

CHAPTER NO. 3

PRODUCTION & SALES PERFORMANCE & POLLUTION

INTRODUCTION

In any organisation production & sales performance plays important role and it decides profitability of the company. Sales department decides which product specification to be produced on the basis of market requirement and profit margin. Production department decides how to produce the product specified by sales department with the maximum utilisation of existing plant so that the production cost of that product will be lowest. If the selling price of product is high and its cost of production is low which ultimate results in to high profit margin. So it is essential to study the performance of production and sales of this mill.

A) PRODUCTION PERFORMANCE :-

In this section we are going to study count wise production, total production, spindle utilisation, reason for under utilisation of plant for last ten year.

B) SALES PERFORMANCE :-

In this section we are going to study mills total sale, yarn export, yarn sale in local market & yarn sale rate per unit for last 10 years.

C) POLLUTION

SECTION A

PRODUCTION & SALES PERFORMANCE

Production performance is one of criteria to test the performance of the mill. Full utilisation of the install capacity of the spinning mill is the most important factor influencing the production performance of the mills.

3.1 PRODUCTION OF YARN :-

The production of yarn of the mill over the period under study is shown is the following table No. 3.1

Table No. 3.1 : Progress in Yarn Production :

Year	Total Production of Yarn	Growth rate in percentage
1991-92	2161195	---
1992-93	2653453	22.77
1993-94	2948777	11.12
1996-97	3161176	7.20
1997-98	3126523	-1.09
1998-99	3334209	6.60

Source :- Various annual reports.

From the table, it is observed that yarn production per year shows growing trend with time, but growth rate in percentage did not remain the same. Even though growth rate gone up 22% in the year 1992-93 and came down in minus side in 1997-98 the over all growth rate achieved is 55.4% in 1998-99 compare to production of 1991-92.

3.2 YARN PRODUCTION COUNT WISE :-

In the table 3.2 count wise production of mill in last 10 years.
Yarn Production Count wise.

Sr	Count NE	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1997-98	1998-99
1	8/1	---	---	---	---	---	---	---	7500
2	10/1	---	---	---	---	---	---	179974	41184
3	12/1	---	---	---	---	---	---	6798	9486
4	13/1	---	---	---	---	---	---	---	---
5	14/1	---	---	---	---	---	---	---	---
6	16/1	760	---	---	---	55744	15787	326359	698649
7	18/1	36723	---	---	---	---	---	7968	7534
8	20/1	227111	---	---	125596	395909	95898	87926	670073
9	24/1	30369	---	---	21611	86110	---	54029	220987
10	26/1	386928	---	---	---	21611	32072	2605	344736
11	30/1	208359	254040	2007815	2518935	2553624	1577959	3035702	926757
12	32/1	7457	123304	---	150953	79531	101096	436423	252351
13	33/1	6819	---	---	---	---	---	---	1920
14	34/1	53768	---	---	29545	---	---	---	7298
15	36/1	664003	---	---	---	---	---	6976	58128
16	40/1	---	1773734	643625	69766	104099	300902	973626	30431
17	46/1	---	---	---	---	---	---	---	1000
18	50/1	---	---	---	---	---	1900	---	5000
19	54/1	---	---	---	---	---	---	---	39025
20	60/1	---	---	---	32369	---	2407	---	12200
21	Other Count	---	10115	2012	---	---	---	---	---
	Total	162223301	216119548	2653453	2948777	3197935	2524387	3126523	3334209

Source : Various Annual Reports of the Mill

In ten years the mill has produced 20 types of yarn counts. In initial years mills yarn count range was from 16 to 36 only, afterwards this range is becomes wide from 8 to 60 in 1998-99. Production of a mill is depends upon the type of yarn count to be produced. If the average count of mill is lower the production will be higher due to higher diameter of yarn and vise versa.

That was observed that production was continuously increasing from 1990-91 to 1994-95 due to count producing was towards lower side. In year 1995-96 production are suddenly

dropped due to production of higher counts. For a mill producing a particular count is depends of its demand form market with certain profit margin and its machinery set up.

