THE PROFILE OF THE SPB LTD
CHAPTER II
GROWTH AND DEVELOPMENT OF PAPER INDUSTRY

ORIGIN OF PAPER

Paper represents the index of civilization. It plays a more important role in the modern era. It began nearly two thousand years ago in China, when Ts'ai-lung became the first man to produce a sheet of paper. He was the first man to fabricate paper but he was not actually the first paper maker. As a matter of fact the first paper maker, was an insect i.e., the four winged social wasp. Paper has replaced to a large extent many other materials such as glass, cotton, leather, etc. It has replaced them not only because of price but because of utility. It is truly said that the quantum of production and consumption of paper in a country is the index of its standard of living.

Paper is essentially a cellulosic fabric. Theoretically any fibrous material which contains cellulose can be used for making paper. Raw materials required for pulp and paper industry can be classified as fibrous and non-fibrous. Fibrous raw materials include hardwood, softwood, bamboo, bagasse and careal straws. Non-fibrous raw materials include chemicals used in pulping and paper making process.

In India paper is made mainly from bamboo. Waste paper cotton rags and jute stalks are also used in moderate quantities in making
it. Recently they use bagasse as raw material which is an industrial
waste in the manufacture of sugar.

Chemically, bamboo is made up of 60 percent cellulose,
25 percent lignin and about 15 percent carbohydrate protein, resin, fats
and silica. The composition of Bagasse is in no way different from the
above. It is the cellulose in the bamboo and Bagasse which eventually
become paper.

MANUFACTURING PROCESS

The first stage in the conversion of raw materials into
paper consists of reducing fibrous materials such as grass, bamboo and
other soft and hardwoods to bits and shreds by mechanical means.

Bamboo chips or bagasse fibres, as the case may be, are
next mixed and impregnated with a solution of caustic soda and sodium
sulphide and "cooked" in a closed pressure vessel at a high pressure and
temperature using saturated steam. This "cooking" dissolves the lignin
in the bamboo chips and bagasse fibres and separates the cellulose in
the form of pulp.

This cooked mixture is also called as "Black Liquor". This
mixture is continuously blown out of the Digester and is collected in
a Blow Tank. From the tank, the mixture is passed over screens which
remove knots and uncooked material into a series of wire mesh covered
reveolving drums-called washers-to wash the cellulosic pulp component free of Alkali.

The pulp next moves into a Bleach plant through a set of screens designed to remove shieves, sand and similar other extraneous matter, while "cooking" removes most of the lignin to set the fibres free bleaching carries delignification a step further and in the process whitens the brown pulp. Bleaching is carried out in this stage using chlorin in the first stage and calcium hypochlorite in the second and third stages. At the end of each stage of treatment, the pulps washed free of chemicals.

During the process of refining the pulp is blended by successive additions of chemicals in predetermined proportions. Talcum powder and chinaclay are added to improve printability, increase brightness and capacity, colour and whitening agents to obtain the desired shade, rosin and alum to render the sheet imprevious to ink.

The blended stock is pumped through a series of screens designed to eliminate dirt, shieves and other similar extraneous matters in suspension and flow on to a endless belt of wire mesh and as the water in it drains out settles in a tangle of fibres and forms into a web. This web, after it leaves the swire mesh pass through presses which compress the fibre and remove the water therefrom. Pure wool felts carry the sheet, cushion it against crushing and expel the water by blotting. The sheet next passes over a series of dryers consisting of steam-heated cylinders which evaporate and remove the water in the sheet.
The dry sheets run last of all through calender and is compacted ironed and smoothened. The paper made is thereafter cut into required size, examined for defects, packed and sent out to the market.

Depending upon the nature of raw materials and the varieties of paper to be manufactured, different types of pulping processes are adopted. The pulping process can be classified into three major groups: mechanical, chemical, and semi-chemical. The common purpose of each of these processes is to reduce wood to fibres.

