EXECUTIVE SUMMARY

Ratio Analysis is one of the techniques of financial analysis where ratios are used as a yardstick for evaluating the financial condition and performance of a firm. Analysis and interpretation of various accounting ratios gives a better understanding of financial condition and performance of firm. Trend ratios indicate the direction of change in the performance – improvement, deterioration or constancy- over the year.

Objectives of the study:

1. To help the management in its planning and forecasting activities.
2. To evaluate operational efficiency, liquidity, and solvency of NSL.
3. To help the management in having effective control over the activities of different departments.
4. To compare the previous five years and present year performance of the company.
5. To give suggestion and recommendation based on the study.

For the study Nirani sugars Ltd, is considered. The ratio analysis is done using the Income statements and Balance Sheets of the company between 2005 to 2009.

Data Interpretation on trend ratio analysis is carried out at NSL at Kulali cross Tq: Mudhol Dist: Bagalkot Karnataka State. For study, of five years is considered and compared it’s performance over the period of five years. For result analysis and MS Excel Software package are used. From the analysis, I am able to indicate following finding of the firm

1. From the current ratio it is found that the ratio is not satisfactory because the % increase in current assets is less than the % increase in current liabilities during the year 2005-2009. The highest ratio recorded is 3.04 in 2005 and the lowest ratio recorded is 0.42 in the year 2007. And less than the standard ratio.

2. From the gross profit ratio it is found that the ratio is satisfactory during the last three years from 2007 to 2009. The highest ratio recorded in the year 2008 is 21.65 and the lowest ratio recorded is 0.11 in the year 2005.

3. From the operating profit ratio it is found that the ratio is highly satisfactory during the considered financial years. The highest ratio recorded is 100.08 in the year 2007 and the lowest is 66.56 in the year 2004.
Finally study concluded by giving some suggestion in view of improving performance and efficiency of the company.
INTRODUCTION

Ratio analysis is a technique of analyzing the financial statement of industrial concerns. Now a day this technique is sophisticated and is commonly used in business concerns. Ratio analysis is not an end but it is only means of better understanding of financial strength and and weakness of a firm.

Ratio analysis is one of the most powerful tools of financial analysis which helps in analyzing and interpreting the health of the firm. Ratio’s are proved as the basic instrument in the control process and act as back bone in schemes of the business forecast.

With the help of ratio we can determine

- The ability of the firm to meet its current obligation.
- The limit or extent to which the firm has used its borrowed funds.
- The efficiency with which the firm is utilizing in generating sales revenue.
- The operating efficiency and performance of the company.

Classification of Ratios

Ratios can be classified into different categories depending upon the basis of classification.

I. TRADITIONAL CLASSIFICATION

Traditional Classification has been on the basis of financial statements, on which ratio may be classified as follows.

1. Profit & Loss account ratios.
   E.g. Gross Profit Ratio, Net Profit Ratio, Operating Ratio etc

   E.g. Current Ratio, Debt Equity Ratio, Working Capital Ratio etc

3. Composite/Mixed ratio.
   E.g. Stock Turnover Ratio, Debtors Turnover Ratios, Fixed Assets
   Turnover Ratio etc
II. FUNCTIONAL CLASSIFICATION OF RATIOS

Functional ratios

1. Liquidity ratios
   a) Current Ratio
   b) Quick Ratio

2. Leverage Ratios
   a) Debt-equity Ratio
   b) Current Asset to Proprietor’s fund Ratio

III. PROBABILITY RATIOS

   a. Gross profit Ratio
   b. Operating profit Ratio
   c. Return on investment

IV. ACTIVITY RATIO

   i. Inventory Turnover Ratio
   ii. Asset Turnover Ratio:
      a. Fixed Asset Turnover Ratio
      b. Current Asset Turnover Ratio
   iii. Working Capital Turnover Ratio.
The Historical Background of the Indian Sugar Industry:

The sugar industry is proud to be an industry which spreads the taste of sweetness to the mankind. The history of origin of this industry is as old as the history of mankind. Sugar is generally made from sugarcane and beet. In India, sugar is produced mainly from sugarcane. India had introduced sugarcane all over the world and is a leading country in the making of sugar from sugarcane.

‘Saint Vishwamitra’ is known as the research person of sugarcane in religious literature. We can find the example of sugarcane in Vedic literature also as well as sugarcane. We can also find the reference of sugar and the sugarcane in Patanjali’s Mahabashya and the treatise on the grammar of ‘Panini’. Greek traveler ‘Niyarchus’ and Chinese traveler ‘Tai-Sung’ have mentioned in their travelogue that the people of India used to know the methods of making sugar and juice from sugarcane. The great Emperor Alexander also carried sugarcane with him while returning to his country.

Thus from different historical references and from some ‘Puranas’ it can be concluded that the method of making sugar from sugarcane was known to the people of Bihar. The historical evidences of sugar industry prospering in ancient India concrete and this has helped to develop and prosper the co-operative sugar movement in India.
National Scenario Of Sugar Industry:

The first sugar mill in the country was set up in 1903 in the United Provinces. There are 566 installed sugar mills, of which 453 were in operation in the year 2002-03 and utilized 194.4 million ton of sugarcane (69% of total cane production) to produce 20.14 million tons of sugar. About 5 lakhs workmen are directly employed in the sugar. About 5 lakhs workmen are directly employed in the sugar industry besides many in industries, which utilize by-products of sugar industry as raw material.

India is the largest consumer and second largest producer of sugar in the world. The Indian sugar industry is the second largest agro-industry located in the rural India. Indian sugar industry has been a focal point for socio-economic development in the rural areas. About 50 million sugarcane farmers and a large number of agricultural laborers are involved in sugarcane cultivation and ancillary activities, constituting 7.5% of the rural population. Besides, the industry provides employment to about 2 million skilled/semi skilled workers and others mostly from the rural areas. The industry not only generates power for its own requirement but surplus power for export to the grid based on by-product – Bagasses. It also produces ethyl alcohol which is used for industrial and potable uses, and can be used to the manufacture Ethanol, an ecology friendly and renewable fuel for blending with petrol.

The sugar industry in the country uses only sugarcane as input; hence sugar companies have been established in large sugarcane growing states like Uttar Pradesh, Maharashtra, Karnataka, Gujarat, Tamilnadu, and Andhra Pradesh. In sugar year 2003-04, these six states contribute more than 85% of total sugar production in the country; Uttar Pradesh, Maharashtra, and Karnataka together contribute more than 65% of total production. The government of India licensed new units with an initial capacity of 1250 TCD up to the 1980s and with the revision in minimum economic size to 2500 TCD, the government issued licenses for setting up of 2500 TCD plants thereafter. The government de-licensed sugar sector in the year of 11 September 1988.

The entrepreneurs have been allowed to set up sugar factories of expand the existing sugar factories as per the techno-economic feasibility of the project. However, they are required to maintain a radial distance of 15 kms from the existing sugar factory.
After de-licensing, a number of new sugar plants of varying capacities have been set up and the existing plants have substantially increased their capacity.

There are 566 installed sugar mills in the country as on March 31st 2005, with a production capacity of 180 lack MTs of sugar, of which only 453 are working. These mills are located in 18 states of the country.

The sector wise break up’s as follows:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Sector</th>
<th>No of factories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Private</td>
<td>189</td>
</tr>
<tr>
<td>2.</td>
<td>Public</td>
<td>62</td>
</tr>
<tr>
<td>3.</td>
<td>Co-operative</td>
<td>315</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>566</td>
</tr>
</tbody>
</table>
TITLE: PROJECT ON RATIO ANALYSIS AT NSL

Objectives of the study:

6. To help the management in its planning and forecasting activities.
7. To evaluate operational efficiency, liquidity, and solvency of NSL.
8. To help the management in having effective control over the activities of different departments.
9. To compare the previous five years and present year performance of the company.
10. To give suggestion and recommendation based on the study.

