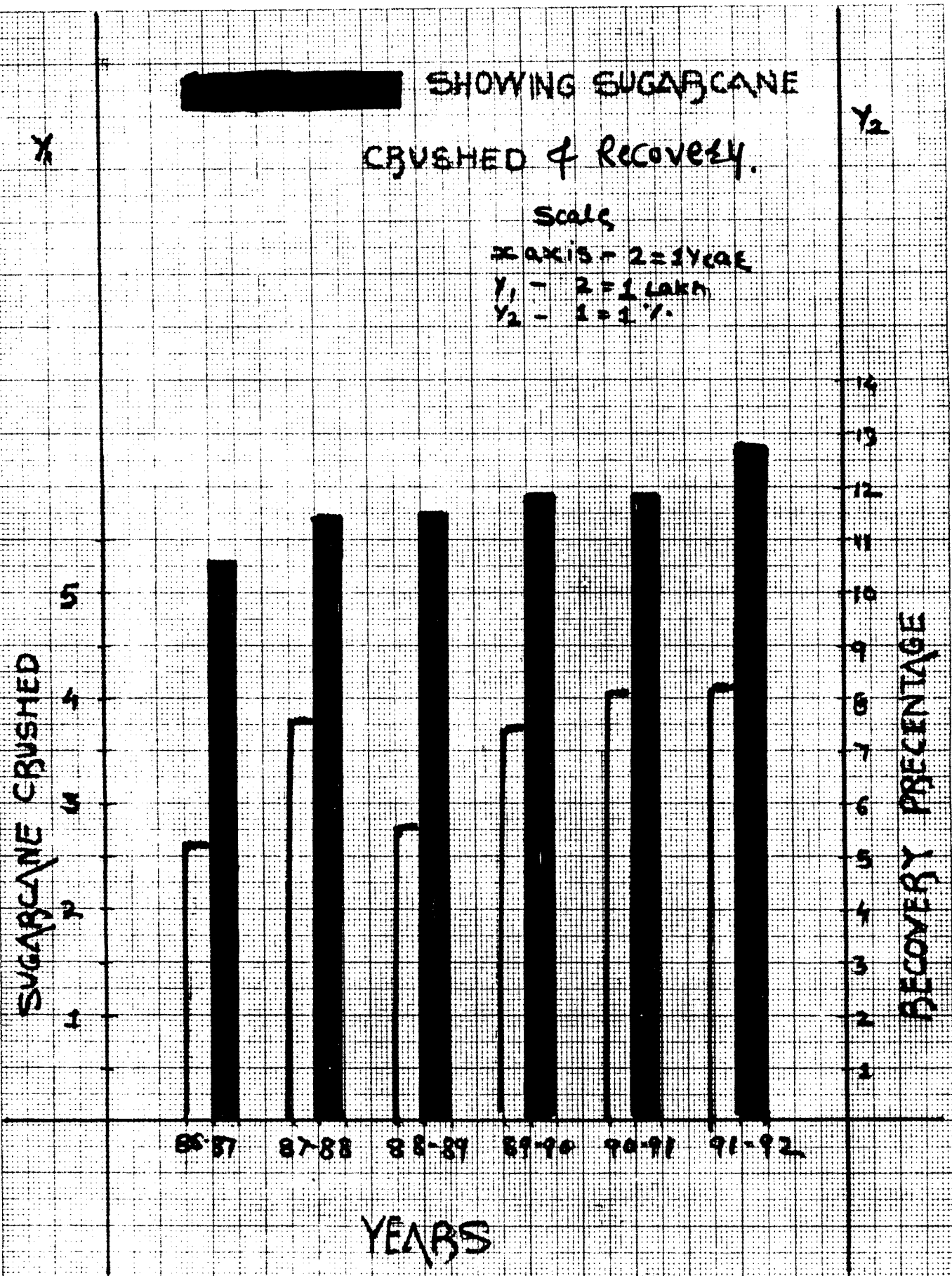
Y₂

Scale

X AXIS - 2 = 1 YEAR

Y₁ - 2 = 1 LAKH

Y₂ - 1 = 1 %



SUGARCANE CRUSHED

RECOVERY PERCENTAGE

YEARS

TABLE 4.2 : Sugarcane Purchased from Members & Non-Members in the Area of Jurisdiction of the Karkhana.