MECHANICAL PULPING

In this process, the pulp is produced by grinding of logs. The yield from mechanical pulp is as high as 93 percent compared to 50 percent or less in the chemical process. No chemicals are needed. Capital and maintenance costs are relatively low. However, the quality of the pulp is inferior and it cannot be used in the production of high quality paper. Mechanical pulping is one of the important methods of making pulp for the manufacture of newsprint.

CHEMICAL PULPING

In this process, chemicals are used to dissolve the raw materials to reduce them to fibres. In contrast to mechanical pulp, chemicals pulp is costly owing to low yield (about 50 percent) and the application of chemicals. But chemical pulp is in wide demand as it is necessary
input for a variety of papers. About two thirds of the world's wood pulp is produced by various chemical processes. Paper production in India is also largely based on chemical pulp.

**SEMI-CHEMICAL PULPING**

In between the mechanical and chemical pulping processes is the semi-chemical pulping process. In this process, wood is given a mild chemical treatment for softening so that mechanical means may be used to complete the fibre separation. This process is steadily gaining ground owing to its flexibility in terms of raw material requirements, the high pulp yield (up to 75 percent or higher) and the relatively low capital investment per tonne in comparison with chemical pulping.\(^1\)

**ORIGIN OF PAPER INDUSTRY**

The beginning of the paper industry in India dates back to 1832, when the first paper machine was installed in Serambur in West Bengal which worked with imported pulp. The use of bamboo in paper making was first advocated by Rutledge in 1875. At the instance of British Government in 1906, R.W. Sundall made a very thorough investigation on the use of bamboo for paper making. Raist was finally responsible to prove that bamboo can be pulped economically and bleached.

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pulp can be produced from bamboo at price levels acceptable to the Indian market. In order to protect the indigenous bamboo based paper industry a protective duty was levied in 1925 on imported paper. The required incentive and atmosphere for the growth of paper industry was thus created.²

Apart from the shortage of paper created in India during the time of II World War, there was also a steep rise in the per capita consumption of paper which went up from 0.7 kg in 1951 to 2.0 kg in 1961. This gives a fillip to the paper industry.

Social development and spreading of knowledge may best be reflected by the consumption of paper. In 1984 the per capita consumption of paper in India has increased to 4.5 kg while in developed countries the increase ranges between 170 kg to 420 kg. Judged by world standards our country has a long way to go to ensure 100 percent Literacy and to maintain parity of industrial development with the advanced countries.

In the area of newsprint also India's progress is not satisfactory. India's newsprint consumption of 8.5 lakh tonnes per annum is just above 1 percent of the world total. The first paper mill, for the manufacture of newsprint was started at Nepanagar in Madhya Pradesh.

To meet the increasing demand for newsprint Kerala Nesprint Mill, was also started. Recently Tamil Nadu had one such mill at Kakitha Puram in Trichy district which manufacture newsprint with nearly 75 percent of bagasse as a component.

**MAIN PROBLEMS**

Even though paper industry is rated as a high priority industry it is facing many problems. Problems of shortage of raw material is very acute and it threatens even the very existence of the industry. The main problems which are confronting the industry can be enumerated as follows.

**RAW MATERIALS**

Paper Mills in India are using bamboo, wood, wastage paper cuttings, rags, pulp, bagasse, etc., as raw materials. However, the use of bagasse as raw material is a recent phenomenon and almost all paper mills are using only conventional raw materials such as bamboo, wood, etc., the machines installed at high cost in these mills, can process only these raw materials and not bagasse.

The availability of bamboo is not adequate and the pulpable wood is also scarce. The gradual reduction in forest area, coupled with a reduction in productivity in the forest have contributed to an actue raw material scarcity. The forest department has claimed that out of
328 million hectares forest occupies 68 million hectares. But a report made through satellite pictures says that only 34 to 35 million hectares of land are under good tree cover. The raw material Committee of the Development Council for paper and pulp industry has also found out the only 32.5 million hectare are really under tree cover.

