## CHAPTER

## CHAPTER - III

## ECONOMIC ANALYSIS

### 3.1 INTRODUCTION

In this chapter we have made an attempt to study the working of Sangole Sootgirni. The economic analysis of the firm includes production and trends in it, sales and trend in it, in section one.

In section second the capacity utilisation is presented and the causes behind it are explained.

## SECTION - I

### 3.2 PRODUCTION AND TRENDS

In this section count wise production, total production of yam produced by the mill during the period under study is explained.

The production of yarn to the mill over the period under study is shown in the Table No.3.1.

Table No. 3.1
Progress in Yam Production

| year | Total production of Yarn <br> $(\mathrm{Kg})$ | Growth Rate in <br> percentage (over <br> previous year) |
| :---: | :---: | :---: |
| $1994-95$ | 4814924 | - |
| $1995-96$ | 5498268 | 14.19 |
| $1996-97$ | 6257697 | 13.81 |
| $1997-98$ | 6273842 | 0.25 |
| $1998-99$ | 5612208 | -10.54 |

Source : Various Annual Reports of the mill

From the Table, it is observed that yarn production per year shows an increasing trend with but growth rate in percentage shows a decline. Even though growth rate was $14.19 \%$ in the year 1995-96 it came down to minus side in 1998-99.

From the Table, it is observed that yarn production per year shows growing trend with, but compound growth rate in percentage shows increasing. Even the growth rates gone up 30.29 percent in the year 1997.98 and came down 16.55 percent in the year 1998-99.

In five year's period the Mill has produced 55 types of yarn counts. In the year of 1994-95 to 1998-99 mills produced 10 carded to 43 carded yarn. In the year 1995-96 mills produced 43 carded yarn. In the year 1997-98 mill produced 18 combed Hosiery Export yarn. In the year 1998-99 mill produced 10 carded and 2/10 carded export yarn. This is shown in Table No. 3.2.
Table 3.2
Yarn production count-wise

| Sr. No. | Count | 1994-95 | 1995-96 | 1996-97 | 1997-88 | 1998-99 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 10 \text { carded } \\ & 1 / 10 \end{aligned}$ | - |  |  |  | $\begin{gathered} 600 \\ 55871 \end{gathered}$ |
| $\begin{aligned} & 3 \\ & 4 \\ & 5 \end{aligned}$ | 14 carded 14 x $x$ <br> 2/14 canded | $1150$ | 288175 87000 47422 | $\begin{gathered} 230679 \\ 57400 \\ 4974 \end{gathered}$ | $\begin{gathered} 158336 / \\ 45960 \end{gathered}$ | $\begin{gathered} 198591 \\ 4885 \\ 6997 \end{gathered}$ |
| $\begin{aligned} & 6 \\ & 7 \\ & 8 \end{aligned}$ | 16 carded <br> 16 carded Hojiaji <br> 2/16 canded | $\begin{gathered} 168159 \\ 600 \\ 11845 \end{gathered}$ | $\begin{gathered} 495421 \\ 32130 \\ 163177 \end{gathered}$ | $\begin{gathered} 366973 \\ 27899 \\ 4190 \end{gathered}$ | $\begin{gathered} 99774 \\ - \\ 24506 \end{gathered}$ | 67116 |
| 9 | 18 combed Hojiari Export | - | - | - | 22181 | - |
| $\begin{aligned} & 10 \\ & 11 \\ & 12 \\ & 13 \\ & 14 \\ & 15 \\ & 16 \\ & 17 \end{aligned}$ | 20 carded <br> 20 carded Hojiari <br> 20 carded Export <br> 20 carded Hojiari <br> 2/20 xx <br> 2/20carded <br> 2/20 canded Export <br> 2/20 combed Hojiari | 848425 <br> 192866 <br> 129658 <br> 188201 | $\begin{gathered} \hline 1521820 \\ 298960 \\ - \\ 24082 \\ 87988 \\ 96792 \\ 97476 \end{gathered}$ | $\begin{gathered} 1816739 \\ 255219 \\ 1495704 \\ 14886 \\ 100400 \\ 44364 \\ 424050 \end{gathered}$ | $\begin{gathered} 2207395 \\ 149343 \\ 1116410 \\ 156123 \\ 86200 \\ 9474 \\ 387820 \end{gathered}$ | $\begin{gathered} 1588443 \\ 11970 \\ 785220 \\ 52385 \\ 92297 \\ 36815 \\ 242129 \\ 42671 \end{gathered}$ |