LIMITATION OF THE STUDY

1) The study is limited to few ratios because of non-availability of detailed financial data.
2) The study is used on secondary data such as annual report of the company.
3) The reliability and accuracy of calculation depends more on information found in profit and loss a/c and balance sheet.
4) The study is confined only to a period of 5 years.

METHODOLOGY
The study is conducted at Nirani Sugars Ltd, Mudhol. Tq; Mudhol, Dist: Bagalkot.

SOURCES OF DATA COLLECTION

The data is collected in two types

1) PRIMARY DATA
2) SECONDARY DATA

1) Primary data:
It will be collected with the help of interaction with the employee of NSL, and the internal guide.

2) Secondary data:
Through Annual Reports of the company, Magazine etc.
COMPANY PROFILE

Name of the company: NIRANI SUGARS LIMITED. MUDHOL

Address: NIRANI SUGARS LIMITED.
VINAYAK NAGAR, SY NO-166
NEAR KULALI CROSS,
JAMAKHANDI ROAD,
MUDHOL – 587313
DIST: BAGALKOT

Regd. Office: # 2053, High Point- II
45 Palace Road,
Bangalore – 560 001

Branch Office: Bijapur

Status of Company: Sole trading concern

Constitution of the firm: Registered under companies act 1956

Financial Institutions: K.S.I.D.C, IDBI, BOI,
K.S.F.C

Bankers of the Company: I.C.I.C Bank Jamakhandi
S.B.I Mudhol Branch.
Indian Bank Lokapur.
Grameen bank Mudhol.

Products: Sugar (L30, M30, S30)
Molasses, Press Mud, Bagasse.
Electricity.

Press Mud / Filter cake: This is also another type of product. It is sold for Rs.250 per Ton.

Sugar Storing Capacity: 2 lakh Bags.
HISTORY OF NIRANI SUGARS LTD.

M/s. Nlranis Sugars Limited (NSL), a company incorporated on the 6th Dec, 1995 under the Companies Act, 1956 has applied for Term Loan of Rs. 15.90 crores to Sugar Development Fund(SDF) for meeting part of the capital cost of its project envisaging modernization & up-gradation of existing sugar factory with an installed capacity of 1250 TCD to 3750 TCD with substantial investment at Kulali cross Mudhol Tq. Dist. Bagalkot, Karnataka State, NSL has included in the scope of the project, the cogeneration of surplus power also at a total project cost of about Rs. 97.00 crores. (Sugar unit Rs. 53.00 crores and cogeneration unit Rs. 44.00 crores). Total Cost of the Project, for the Sugar plant expansion Rs. 5300 Lakhs,(Rs. 42.00 Crores for sugar and 11.00 crores loading from co-generation plant cost) consisting of an Equity Contribution of Rs. 5.30 Crores Promoters, Rs. 15.90 crores equity from Sugar development fund of Govt. of India & the balance of Rs. 31.80 crores funded through Term Loans from the Financial Institutions/Banks.

The funding for the cogeneration plant costing Rs. 4400.00 Lakhs is envisaged by obtaining Rs. 3080 Lakhs from IREDA, Rs 440.00 Lakhs from promoter’s contribution and Rs. 880 Lakhs from sugar development fund.

M/s. Nirani Sugars Limited (NSL) is a company registered under the Indian Companies Act, 1956, initially as Private Limited Company, vide registration certificate number 08/19340 of 1995 dated 06.12.1995 by the registrar of companies in Karnataka, Bangalore, Subsequently, the company has been converted into Public Limited Company vide Certificate of Incorporation dated 15.02.2002 by ROC, Karnataka, Bangalore.

The unit was originally established in the year 1997-98 as a modern Khandasari sugar unit with a crushing capacity of 500 tones of cane per day and later converted into white crystal sugar unit. This is one amongst the earliest Khandasari unit in the country, which started with a new technology like:
Ratio Analysis at NSL

(a) High pressure boiler (32.0 ATA)
(b) Multiple effect pressure evaporator system with falling –film evaporator and also with captive power generation.

Subsequently making use of the Government of India’s liberalized policy, vide Govt. of India notification DCS/S/14/DTD 02-06-1998, which permitted Khandasari sugar units to use vacuum system, they modernized the unit quickly by adding vacuum pans and vacuum evaporators. The capacity of the plant was increased in stages to its present capacity of 1250 TCD during 2005-06. The plant runs fairly efficiently and is self sufficient in fuel and power. It has recorded an average sugar recovery of over 11 percent during 1999-2000 crushing season.

M/s. Nirani Sugar Ltd. Now proposes to expand the sugar factory from the present capacity of 1250 TCD to 3750 TCD by adding a new plant of 2500 TCD, retaining the existing plant also. Also 16 MW Cogen Power Plant is part of the expansion. The project appraisal was done by Milton Consultancy Services Limited, Pune.

BACKGROUND OF PROMOTERS

The key promoter of the company also Chairman of the company, Mr. Murugesh R. Nirani is Member of the Legislative Assembly(MLA), Government of Karnataka.

PROMOTERS:

M/s. Nirani Sugars Limited promoted by the following Directors:

1. Mr. Murugesh R. Nirani, B.E., D.B.M (MLA)
2. Mr. Hanumanth Rudrappa Nirani, M.Com L.L.B
3. Mrs. Kamala Murugesh Nirani, B.A.

1. Mr. Murugesh R. Nirani, aged about 40 years is the Chief promoter and the Chairman & managing Director of the company, is a Technical Graduate and is the sitting Legislator (MLA) representing Bilagi constituency in Assembly of Karnataka, He hails from an agricultural family from Bilagi Taluk of Bagalkot District. He started his carrier as an industrialist by settling up a modern Khandasari sugar plant at Mudhol. Mr. M.R. Nirani has also co-promoted a 2500
TCD sugar plant at Badagandi village in Bilagi taluk viz. Bilagi Sugars Limited in which he holds the position of Managing Director. This unit has just successfully completed trial runs and started commercial operations (during January 2006). Mrs. M.R. Nirani has also been recognized and awarded Bharat Udyog Ratna award from govt. of India. He has the credit of taken over a sick mini cement plant of 100 TPD capacity at Mudhol and successfully put into commercial operation with an increased capacity of 200TPD within a short span of time. His social services contributed in setting up residential schools, D.Ed. college at Mudhol.

2. Mr. Hanumanth R. Nirani, aged about 40 years is a post –graduate in commerce and also a leading advocate in Bilagi Tq. He is the brother of Mr. Murugesh R. Nirani and is also actively involved in the day-to-day operations of the sugar plant.

3. Mrs. Kamala Murugesh Nirani aged about 32 years is another director on the Board of the company and is the wife of Mr. Murugesh R. Nirani, who associates Mr. Murugesh R. Nirani and Mr. Hanumanth R. Nirani in company matters.

As could be observed the company is a family concern and the overall management of the Company rests with Chairman Shri. Murugesh R. Nirani who is assisted by the other Board of Directors.

Factors Behind Establishment

1. Abundant available of resources like raw material(sugarcane), labors (skilled & semi-skilled), transportation facilities, banking facilities,

2. Fertile land with having irrigation facilities. (GLBC, Krishna River, Ghataprabha river)

3. No strong competitors.

PRODUCT PROFILE

Product Profile:

Main product – White Crystal Sugar:
The main product of the sugar manufacturing process is white crystal sugar. This white crystal sugar is manufactured in the following grades:

L-30  [ Large size sugar]
M-30 [ Medium size sugar]
S-30 [Small size sugar]
S2-30 [Very small size sugar]

By-Products of Sugar Cane:
The sugar mill produces many by-product along with sugar. A typical sugarcane comprising of 5000 tons capacity can produce 345 ton of sugar, 8000 liters alcohol 3 tons of yeast, 15 tons of potash fertilizer, 25 ton of press mud fertilizer and 750 kw of power from bagasse.

