CHAPTER IV

PROFILE OF STUDY MILLS AND ITS OVERALL PERFORMANCE
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Sugar industry is one of the agro based industry which contributes significantly to the growth of the global economy by providing large scale direct employment of several thousands of people and indirect employment to several lakhs of farmers and agricultural workers in the rural areas who are involved in cultivation of cane, harvesting, transport and other services.

Sugar is produced in over 120 countries. Roughly 70 percent of world sugar is produced from sugarcane primarily grown in the tropical and sub tropical zones of the southern hemisphere, The balance 30 percent sugar comes from sugar beet grown mainly in the temperate zones of the northern hemisphere.

Brazil remains unchallenged as the top sugar producer followed by India. Despite lower per capita consumption, India stands highest in aggregate sugar consumption. Global sugar consumption steadily grows at 2 percent p.a. while year on year production volume fluctuates owing to agro and economic factors. Much of the consumption increase comes from developing countries, while demand is near static in developed countries. About 70 percent of world sugar production is consumed in the country of origin, while the balance is traded in global market. In India, supply has grown faster than demand and this has placed a downward pressure on sugar prices in 2006 - 07.
GLOBAL SCENARIO

The world sugar production recording an increase of 8.2 percent in 2005-06, grew by another 9.6 percent in 2006-07 to reach 167.3 MMT. This was the second successive increase against the backdrop of anticipated shortage in sugar availability, primarily driven by diversion of cane for ethanol production in Brazil and slowdown in sugar exports from Economic Union countries. All this nurtured the belief that global sugar prices would stay high and opened the door to investments in sugar and ethanol. Given these rosy prospects the sugar sector was awash with investments in sugar industry. Expectations, that in future any surplus cane would be absorbed by higher alcohol production has proved to be wishful thinking and the world is faced with a surplus of sugar. The following table gives a summary of World Sugar Production

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<tr>
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<tr>
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<td>26.14</td>
<td>27.73</td>
<td>32.64</td>
<td>32.77</td>
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<tr>
<td>India</td>
<td>14.74</td>
<td>13.80</td>
<td>20.94</td>
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<td>EU</td>
<td>20.20</td>
<td>21.95</td>
<td>21.94</td>
<td>17.05</td>
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<tr>
<td>China</td>
<td>10.90</td>
<td>9.86</td>
<td>9.58</td>
<td>13.04</td>
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<tr>
<td>USA</td>
<td>7.85</td>
<td>7.15</td>
<td>6.71</td>
<td>7.70</td>
</tr>
<tr>
<td>Thailand</td>
<td>7.28</td>
<td>5.43</td>
<td>5.08</td>
<td>6.98</td>
</tr>
<tr>
<td>Mexico</td>
<td>5.36</td>
<td>6.00</td>
<td>5.39</td>
<td>5.43</td>
</tr>
<tr>
<td>Sub-Total Top 7</td>
<td>92.47</td>
<td>91.91</td>
<td>101.37</td>
<td>113.56</td>
</tr>
<tr>
<td>% of Total World</td>
<td>64.3%</td>
<td>65.1%</td>
<td>66.4%</td>
<td>67.9%</td>
</tr>
<tr>
<td>Others</td>
<td>51.28</td>
<td>49.18</td>
<td>51.22</td>
<td>53.72</td>
</tr>
<tr>
<td>World Total</td>
<td>143.75</td>
<td>141.09</td>
<td>152.59</td>
<td>167.27</td>
</tr>
</tbody>
</table>

Source: F.O. Licht's International Sugar and Sweetner Report dated 24.07.07
The following table illustrates the World Sugar Balance:

**TABLE NO 4.2**

**WORLD SUGAR BALANCE (MMT)**

<table>
<thead>
<tr>
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</thead>
<tbody>
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<td>66.80</td>
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<td>64.56</td>
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<tr>
<td>Production</td>
<td>143.75</td>
<td>141.09</td>
<td>152.59</td>
<td>167.27</td>
</tr>
<tr>
<td>Imports</td>
<td>49.16</td>
<td>50.90</td>
<td>53.46</td>
<td>51.34</td>
</tr>
<tr>
<td>Consumption</td>
<td>141.50</td>
<td>144.06</td>
<td>146.20</td>
<td>150.41</td>
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<tr>
<td>Exports</td>
<td>52.39</td>
<td>54.08</td>
<td>55.94</td>
<td>56.32</td>
</tr>
<tr>
<td>Closing Stock</td>
<td>66.80</td>
<td>60.65</td>
<td>64.56</td>
<td>76.44</td>
</tr>
<tr>
<td>Stock as % of Consumption</td>
<td>47.2</td>
<td>42.1%</td>
<td>44.2%</td>
<td>50.8%</td>
</tr>
<tr>
<td>Stocks as No. of Months</td>
<td>5.66</td>
<td>5.05</td>
<td>5.30</td>
<td>6.10</td>
</tr>
<tr>
<td>+/- Production (%)</td>
<td>-4.44%</td>
<td>-1.85%</td>
<td>8.15%</td>
<td>9.63%</td>
</tr>
<tr>
<td>+/- Consumption (%)</td>
<td>1.31%</td>
<td>1.81%</td>
<td>1.48%</td>
<td>2.88%</td>
</tr>
</tbody>
</table>


In the last two years, world sugar production has increased by 9 percent whereas consumption has increased by only 2 percent. On a long term horizon, consumption of sugar is expected to grow by 2.5 percent to 3 percent which depends inter-alia on population in 2007 – 08. It will continue to be a robust indicating that another surplus year is not outside the realm of possibility unless adverse weather comes to the rescue of sugar producers.

**LONG - TERM TRENDS IN WORLD SUGAR CONSUMPTION**

Consumption is the driver of the world sugar economy. Sugar produced must necessarily be consumed at some time. Economists have identified six to seven drivers of demand. The most important of these are:
1. Population growth

2. Per capita income

In 2006-07 global consumption was around 150 million tonnes. However, consumption growth across countries is not secular and there exists large regional variations.