| $\begin{aligned} & 18 \\ & 19 \end{aligned}$ | 2/20 cone 9/20 carded | $\begin{gathered} 107813 \\ 5880 \end{gathered}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 20 \\ & 21 \end{aligned}$ | 21 carded Export 2/21 combed Hojiari |  |  |  |  | $16421$ |
| $\begin{aligned} & 22 \\ & 23 \\ & 24 \\ & \hline \end{aligned}$ | 22 carded 23 K.H. Export $2 / 23$ canded | - | $\begin{gathered} 313134 \\ \cdot \\ . \\ \hline \end{gathered}$ | 131836 322024 <br> 111669 | $\begin{gathered} 49092 \\ - \\ 78870 \end{gathered}$ |  |
|  | 24 K.H. <br> $2 / 24$ carded export |  |  | $137640$ | $27212$ | $\begin{gathered} 143162 \\ 20295 \end{gathered}$ |
| $\begin{aligned} & 27 \\ & 28 \end{aligned}$ | 25 carded Hojiari <br> $2 / 25 \mathrm{~K} . \mathrm{H}$. | $48736$ | $\begin{gathered} 83011 \\ 667 \end{gathered}$ |  |  |  |
| 29 | $26 \mathrm{C.H}$. | - | - | 1000 | - | - |
| 30 31 32 33 34 | 30 K. Hojiari <br> 30 Co. Hojiari <br> 30 combed <br> 2/30 canded <br> $2 / 30 \mathrm{C}$ | $\begin{aligned} & 125580 \\ & 268948 \end{aligned}$ | $\begin{gathered} \hline 75907 \\ 206914 \\ \cdot \\ 7500 \\ 24232 \end{gathered}$ | $\begin{gathered} 298520 \\ 78229 \\ 32237 \end{gathered}$ | $\begin{gathered} 116223 \\ 0714445 \end{gathered}$ | $83339$ |
| 35 | 2/30 combed | - | - | - | - | - |
| $\begin{aligned} & 36 \\ & 37 \end{aligned}$ | 31 carded <br> 2/31 canded | $\begin{aligned} & 739395 \\ & 726999 \end{aligned}$ | $\begin{gathered} 196834 \\ 2993 \end{gathered}$ | $83911$ | 906315 | 969193 |


| $\begin{aligned} & 38 \\ & 39 \\ & 40 \end{aligned}$ | 32 combed Hojari <br> 2/32 combed Hojiari Export <br> 2/32 canded | - |  | $77325 \text { [C.H.] }$ | $\begin{gathered} 1188 \\ 190926 \end{gathered}$ | $\begin{gathered} 2542 \\ 49121 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 41 \\ & 42 \\ & 43 \end{aligned}$ | 34. Hojiari <br> 34 carded <br> 34 co. Hojiari | $\begin{gathered} 586630 \\ - \\ 177509 \end{gathered}$ | $\begin{gathered} 41285 \\ - \\ 170690 \end{gathered}$ | $\begin{gathered} 834 \\ \cdot \\ 141681 \end{gathered}$ | $114187$ | $\begin{gathered} 24160 \\ 173289 \end{gathered}$ |
| $\begin{aligned} & 44 \\ & 45 \end{aligned}$ | $\begin{aligned} & 35 \mathrm{~K} . \\ & 36 \text { corded } \end{aligned}$ | $1221862$ | 136363697634 | $104936$ | $927719$ | $752438$ |
| 46 47 48 49 | 40 Co. Hojiari <br> 40 combed <br> 40 corded <br> 40 combed Warp | $\begin{aligned} & 62832 \\ & 94108 \end{aligned}$ | $\begin{gathered} 29633 \\ 7809 \\ 19020 \\ - \end{gathered}$ |  | $\begin{aligned} & \hline 29725 \\ & 90204 \end{aligned}$ | $74937$ |
| 50 51 | $\begin{aligned} & 2 / 40 \mathrm{Co} \\ & 2 / 40 \mathrm{C} \end{aligned}$ | $51390$ |  | - |  |  |
| 52 53 54 | 41 carded <br> 41 carded <br> 2/41 canded | $\begin{gathered} 120265 \\ 300 \\ 18073 \end{gathered}$ | $\begin{gathered} 74297 \\ - \\ 16745 \end{gathered}$ |  | $42214$ | $21036$ |
| 55 | 43 carded | - | 750 | - | - | - |
|  | Total production | 4814924 | 5498268 | 6257697 | 6273842 | 5612208 |
|  | Total production | 4814924 | 5498268 | 6257697 | 6273842 | 5612208 |