Molasses:
Molasses is the final effluent obtained in the preparation of sugar by repeated crystallization. Molasses still contains some quantity of sugar, but this sugar cannot be extracted by usual technology. It is the end product from a refining process carried out to yield sugar. Sucrose and invert sugars constitute a major portion (40 to 60%) of Molasses. The yield of Molasses per ton of sugarcane varies in range of 3.55 to 4.5%.

Molasses is mainly used for the manufacturing of ethyl alcohol (ethanol). Yeast and cattle feed NSL produces alcohol from the molasses left after the extraction of sugar from cane juice. Cane be used both for portable purpose as well as an industrial chemical. Further this alcohol can be again purified to produce fuel alcohol that cane be blended with petrol. Ethanol is in turn used to produce portable liquor and downstream value added chemical such as acetone, acid, butanol, acetic anhydride, etc. face stiff competition from production through the petrochemical route.
The government controls the expert of molasses through export license issued for every quarter. Molasses and alcohol crop based industries were decontrolled in 1993 and being controlled by respective state government polices. Nearly 705 of the alcohol produced is consumed by portable alcohol sector.

The molasses prices that used to rule around 200 per ton during the yearly niceties shot up to Rs.1400 per ton as a result of decontrol crop in 1996, the prices came down to Rs .400 level. The increase in excise duty to specific rate of Rs.500 per ton in 1997 budget lend to sharp increase in molasses price.

**Bagasse:**

Bagasse is a fibrous residue of cane stalk that is obtained after crushing an extraction of juice. It consists of water, fiber an relatively small quantities of soluble solids, the composition of bagasse various based on the variety of sugarcane, maturity of cane, method of harvesting and the efficacy of the sugar mill, the usual bagasse composition is given below.

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>RANGE IN %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>46-52</td>
</tr>
<tr>
<td>Fiber</td>
<td>43-52</td>
</tr>
<tr>
<td>Soluble solids</td>
<td>2-6</td>
</tr>
</tbody>
</table>

Bagasse is usually as a combustible in the furnaces to produce steam, which in turn is used to generate power, it is also used as raw materials for production of paper and as feedstock for cattle.

**Power Generation Plant:**

Power plant uses the fiber of the processed sugar cane (bagasse) as fuel to generate electrically in an environmentally responsible manner. An integrated11.2 MW power generates and supplies electricity to the state grid produced for sugar cane waste used to rotate turbines 24MW power is utilized in the plant remaining power is supplied to KPTCL.
Area of operation-Global/National/Regional:

NSL manufacture is originally from Karnataka. The head office of NSL Mumbai, Bagalkot Sameerwadi plant is main manufacturing plant.

- Mudhol
- Mahalingapur
- Malapure
- Sorganvi
- Roogi
- Uttur
- Jamakhandi
- Basavanbagevadi
- Sameerwadi

Table of Sugar Cane Crushed in different year

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Year</th>
<th>Cane Crushed (In Lakhs)</th>
<th>Recovery %</th>
<th>Duration (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1999-2000</td>
<td>44589.123</td>
<td>7.61</td>
<td>200</td>
</tr>
<tr>
<td>2</td>
<td>2000-2001</td>
<td>90597.812</td>
<td>8.81</td>
<td>212</td>
</tr>
<tr>
<td>3</td>
<td>2001-2002</td>
<td>74547.53</td>
<td>9.75</td>
<td>183</td>
</tr>
<tr>
<td>4</td>
<td>2002-2003</td>
<td>45735.43</td>
<td>9.6</td>
<td>121</td>
</tr>
<tr>
<td>6</td>
<td>2004-2005</td>
<td>63234.160</td>
<td>8.61</td>
<td>155</td>
</tr>
<tr>
<td>7</td>
<td>2005-2006</td>
<td>47440.730</td>
<td>10.09</td>
<td>163</td>
</tr>
<tr>
<td>8</td>
<td>2006-2007</td>
<td>1342863.750</td>
<td>12.11</td>
<td>211</td>
</tr>
<tr>
<td>9</td>
<td>2007-2008</td>
<td>1831907.543</td>
<td>12.56</td>
<td>213</td>
</tr>
</tbody>
</table>
ORGANISATION STRUCTURE

Managing Director
  ↓
General Director

Production Engineers
  ↓
Manufacturing Chemist
  ↓
Supervisors
    ↓
Environment Engineers
      ↓
Mechanical Maintenances
      ↓
Electrical Maintenances

Cane Development officer
  ↓
Assistant C.D.O

Finance Manager
  ↓
First Division Clerks
  ↓
Second Division Clerks
    ↓
Assistant

Personnel Manager
  ↓
Security Officer
  ↓
Time Officer
    ↓
Assistant
Board of Management

1. Sri. Murugesh R. Nirani Chairman & Managing Director
2. Sri. Sangamesh R. Nirani Executive Director.
FUNCTIONAL DEPARTMENTS
STUDY OF DEPARTMENTS

1. Human Resource Department
2. Marketing Department
3. Purchase Department
4. Cane Development Department
5. Production Department
6. Finance Department
7. Sales and Distribution Department
HUMAN RESOURCE DEPARTMENT

The Human Resource department is primarily concerned with the human constitution of an organization. It is concerned with the manpower recruitment, remuneration, promotion, retirement etc., all related to human resource or labors of the organization.

The Human Resource Department refers to the systematic approach to the problem of selection, training motivating and retaining personnel in any organization. It also considers with planning, organizing, directing the personnel functions in the organization.
The department is also concerned with recruitment selection and placement.

1. Development and training to the workers.
2. Development evaluation of the workers.
3. Wage and salary administration.

In Nirani Sugars the personnel manager takes all the above responsibilities and undertakes the activities concerned with him.

Suitable candidates are selected to a particular job according to their qualification and experience.

There is no necessary to give training to the workers on separate machine other than actual production process. Hence training is given on the job only.

Manager and supervisor are continuously inspecting every worker to access their performance and there is a better scope for hard workers.
TIME OFFICE

Time office is one of the important sections of administration department. This section maintains the attendance of workers. It also shows records of a particular worker about his working hours, d.t., etc. It evaluates the workers punctuality, discipline and uniforms and maintains documents and records for the future reference purpose.

FUNCTIONS

1. Showing the absenteeism report of HOD.
2. To receive the attendance cards from the workers.
3. To put attendance of the workers in the muster role.

In time office there are 4 types of leaves.

SICK LEAVE: employees are eligible to take leave on the sickness. 8 days sick leave shall be granted with full wages.

CASUAL LEAVE: 10 days casual leave shall be granted with full wages or pay including DA to the every workman.

PRIVILEGED LEAVE: 15 Days privileged leave shall be granted with full wages or pay including DA to the every workman for every completed year.

SECURITY OFFICE

Security officer also one of the important section of the administration department. There are totally 39 guards.
DUTIES OF SECURITY OFFICER

1. Maintain the silencing in the factory area.
2. Time maintenance of workers.
3. Raw materials are checked according to the voucher.
4. Incoming materials are checked, if they are right, they will records inward and seal the bill and leave inside.
5. If out going material from the industry that person must and should have got pass and it is entered in outwards.
6. If goods are returnable, it will be entered in return A/C book.
7. All times of A/C’s are submitted to M.D. daily.

FACILITY TO WORKERS

1. Availability of rest house with TV facility.
2. Availability of quarters.
3. Providing 2 wheelers for employees who are visiting the field to supervise and check the availability cane.
4. Executive levels are provided with 4 wheelers.
5. Weekly one holiday of any in a week

NATIONAL HOLIDAY

The industry can give the leave for the national holidays, fair days of national holidays should be given to the employees, such as Independence day, Republic Day, Gandhi Jayanti etc.