**INDIAN SCENARIO**

In 2006 - 07 India has shown a massive growth. Production has improved to around 28 million tonnes from around 20 million tonnes in 2005 - 06. This rise was triggered by tight supplies from 2004 - 05 and 2005 - 06 leading to higher domestic prices, which together with incentives to expand production coming from state governments, led the industry to create new production capacities at a rapid pace. This growth in production led to fall in sugar and sweetener prices. In response to lower sweetener prices, farmers switched their cane away from the Khandsari producers, whose prices are linked to market. This switch has compounded the problem of sugar surplus and forced the government to take steps to mitigate the effects of over production such as creation of a buffer stock of 5 million tones and export incentives.

The problem will ease for this season as production is likely to fall to around 25 million tonnes. Assuming exports of around 3 million tonnes and domestic demand of around 23 million tonnes, closing stocks could fall by around 1 million tonnes by September 2008. Sugar prices are therefore expected to come up in the future.
TABLE NO 4.3
TRENDS IN DOMESTIC DEMAND AND SUPPLY (MMT)

<table>
<thead>
<tr>
<th>SUGAR</th>
<th>FY00</th>
<th>FY01</th>
<th>FY02</th>
<th>FY03</th>
<th>FY04</th>
<th>FY05</th>
<th>FY06</th>
<th>FY07</th>
<th>FY08e</th>
<th>FY09f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Op. Stock</td>
<td>6.8</td>
<td>9.3</td>
<td>10.6</td>
<td>11.2</td>
<td>12.4</td>
<td>8.2</td>
<td>4.6</td>
<td>3.7</td>
<td>7.7</td>
<td>6.7</td>
</tr>
<tr>
<td>Production</td>
<td>18.2</td>
<td>18.5</td>
<td>18.5</td>
<td>20.1</td>
<td>13.5</td>
<td>12.7</td>
<td>19.3</td>
<td>28.0</td>
<td>25.0</td>
<td>19.0</td>
</tr>
<tr>
<td>Demand - Total</td>
<td>16.2</td>
<td>17.2</td>
<td>17.9</td>
<td>19.0</td>
<td>18.1</td>
<td>18.5</td>
<td>20.1</td>
<td>24.0</td>
<td>26.0</td>
<td>23.5</td>
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<tr>
<td>Domestic</td>
<td>16.1</td>
<td>16.2</td>
<td>16.8</td>
<td>17.5</td>
<td>17.9</td>
<td>18.5</td>
<td>19.0</td>
<td>22.5</td>
<td>23.0</td>
<td>23.5</td>
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<tr>
<td>Exports</td>
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<td>1.0</td>
<td>1.1</td>
<td>1.5</td>
<td>0.2</td>
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<td>1.1</td>
<td>1.5</td>
<td>3.0</td>
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<tr>
<td>Imports</td>
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<td>-</td>
<td>-</td>
<td>0.4</td>
<td>2.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cl. Stock</td>
<td>9.3</td>
<td>10.6</td>
<td>11.2</td>
<td>12.4</td>
<td>8.2</td>
<td>4.6</td>
<td>3.7</td>
<td>7.7</td>
<td>6.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Cl. Stock (Months)</td>
<td>6.9</td>
<td>7.4</td>
<td>7.5</td>
<td>7.8</td>
<td>5.4</td>
<td>3.0</td>
<td>2.2</td>
<td>3.9</td>
<td>3.1</td>
<td>1.1</td>
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<tr>
<td>Stock-to-use Ratio</td>
<td>57.4%</td>
<td>61.6%</td>
<td>62.6%</td>
<td>65.3%</td>
<td>45.3%</td>
<td>24.9%</td>
<td>18.4%</td>
<td>32.1%</td>
<td>25.8%</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

Source: CRISIL – up to FY06; BHL – from FY’07, e: Estimate, f: Forecast

Sugar Prices: From January 2004 to June 2006, domestic sugar prices were on the uptrend as a result of a fail in sugar production. Prices peaked during April - June 2006, after which they started correcting. The Government banned sugar exports in January 2007 resulting in a sharp drop in prices.

Currently sugar (S-30 variety) is quoted at around Rs. 1,350 per qtl. The year end inventory of sugar is approximately 4 months of annual consumption including exports.

INDUSTRY DRIVERS

The Performance of the Industry mainly depends on:

1. Internal factors
2. External factors
Internal Factors:
1. Plant size and location
2. Plant efficiency
3. Value addition from by-products
4. Financial Management

External Factors:
1. Availability of sugarcane
2. Sugarcane prices
3. Government Policy
4. Sugar Prices

1. Availability of Sugarcane

Acreage under cane cultivation has increased from 4.2 million hectares in 2005-06 to around 4.9 million hectares in 2006-07. Sugarcane production has increased from 281 million tonnes in 2005-06 to 345 million tonnes in 2006-07.

The following table gives the year-wise data relating to sugarcane production and area cultivated:

<table>
<thead>
<tr>
<th>Year</th>
<th>Area under sugarcane cultivation ('000 hectares)</th>
<th>Sugarcane production ('000 tonnes)</th>
<th>Yield per hectare (tones)</th>
<th>Factories in Operation (nos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997-98</td>
<td>3,930</td>
<td>2,79,541</td>
<td>71.1</td>
<td>400</td>
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<tr>
<td>1998-99</td>
<td>4,055</td>
<td>2,88,722</td>
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<tr>
<td>1999-00</td>
<td>4,220</td>
<td>2,99,324</td>
<td>70.9</td>
<td>423</td>
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<tr>
<td>2000-01</td>
<td>4,316</td>
<td>2,95,956</td>
<td>68.6</td>
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<tr>
<td>2001-02</td>
<td>4,430</td>
<td>2,97,208</td>
<td>67.4</td>
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<tr>
<td>2002-03</td>
<td>4,520</td>
<td>2,87,383</td>
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<td>453</td>
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<tr>
<td>2003-04</td>
<td>3,938</td>
<td>2,33,862</td>
<td>59.4</td>
<td>422</td>
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<tr>
<td>2004-05</td>
<td>3,662</td>
<td>2,37,088</td>
<td>64.8</td>
<td>400</td>
</tr>
<tr>
<td>2005-06</td>
<td>4,201</td>
<td>2,81,172</td>
<td>66.9</td>
<td>455</td>
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<td>2006-07</td>
<td>4,850</td>
<td>3,45,000</td>
<td>71.1</td>
<td>499</td>
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</table>

Source: CRISIL / ISMA
TABLE NO 4.5
SUGARCANE – STATE WISE AREA UNDER CULTIVATION (‘000 hectares)