Year	Sugarcane Purchased (Metric Tonnes 000)	Percentage to the total sugarcane crushed
1980-81	123.7	76
1981-82	186.9	65
1982-83	197.8	65
1983-84	106.8	54
1984-85	180.6	77
1985-86	156.2	76
1986-87 (Expansion Year)	171.0	70
1987-88	191.4	50
1988-89	153.0	55
1989-90	217.3	58
1990-91	204.8	51

Source : Compiled from the Annual Reports.

The above two tables show that Gadhinglaj Karkhana has tried to adjust to the requirements initiated by the expansion carried out by it in the best possible manner. It has motivated the canegrowers in the area of its jurisdiction to raise more of sugarcane crop and sell it to the Karkhana.

OTHER MEASURES :

Gadhinglaj Karkhana has taken initiative in helping cane-growing members get the benefits of infrastructural facilities (Like Water Schemes) and they are motivated to go in for improved variety of cane-seed. For that purpose, the Karkhana has helped the members in more than one ways, for example, the Karkhana prepared the lift irrigation schemes, drip-irrigation schemes, bore-well scheme etc. and got them sanctioned from the financing agencies. Secondly, the Karkhana gave cash subsidy to those who had bore-well/drip-irrigation schemes.

PART II : DISTILLERY PROJECT :

Proposal for distillery with a capacity of 25,000 litres per day was submitted by Gadhinglaj Karkhana on 8/7/1983. The Government granted permission to the distillery on 14/02/1984. An important condition was to place the order for the plant and machinery on or before 31st March, 1986. The Karkhana approached the State Level Committee and requested it to invite quotations from suppliers so as to enable the Karkhana to place the order before the

end of March 1986. The State Level Committee approved Praj Construction Pvt. Ltd., Pune as the suppliers and accordingly the order for plant and machinery was placed with them on 12/2/1986.

CAPITAL REQUIREMENTS :

Cost of the distillery project was Rs.265 lakhs. Debt-equity norm approved for the project was 65:35. Debt component, therefore, worked out to be Rs.171.60 lakhs and equity component, Rs.93.40 lakhs. This amount was raised, in time, from the following sources.

<u>Amount (Rs.Lakhs)</u>	<u>Source</u>
171.60	National Co-operative Development Corporation, New Delhi, provided the loan amount (17/10/1986).
93-40	Raised through deposits from members.
<hr/> 265.00 <hr/>	Total

PROJECT IMPLEMENTATION :

The distillery project could be complete in time. It started operations on 31/3/1987. Karkhana could manage to take a trial season that year using 191 MT of molasses using only 25.73 % capacity. Capacity utilisation of the distillery showed improvement after the year 1987-88.

POST - EXPANSION ACTIVITIES :