DUTIES OF TIME OFFICE

1. Maintenance of clock
2. Sequencing the punching cards
3. Siren maintenance (signal value)
4. Observation of employees
5. Maintaining Notice Board
6. Accepting leave letter application
7. Over time requisition
8. Absent statement
SHIFT WORKING

In a shift of 8 hours factory is providing 4 types of shifts:-

1\(^{st}\) shift 4 am – 12 pm
2\(^{nd}\) shift 12 pm – 8 pm
3\(^{rd}\) shift 8 pm – 4 am
General shift 8.30 am – 5.30 pm

The time office maintains register of muster role absenteeism, accident report file and leave letter file.

OBJECTIVES OF HUMAN RESOURCE DEPARTMENT

1. To maintain good relation between employer and employees.
2. To maintain good industrial relation.
3. To select right person at right job.
4. To cope with a chain.
5. To develop employees in organization.
6. To full utilization of human resource.

FUNCTIONS OF HUMAN RESOURCE DEPARTMENT

Recruitment
Job analysis and job description
Promotion
Wages and salary administration
Training and development
Records and incentives
Welfare maintenance
**H. R. D**

**NUMBER OF WORKERS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officers</td>
<td>24</td>
</tr>
<tr>
<td>Regular</td>
<td>172</td>
</tr>
<tr>
<td>Trainees</td>
<td>351</td>
</tr>
<tr>
<td>Daily wages with order</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>564</td>
</tr>
</tbody>
</table>
The term marketing has been derived from the word MARKET. Market is generally understood as a place or geographical area where buyers and sellers meet and enter into transactions involving transfer of ownership of goods, service, and securities.

Features of Marketing

1. It is consumer oriented.
2. It starts and ends with consumer.
3. Marketing is a system
4. It is a goal oriented.
5. Exchange process is the essence of marketing.
6. It is the guiding element of business.
MARKETING

Marketing is a social and managerial process by which individual and group obtains what they need and what through creating, offering and exchanging products of values with others. This marketing is important element in every organization, which should be maintained compulsory in a systematic manner.

This section will take care of all sale transactions like sale of sugar, molasses, Bagasse and scrap material. This section works by 7 employees including sales manager. The factory has sold the sugar according to central government notification. The central government sends the notice to the factory every month regarding sale of sugar, without notice the sugar is not sold to anybody. The government is giving permission for a particular period, particular for sale of sugar. The sugar is sold to the buyer who quotes highest price. In this section, some records like sale of sugar register, molasses register, Bagasse registers and scrap material registers are maintained.

PRODUCT OF SALE

The organization undertakes selling activities in two methods:-
1 **FREE SALE**: free sale of sugar is being done to bulk purchases on the basis of tenders called, collected, negotiated and sold.
2 **LEVY SALE**: This is being sold to the government of Karnataka on levy basis. The government then distributes the same to the public through public distribution outlets at predetermined reasonable price.
PURCHASE DEPARTMENT

Purchase success and failure of any company depends on the cost of materials, the proper buying of materials and procurement of materials at the right time from the right source is having greater importance in any business. There is a need for separate department for buying the materials known as Purchasing department.

The purchase section also connected to administrative department. In this section 3 workers are working including purchase officers. This section is purchasing all types of materials for the factory, plant and machinery.

This department also maintains the quality of raw materials, by taking the sample of cane to laboratory test then if the raw material will below standard then will be rejected, otherwise the raw material will be purchased at the particular price.

FUNCTIONS OF PURCHASE DEPARTMENT:

- Receiving purchasing requisition
- Determining the volume of materials to be ordered
- Placing orders
- Inviting tenders and quotations from different suppliers
- Checking and passing bills for payment.
- Receiving and inspecting materials.
QUALITIES OF PURCHASE MANAGER

In Nirani Industry the purchase has to follow the following qualities.

- Good knowledge of industry and material used in the industry.
- Administrative and organizing ability
- Honesty and integrity
- Knowledge and contract of law
- Knowledge of economic principles and demand and supply
- Knowledge of government policies

RESPONSIBILITIES OF PURCHASING MANAGER

- Purchasing of materials at right time and in proper way from right source.
- Receiving or materials.
- Storing of materials.
- Issuing of materials.
- Accounting of materials.
- Keeping proper records of material purchased.
- Properly planned for material required.
- Co-ordination and cooperation between different departments.
OBJECTIVES OF CANE DEVELOPMENT DEPARTMENT

- To get high yield of sugarcane to the factory in right time.
- To improve variety of cane
- To develop the backward area
- To provide all facilities like seeds, fertilizers, unloading and loading charges
- To maintain registration of cane, gang and plantation.
- To undertake seed distribution programme

The soil of this area is varying alluvial fertile soil is there on the bank of Krishna and Ghataprabha rivers. Further upwards, there is a medium deep black soil, vary fertile well drained light to medium clay soil, which has received heavy application if from yard Manu science last 10-12 years also is presently in some parts.

The main function of cane development department is to arrange for raw material, which is required to the factory. For this the order is received by priority basis (that is growers who grows sugar cane first in his land). They also provide a loading gang with 8 to 10 members per village and also a bonded tractor for transportation.

SUGAR CANE VARIETIES

At present COC-671, COC 8011 are very popular sugar cane varieties growing in this area. The factory had introduced a new variety of sugar cane that is COC – 86032 two years back. Here more than 85% of sugar cane is of variety COC – 671 which is mainly grown in this area.

<table>
<thead>
<tr>
<th>S.I.</th>
<th>NAME OF THE VARIETY</th>
<th>AREA IN HA (P)</th>
<th>(R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CO-C-671</td>
<td>1153 ha</td>
<td>60.02%</td>
</tr>
<tr>
<td>2</td>
<td>CO-8011</td>
<td>480 ha</td>
<td>24.99%</td>
</tr>
<tr>
<td>3</td>
<td>CO-86032</td>
<td>1921 ha</td>
<td>14.99%</td>
</tr>
</tbody>
</table>
PRODUCTION DEPARTMENT

The production department is center of the center organization. The main function of the production department is Functions:

- To maintain close and co-ordinates relationship with all others.
- To upgrade the technical efficiency of the production.
- To flow up the daily production schedule of as per plan.
- To produce the future needs of the company and to promote the organization.

OBJECTIVES

- To plan and meet the production requirements as per customer specification through the continuous improvement in the planning processing and optimum utilization of resource.
- To identify control the customer supplied products.
- To produce for future needs and customers specification.

This department is one of the core parts in every organization and it plays a vital role in the organization, smooth going, basically, in every sugar industry production is divided in to two sections.

- Engineering section
- Manufacturing section
PRODUCTION PROCESS

Step 1. weighing of sugar cane, it means, when the sugar cane comes to the factory. After weighing of sugar cane the unloaded carrier cane weigh bridge.

Step 2. In the next step sugar cane go to the cane cutter machine and it cuts the fine pieces after that, there are 3 mills and 5 mills tandem that is sequential mill.

Step 3. After the milling of sugar cane there is a separation of bagasse and juice milk, bagasse will be used as a fuel. There are 7 boilers. They used as a fuel and there is production steam and steam is used to produce the electricity.

Step 4. The juice, weighing takes place and there are mixing the juice and there is addition of phosphoric. After heated of juice milk 75 C that juice is called as Raw juice.

Additional of milk of lime and SO2 is called Sulfur and this again goes to juice heater it heated up to 104 C.

Step 5. Then the next step, the juice sent to clarifier and in that there is a separation of dust and clear transfers juice.

Clear juice sends to “Bhoomi Labh”. This is the produce fertilizer. Clear juice will be thick. It calls as syrup. Again add to the milk and SO2 then it is called syrup suplitation.

Step 6. Suplitation comes to the pan boiling station and this there are 3 categories, A,B and C first of all the suplitation goes to the “A” category.

And the pan boiling directly goes to pan crystal. Raw sugar goes to the centrifugal machine routed to the high speed of around 1200 rbm. It will be separated sugar crystal and molasses.

Step 7. In this, the sugar crystal downs and passes through grass happener. In the grass happener the sugar goes to the one place to another place.
After there is gradation, in that there are 3 grades. It will be divide the 3 grades:- high grade, small grade, low grade.