<table>
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<tr>
<th></th>
<th></th>
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<tbody>
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<td>A P</td>
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<td>192</td>
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<td>Bihar</td>
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<td>Karnataka</td>
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<td>U P</td>
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<td>1,975</td>
<td>2,011</td>
<td>1,938</td>
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<td>2,149</td>
<td>2,030</td>
<td>1,955</td>
<td>2,156</td>
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<td>-</td>
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<td>126</td>
<td>134</td>
<td>128</td>
<td>107</td>
<td>101</td>
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<td>West Bengal</td>
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<td>23</td>
<td>22</td>
<td>23</td>
<td>20</td>
<td>17</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Others</td>
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<td>12</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>13</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>All India</td>
<td>4,174</td>
<td>3,930</td>
<td>4,055</td>
<td>4,220</td>
<td>4,316</td>
<td>4,430</td>
<td>4,520</td>
<td>3,938</td>
<td>3,662</td>
<td>4,201</td>
</tr>
</tbody>
</table>

Source: Seventy Sixth Annual Report 2006 – 07, Bajaj Hindustan Ltd, Page No.54

It may be observed that since FY 2005, area under sugarcane cultivation has increased by around 32 percent and coupled with an increase in yield per hectare which resulted in a substantial increase in sugar production in the country.

2. Sugarcane prices

Sugarcane is the main raw material in the production of sugar and accounts for around 65 to 70 percent of the cost of production. Financial performance
therefore has a high correlation to cane prices. Any increase in the sugarcane price adversely impacts profitability.

Sugarcane prices are regulated by the Government. The Central Government decides the minimum price called the Statutory Minimum Price (SMP), at which sugar mills have to purchase cane from farmers. The SMP is based on the recommendations of the Commission for Agricultural Costs and Prices. For 2007-08 the SMP is fixed at Rs 81.18 per qtl. linked to a base sugar recovery of 9 percent.

Sugarcane prices announced by the government are a function of cost of production such as rental value of land, input costs, finance costs and cost of labour including family labour. The State Governments also have the powers to declare a price for procurement of cane called the State Advised Prices (SAP).

3. Government Policy

Sugar is the second largest agro-processing industry in India after textiles. Sugar being an essential commodity and having a high weightage of around 3.6 percent in the Wholesale Price Index (WPI), is highly regulated by the Government through control on cane pricing, external trade, and control on sugar that can be sold in the open market. The political sensitive nature of the industry means that governments are hesitant to loosen their grip over the industry.

Domestic sugar sales are regulated by the Central Government which decides how much a mill can sell in the open market i.e. “free sale” quota and how
much is to be released by the mills for distribution through the public distribution system i.e. “levy quota”. Levy sugar prices are usually lower than market prices. Sugar sales are subject to release orders from time to time.

The Government also regulates Import and Export of sugar in times of expected shortages in the domestic market.

4. Sugar Prices

Sugar prices are a function of demand and supply. In periods of high production, market prices fall due to an excess supply and inventory build up. Prices correct themselves when inventory is consumed and production is not able to meet with demand. Sugar prices started their upward movement in 2003-04 from Rs.1,300 per qtl and reached a historic height of around Rs.1,900 per qtl in May 2006 mainly on account of a drop in production in 2003-04 and 2004-05. Since then prices have dropped by around 30 percent due to increased production in 2005-06 and 2006-07.

INTERNAL FACTORS

1. Plant Size and Location

As with any other industry, size is of vital importance in the sugar industry. Large size will enable mills to take advantage of economies of scale and reduce cost of production. Sugar plants need to be located in an area where adequate sugarcane is available. It is also vital that the mill is able to attract a high percentage of cane for sugar crushing out of the total cane grown in the area.
Sugarcane is bulky and also need to be crushed as soon as it is harvested. Hence it is important that the Mills are located close to cane farms.

2. **Plant efficiency**

Sugar recovery is one of the major factors affecting financial performance. Even a small increase in recovery level could have a significant impact on the profitability of a company. Sugar recovery inter-alia depends on internal plant efficiencies, time taken by the Mill to crush cane from the time it is harvested, processing losses etc. Factors like development of infrastructure around the plant and maintenance of plant and machinery also helps in obtaining higher recoveries.

3. **By-products**

Optimal utilisation of by-products is another key element in sugar industry. Integrated sugar mills which produce Bagasse, Alcohol and Power are more likely to perform better than that those which only produce sugar and sell Bagasse and Molasses. By opting for an integrated model mills, one could earn a higher margin due to higher value addition and partially mitigate risk arising out of a down turn in sugar business.

4. **Financial Management:**

Sugar industry is highly working capital intensive. Sugar operations are seasonal in nature. Crushing operations happen on an average for around 125 days, whereas sales of sugar happens throughout the year. However crushing duration varies across the country depending on cane availability etc. For instance, crushing is done for around 150 -160 days in a year from October till April. Working capital is
therefore required during the crushing season and gets liquidated out of sales proceeds. Efficient working capital management lowers interest cost and improves profitability.

The Global situation has been more or less reflected in India. The rebound of the cane crop and the enthusiastic response to higher cane prices has resulted in substantial surplus for the Sugar Season 2006-07. Latest production estimates are around 27 MMT for this Sugar Year against the estimated consumption of 19.5 MMT.

With a bumper sugarcane crop and increased crushing capacities, sugar production in India has recovered in a short span of time to record levels resulting in high inventory build up. Further with untimely Government intervention by banning exports of sugar, realisation has fallen sharply. Recent sugar price fall below the cost of production has forced Government of India to review sugar industry policy comprehensively. Unless both the State and Central Governments revise the policy realistically in terms of cane price, taxes thereon and export of sugar price and movement of Molasses and Ethanol, this industry will be ruined. The country will face large cane payment arrears with consequent effect on the fortunes of farmers.

The industry is still controlled by the Government through levy obligation and release mechanism. Due to the Government regulations, the Companies are unable to take timely effective steps to tackle the challenges facing the industry or
devise effective strategies to meet those challenges. Continuing decline in sugar prices may affect the viability of the sugar mills in future, especially the stand alone sugar mills which may face liquidity crunch.

Even as major policies are being modified on an ad-hoc basis, a plethora of controls and administrative measures by the Central and State Governments continue to impact the industry and its overall performance on account of unresolved contradictions and decisions based on political considerations.