In this situation, the planning commission and the Industry Ministry are seriously examining the proposal for raising forests exclusively for the use of Country's paper and pulp industry. The forest wealth, which is diminishing at an alarming rate, neither caters to the needs of fire-wood, nor does it meet the requirements of forest based industry such as paper and pulp sector, added to this the prices at which the paper industry expects raw materials are extremely low compared to the prices being paid by the people for fire-wood.

The expert Committee of the Development Council for paper industry estimated that the industry would need 81.5 lakh tonnes per annum of pulpable wood by 2000 A.D. There are two alternatives open to the paper industries importing pulp and switching over to other raw materials like begasse. Imported pulp is costlier and hence, the idea is not financially sound. Switching over to bagasse requires more capital expenditure which almost all paper mills in India cannot afford to. Unless a national policy for development of forest resources, particularly as captive plantation, be adopted and implemented immediately
the industry would not be able to meet the raw material requirement even for its existing capacity. For example SPB Ltd. was closed in 1984 for 21 days due to non-availability of rawmaterial.

POWER

Power is equally important like raw material to turn the wheels of industry. The rapid growth of demand for power has been posing a challenge to the power supply industry. A result pronged approach has been evolved to meet the growing energy needs of the country with zeal and determination. This is being done by improving and rationalising the System of Management resources.\(^3\)

In the absence of adequate power supply by the State Government, the industries have to depend upon their own power generation. Power generation by using furnace oil is very costly. Generation of power by using coal or lignite is also costlier, even though their prices are comparatively low, thus the high cost of power generation leads to an increases in the cost of production. The problem of power disrupts the production planning schedule.

COST OF CHEMICALS

The paper industry is using various chemicals such as alum, causticlye, chloride etc., The cost of production in these industries has

\(^3\) Years of Achievement, Power Development, D.A.V.P. Govt. of India, February 1976, p. 13.
also gone up. These industries also depend upon power. Due to power cut they have to shut down or incur additional expenditure for power generation which increases the cost of chemicals.

**HIGH COST OF PRODUCTION**

The increased expenditure towards raw materials, high cost of power generation, extra expenditure towards chemicals will naturally increase the cost of production. Added to this the non-availability of vessels for the shipment of coal and the resultant high cost of transportation, purchase of chemicals at far off places, the ever increasing salary and wage bills of industrial units have the cumulative effect of increasing the cost of production.

**MACHINERY**

Paper mills in India are using machinery which can be classified as obsolete. Even the modern machines can process only conventional raw materials. With an acute scarcity of bamboo and pulpable wood, the mills are compelled to switch over to other raw materials like bagasse. Processing of bagasse requires new type of machinery. Installation of such new machinery makes the machineries already installed obsolete.

**SUPPLY OF PAPER AT CONCESSIONAL RATE**

The higher the consumption of papers, the higher will be the literary percentage of a country. Further it is also an important
item of day today routine. Therefore Government wants to provide paper at cheaper rates. The social objectives of the government may be loudable but is not profitable for the paper mills. The price fetched by the paper mills for such concessional supply is less than the cost of production and hence, the paper mills are incurring loss on that account.

DEVELOPMENT UNDER THE FIVE YEAR PLANS

At the beginning of the First Five Year Plan in 1951, there were only 17 paper and paper board mills with an installed capacity of 1.37 lakh tonnes. The number of paper mills rose to 106 with an installed capacity of 13.94 lakh tonnes by the end of the Fifth Five Year Plan (1974-79). At the end of the Seventh Five Year Plan (1984-89) is 297 paper mills with an installed capacity of 28.57 lakh tonnes. Currently the paper industry has been given the status of a core-sector industry in the plan document.