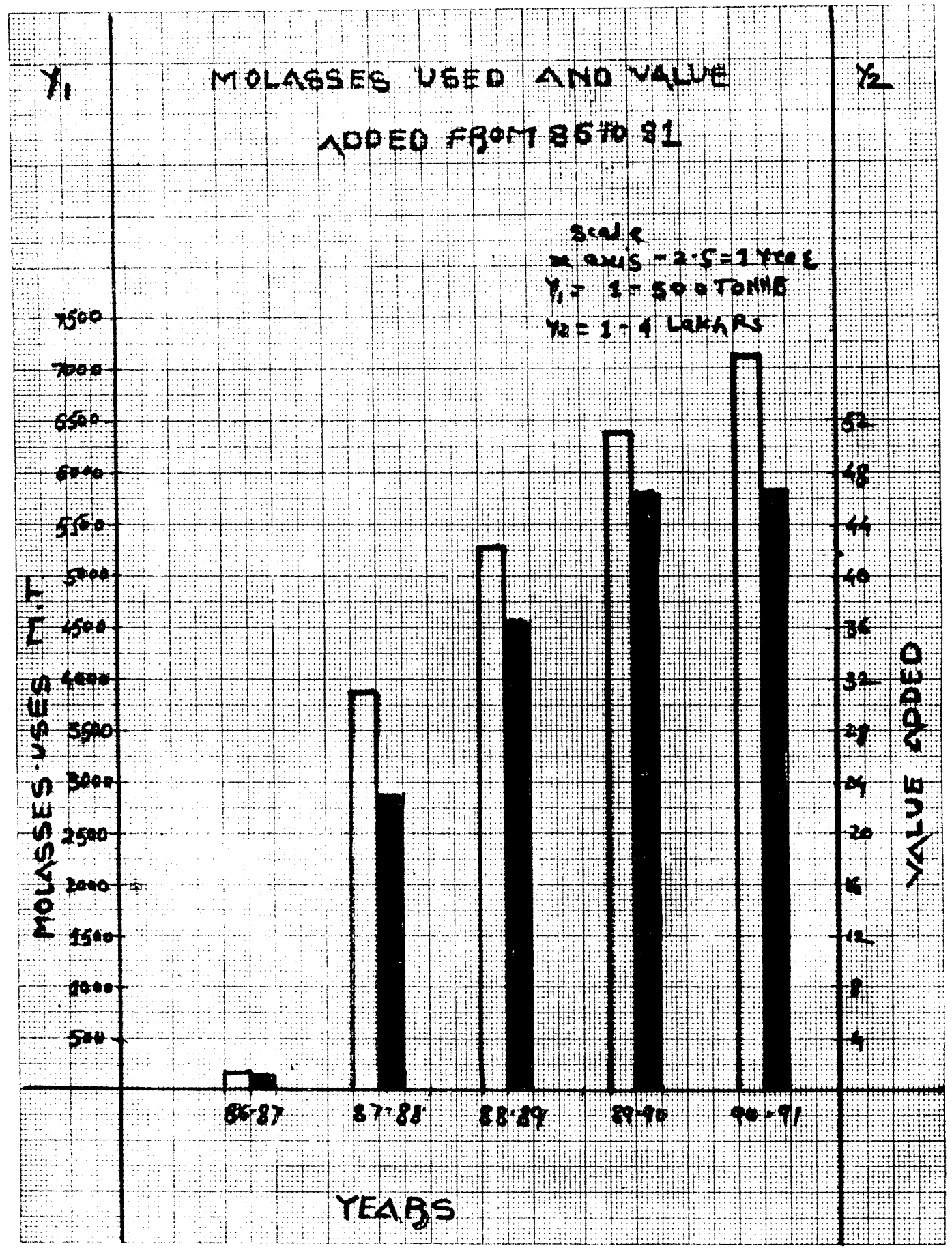
The Table given below gives details of yearwise production of alcohol, value added etc.

Table 4.3 :

MOLASSES USED, ALCOHOL PRODUCED
AND VALUE - ADDED

Year	Molasses Uses M. T.	Value of Molasses used (Rs.lakhs)	Value of Alcohol Produced (Rs.Lakhs)	Value Added (Rs.Lakhs)
1986-87	191	0.19	1.46	1.27
1987-88	3891	3.81	27.06	23.25
1988-89	5304	5.19	41.91	36.72
1989-90	6373	6.24	52.67	46.43
1990-91	7141	6.99	53.89	46.90

SOURCE : Compiled from the Annual Reports of Gadhinglaj Karkhana.



Managing post-expansion operations in case of distillery was not difficult. It was the supply of molasses from one unit to another unit at a specific " Transfer Price ". The Karkhana and the distillery unit could adjust to the changes made by this expansion almost immediately.

PART III : GENERAL OBSERVATIONS :

Management of expansion and post-expansion operations of Gadhinglaj Karkhana ^{was} efficient and effective. The following details would support this statement.

- (1) Both the expansion ^{plans} ~~plans~~ were started and completed in time.
- (2) No difficulty was experienced in raising capital.
- (3) Suppliers selected could carry out the work allotted in specified time without any major hindrance.

- (4) Project cost escalation in case of expansion project was about Rs.5 lakh. As compared to the total project cost of Rs.350 lakh, this amount was negligible. In case of distillery project there was no cost escalation.
- (5) Post-expansion adjustments, in both the expansion plans, were done smoothly.