The record production of sugar in the country has given the industry an opportunity to play a major role in the international sugar market by capturing a sizeable market share. Effective utilization of by-products to manufacture value added products like power and alcohol offer opportunities for the sugar industry to limit the impact of price volatility due to sugar cycle and sustain the economic viability of the factories during downturn scenario. The Central Government is proposing to make it mandatory blending of 10 percent ethanol with petrol which will provide business opportunity to the sugar industry. Global warming is being recognized as an international problem and most of the countries are giving encouragement for the use of renewable energy to reduce carbon emissions. The bagasse based cogeneration projects which come under this category provide opportunity to sugar factories to earn additional revenue by sale of carbon credits under the Clean Development Mechanism.
PROFILE OF THE STUDY MILLS

The sugar industries strongly believe that its people are the most sustainable and invincible source of competitive business advantage. The organisation cherishes its association and relationship with every single and valuable member of an inspired team of organisations.

The organisations create an enabling and energizing environment which motivates its people to collectively strive to achieve the mission of creating an institution that seats benchmarks and standards for others to emulate and create wealth for all stake holders through ethical and socially responsible business practices.

To help and back up the organisation’s aggressive growth strategy and consequent business plans, organisations have significantly expanded its human resource capital over the years, to enable the organisation grow faster and glow better.

Some salient HR Best Practices that the organisations have evolved, systemised and implemented include:

- Assessment of job satisfaction level among employees through regular employee satisfaction surveys conducted by an external agency. The organisations follow upon the insight gained through these surveys through over customised and focused HR initiatives.
• The successful launching of employee suggestion scheme and to create and enhance, an awareness of this scheme, a workshop also organised. The aim is to enhance the involvement of all employees, encourage hidden talent through wider participation and improve internal system and process.

Sugar industries are keenly alive to the fact that continually accelerating the learning process within their organisation is critical to anticipate and meet the emerging challenges of an increasingly globalizing and intensely competitive business environment. The process of acquiring, managing, leveraging and appropriately adapting and applying knowledge is becoming increasingly integral to business success.

The training programmes are meticulously designed and carefully conducted, after keenly ascertaining and analysing emerging organizational and business needs. A need-based training calendar has been designed at all the sugar industries.

However, the following HRD practices are generally implemented in the sugar mills. These practices are classified into three fold, namely Training and Development, Performance Appraisal and Reward and Recognition.

**HRD Practice Relating to Training and Development**

The development of high potential workers with the support of continuous training and retraining is now-a-days seen a core element in the development of competitive advantage of the organisations. The following are the important HRD
practices relating to training and development which are presently followed in study sugar mills.

1. Employees are sponsored for training on genuine training needs.
2. Training programs enable the employees to gain continuous improvement and update knowledge.
3. After training, employees are given opportunities to try out what they have learnt.
4. Training helps to develop employees to equip themselves to adopt and face challenges.
5. The training programmes are useful for personal growth and development of employees.
6. Training programmes cover various fields and are useful.

HRD Practice Relating to Performance Appraisal

Performance appraisal is one of oldest and most important practices of management. It refers to all the formal procedures used in working organisation to evaluate the personalities and contributions of group members. There are several factors affecting the performance appraisal namely, environment constraints, organisation leadership, independence of sub-system, organizational structure etc.

By identifying the strengths and weaknesses of an employee it serves as a guide for formulation of a suitable training and development programme to improve their quality of performance. Every organisation followed the
performance appraisal system according to their convenience. Herewith, some important HRD practices relating to performance appraisal which are generally followed in study sugar mills are illustrated.

1. Performance appraisal reports are assessed on adequate information and objectives
2. Performance appraisal are concluded at regular intervals
3. Performance appraisal are applied to employee to find out their strength and weakness but not to find fault on them.
4. Employees are appraised by the capable experts but not by their immediate supervisors.
5. Performance appraisal provides an opportunity to improve their performance, behaviour, attitude and action.
6. Any adverse weaknesses of employees are communicated to them based on the performance appraisal system confidentially.
7. Employees accept behaviour feedback and use them for development.

**HRD Practice Relating to Reward and Recognition**

Rewards may or may not enhance the employee’s financial well-being. If they do, they can do this directly through wages, bonuses, profit sharing and the like; indirectly-through supportive benefits such as pension plans, paid vacations, paid sick leaves and purchase at discount.
Recognition is the most important tool to motivate the employees in an organisation. Every employee expects respect in organisation. There are several practices adapted by an organisation to fulfill the employees’ needs. The following are general practice adapted by study sugar mills.

1. Employees are recognized for their experience and qualification.
2. Management rewards employees for contribution of good work.
3. Managerial staff are focused to develop, prepare juniors to adopt to organisations features.
4. Supervisors appreciate employees with special care.
5. Employees’ welfare are taken care so that they save a lot of mental energy for work purpose.
6. Employees are respected and considered as back bone for the growth of the company.
7. Supervisors understands the employees when mistakes are committed and do not punish or discourage them.
8. Job rotation facilitates employees’ development.

1. E.I.D. PARRY (INDIA) LTD.

E.I.D. Parry is over two hundred years old. The mill became the harbinger of sugar industry in India more than 160 years ago, surviving wars, famines, epidemics, industrial and technological revolutions, evolving agrarian trends and patterns and other seemingly insurmountable upheavals. E.I.D. Parry always looks forward to opportunities that come as challenges.
The legend of E.I.D. Parry dates back to 1788, when, on July 17, Thomas Parry, a Welsh trader, first set foot on Indian soil. He foresaw tremendous prospects in India and established a business in piece goods and banking. In 1819, Parry and John William Dare became partners. And their company began to weave a tale of wonder. After independence there was a strong impetus to Indianise the company. In 1972, the E.I.D. Parry board resolved to apply to the Government of India for conversion into an Indian company.

NEW CHALLENGES, NEW OPPORTUNITIES

The year that went by saw an overall economic slow-down in the sugar industry worldwide. The global statistics show that sugar supply has grown faster than sugar demand and this has placed downward pressure on prices in 2006-07. Sugar production is now at its peak everywhere. Good seasonal conditions have led to higher production in Brazil and India.