Following conclusions can be made from Table No. 3.2.

1) The production of different counts of yam shows a diversification of the mill in yarn production.
2) That was observed that production was increasing from 1994-95 to 1997-98 due to production of per spindles in grams in comparatively increase.
3) The maximum production was observed is 62.73 lakhs in 1997-98 with production of per spindles in grams is comparatively increasing due to working of large number of spindles. Other reasons for increasing production were proper maintenance and cleaning of spindles, sufficient supply of labour and the power.
4) In the year of 1998-99 production are suddenly dropped due to production of per spindles in grams is comparatively decreasing due to spindles are not working because of the problem of cleaning the machinery, maintenance, lack of back process, lack of labour supply, and the lack of supply of electricity.

### 3.3 SALES AND TRENDS IN IT

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, the selling of product is also important. The good selling ability of company not only creates market for its product but also helps the company in diversification of product to get higher value addition for its product to eam maximum profit. Sales performance of the company 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.

Selling of product in international market depends not only upon the selling skill 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 day due to availability of cheaper raw material and labour in other countries like Africa, Indonesia, Pakistan, Australia and are producing better quality of yarn at cheaper rate compared to our country. At present, Textile
production within the country is in surplus so the local mills are also facing financial problems due to lower profit margin.

The Mill is exporting its product in Developed countries such as Hong Kong, Malaysia, Japan, South Korea, Singapore etc.

Table No. 3.3
Sales and Trends

| Year | Total Sales <br> (per Kgs) | Total Sale <br> (Rs. Lakh) | Sale in <br> Rs. Per Kgs | Compound <br> Growth <br> Rate (\%) <br> (Sales in <br> per kg.) |
| :---: | :---: | :---: | :---: | :---: |
| $1994-95$ | 4735597 | 4054.48 | 85.62 | - |
| $1995-96$ | 5559097 | 4833.06 | 86.94 | 1.54 |
| $1996-97$ | 6281970 | 5070.77 | 80.72 | -5.72 |
| $1997-98$ | 6021186 | 5223.44 | 86.75 | 1.32 |
| $1998-99$ | 5520576 | 4906.31 | 88.87 | 3.80 |
| Average | 5623685.2 | 4817.61 | 85.78 |  |

Source : Annual Report of Mill

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. 3.3

From Table No. 3.3 we find that there are fluctuations in total sales and sale price of the yarn. However, the fluctuations in sale price are higher than the fluctuations in total sales. This implies that price elasticity of yam is less than one.

In last five years sale of company has increased but in the year of 1998-99 total sale of yarn is decreased. As well as sale rate of yarn per kg. Also increased which indicates company's total production is slowly increased. In the year of 1996-97 yarn sale rate per kg . Was lower because of production of low value product, which is as per the demand of the market but local sale was higher.

The company has exported above 16 crore and helped country to earn foreign exchange.

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.3.3.