The future expansion of the paper industry is dependent upon the easy availability of pulp. The softwoods and bamboos have limitations of their own. Hence the paper mills have no option but to import pulp from abroad in the long run besides recycling the available waste paper.
The following Table explains this,

### TABLE 2.1
IMPORTS OF PULP AND WASTE PAPER DURING 1980-88

<table>
<thead>
<tr>
<th>Year</th>
<th>Pulp and Waste Paper [value in crores]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-81</td>
<td>12.3</td>
</tr>
<tr>
<td>1981-82</td>
<td>18.3</td>
</tr>
<tr>
<td>1982-83</td>
<td>37.5</td>
</tr>
<tr>
<td>1983-84</td>
<td>95.0</td>
</tr>
<tr>
<td>1984-85</td>
<td>176.2</td>
</tr>
<tr>
<td>1985-86</td>
<td>245.5</td>
</tr>
<tr>
<td>1986-87</td>
<td>208.4</td>
</tr>
<tr>
<td>1987-88</td>
<td>228.0</td>
</tr>
</tbody>
</table>

**Source:** Economic Survey, 1988-89, Dept. of Economic Affairs, Govt. of India

In the budget for 1987-88 and 1988-89, the Government of India imposed 15 percent duty on the import of waste paper. This 15 percent import duty on waste paper has come as a load on the Small Paper Units and their pleadings with the government for its withdrawal have no use.

For a long time, India has been planning to use straw and bagasse for the manufacture of paper. The sugar mills use bagasse as fuel. Unless they are provided an alternative fuel at the same cost as bagasse they cannot be persuaded to spare bagasse for paper manufacture. It may be underlined that bagasse is available to sugar mills at no extra
cost. Hence, there is no way to provide an alternative fuel at the same cost as bagasse.

One of the suggestions made by the working group appointed by the Central Ministry at Industry a decade ago, is that "for every state a forestry sector development strategy should be evolved which aims at optimisation of resources utilisation and management". No one state of this country has made this suggestion. Consequently the country is forced to adopt adhoc measures to meet this situation.\(^4\)

The question of prompting Captive Plantation by paper mills has been raised for a number of times. But the Central Government has not encouraged the scheme of Captive Plantation by paper mills even though the Planning Commission has recommended it is Seventh Five Year Plan document.

The land ceiling acts stand in the way of leasing land to paper mills. However, land covered by Coffee, Cocoa, Cardamom or Rubber land is exempted from land ceiling. It is necessary to examine whether similar exemption can be granted for the lands which are to be brought under tree crops. If such exemption is granted, it will facilitate the leasing of forest lands to paper mills.

\(^4\)Facts for you, August 1989, p. 23.
The demand for paper is likely to grow every year by at least five percent due to a variety of factors including the rising need of packaging paper by the food processing industry. The wood is replaced by paper for packaging of horticultural and certain industrial products. But the paper industries in India use on an average 71 percent of the installed capacity. The increasing demand is met by the imports from foreign countries. The table 2.2 and 2.3 shows the situation.

**TABLE 2.2**

**CAPACITY UTILISATION RATIO OF PAPER AND PAPER BOARDS**

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Units</th>
<th>Installed Capacity [000 tonnes]</th>
<th>Production [000 tonnes]</th>
<th>Capacity Utilisation Ratio [Percent]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985-86</td>
<td>267</td>
<td>2655</td>
<td>1813.4</td>
<td>72.6</td>
</tr>
<tr>
<td>1986-87</td>
<td>288</td>
<td>2758</td>
<td>1890.9</td>
<td>69.9</td>
</tr>
<tr>
<td>1987-88</td>
<td>297</td>
<td>2851</td>
<td>1997.9</td>
<td>71.2</td>
</tr>
</tbody>
</table>

*Note*: Capacity utilisation ratio is worked out on the basis of the average installed capacity at the beginning and at the end of the relevant financial year.