With a bumper sugarcane crop in 2006-07 and increased crushing capacities, sugar production in India touched record levels, resulting in huge inventory build-up. This put downward pressure on the sugar prices. To make matters worse, the Government imposed a Sugar Export ban. When the ban was removed in January 2007, domestic sugar prices plummeted and the international prices of sugar also crashed. This added to the exporter's plight. All these have resulted in the profits from sugar business remaining low during the second half of this year. E.I.D. Parry too suffered a setback.
COLLABORATIONS

With the business growing over the years, the mill have joined hands with international giants and taken steps for a brighter future. E.I.D. Parry completed its restructuring during 2005-06 converting its sanitary ware business into a joint venture with Roca Sanitario S.A. Through its subsidiaries Coromandel Fertilisers Ltd. (CFL) and Godavari Fertilisers and Chemicals Ltd. (GFCL) and Joint Venture, Parryware Roca Private Limited, it retains a significant presence in the fertiliser and sanitaryware business respectively.

The Company also entered into a Joint Venture Agreement with Cargill Asia Pacific Holdings PTE Limited, a wholly owned subsidiary of Cargill International, to form Silkroad Sugar Private Limited. The Joint Venture will set up a stand alone sugar refinery at Kakinada, Andhra Pradesh. Parry Nutraceuticals Limited, which has global presence, was merged with E.I.D Parry during the year.

Over the years its investments made towards the maximum value extraction from the cane, are coming good. The flexibility in its processes to manufacture a more profitable product mix is adding to its strength. The company has leveraged its presence in other categories such as fertilizers and sanitary ware to hive them off into mighty stand-alone entities that are highly profitable market leaders. By entering the lucrative segments such as Bio-Farm-inputs and Nutraceuticals, the company is blazing a trail in the Hi-profit Hi- growth sectors of international business. While in the short term, relief measures are being
implemented by the Government to provide relief to the sugar industry to bring back stability of sugar prices, the long-term outlook for sugar remains positive and promising. Despite challenges, E.I.D. Parry is optimistic that it will undoubtedly benefit its stakeholders in future by identifying opportunities lying beyond challenges and creating value out of them.

PERFORMANCE OF E.I.D. PARRY

The Company achieved a turnover of Rs. 70718 lakhs including other income of Rs.15546 lakhs for the year ended 31st March, 2007. The Profit Before Interest and Depreciation grew by 13 per cent to Rs. 20109 lakhs and the Earning Before Tax was up by 21 per cent to Rs.17033 lakhs. The Profit After Tax (PAT) was Rs. 12742 lakhs (10%) compared to that of last year amounting to Rs. 11584 lakhs. The profit for the year includes Rs.11812 lakhs representing income of a non recurring nature compared to Rs.2285 lakhs in previous year. Excluding this income (Rs.11812 lakhs) and the tax thereon (Rs.2640 lakhs) the Profit Before Interest and Depreciation was Rs.8297 lakhs, Profit Before Tax was Rs.5221 lakhs and the Profit After Tax (PAT) was Rs. 3570 lakhs.

HIGHLIGHTS

• E.I.D. Parry (India) Ltd. achieved a sales turnover of Rs. 757.09 crores including other income of Rs. 173.86 crores.

• It has incorporated another sugar plant at pondicherry, commenced operations and achieved high productivity with in a short period.
• It was also having another important green field plan in Tamilnadu to increase overall productivity.

• 22 MV Co-generation unit has been commenced in Pugalur and one more plant is under construction in Pettavaittalai and it will be commenced shortly. Nellikuppam unit is converted into a multi product unit to increase the overall performance of the unit.

• It has taken considerable effort to export the product throughout the world.

• It also provides lot of employment opportunities needed in the society.

• It helps to improve the standard of living.

• Last but not least, the mill takes maximum effort to satisfy the consumer society through their products.

HRD PRACTICES

The organisation that would like to be dynamic and growth oriented can do so only by making its employees competent, dynamic and growth oriented. Competencies and dynamism of employees results only when the organisation has a development climate and HRD processes internalised. The initiation, development and internalisation of HRD processes are possible through HRD mechanisms and subsystems.

The Company followed the HRD practices very traditional like performance appraisal concluded at regular intervals, review discussion for every training period, feed back from the their employee and counseling sessions etc. The
management reward employees for contribution for good work. Managerial staff are focused to develop, prepare juniors for organisations better future.

The Company concentrate on their decision for promotion, salary increment, placements, transfer, discharge etc. These methods of HRD practices on specific accomplishments and outcomes are achieved as a result of job performance rather than on job behaviours. Job performances is viewed as a series of expected results which can be compared with actual performance results. Evaluation is based on how goals and objectives have been met in relation to predetermined standards.

General approach of employee participation in management scheme is also followed in the company for getting better feedback from their employees. The employees who contribute good suggestion to the management will be rewarded with cash benefits.

Training is most important function that directly contributes to the development of human resources. It is also the most frequently used HRD mechanism in the organisation.

**On-The- Job Training:** Under this method, the following training systems are adopted. (1) Job instruction Training (2) Coaching and (3) Job rotation.

**Experimental Methods**

The objective of this method is to help an individual to understand one self and others. Such understanding help an individual to understand the human
relationship in a work situation, including at times his managerial style. However, the mill adapted two types of experimental training. Namely sensitive training and transactional analysis.

The above said HRD practices are implemented in E.I.D Parry (India) Limited.

2. KOTHARI SUGARS AND CHEMICALS LTD.

The company was incorporated on 1963 with a production capacity of 1250 TCD. The company’s registered office is situated at “Kothari Building, 115, Mahatma Gandhi Salai, Chennai. The company has a present authorized capital of Rs.3,600 lakhs and a paidup capital of Rs. 2,891.42. The company was promoted by B.H.Kothari, his present position in the company is Chairman and Managing Director.

INTRODUCTION AND HISTORY OF FACTORY AT KATTUR

- The plant Located at Kattur Village - Lalgudi Taluk, Trichy District was installed in the year 1963 with a capacity of 1250 TCD.
- Double sulphitation process is adopted from the beginning for manufacturing of Sugar.
- The capacity of the plant was expanded in the year 1968, 1972, and 1988 in stages to 2900 TCD.
- In the year 1995 a Cane Separation System was added to process additionally 1100 TCD.
- However Cane Separation System is not in operation. The system was discontinued from 1998-1999 due to its unviable economics.
HIGHLIGHTS

• Kothari sugar plant was incorporated in the year 1963 at Kattur village.
• It achieved a sales turnover of Rs. 250.18 crores including the other income of Rs. 9.57 crores.
• The capacity of the plant was expanded from 1250 TCD to 2900 TCD in the year 1998.
• Cane separation system was incorporated in the year 1955 to increase the productivity.
• It also takes considerable effort to provide employment opportunity.