### 3.4 SUPPLY ELASTICITY OF YARN SALE

The price elasticity of yarn sell is the responsiveness of change in price of yam and its impacts on yarn sale. The study of supply elasticity helps the unit to understand the impact of the price variation on its revenue and profitability. The high price sensitive indicate the competitive nature of the market in such a market the firm can increase itself by selling more at a lower price. However, if the mill could not succeed in reducing the sell with fall in price it shows the inability/or the inefficiency of the firm due to structural rigidities.

The Table No. 3.4 shows the price elasticity of yarn sale for the period under study.

Table No. 3.4
Supply Elasticity

| Year | Total <br> sales <br> (in lakhs) | \% change | Sale price <br> (Kgs. Rs.) | \% change | Price <br> elasticity <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1994-95$ | 4054.48 | - | 85.62 | - | - |
| $1995-96$ | 4833.06 | 19.21 | 86.94 | 1.54 | +12.46 |
| $1996-97$ | 5070.77 | 4.92 | 80.72 | -7.15 | -0.68 |
| $1997-98$ | 5223.44 | 3.01 | 86.75 | 7.47 | +0.40 |
| $1998-99$ | 4906.31 | -6.07 | 88.87 | 2.44 | -2.48 |
| Overall |  | 21 |  | 3.8 | 5.53 |

Source : Annual Report of Mill

We get following conclusions from the Table No. 3.4 price elasticity of yarn sale.

1) Though overall price elasticity of yarn sale to its price shows that the normal law of supply holds true for two observations. But for the remaining there is opposite tendency. In the case of price elasticity for the year 1995-96 over the year 1994-95 there is very high supply elasticity of $12.46 \%$.
2) In the year 1996-97 there was drop in yarn sale price. However, it was not followed by drop in yarn sale. On the contrary yarn sale increased leading to negative price elasticity. However it is less than one. In the next year the
sale price of yarn again improved and so the total saie also. The price elasticity 1994-95 is positive, but weak (0.40\%).
3) In the next year again sale price of yarn increased but the total sale decreased. This leads to again a negative supply elasticity of $\mathbf{- 2 . 4 8}$.
4) The overall supply elasticity is positive and sufficiently high as it is $5.53 \%$. This mean yarn market competitive. The revenue of the mill will be affected largely by fluctuations in the yarn prices.

### 3.5 TRENDS IN PRODUCTIVITY

The production of yarn per day per labour to the mill shows the labour productivity over the period. It is shown in the Table No. 3.5

Table No. 3.5
Trends in Productivity

| Year | Total <br> production <br> in Kg. | Total labour | Per labour <br> production <br> in Kg. | Per labour <br> per day <br> production <br> in Kg. |
| :---: | :---: | :---: | :---: | :---: |
| $1994-95$ | 4814924 | 1100 | 4377.20 | 12.26 |
| $1995-96$ | 5498268 | 1200 | 4581.89 | 12.76 |
| $1996-97$ | 6257697 | 1200 | 5214.75 | 14.61 |
| $1997-98$ | 6273842 | 1200 | 5228.20 | 14.60 |
| $1998-99$ | 5612208 | 1200 | 4676.84 | 13.10 |

Source : Various Annual Reports.

From the Table, it is observed that yam production per day and per labour was increasing but in the year 1998-99 shows decreasing. The causes are decreasing the per labour and per day production of yarn in Kg . Such as obstacles in power supply, shut of the spindles, repairing of power, cleaning and the back processing. The number of workers shows downward inflexibility. This also affected the productivity.

## SECTION - II

### 3.6 SPINDLES CAPACITY AND ITS UTILISATION

The capacity utilization of the plant is the result of overall functioning of machinery and management together. It is used as an important indicator to measure the overall performance of the unit. The concept of capacity utilization differs for different industries. In the case of textile mill the capacity utilization is defined as below. Hence, in this chapter an analysis of capacity utilization of the mill is made the trends in a capacity Utilisation in the soot Girni. As the mill works for 24 hours in a day in 3 shift each on 8 hours. The Utilisation 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. We have followed the capacity concept and capacity utilization as given by SITRA.