### TABLE 2.3
IMPORTS OF PAPER AND PAPER BOARDS
DURING 1980-88

<table>
<thead>
<tr>
<th>Year</th>
<th>Value in crores</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-81</td>
<td>186.5</td>
</tr>
<tr>
<td>1982-83</td>
<td>159.5</td>
</tr>
<tr>
<td>1983-84</td>
<td>156.6</td>
</tr>
<tr>
<td>1984-85</td>
<td>195.5</td>
</tr>
<tr>
<td>1985-86</td>
<td>226.0</td>
</tr>
<tr>
<td>1986-87</td>
<td>194.8</td>
</tr>
<tr>
<td>1987-88</td>
<td>258.1</td>
</tr>
</tbody>
</table>

**Source:** Economic Survey 1988-89,
Dept. of Economic Affairs,
Govt. of India.

Paper prices have been shooting upwards since February 1989 due to a series of measures taken by the Government.

In the first place, the import duty on glazed newsprint was raised sharply so as to discourage its use by the newspapers and magazines. Second, the prices of indigenous newsprint were also hiked by the public sector newsprint manufacturing enterprises. The paper manufacturers seized this opportunity to raise the prices of their products as well.

The impact of raising paper prices on the education of children of this country has been completely ignored. The prices of textbooks, copybooks and other various varieties of books used by children...
have skyrocketed. The favoured treatment which had been accorded, to this section of society in the past has been quietly given up.

A working group has made 14 suggestions a decade ago to augment the supply of raw materials but not one of them has been implemented so far. In the meantime, the paper prices are shooting up also because of the escalation in Newsprint price—both imported and indigenous.

The paper mills of this country have not been doing well financially. Their total production is around two million tonnes a year. For a variety of reasons, they are not able to utilise full capacity. Facility of inputs, lack of working capital and shortage of electricity has made a number of units sick and on July, 1989, nearly 100 paper mills are reported to be sick. Without the government's assistance, they will continue to be sick.

ORIGIN AND GROWTH OF SESHASAYEE PAPER AND BOARDS LTD

The year 1950 witnessed the birth of new paper mills in India. However, only in 1960 the state of Tamil Nadu saw the birth of one such mill, which is the integrated pulp and paper mill of Seshasayee Paper and Boards Limited and popularly known as SPB Limited. It was established on the banks of river Cauvery at Pallipalayam, Salem district, bordering Erode. The mill was established in technical collaboration with
Messrs. Parsons and Whittemore Inc. U.S.A. This is the biggest paper mill in South India with an annual turnover of about Rs.38 crores and a manufacturing capacity of 55000 tonnes of paper and boards per annum.

The mill is first ever in the world to cook bamboo in its continuous digester. This is the first mill to cook bamboo and bagasse in the same digester.

Considerable research and development were undertaken by the mills to identify a wide spectrum of primary raw materials to supplement the conventional raw material for the manufacture of pulp and paper. Joint research project is also undertaken with neighbouring agricultural university for growing new strains of fast growing species of wood which can be used as raw material with advantage. The company has also undertaken a joint research programme in association with Beloit Jones Divisions, U.S.A.

The company entered the field of technical consultancy services in the eighties for establishment of integrated pulp and paper plants, both in India and abroad. In 1981, the company got a prestigious contract to render technical consultancy for installation of a massive newsprint project based on bagasse for the Tamil Nadu Government. The company enlarged its scope of consultancy services by extending the services for establishing a sugar mill, Ponni Sugars and Chemicals Ltd, adjacent to the company's paper and board plant at Pallipalayam.
As a unique step, the sugar mill installed a coal fired boiler with a view to release its entire bagasse production to the company to supplement the fast depleting forest based raw material resources. The company took advantage of this tie up arrangements by establishing a bagasse processing system to manufacture paper with bagasse pulp, which incidentally is entitled to 100 percent excise duty exemption. Simultaneously, the company undertook a renovation and modernisation programme between 1982 and 1984 to modernise the two paper machines installed at the time of inception, with a view to diversify and enlarge its product range and produce specialised grades of paper and boards.