HRD PRACTICES

Knowledge of one’s strengths helps one to become more effective, to choose situations in which one’s strengths are required, and to avoid situations in which one’s weaknesses could create problems. This also increases the satisfaction of the individual. Often, people do not recognize their strengths. Supervisors in HRD systems have the responsibility for ongoing observation and feedback to subordinates about their strengths and their weaknesses, as well as guidance in improving performance capabilities.

Practices of Carrier Planning

The HRD philosophy is that people perform better when they feel trusted and see meaning in what they are doing. In the HRD system, corporate growth plans are not kept secret. Long-range plans for the organisations are made known to the employees. Employees are helped to prepare for change whenever such
change is planned; in fact, the employees help to facilitate the change. Major changes are discussed at all the levels to increase employee understanding and commitment.

Most people want to know the possibilities for their own growth and career opportunities. Because managers and supervisors have information about the growth plans of the company, it is their responsibility to provide information to their subordinate and to assist them in planning their careers within the organisation. Of course, the plans may not become a reality, but all are aware of the possibilities and are prepared for them.

**Training Practices**

Training is linked with performance appraisal and career development of the organisation. The employees of the mill are trained on the job and through special in-house training programmes. For some employees outside training may be utilized to change, update or develop specific skills. This is especially valuable if the outside training can provide expertise, equipment, or sharing of experiences that are not available within the organisation.

**Reward and Compensation**

Rewards are something that attracts workers and stimulates them to work. The reward can be financial and non-financial. Both type of rewards play an important role under different conditions. The following rewards practices are adapted in this mill to motivate the employees.
Individuals Rewards Scheme

The simplest plan in this category is the piece rate system. Under this system there are three plans which are used in this mill namely (1) Halsey plan (2) Rowan Premium plan and (3) Emersson Efficiency plan.

Group Rewards Scheme

The group rewards scheme is appropriate where jobs are interdependent. It is difficult to meaningfully measure individual performance and group pressure affect the performance of members of the group. The following group reward system are practiced in this mill.

1. Profit Sharing: This is very simplest method of calculating performance and giving reward to team members. The basic rationale behind profit sharing is that the organizational profit is an outcome of the cooperative efforts of various parties, therefore, employees also share in profits as shareholders.

2. Co-partnership: This method is an improvement over profit sharing. In this scheme, employees also participate in the equity capital of the company. The employee can have shares either on the basis of cash payment or in lieu of other rewards payable in cash like bonus. Under this scheme the employees become shareholders.
3. PONNI SUGARS (ERODE) LTD.

Ponni Sugars (Erode) Ltd. is an offspring of Ponni Sugars and Chemicals Ltd (PSCL) under a Demerger Scheme sanctioned by the Hon’ble High Court of Madras on 10th September 2001. In terms of the Scheme, the company took over the business of Erode Undertaking with concurrent transfer of major part of stakeholders’ interest in PSCL to the company.

The sugar mill was set up with 1250 TCD capacity in 1984 in a record time of 12 months. It achieved full capacity crushing during the very first year of its commercial operation that enabled declaration of a maiden dividend of 10 per cent in that very first year, a record in the annals of sugar industry. It was a trendsetter in mobilising surplus cane during its infancy stage from neighbouring sugar mills and extending crushing season to well above industry average. Its capacity was expanded to 2500 TCD in 1994.

The sugar mill has successfully implemented an innovative Lift Irrigation Scheme by bringing in dry lands under cane cultivation, utilizing the effluent discharge of the neighbouring paper mill. This has helped secure multitudinal benefits – providing a dependable and perennial source of irrigation to farmers in the neighbourhood, increase of land value manifold in the region, transforming the livelihood of local rural population, resolving the raw material needs of sugar and paper mills and addressing ecological concerns in effluent discharge.
Right at its inception, Ponni sugars was structured on the concept of total diversion of bagasse for paper. Accordingly it installed a coal fired boiler and later added a multi fuel boiler in place of conventional bagasse fired boilers. It has a bagasse tie up arrangement with Seshasayee Paper and Boards Ltd for a mutually beneficial and rewarding long term relationship.

Ponni Sugars is an efficient and quality producer of sugar, catering to both domestic and international markets. It is a venerable partner for villagers growing sugarcane in its neighborhood. It enjoys cordial relationship with employees. It firmly believes in transparent and fair dealings with all its stakeholders by following sound corporate governance norms both in letter and spirit.

**DATE CHART**

26-12-1996 Company incorporated under the name **SPB Sugars and Chemicals Limited**

25-01-2000 Name of the company changed to **Ponni Sugars (Erode) Limited**

10-09-2001 Demerger Scheme for the transfer of Erode Undertaking of Ponni Sugars and Chemicals Ltd established in 1984 to the company effective 01.04.1999. Sanctioned by High Court of Madras.

18-10-2001 Completion date of Demerger Scheme which comes into effect from 01.04.1999.
FACTORY FACT SHEET

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<th>Description</th>
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<td>Year of Establishment</td>
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<tr>
<td>Initial Capacity (TCD)</td>
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<tr>
<td>Present Capacity (TCD)</td>
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</tr>
<tr>
<td>Factory Area (acres)</td>
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<tr>
<td>Colony Area (acres)</td>
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</tr>
<tr>
<td>Seasonal</td>
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</tr>
<tr>
<td>Total</td>
<td>451</td>
</tr>
<tr>
<td>No. of Employee Quarters</td>
<td>145</td>
</tr>
<tr>
<td>No. of Cultivators</td>
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</tr>
<tr>
<td>Annual Cane Area under Registration (acres)</td>
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</tr>
</tbody>
</table>


HRD PRACTICES

A number of HRD practices are being used by Ponni Sugars (Erode) Ltd. to develop their human resource. Some of the HRD practices directly attempt at developing employee competencies to perform their present and future roles as well. The practice deals with providing a healthy environment that facilitates a high level work motivation and thereby job performance. A few other HRD practices aim at developing or strengthening human process in organisation namely team spirit, cordial relationship, collaborative attitudes, right values etc. These HRD practices have been introduced since its incorporation.
A performance appraisal is being used increasingly for development purpose and to fix the remunerative packages. Therefore the company implemented the following practices to measure the performance of employees.