The maximum production was observed is 33.34 lakhs in 1998-99 with production of maximum number of counts. This trends indicates that the mill has widen its product range and developed market in different count which is very essential factor to run mill for longer period without depending on one particular count and particular market.

3.3 SPINDLE CAPACITY AND IT'S UTILIZATION :-

The mill works for 24 hour in a day in 3 shifts each on 8 hour. The utilization is calculated in full working for 358 days in three shifts of 8 hours. Full utilization may not be possible due to stoppages of machines for different reasons.

The spindle capacity utilization is shown in the Table No. 3.3

Table No. 3.3

Spindle Capacity Utilization: -

Year	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99
Sitra Standard Spindle Utilization	100	100	100	100	100	100	96	96	96
	79.26	83.43	81.04	78.60	81.80	86.69	88.93	86.45	83.19

Source :- Various Annual report of mill.

There is the fluctuation in the average percentage of spindle utilization. It improved from 79.26 to 86.93 from 1990-91 to 1997-98. And there after it came down up to 83.19 in 1998-99. Further analysis of the utilization of the capacity during ten years (1990-91 to 1998-99) is shown in the table No. 3.3

The under utilization of the mill during the 1990-91 to 1998-99 was very closely caused for being uneconomic position from the technical point of view.

3.4 UNDERUTILISATION CAUSES :-

There are various causes of underutilisation which are (a) Due to labour (b) Power failure (c) Maintenance (d) Lower carding speed (e) Others. Utilisation loss are shown in the following table No. 3.4

Table No. 3.4

Under Utilisation Causes

Year	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99
SITRA Standard	100	100	100	100	100	100	96	96	96
Average Spindle Utilization	79.26	83.43	81.04	78.60	81.80	86.69	88.93	86.45	83.19
Non-Utilization	20.94	16.57	21.40	21.40	18.20	13.31	11.07	33.55	16.81
Percentage of idle spindles with installed spindle									
a)Due to labour	0.22	0.92	1.15	0.18	0.62	0.31	1.02	1.73	0.96
b)due to power failure	1.05	2.57	2.04	0.93	1.28	3.61	4.05	5.43	4.16
c)maintenance	1.90	2.53	0.81	0.95		4.39	1.24	1.16	1.00
d)lower carding speed for maintaining yarn quality	8.89	4.66	5.75	2.72					
e)Others (electrical, mechanical, internal power failure count change etc.)	8.68	5.89	2.51	3.39	14.13	5.00	4.76	5.23	10.44
f) due to jockey pulley shortage			6.70	13.23					

Source :- Various Annual Reports of the Mill.

The average number of spindle worked was favorable but not up to the standard utilization (that is 100 percent). Here, the highest utilization achieved is 88.93 in the year 1996-97. It seems to be an under utilization of plant capacity was one of important reasons for the mill going to losses.

Electricity failure is not only one problem affecting spindle utilization but also some of other factors like labour, maintenance, lower carding speed, coarser count are affecting in spindle utilization.

The analysis of the trends of each factors affecting utilization. Some of the factors which are dominant in initial years like lower carding speed and jockey pulley shortage initial years are eliminated completely after words and other factor like power failure, electrical, mechanical, internal power failure and count changes are showing increasing trends. The factors like labour and maintenance are remain more or less constant. The mill has to take certain precautionary action to reduce losses due to power failure and internal electric, mechanical failure and count changes. To reduce power failure losses mill has put proposal to financial institutions for setting up a power plant to run whole mill on that.

SECTION B

SALES PERFORMANCE :-

For any manufacturing company selling of product at reasonable price is very essential for running business. Company's sales performance plays very important role in company's profit. Besides production capacity, production rate, quality of product, selling of product is also important because good selling ability of company not only creates market for existing product but also try to get higher rate for a product, new market for its product. Good marketing also helps the company in diversification of product to get higher value addition for its product to earn maximum profit.

Sales performance of the company is depends upon quality of product, cost of manufacturing and selling ability of sales department of the company.