The total foreign exchange earnings during the year attributable to consultancy services in US $364,500 equivalent Rs. 43 lakhs in addition to the rupee income earned in rendering services to TNPL.

A planned and well-laid housing colony accommodate at present nearly 1100 of its employees with facilities of a High School and Elementary School, Recreation Clubs, and Open Air Theatre, Parks, Temple, Church and Mosque, a Shopping Complex and other amenities.

HIGHLIGHTS OF SPB LTD

1. Incorporation of the company : 1960
2. Commencement of production : 1962
3. First expansion : 1969
FINANCIAL PROFILE OF SPB LTD

Ratio analysis does not provide an end itself, but only a means of understanding business unit's financial position. There are a number of ratios which can be computed from a single set of financial statements, but only a few can be useful in any particular situation to focus on the financial position of a business concern. In the case of SPB Ltd only three important ratios such as Gross Profit Ratio, Stock Turnover Ratio and Working Capital Ratio have been compiled from the financial statements of the company, for the study period of 1983-89 as represented in the Tables 2.4 and 2.5.
TABLE 2.4
FINANCIAL PROFILE OF SPB LTD DURING 1983 to 1989

[Rs. in Lakhs]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid-up capital</td>
<td>525</td>
<td>525</td>
<td>525</td>
<td>525</td>
<td>525</td>
<td>525</td>
</tr>
<tr>
<td>Reserves &amp; Surplus</td>
<td>453</td>
<td>395</td>
<td>457</td>
<td>338</td>
<td>44</td>
<td>0.080</td>
</tr>
<tr>
<td>Secured and un-secured Loans</td>
<td>1601</td>
<td>1781</td>
<td>19884</td>
<td>2148</td>
<td>2029</td>
<td>2717</td>
</tr>
<tr>
<td>Current Liabilities and Provisions</td>
<td>1056</td>
<td>1160</td>
<td>1302</td>
<td>1626</td>
<td>1623</td>
<td>630</td>
</tr>
<tr>
<td>Represented by Net Fixed Assets</td>
<td>2422</td>
<td>2503</td>
<td>2646</td>
<td>2687</td>
<td>2406</td>
<td>2138</td>
</tr>
<tr>
<td>Investments</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Current Assets Loans and Advances</td>
<td>1196</td>
<td>1340</td>
<td>1403</td>
<td>1932</td>
<td>1830</td>
<td>1711</td>
</tr>
<tr>
<td>Manufacturing and other expenses</td>
<td>3162</td>
<td>3487</td>
<td>4726</td>
<td>4864</td>
<td>4313</td>
<td>4650</td>
</tr>
<tr>
<td>Sales [inclusive Excise duty]</td>
<td>4824</td>
<td>4480</td>
<td>5642</td>
<td>5587</td>
<td>5438</td>
<td>5552</td>
</tr>
<tr>
<td>Gross Profit [before in tax dept.]</td>
<td>556</td>
<td>452</td>
<td>437</td>
<td>520</td>
<td>372</td>
<td>394</td>
</tr>
<tr>
<td>Profit and Loss</td>
<td>+74</td>
<td>-58</td>
<td>-88</td>
<td>-118</td>
<td>-294</td>
<td>-250</td>
</tr>
<tr>
<td>Working Capital</td>
<td>140</td>
<td>180</td>
<td>101</td>
<td>306</td>
<td>207</td>
<td>1071</td>
</tr>
</tbody>
</table>