Step 8. And then the sugar goes to the different vessels. In that, package of sugar. In this there are 2 types packing exporting and domestic is different.

FINISHED PRODUCTS

Finished product is sugar. There are 3 types of finished sugars, High Quality, Middle Quality and Low Quality.

These are 3 types of bye products
- Molasses
- Bagasse
- Filters mud

ENGINEERING SECTION

This section is assisted by workshop. It maintains all the work connected with plant and machinery.

WORKSHOP:-

In this workshop machinery work is done. The spares, materials are fabricated using the lather machines in the workshop, shaping like square cutting etc is also done in the workshop. Following machines are used in this workshop.

- 2 lathe machines for round job
- 1 redial drilling machines for drilling hole
- 1 shaping machine of 32* for right angle planning
- 1 hacksaw machine for cutting
- 1 grinding machine for tool grinding
MANUFACTURING SECTION

The manufacturing section again divided into 3 sub sections.

- Laboratory
- Manufacturing process
- Go down

LABORATORY

The factory has a separate well equipped laboratory. The main activity of the lab is to check the content of sugar in the sugarcane and also fixing the correct shape and size of sugar. The lab prepares hourly reports which advice on the addition of other chemicals in the production.

OTHER CONCERNED ACTIVITIES OF THE LABORATORY

- It determines the percentage of water content in the dilution of juice.
- It determines as well as maintaining the temperature of boiling juice.
- Choice of color and size of sugar.
- To manage time and quality.
- It decided the percentage and contents and chemicals to be added during production.
- To finds the PH of water through universal indicator.
CHEMICAL DEPARTMENT

Lab Chemist

Lab In-charge

Mafct Chemist  Mafct Chemist  Mafct Chemist

CHEMICALS USED IN PRODUCTION

Caustic Soda ( Sodium Carbonate )
Washing soda ( Sodium Bicarbonate )
Common salt ( sodium Chloride )
Phosphoric Acid ( To maintain the PH )
Ammonium Bi-fluoride
Formalin quality maintain and preservative
Mill sanitation chemical to prevent the generation of bacteria and germs
Hydrous - Used for Color
Viscosity - Used for reducer
Misopropile - Used for Alcohol
Commercial HCL
Bleaching Powder - Shining purpose
Led Acitate - For laboratory purpose
Process

Sugar Cane
  \|-- Weighment
    \|-- Crushing in \n
    Juice
      \|-- Heat 70°C
      \|-- Liming
      \|-- Heat 100°C
          \|-- Clarification
              \|-- Mud
                  \|-- Filteration 
                      \|-- Press Mud
                          \|-- Return to Juice
                      \|-- Filterate
                          \|-- Pan Boiling
                              \|-- Molasses
                                  \|-- Sugar
                              \|-- Massecuite
                                  \|-- Vapors
                                      \|-- Power
                                          \|-- Turbine
                                              \|-- Steam
                                                  \|-- Boiler
                                                      \|-- Bagasse
SALES AND DISTRIBUTION DEPARTMENT

SALES MANAGEMENT PRACTICE OF NIRANI SUGARS

The marketing department of Nirani Sugars is working in two ways.

1. Free Scale
2. Levy Scale

The output of the factory produced is sold to public and Government in the ratio of 40:60 all the functions of marketing department are generally done by the sales manager who is in charge of assistant manager.

The factory has big market area for sugar in Bagalkot, Bijapur and Belgum Districts. Little in local area covered by local sugar dealers. The bi-products is also sold in large volume to biscuits, chocolate and wine industries and also is used by distilleries.

SALESMANSHIP AT NIRANI SUGARS

It is the duty of marketing manager to appoint sales representatives. Salemanship is not necessary at Nirani Sugar because the reasons are

- Because their product is available at every corner of the district
- As the product is not a luxury one so it is not necessary to appoint sales man.
- As the product is an essential one salesman are not required to approach the customers at their door step and induce them to purchase their product.
SWOT ANALYSIS
SWOT ANALYSIS

STRENGTHS

- The Promoter are young political background and have vast industrial experience in the field of Sugar and are having good relationship with the local farmers. This may help them in sugarcane procurement.
- No difficulty is envisaged in availability of raw material i.e. sugar cane, as the project is coming up in the area of sugar cane growing belt with a good irrigation facilities and good recovery.
- The area will not suffer draught as the Lift irrigation system of Almatti Dam as already implemented hence the Sugar recovery in the area is good.
- The co-generation of power of 16 MW will improve the profitability of the company.
- The by-product viz. molasses will bring additional revenue as it will be sold to distillery units as raw material.

WEAKNESSES

- Co-Gen plant being capital intensive, economics of operations suffer in case of shortened season.
- Sugar imports will have bearing on the profit margins of the company.
- Any disturbance in the co-gen plant would interrupt sugar manufacturing operations totally. The cost of such interruptions can be extremely high on account of production loss, machine failure, spillage of juice, sugar and quality degradation.
- The promoters are having political background and changing loyalties by the local farmers may affect them in sugarcane procurement.
OPPORTUNITIES

- Setting up of further down stream projects like manufacture of ethanol or a distillery for manufacture of liquor.

THREATS

- Raw material, cane, being a agricultural product its availability and prices are dependent upon vagaries of monsoon.
- Tough competition from other sugar factories.
- Failure to adopt modern technology.
- Unable to satisfy the needs of workers, this might make them to leave the organization.
Vision of Nirani Sugars Ltd.

1. To establish production 7,500 T.C.D at Mudhol.
2. To produce 40 Megawatt electricity.
3. To produce 12,000 liters of distillery unit.
4. To produce 10,000 ton Bio fertilizers.
5. To establish agricultural development and resource center at Mudhol.
6. Plan to establish Nirani Education Institution in Bilagi and Mudhol.
8. To implement highly technical Nirani Educational institutes Mudhol & Bilagi
MISSION

- We will provide products of superior quality at competitive price and ensure sustained profitability and growth.
- We will protect the interest of all concerned promoters, shareholders, customers, distributors, employees and community.
- We believe in fair trade practice, standards and strive for total customer satisfaction, keeping the environment eco friendly.
- We believe that our people are most valuable assets for personal and organizational growth.
- We will treat our people with dignity and look after the safety and welfare of individuals and their families.
- We provide electricity which is major necessity for the country.
- Sugar industries are providing ethanol which can be added in diesel and diesel is major requirement of the company.

OBJECTIVES OF NIRANI SUGARS LTD.:

1. Maximum, effective and efficient utilization of available resources.
2. To manufacture good quality sugar and bi-products.
4. To provide comparative market rate to the farmers.
5. Proper co-ordination and co-operation among its members.
6. To maintain proper means of transportation to the farmers during season.
7. Provide modern techniques and methods of cultivation and to supply seeds, fertilizers to the farmers.
8. To undertake such other activities as are incidental and conductive to the development of society.
DATA INTERPRETATION

& RATIO ANALYSIS
INTRODUCTION

Ratio analysis is a technique of analyzing the financial statement of industrial concerns. Now a day this technique is sophisticated and is commonly used in business concerns. Ratio analysis is not an end but it is only means of better understanding of financial strength and and weakness of a firm.

Ratio analysis is one of the most powerful tools of financial analysis which helps in analyzing and interpreting the health of the firm. Ratio’s are proved as the basic instrument in the control process and act as back bone in schemes of the business forecast.

With the help of ratio we can determine
- The ability of the firm to meet its current obligation.
- The limit or extent to which the firm has used its borrowed funds.
- The efficiency with which the firm is utilizing in generating sales revenue.
- The operating efficiency and performance of the company.

Classification of Ratios

Ratios can be classified into different categories depending upon the basis of classification.

I. TRADITIONAL CLASSIFICATION

Traditional Classification has been on the basis of financial statements, on which ratio may be classified as follows.