Good quality and lower cost of product always strengthen the sales ability of company and in other way better sales performance increases companies profit and indirectly supports for higher production of quality product.

For export oriented unit, selling of a product in international market is not only depends upon the good selling ability of company but also quality and cost of product. In case of textile sector especially cotton spinning units selling of yarn in international market is becoming difficult day by days due to availability of cheaper raw material and labour in other countries like Africa, Indonesia, Pakistan, Australia & are producing better quality of yarn at cheaper rate compared to out country. In today's condition, textile production inside country is becoming surplus than the countries demand so locals mills are also facing financial problems due to lower profit margin.

3.5 COTTON PURCHASE BY MILLS :-

Mill buys cotton in several different ways either single or in combination.

- 1) Exclusively from trade which would include govt. bodies like the Maharashtra State Marketing Federation and the Cotton Corporation of India.
- 2) Direct from co-operatives.
- 3) Direct from cotton growers.
- 4) From the primary merchants who initially buy Kapus from the farmers and latter sale either direct to the mill or to secondary merchants. Through regulated markets in the Kapus form and there after the mill undertakes the pressing and ginning of material.

3.6 EXPORT OF COTTON YARN :-

Mill has exported range of yarn counts in past few year which can be seen from following table No. 3.5

Table No. 3.5

Mills Export of Cotton Yarn.

Sr	Count NE	1990-91	1991-92	1992-93	1993-94	1995-96	1997-98	1998-99
1	8/1	---	---	---	---	---	---	773565
2	10/1	---	---	---	---	---	20487745	4162115
3	12/1	---	---	---	---	---	639338	379210
4	13/1	---	---	---	---	---	863666	---
5	16/1	---	---	---	---	1444556	21057691	56187841
6	18/1	---	---	---	---	---	909667	632432
7	20/1	1296164	190268	---	9554982	11110071	8125354	6073893803
8	24/1	8616606	846365	---	1524240	3640549	5962823	20761680
9	26/1	6663696	4156534	---	---	---	305959	35998509
10	28/1	1843519	---	---	---	---	---	---
11	30/1	33671817	19289598	198323256	216197657	42642049	87014713	91949554
12	30/1	---	---	---	---	188131070	---	---
13	32/1	20453544	7801961	1599855	15446398	12531070	39852961	41730036
14	33/1	---	---	---	738622	---	---	205440
15	36/1	3891301	---	1624735	---	---	852624	8164771
16	40/1	56780224	144216568	54903810	374321351	---	97380055	311441919
17	50/1	---	---	---	---	40473667	---	---
18	60/1	---	---	---	---	6070	---	---
19	Total Sale	132320198	178948312	260266892	286662954	300247093	290025978	375978023

Source :- Various Annual reports of Mill.

Nav-Maharashtra Spinning Mill is first export oriented unit in co-operative sector and exporting various counts from 20's to 40's in initial year and increased its count range from 8 to 60 count. This mill is exporting the yarns of various counts to different countries like England, Ireland, Mauritius, The European Mainland, Singapore, Malesia, Indonesia, Thailand, Korea and Taiwan.

In last two years company was produced highest varieties of yarn counts that is up to thirteen types and achieved highest production and yarn sale.

3.7 MILL EXPORT & LOCAL SALE

The mill has sold its product and byproducts in export as well as in local market. The Company's contribution of sale in export and local market is estimated in following Table No. 3.6

Table No. 3.6

Table showing mills exports & local sale

Year	Total Yarn Sale	Export Sale	In %	Local Sale	In %	Growth Of Sale
1990-91	132320198	128216873	960.89	4103324	3.10	
1991-92	178948312	176501925	98.63	700200	0.39	35.23
1992-93	260266892	256452256	98.23	5068704	1.76	10.14
1993-94	286662954	281594250	98.23	5068704	1.76	10.14
1994-95	337614882	337614882	100	---	0.00	17.77
1995-96	300247093	300247093	100	---	0.00	-11.06
1997-98	290025178	284253098	98	5772080	1.99	-3.40
1998-99	375978023	353131885	93.92	22846138	6.07	29.63

Source : Various Annual Reports of Mill.