1. **Ranking Method**

   Ranking method is the simplest method of performance appraisal, to compare one man with all other men and place of employees in a simple rank order. In this way ordering is done from the best to worst of all individual comparing the group.

2. **Checklist Method**

   Under this method the performance appraisal is a list consisting of a number of statements about the workers and their behaviour. Each statement on this list is assigned a value depending upon its importance.

   The workers' participation in management scheme is an important method of collecting information from the mill employees. The mill actively implemented the scheme and collected valuable suggestions from their employees. The following methods of workers' participation in management scheme are followed.

   1. Suggestion Scheme
   2. Works Committee
   3. Joint Management Council
   4. Board Representation
Under the suggestion scheme, a suggestion committee is constituted consisting of equal number of members from management and workers. Works Committee is constituted consisting of 25 workers only. The committee gives periodical report to the management. Joint management council is formed at plant level with equal number of representatives from workers and staff level. The committee concentrates on some important matters such as working conditions, indiscipline, absenteeism, training, safety, accident prevention and holidays schemes.

Board representation is a scheme consisting of one or two representatives of workers nominated on the board of directors. The basic idea behind incorporating workers’ representation on the board of directors is to safeguard the workers interest. This is the highest form of workers' participation in management.

4. SAKTHI SUGARS LTD.

Sakthinagar unit, the company’s first unit in Tamilnadu, India, commenced its production in the year 1964 with an initial crushing capacity of 1250 tonnes per day. It has now expanded to 6000 tonnes per day. The unit provides employment for over 1000 people, indirect employment to nearly 40,000 people in the agricultural sector, besides catering to 20,000 cane growers.

It produces super fine variety of sugar corresponding to International standards i.e., measured at a grade 35 and below by International Commission for Uniform Method of Sugar Analysis (ICUMSA), a measure to determine the
quality and colour of sugar adopted by European market. It has secured national efficiency awards many years. Upto 12,000 tonnes this variety of sugar has been exported during the 1998-99 season. It has improved the yield per hectare to more than 120 MT due to pioneering effort of cane department. Sugar recovery has improved vastly upto 10 per cent. All this has been possible through constant R&D efforts, excellent rapport with the farming community, adoption of appropriate technology in cane cultivation and processing techniques.

The second unit of Sakthi Sugars was established in 1989 in the district of Sivaganga in Tamilnadu, India, as a part of the Company’s expansion plans in one of the most backward areas. The unit has a crushing capacity of 4000 tonnes of sugarcane per day. This is the most modern sugar factory in India with Auto-Setting mills and computer aided controls for the operation of boilers and other equipments so as to achieve a high degree of efficiency. It benefits 20,000 small and marginal farmers and provides direct employment for 750 people and indirect employment opportunities for over 7000. The unique achievement in this plant is low man power, high rated capacity and best pollution management.

**HIGHLIGHTS**

- It was established in the year 1964 with the capacity of 1250 TCD and it was expanded from 1250 TCD to 6000 TCD.
- It provides direct employment for 1000 youths and also provide indirect employment for nearly 40,000 in the agriculture field.
• It takes considerable effort to satisfy the domestic as well as foreign customers through their five variety of sugar.

• Many times it has secured national efficiency award.

• The second unit was incorporated in the year 1969 in Sivakanga in Tamilnadu. It provides direct employment for 750 youths and also provides indirect employment nearly for 7000 youths.

• The unique achievement of this plant is high productivity and efficiency.

• It has also achieved a sales turnover of Rs. 806.43 crores including other income.

**HRD PRACTICES**

In the present age of cut-throat competition, it is time for Sakthi Sugars Limited to change in the HRD practices. This is possible only when the employees in the mill are capable enough to cope up with the pressure of changing environment. For this there is no other alternative than to subject them to various training and development programmes as per current environment.

Therefore based on the above issues the following training programmes are presently adopted by the mill to enrich employees strength.

**Introduction Training** : The objective of introduction training is to familiarize the new employee with the company rules and regulations, introduce him to his fellow workers and to give him an idea of where his job fits in the total operation of the mill.
**Refresher Training** : Learning new techniques also is an important objective for training programme of the mill. The new equipments and new products require employees and salesman as well to learn new skills.

**Performance Appraisal**

Appraisal is the evaluation of present performance and future capabilities. Appraisal is the evaluation of worth and quality of merit. The mill measures both performance in accomplishing goals, plans, merit rating and performance.

Merit rating evaluated with internal merits and qualities like his nature, bodily and mental merits etc. but in performance appraisal, evaluation made of quantitative factors based on production quantity, quality of accepted and unaccepted job. The following performance appraisal techniques are implemented by the mill for evaluating performance of every worker.

1. Number of units produced per day
2. Number of accidents committed by workers
3. Number of best suggestions

**Workers Participation**

Workers Participation of the mill, broadly be taken to cover all terms of association of workers and their representatives with the decision making process, ranging from exchange of information, consultations, decisions and negotiations to more institutionalized forms such as the presence of workers’ members on
management by workers themselves. The following participation management system constituted the mill.

<table>
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<tr>
<th>Sl. No</th>
<th>Participation Scheme</th>
<th>Number of Members</th>
<th>Activities</th>
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<td></td>
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<td>Workers</td>
<td>Mgt.</td>
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<tr>
<td>1</td>
<td>Joint Management Council</td>
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<td>2</td>
<td>Works Council</td>
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<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Provident Fund Council</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Participative forum</td>
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</table>

Joint management council are formed in the mill at factory level with 10 members of representative from employees and 2 members for the executive level. The committee concentrates on matters relating to working condition, indiscipline, method of training and level of safety measurement. Works Council constitute of 8 representative from employees and 1 member from management level. The main purpose behind the council is to evolve ways and means for maintaining cordial and harmonial relationship between the employees and the management.

The provident fund council constituted with 12 members. Out of 12 members 10 from employees representative and balance from management. The council concentrates on all payments to the employees such as advance salary, method of calculation of wages, deductions for advance payment, leave salary etc.
The participative forum is constituted with 2 members. The members nominated by the workers to participate in the management decision making process for the benefit of workers.