1. Profit & Loss account ratios.
   E.g. Gross Profit Ratio, Net Profit Ratio, Operating Ratio etc

   E.g. Current Ratio, Debt Equity Ratio, Working Capital Ratio etc

3. Composite/Mixed ratio.
   E.g. Stock Turnover Ratio, Debtors Turnover Ratios, Fixed Assets Turnover Ratio etc
II. FUNCTIONAL CLASSIFICATION OF RATIOS

Functional ratios

2. Liquidity ratios
   c) Current Ratio
   d) Quick Ratio

2. Leverage Ratios
   c) Debt-equity Ratio
   d) Current Asset to Proprietor’s fund Ratio

III. PROBABILITY RATIOS

a. Gross profit Ratio
b. Operating profit Ratio
c. Return on investment

IV. ACTIVITY RATIO

i. Inventory Turnover Ratio
ii. Asset Turnover Ratio:
   c) Fixed Asset Turnover Ratio
   d) Current Asset Turnover Ratio

iii. Working Capital Turnover Ratio.
ANALYSIS & INTERPRETATION

I. Liquidity Ratio

Liquidity ratio measures the ability of the firm to meet its current obligation (liabilities). In fact analysis of liquidity needs the preparation of cash budget and cash and fund flow statement but liquidity ratio, by establishing a relationship between cash and other current asset to current obligation, to provide a quick measure of liquidity. A firm should ensure that it doesn’t suffer lack of liquidity and also that it dose not have excess liquidity.

The common liquidity ratios are:

1. Current Ratio

Current ratio may be defined as the relationship between current asset and current liabilities. This is a measure of general liquidity & is most widely used to make analysis of short-turn financial position or liquidity of firm. It is calculated by dividing the total current assets by total current liabilities.

\[
\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
\]
INTERPRETATION
The above table shows that NSL’s current ratio has decreased from 3.04 to 1.5 in the year 2005 and 2006 and in the year 2007 it was drastically fluctuated to 0.42 and then the year 2008 it raise to 0.48 but again decreased to 0.45 in the 2009.

The company had the fluctuation of 24.20% increase in current assets and 8.18% in current liabilities. in the year 2009 the current assets has decreased by 16.38% and 10.82% in current liabilities.

An ideal current ratio is 2:1 for every one rupee of current liabilities, current assets of doable rupee are available. The current ratio determines margin of safety for creditors, there has been decrease in the ratio during 2009 compared with 2008.
2. Quick Ratio/Acid Test Ratio

Quick ratio establishes relationship between quick or liquid assets & current liabilities. It is also known as acid test ratio. An asset is said to be liquid if it can be converted into cash within short period of time without loss of value. The prepaid expenses and stock were excluded.

\[
\text{Quick ratio} = \frac{\text{Quick asset}}{\text{Current Liabilities}}
\]

<table>
<thead>
<tr>
<th>Year</th>
<th>Quick Assets</th>
<th>Current Liabilities</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>2842892837</td>
<td>141205546</td>
<td>2.01</td>
</tr>
<tr>
<td>2005-06</td>
<td>177992977</td>
<td>224758035</td>
<td>0.79</td>
</tr>
<tr>
<td>2006-07</td>
<td>138313276</td>
<td>802862101</td>
<td>0.17</td>
</tr>
<tr>
<td>2007-08</td>
<td>127813793</td>
<td>868538146</td>
<td>0.15</td>
</tr>
<tr>
<td>2008-09</td>
<td>170711841</td>
<td>770539918</td>
<td>0.22</td>
</tr>
</tbody>
</table>

**INTERPRETATION:**

The above table shows that the quick assets of NSL has decreased from 2.01 to 0.79 in the year 2005 and 2006 and had drastic fluctuation to 0.17 and 0.15 in the year 2007 and 2008 and had slight raise to 0.22 in the year 2009.

The company had fluctuation 7.59% decrease in quick asset and and 8.18% increase in current liabilities and in the year 2009 there was increase in quick asset 33.56% and 10.82% decrease in current liabilities.

This ratio measures firm’s ability to serve short term liabilities. The ideal quick ratio is “1”. a low quick ratio represents that firm’s liquidity poison is not good.
II. Leverage Ratios

Leverage ratios are also known as capital structure ratio. These ratios indicate the mix of funds provided by owners & lenders. As a general rule these should be an appropriate mix debt & owners equity in financing the firm’s assets.

Leverage ratios are calculated to judge the long-term financial position of the company. Some of the popular leverage ratios are:

a. Debt-Equity Ratio

Debt-Equity ratio shows the relative contribution of creditors and owners. Debt-Equity also known as External-Internal equity ratio. It is calculated to measure the relative claims of outsiders against firm assets.

\[
\text{Debt-Equity Ratio} = \frac{\text{Total Debt}}{\text{Net Worth}}
\]

### TABLE-2.1 Debt Equity Ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Debt</th>
<th>Net Worth</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>554110249</td>
<td>43052429</td>
<td>0.61</td>
</tr>
<tr>
<td>2005-06</td>
<td>499246293</td>
<td>63171947</td>
<td>0.62</td>
</tr>
<tr>
<td>2006-07</td>
<td>547168647</td>
<td>568828076</td>
<td>0.52</td>
</tr>
<tr>
<td>2007-08</td>
<td>565092766</td>
<td>570188858</td>
<td>0.82</td>
</tr>
<tr>
<td>2008-09</td>
<td>622397167</td>
<td>571266087</td>
<td>0.93</td>
</tr>
</tbody>
</table>
INTERPRETATION

The table shows that the total debt ratio of NSL had increased in the year 2005 and 2006 from 0.61 to 0.62 and had fluctuated to 0.52 in the year 2007 and further increased to 0.82 in the 2008 and 0.93 in the year 2009. The company had increased its total debt by 3.27% and 0.23% in net worth and in the year 2009 the debt was increased by 11.02% and 0.188% in net worth.

Debt equity ratio measures ultimate solvency of the company. It provides a margin of safety to creditors, thus when the ratio is smaller the creditors are more secured. An appropriate debt equity ratio is 0.33. A ratio higher than this is an indication of risky financial policies.
b. Current Assets to Proprietor’s funds ratio

This ratio is calculated by dividing total current assets by shareholders funds. It indicates the extent to which proprietor funds are invested in current assets. There is no rule of thumb for this ratio & depending upon the nature of the business there may be different ratios for different firms.

\[
\text{CA to PF ratio} = \frac{\text{Current Assets}}{\text{Proprietors Fund}}
\]

**TABLE-2.2 Current Assets to Proprietors Fund**

<table>
<thead>
<tr>
<th>Year</th>
<th>Current Assets</th>
<th>Proprietors Fund</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>430076093</td>
<td>217335000</td>
<td>1.97</td>
</tr>
<tr>
<td>2005-06</td>
<td>343665293</td>
<td>217400000</td>
<td>1.58</td>
</tr>
<tr>
<td>2006-07</td>
<td>336389326</td>
<td>217530000</td>
<td>1.55</td>
</tr>
<tr>
<td>2007-08</td>
<td>417811264</td>
<td>218018495</td>
<td>1.92</td>
</tr>
<tr>
<td>2008-09</td>
<td>349345761</td>
<td>223983274</td>
<td>1.56</td>
</tr>
</tbody>
</table>

**C/A TO PROPRIETARY RATIO**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>1.97</td>
</tr>
<tr>
<td>2005-06</td>
<td>1.58</td>
</tr>
<tr>
<td>2006-07</td>
<td>1.55</td>
</tr>
<tr>
<td>2007-08</td>
<td>1.92</td>
</tr>
<tr>
<td>2008-09</td>
<td>1.56</td>
</tr>
</tbody>
</table>
INTERPRETATION

The table of current assets to proprietory ratio shows that the ratio has been decreased by 1.97 to 1.58 in the year 2005 and 2006 and 1.55 in the year 2007 and then raise to 1.92 in the year 2008 and then decreased to 1.56 in the year 2009.