In last ten years companies export sale was about 98% and was achieved 100% in 1994-95 and 1995-96. In last year around 6% sale is in local market, which is because of bad international market condition. However growth of sale was observed maximum in initial period companies sale very low and it increased very fast maximum up to 45% then it come down -11% in 1994-95. In last year it was 29.63% compare to last year i.e. 1997-98.

3.8 Sale rate per Kgs. :

Sales rate per kgs of yarn indicates value of product which company is making. High value product gives higher sales turnover and which can be seen from the Table No. 3.7

Table No. 3.7

Table showing Sale Rate Per Kgs.

Year	Total Sale(Kgs.)	Total Sale(Rs.)	Sale in Rs.per Kgs.	Growth rate %
1990-91	2036627	138331005	67.92	---
1991-92	2034260	198666868	97.66	43.78
1992-93	2610961	260266892	99.68	2.06
1993-94	3263638	286662954	87.83	-11.88
1994-95	3196077	337614882	105.63	20.26
1995-96	2524387	300247093	118.93	12.59
1997-98	2449023	290025188	118.42	-0.42
1998-99	3618011	375978023	103.91	-12.25

Source :- Annual Report of Mill

In last ten years period not only local sale of company has increased but also sale rate per Kg. Also increased, which indicates companies total production is increased as well as company is producing higher value product. In last year sale rate per Kg. Was lower because of producing of low value product, which is as per the demand of the market but local sale was higher.

Since company is not importing any cotton from outside country, its intensity of import is zero. This company has exported above 35 crore and helped country to earn foreign exchange. Higher percentage of export sale to total sales indicates higher export intensity of sale.

SECTION C

POLLUTION

NAV MAHARASHITRA SPINNING MILL AND ENVIRONMENTAL POLLUTION -

Human needs are unlimited and resources are limited. To fulfil continuous growing human needs, human started different types of industries and generated new resources out of it. In today's competitive world every country trying to build up good economical condition of the country. Industrialization is one of the important sector to achieve this goal, due to this every where in the world rapid industrialization taking place. Profitable factor of this industrialization is generation of economy and better resources for human for mankind and other hand negative factors are of its bad side effects like air, sound, water pollution, which are disturbing ecological balance of nature.

After Cretan period of industrialization human realized that the pollution due to industrialization would badly effect human life and he started to control it. To control the pollution, different standards are man need on disposal of by product of industries and working atmosphere in the industry. Day by day these standards are becoming strength and narrower and high pressers are putting for necessity of efficient treatment plans in the industries.

In textile industry different process are creating different type of pollution like spinning and weaving process creating mainly sound and air pollution avail chemical processing of fabric creating water pollution.

Nav-Maharashtra is spinning deviation of textile industry of producing only yarn from cotton fibre. In this process mainly two types of pollution are being created 1) Air Pollution, 2) Sound Pollution.

Since in this process very low quantity of water used for humidification water pollution is not tasking place. In the process of manufacture of yarn in the cotton fibre and dust in cotton fibres and dust in the cotton liberated into atmosphere of the developments.

In this mill due to effective conditioning plans and overhead cleaner, suctionducts the flying fibre and dots in the departmental atmosphere are succeed from the year and fluttered them in filter plant and air is recirculated into department. The more flying fibresis observe in ring frame department were more number of overhead cleanness are provided for each machines and number of air circulated in the department are kept more. However mill is provided goggles, caps and masks for the workers must actually working condition don't observes such items with workers.

At the time of electric failure mill is using generator are is polluted. For this mill is 52 acres out of this 15% area is covered by mills building and 85% area covered by road, cycle stand, and garden. Mill is planted about 1700 trees at the back side of the mill.

In the spinning process machines are working different speed and creating different noise the intensity of noise is depends upon mechanical condition and speed of machines. Since this mill a Export Oriented Unit attenuation toward machine maintenance and speed of the machines are paid regularly due to regular maintenance and optimums speed, vibrations in the machines are lower and creating lower noise.