Source: Annual Report of SPB Ltd.
TABLE 2.5

IMPORTANT FINANCIAL RATIO OF SPB LTD DURING 1983 TO 1989

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Profit Ratio [%]</th>
<th>Stock Turnover Ratio [times]</th>
<th>Working Capital/Turnover [times]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982-83</td>
<td>9.09</td>
<td>25.59</td>
<td>59.38</td>
</tr>
<tr>
<td>1983-84</td>
<td>11.52</td>
<td>24.20</td>
<td>34.45</td>
</tr>
<tr>
<td>1984-85</td>
<td>10.08</td>
<td>21.58</td>
<td>24.88</td>
</tr>
<tr>
<td>1985-86</td>
<td>7.75</td>
<td>19.39</td>
<td>55.86</td>
</tr>
<tr>
<td>1986-87</td>
<td>9.30</td>
<td>9.36</td>
<td>18.25</td>
</tr>
<tr>
<td>1987-88</td>
<td>6.93</td>
<td>8.36</td>
<td>26.46</td>
</tr>
<tr>
<td>1988-89</td>
<td>7.09</td>
<td>12.62</td>
<td>51.88</td>
</tr>
</tbody>
</table>

Source: Annual Report of SPB Ltd.

GROSS PROFIT RATIO ANALYSIS

Gross Profit Ratio indicates the degree to which selling prices of goods per unit may decline without resulting in losses on operation of a firm.

\[
\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100
\]

A low gross profit ratio indicates unfavourable purchasing and mark-up policies, inability of the management to develop sales volume, thereby making it impossible to buy goods in large volume, marked reduction in selling prices not accompanied by proportionate decrease in cost of goods and effective competition.

The gross profit ratio has been declining steadily excepting for 1986-87, which is inadequate to meet other overheads. Except for
the year 1984, the company has been incurring heavy losses for various reasons such as, severe competition, price hike with regard to the basic raw materials and processing materials increase in the excise duty, etc. Gross profit ratio touched the lowest for the year 1987-88 and stood at 6.93 of the company was facing near closure in that year. The position has slightly improved in subsequent year viz., 1988-89.

**STOCK TURNOVER RATIO ANALYSIS**

Stock turnover ratio reveals the number of times finished stock is turned over during a financial year. This is computed by applying the following formula.

\[
\text{Stock Turnover Ratio} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}
\]

It is an indication of the velocity with which merchandise moves through the business. The stock turnover ratio which stood at 23.59 times during 1982-83 was the highest one for the study period. This was due to the lower investment, effected in inventories. The ratio which touched 8.36 times during 1987-88 was the lowest. This only reflected dull business and over investment in inventories.

The ratio has been decreasing year by year with the exception of 1988-89. During 1988-89, effective measures were implemented by the management to bring down the investment effected on inventories in that year.
WORKING CAPITAL TURNOVER ANALYSIS

Working capital turnover ratio is the test to measure the efficiency with which net working capital is utilised. It is the ratio of net sales to net working capital. It indicates whether the business is operating with a small or large amount of net working capital in relation to sales. The ratio which works out to 59.38 times during 1982-83 was the highest for the study period. This reveals a favourable turnover of inventories and receivables. The ratio again shoot up to 55.86 times during 1985-86 followed by a fall to 18.25 times in the next year viz., 1986-87. It again noted to 26.46 times in 1987-88 and again to 51.88 times in 1988-89 which only reveals the effective utilisation of working capital in the last two years.

In general after 1980 the paper mill was not financially sound and has been incurring heavy losses year after year excepting for the year 1983-84 wherein it has made a profit of Rs.74 lakhs and was in a position even to declare a dividend of 12 percent to the shareholders.

Even though the mill has increased its production in the subsequent years it could not earn any profit for the following reasons.

In the first place, due to the acute scarcity of conventional raw materials, bagasse was also used partly in the manufacturing process.
as alternate raw materials, despite the fact, the productivity of the bagasse is lower than that of the conventional raw materials.

In the second place due to over estimation of the existing demand for the paper and allied products, the government allowed the mushroom growth of Small Scale Industries manufacturing paper through various financial incentives which in turn posed serious competition to SPB Ltd and taken away a large part of its profits.