There was raise in current asset by 24.20% in the year 2008 and proprietary fund by 0.22% and further in 2009 there was decrease by 16.38% in current asset and there was increase by 2.73% in proprietary fund

This ratio indicates the extent to which proprietors fund are invested in current asset
III. Profitability Ratios

The primary objective of a business undertaking is to earn profits. Profit is the difference between revenue & expenses over a period of time. Profit is output of a company & company will have no further if it fails to make sufficient profit. Profits are thus a useful measure of overall efficiency of a firm.

These ratios are calculated to measure the operating efficiency of the company. Beside management, creditors, owners are also interested in the profitability of the company. Generally profitability ratios are calculated either in relation to sales or in relation to investment. The various profitable ratios are:

I In Relation to Sales

a) Gross Profit Ratio

G.P.Ratio measures the relationship between gross profits & sales; it is usually represented in percentage. Thus Gross profit margin highlights the production efficiency at a concern.

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

G.P.Ratio indicate the extent to which selling price of goods per unit may decline without resulting in losses on operations of firm. It reflect efficiency with which firm produces the product.
TABLE-3.1 Gross Profit Ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Profit</th>
<th>Sales</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>32048846</td>
<td>269842495</td>
<td>0.11</td>
</tr>
<tr>
<td>2005-06</td>
<td>119992232</td>
<td>622678642</td>
<td>0.19</td>
</tr>
<tr>
<td>2006-07</td>
<td>81751169</td>
<td>592532689</td>
<td>13.8</td>
</tr>
<tr>
<td>2007-08</td>
<td>98156497</td>
<td>453435123</td>
<td>21.65</td>
</tr>
<tr>
<td>2008-09</td>
<td>79531898</td>
<td>736206987</td>
<td>10.8</td>
</tr>
</tbody>
</table>

GROSS PROFIT RATIO

The above table shows the gross profit ratio of NSL. The table indicates that the ratio in the year 2005 was 0.11 and in the year 2006 it raised to 0.19. Further it had a drastic change in gross profit to 13.8 in the year 2007 and 21.65 in the year 2008, but decreased to 10.8 in the year 2009.

The company had fluctuated by an increase of 20.06% in gross profit and a decrease by 23.47% in the year 2008 and in the year 2009 there is a decrease in gross profit by 18.97% and an increase in sales by 62.36%.

The gross profit indicates the degree to which the selling price of goods per unit may decline without resulting in losses on operation of the firm. It reflects the efficiency with which the firm produces its products.
b) Operating Ratio

It is the relation between cost of goods sold & operating expenses on one hand & the sales on the other hand. It measures the cost of operations per rupee of sales.

\[ \text{Operating Ratio} = \frac{\text{Operating Cost}}{\text{Sales}} \times 100 \]

**TABLE-3.2 Operating Ratio**

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating Cost</th>
<th>Sales</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>179620260</td>
<td>269842495</td>
<td>66.56</td>
</tr>
<tr>
<td>2005-06</td>
<td>498590333</td>
<td>622678642</td>
<td>80.07</td>
</tr>
<tr>
<td>2006-07</td>
<td>592997583</td>
<td>592532689</td>
<td>100.8</td>
</tr>
<tr>
<td>2007-08</td>
<td>447200049</td>
<td>453435123</td>
<td>98.62</td>
</tr>
<tr>
<td>2008-09</td>
<td>545311535</td>
<td>736209987</td>
<td>74.04</td>
</tr>
</tbody>
</table>

**INTERPRETATION**

The above table shows the firm’s operating ratio increasing drastically from 66.56 in the year 2005 to 80.07 and 100.8 in the years 2006 and 2007 but further fluctuating to 98.62 in the year 2008 and 74.04 in the year 2009.

There is a decrease in operating cost by 24.58% and 92.34% in sales but in the year 2009 there was increase by 21.93% in operating cost and 62.36% in sales.

An increase in the ratio over a previous period is an indication of improvement in a operational efficiency of a concern the higher the ratio is more successful the business is, but a lower ratio indicates large amount of manufacturing expenses.
2. Profitability in relation to Investment

a. Return on shareholders Investment:

Return on shareholders investments, popularly known as ROI. It is the relationship between net profit after tax & shareholders funds. Thus this ratio is considered as affective indicator of the company’s profitability because it reflects the success of management in the efficient utilization of the owner’s investment.

ROI = \( \frac{\text{Net Profit after Tax}}{\text{Shareholders fund}} \times 100 \)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Sales</th>
<th>Current Assets</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>269842495</td>
<td>430076093</td>
<td>0.62</td>
</tr>
<tr>
<td>2005-06</td>
<td>622678642</td>
<td>343665293</td>
<td>1.81</td>
</tr>
<tr>
<td>2006-07</td>
<td>592532689</td>
<td>33689326</td>
<td>1.76</td>
</tr>
<tr>
<td>2007-08</td>
<td>453435123</td>
<td>41781264</td>
<td>1.09</td>
</tr>
<tr>
<td>2008-09</td>
<td>736206987</td>
<td>349345761</td>
<td>2.11</td>
</tr>
</tbody>
</table>
INTREPRETATION:

The above table reveals that there is increase in the return on investment from 20% in the year 2005 to 29% in the year 2006 but fell down to 7.01% in the year 2007. Further in the year 2008 there was a drastic raise to 24.41% but fluctuated to 0.04% in the year 2009. Through the analysis we found that in the year 2009 the net profit was decreased by 99.82% and increased shareholders fund by 0.73. This ratio is used to measure the overall efficiency of a concern, the higher the ratio the better the results will be as this ratio reveals how well the resources of a concern are being used.
IV. Activity Ratios:

Funds are invested in various assets in business to make sales & earn profit. The efficiency with which assets are managed directly affects the volume of sales. The better the management of assets, the larger is the amount of sales & the profit. Activity ratio measures the efficiency or effectiveness with which a firm manages its resources or assets. These ratios are also called turnover ratio because they indicate the speed with which assets are converted or turned over into sales.

The various activity ratios are:

a. Inventory Turnover Ratio:

Inventory turnover ratio indicates the number of times stock has been turned over during the period & evaluates efficiency with which a firm is able manage inventory.

The ratio is calculated by dividing the net sales divided by average inventory at cost.

\[
\text{ITR} = \frac{\text{Net Sales}}{\text{Average Inventory at Cost}}
\]

Average inventory should be taken for calculating stock turnover ratio. Adding the stock in the beginning & at the end of period & dividing it by 2 to calculate average inventory.
TABLE-4.1 Inventory turnover ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Sales</th>
<th>Average Inventory</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>269842495</td>
<td>149040556</td>
<td>1.81</td>
</tr>
<tr>
<td>2005-06</td>
<td>622678642</td>
<td>114404573</td>
<td>2.44</td>
</tr>
<tr>
<td>2006-07</td>
<td>592532689</td>
<td>312640080</td>
<td>1.9</td>
</tr>
<tr>
<td>2007-08</td>
<td>453435123</td>
<td>484623044</td>
<td>0.94</td>
</tr>
<tr>
<td>2008-09</td>
<td>736206987</td>
<td>379314434</td>
<td>1.94</td>
</tr>
</tbody>
</table>

INTERPRETATION:
The table shows the increase in the inventory turnover ratio from 1.81 to 2.44 in the year 2005 and 2006. In the year 2007 there was a fluctuation to 1.9 and further to 0.94 in the year 2008 but in the year 2009 there was a drastic increase to 1.94. The company had 23.47% decrease in net sales and increase by 55.00% in average inventory but in the year 2009 there was increase in net sales by 62.36% and decrease by 21.73% in average inventory.