The spindles capacity utilization is shown in the Table No.3.6.

Table No. 3.6
Spindles Capacity Utilisation

| Year | $1994-95$ | $1995-96$ | $1996-97$ | $1997-98$ | $1998-99$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sitra <br> Standard | 100 | 100 | 96 | 96 | 96 |
| Spindle <br> utilization | 89.34 | 75.90 | 74.50 | 84.09 | 80.72 |

Source : Various Annual Report of Gimi.

Following conclusions can be drawn from Table No.3.6

There is the fluctuation in the average percentage of spindle utilization. It declined from 89.34 to 74.50 from 1994-95 to 1996-97. And there after it increase 84.09 in 1997-98. In the year 1998-99 decline 80.72 .

The under Utilisation of the mill during the 1994-95 to 1998-99 was very closely caused for being uneconomic position from the technical point of view.

There are various causes of under utilization, which are as -
(a) Due to labour
(b) Due to cleaning
(c) Due to shortage of back process
(d) Due to shortage of spare and store
(e) Due to count change
(f) Due to power failure
(g) Due to public holiday
(h) Due to maintenance
(i) Due to power maintenance
(k) Due to shortage of employees
(I) Others

The cause wise Utilization loss is shown in the Table No. 3.7
Table No. 3.7
Causewise Utilisation Loss

| Year | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SITRA standard | 100 | 100 | 96 | 96 | 96 |
| Average Spindle Utilization | 89.34 | 75.90 | 74.50 | 84.09 | 80.72 |
| Non utilization percentage | 10.66 | 24.10 | 25.50 | 15.91 | 19.28 |
| a) Due to cleaning | 1.11 | 0.82 | 0.88 | 1.45 | 2.04 |
| b) Due to maintenance | 0.03 | 0.65 | 0.59 | 0.58 | 0.77 |
| c) Due to lack of back process | 1.10 | 0.86 | 0.99 | 0.51 | 1.08 |
| d) Due to shortage of spare \& stores | - | 0.04 | - | - | 0.01 |
| e) Due to labour | 1.82 | 16.21 | 15.70 | 6.06 | 6.95 |
| f) Due to count change | 0.35 | 0.36 | 0.39 | 0.20 | 0.35 |
| g) power fallure | 1.27 | 2.47 | 1.69 | 2.19 | 4.07 |
| h) due to public holiday | 2.30 | 1.91 | 2.19 | 1.92 | 2.19 |
| i) Due to power maintenance | 0.9 | - | - | 0.30 | 0.56 |
| j) Due to plain stoppage | - | - | 2.02 | 1.14 | 0.01 |
| k) Due to shortage of employees |  |  |  | 1.03 | 0.79 |
| 1) others | 0.63 | 0.78 | 1.05 | 0.53 | 0.46 |
| m) Running in | 1.15 | - | - | - | - |

[^0]The average number of spindles worked was favourable but not up to the standard utilization achieved is 89.34 in the year 1994-95. It seems to be an under utilization of plant capacity was one of important reasons for the mill going to losses.

The labour problem is under utilization of spindle. But only one problem is not affected but also some other factors like Electricity failure, public holiday, cleaning, count change, maintenance lack of back process are affecting in spindle utilization.

The analysis of the trends of each factors affecting utilization. Some of the factors, which are dominant, like labour problem, power failure, and public holiday. Such as like labour absenteeism was 1.82 percent in 1994-95. In the year of 1995-96 the percentage were increased 16.21. In the year of 1996-97 percentage were decreased $15.70 \%$ afterwards the absenteeism percentage were decreased. In the year of 1998-99 labour absenteeism percentage were 6.95.

Such as the power failure is dominant factor under utilization. In the year of 1994-95 the percentage of power failure was 1.27. Afterwards power failure percentage was increased.

The factors like maintenance, cleaning and lack of back process remain more or less constant. The mill has to take certain precautionary action to reduce losses due to labour absenteeism, power failure, and public holiday


[^0]:    Source : Various Annual Reports of Mil.