5. RAJSHREE SUGARS AND CHEMICALS LTD.

Rajshree Sugars and Chemicals Ltd was incorporated in the year 1985. Unit - I with a capacity of 2,500 TCD (Tonnes of cane Crushed Per day), commenced operations in January 1990 at Varadaraj Nagar in Theni District of Tamilnadu.

RSCL acquired South India Sugar Ltd, Villupuram in the year 2002 and it was subsequently merged with Rajshree Sugars & Chemicals Limited as Unit-II. With RSCL's expertise, the unit has become one of the most efficient sugar plants in South India.

In 2006, RSCL acquired Trident Sugars limited - 2500 TCD sugar mill at Zaheerabad, Medak District in Andhra Pradesh. The 3 sugar factories have a combined milling capacity of 10000 TCD and produce plantation white crystal sugar of ISS grade S-30 with an ICUMSA less than 100.

RSCL with its Corporate Office in Coimbatore has three modern sugarcane based integrated biorefinery complexes located at Varadaraj Nagar in Theni District and Mundiamppakkam in Villupuram District of Tamilnadu and Zaheerabad in Medak District of Andhra Pradesh with easy access to Tuticorin, Chennai and Visakhapatnam ports.
The plants have a capacity to mill over 10,000 TCD (tons crushed per day) of sugarcane. With their strategic locations in the tropical latitudes the factories have the benefit of longer harvest periods, enabling them to handle nearly 2.5 million tons of sugarcane in a sugar season producing 250,000 tons of sugar. The average sugar recovery is 10.32 per cent and the average sugar cane yield per hectare is 86 tons as against the national average of 59 tons.

The Distillery plant in unit-I, has a capacity of 45 KLPD (Kilo liters per day) enabling production of 12 million litres of alcohol per year. The plant can produce Rectified Spirit, Extra Neutral Alcohol (ENA) and fuel grade anhydrous Alcohol (AA).

The bagasse-based cogeneration plants generate 34 MW of “green power” and after captive consumption supplies surplus power of 18 MW to the state electricity grid. This translates to an annual generation of 179 GWh power with sale of 115 GWh to the state electricity grid.

With increasing need to conserve the natural resources and save energy, RSCL made waste management as a profitable business through innovative use of wastes like press mud and distillery spent wash for the production of organic manure using a state of the art composting technology.

RSCL supports sustainable agriculture by promoting the use of a wide array of organic and bio-inputs for sustainable farming. Realizing the importance of
biotechnology, RSCL is engaged in a host of technology development activities such as sugarcane varietal development through plant tissue culture and production of eco-friendly bio-inputs like bio-fertilisers, bio-fungicides, bio-pesticides, bio-control agents and pheromones.

RSCL has a diverse and rich blend of expert professionals from various fields, which include agriculture, sugar technology, alcohol technology and biotechnology.

Apart from providing direct and indirect employment, RSCL has very close links with more than 37000 farming families. As an agro based industry, RSCL is the economic backbone of Theni and Villupuram Districts of Tamilnadu contributing immensely to their overall socio-economic development.

HIGHLIGHTS

- It was established in the year 1985 with capacity of 2500 TCD in Varatharajnagar at Theni district.
- It has incorporated R&D unit for sugarcane development and bio-technology in the year 1997.
- It has also incorporated 75 TPA bio products production unit and tissue culture labs in the year 1998.
- In the year 1999 it was obtained ISO 9002 certification from TUV and also obtained ISO 9001 : 2000 certification from DNY in the year 2002 and
obtained 9 outstanding certifications from 3 KAL international Netherlands for organic input in the year 2003.

- In the year 2002 it was acquired 3500 TCD sugar factory from south India sugars limited.

- It also hosts technological development activities such as sugarcane varietals development and production of eco-friendly bio inputs like bio-fertilizers, bio-fungicides, bio-pesticides and bio-control agents etc.,

- It has also achieved a sales turnover of Rs.407.47 crores including other incomes.

**HRD PRACTICES**

Every organisation needs to have well-trained and experienced people to perform the activities that has to be done. The mill recognized a high reject rate or larger than usual scrappage indicate a need for employee training. A rise in number of accidents the mill also suggests some type of retraining is necessary. The mill also offers the training during the job changes due to planned change rather than a reaction to immediately unsatisfactory condition.

**Sensitive Training** : Employees are brought together in a free and open environment in which they participate, discuss themselves and their interactive process, loosely facilitated by the professional behaviours scientist. This professional then create the opportunity for the participants to express their ideas, beliefs and attitudes.
**Role Playing** : Role playing in the mill allows the employees to act out problems and to deal with real people. Employees are assigned roles and are asked to react to one another as they would have to do in their jobs.

The mill wants to find out right person for promotion in higher job, formulating a suitable training and development programme and fixing pay package to the employees, the performance appraisal is implemented. In this mill, the following performance appraisal systems are implemented.

1. **Critical Incident Appraisal** : Critical incident appraisal focuses the rater's attention on those critical or key behaviours that makes the difference between doing a job effectively and doing it ineffectively.

2. **Individual Ranking** : The ranking method is used in this mill for evaluating the employees performance. In order to ascertain, merely to list the employees in an order from highest to lowest. Only one of the employee can be 'Best'. The best employee is given some motivation like best promotion and awarded cash benefits.

**Reward System**

Rewards may enhance the employee’s financial well-being. It induces the employees to enter the work with enthusiasm. A well rewarded system will motivate the employees and they will give there co-operation and efficiency to the mill's goals. Therefore the mill adapted the following reward system to enhance the employees.
1. **Intrinsic Rewards**: Intrinsic rewards are the satisfactions one gets from the job itself. These satisfactions are self-initiated rewards, such as having pride in one's work, having a feeling of accomplishment, or being part of a team.

2. **Non-financial Rewards**: Non-financial rewards cover a smorgasbord of desirable 'things' that are potentially at the disposal of the organisation. Their common link is that they do not increase the employee's financial position.

The study mills have followed prompt HRD Practices to develop their workforce. Methods such as training and development, rewards and compensation, performance appraisal and workers' participation in management are practices by all the study mills have in common. But these mills follow their own style in adopting these practice based on their convenience. All these components and their effectiveness are clearly studied and analysed in the forthcoming chapters.