Inventory turnover ratio signifies the liquidity of the inventory. A high ratio implies good inventory management, a low ratio results in blocking of funds in inventory. The reference value of this ratio is 9 and the maximum conversion period is 388.
b. Assets Turnover Ratio:

Assets are used to generate sales. Therefore a firm should manage its assets efficiency to maximum sales. Assets turnover ratio shows relationship between sales & assets. The various assets turnover ratio are:

i. Fixed Assets Turnover Ratio:
This ratio establishes the relationship between the costs of goods sold and fixed assets. It can be calculated by,

\[
\text{Fixed Assets Turnover Ratio} = \frac{\text{Sales}}{\text{Fixed Assets}}
\]

**TABLE : 4.2 Fixed Assets Turnover Ratio**

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales</th>
<th>Net Fixed Assets</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>269842495</td>
<td>523585575</td>
<td>0.51</td>
</tr>
<tr>
<td>2005-06</td>
<td>622678642</td>
<td>532500595</td>
<td>1.16</td>
</tr>
<tr>
<td>2006-07</td>
<td>592532689</td>
<td>568828676</td>
<td>1.04</td>
</tr>
<tr>
<td>2007-08</td>
<td>453435123</td>
<td>570188858</td>
<td>0.80</td>
</tr>
<tr>
<td>2008-09</td>
<td>736266887</td>
<td>571266087</td>
<td>1.29</td>
</tr>
</tbody>
</table>
INTREPRETATION:
The table reveals that there is increase in fixed asset turnover ratio from 0.51 in the year 2005 to 1.16 in the year 2006 but decreased to 1.04 in the year 2007 and drastical fluctuation to 0.8 in the year 2007 and raise in the year to 1.29 in the year 2009.
The company had 23.47% decrease in net sales and increase in fixed assets by 0.23% in the year 2008 and further in the year 2009 it had increase net sales by 62.36% and increase by 0.18% in fixed assets.
One of the cautions to be kept in mind that when fixed assets are old and substantially depreciated the ratio tends to be high, because, the denominator of the ratio will be low.
ii. Current Assets Turnover Ratio:

This ratio is indicates how many net sales are made for every rupee of investment in current assets.

\[
\text{Current Assets Turnover Ratio} = \frac{\text{Sales}}{\text{Current Assets}}
\]

TABLE: 4.3 Current Assets Turnover Ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Profit</th>
<th>Shareholder Fund</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>43052429</td>
<td>217335000</td>
<td>20%</td>
</tr>
<tr>
<td>2005-06</td>
<td>63171947</td>
<td>217400000</td>
<td>29%</td>
</tr>
<tr>
<td>2006-07</td>
<td>15245938</td>
<td>217530000</td>
<td>10.01%</td>
</tr>
<tr>
<td>2007-08</td>
<td>51045767</td>
<td>218018495</td>
<td>23.41%</td>
</tr>
<tr>
<td>2008-09</td>
<td>91423</td>
<td>223983274</td>
<td>0.04%</td>
</tr>
</tbody>
</table>

INTREPRETATION:

The table reveals that the current ratio has drastical increase from 0.62 the year 2005 to 1.81 in the year 2006 but again there was a decrease to 1.76 in the year 2007 and 1.09 in the year 2008. But there was a drastical increase of ratio to 2.11 in the year 2009.

The company had decrease of 23.47% in net sales and increase in current assets by 24.20%. In the year 2009 there was increase in net sales by 62.36% and 16.38% decrease in currents assets.
d. Working Capital turnover Ratio:

A firm may also relate net current assets to sales. Working capital turnover ratio indicates the velocity of the utilization of net working capital.

Working Capital Turnover Ratio = \frac{Sales}{Net Current Assets}

**TABLE: 4.4 Working Capital Turnover Ratio**

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales</th>
<th>Net Current Assets</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>269842495</td>
<td>458642451.5</td>
<td>1.22</td>
</tr>
<tr>
<td>2005-06</td>
<td>622678642</td>
<td>162529306.4</td>
<td>3.37</td>
</tr>
<tr>
<td>2006-07</td>
<td>592532689</td>
<td>2288870547</td>
<td>0.12</td>
</tr>
<tr>
<td>2007-08</td>
<td>453435123</td>
<td>1189072835</td>
<td>5.23</td>
</tr>
<tr>
<td>2008-09</td>
<td>736206987</td>
<td>726908338.1</td>
<td>8.15</td>
</tr>
</tbody>
</table>
INTERPRETATION

The table reveals that the working capital turnover ratio of NSL in the year 2005 was 1.22 and increased to 3.37 in the year 2006. But in the year 2007 there was a drastic fluctuation to 0.12 in the year 2007 further there was a high increase in working capital turnover ratio to 5.23 in the year 2008 and 8.15 in 2009.

There is decrease in net sales by 23.47% and 94.80% in net current assets in the year 2008 and in the year 2009 the net sales increased by 62.36% and decreased by 38.86% in net current assets.

The assets turnover ratio measures the efficiency of a firm in managing and utilizing the assets. Higher turnover ratio, more efficient is the management utilization of the assets while low turnover are indicative of under utilization of available resources and presence of idle capacity. In operational terms, it implies that firm can expand its activity level without requiring additional capital investments.
FINDINGS & SUGGESTIONS
FINDINGS

I. LIQUIDITY RATIO:

1. From the current ratio it is found that the ratio is not satisfactory because the % increase in current assets is less than the % increase in current liabilities during the year 2005-2009. The highest ratio recorded is 3.04 in 2005 and the lowest ratio recorded is 0.42 in the year 2007. And less than the standard ratio.

2. From the quick ratio it is found that the ratio is not satisfactory because the ratios recorded during the year were less than the standard ratio. In the year 2008 the ratio recorded is 0.15 and the ratio recorded highest was 2.01 in the year 2005.

II. LEVERAGE RATIO:

1. From the debt equity ratio it is found that the ratio recorded during the year 2005, 2006, & 2007 is satisfactory as the ratios are near to the standard ratio but during the year 2008 & 2009 it is not satisfactory as the ratios are very high compared to the standard ratio.

2. From the current assets to proprietors fund ratio is not satisfactory as the proprietary funds invested in the current assets is less in the year 2009 is less compared to previous years. The highest ratio recorded is 1.97 in the year 2005 and the lowest ratio recorded is 1.55 in the year 2007.

III. PROFITABILITY RATIOS:

1. From the gross profit ratio it is found that the ratio is satisfactory during the last three years from 2007 to 2009. The highest ratio recorded in the year 2008 is 21.65 and the lowest ratio recorded is 0.11 in the year 2005.

2. From the operating profit ratio it is found that the ratio is highly satisfactory during the considered financial years. The highest ratio recorded is 100.08 in the year 2007 and the lowest is 66.56 in the year 2004.
3. From the return on investment it is found that the ratio calculated for the considered financial years is good. The ratio is satisfactory as the return on investment is effective and good, comparing the previous years.

IV. ACTIVITY RATIOS:

1. From the inventory turnover ratio it is found that the ratio is not satisfactory as the inventory holding period is very high, compared during the financial years.

2. From the fixed assets turnover ratio it is found that the ratio is satisfactory as the ratios are raising yearly during the comparative years.
Suggestion

1. The company may improve its current ratio by decreasing the current liabilities because in the year 2008-09 current assets are decreased and it may also improve its quick ratio.

2. The company may decrease its total debt as there is increase in total debt the year 2008-09. The company may increase its investment in current assets.

3. Long terms solvency of the company has to be improved by limiting amount invested by outsiders to the amount invested by the owner of the company. This can be achieved by purchasing the shares gradually.

4. The proper management of the inventory can improve liquidity position and efficiency of the company.
CONCLUSION

Study of ratio analysis of nirani sugars Ltd. Reveals the performance of the company in terms of financial aspects. It is found that there is increase in sales gross profit during 2005 to 2009. The cash balance is also increased for the above said years this is due to company’s revised policy in debt collection. It is also observed that the current ratio is not so satisfactory which creates chunks in the current assets in the form of sundry debtors and inventory.
References


2). J Madegouda “Accounting for managers”