CHAPTER-IV

PROFILE OF CORMANDEL INTERNATIONAL LIMITED

Fertilizer is a substance that contains nutrients that are added to soil and are essential for plant growth. They are the food materials for the plants. Crop plants require minerals for their proper growth and high yield. They obtain their nutrition from the soil but after taking the crops for several years they get exhausted. They are replaced by adding the fertilizers to the soil.

Kind of Fertilizers:

Fertilizers are available in two kinds:

1. Organic fertilizers

2. Mineral fertilizers

Organic fertilizers come from decayed plant or animal matter and produce mineral fertilizer from certain mineral of synthetic substance. Mineral fertilizers are most widely used fertilizer. They supply three main elements like nitrogen, phosphorous and potash. The mineral and organic matters are added to the fields in order to obtain more and steady yields.

Some fertilizers are made from organic waste such as manure or sewage. Others are manufactured from certain minerals or are produced as synthetic compounds in factories.

People have used fertilizers for thousands of years even though at one time they did not know why it was beneficial for plants. Long before they gained an understanding of plant nutrition. People noticed that animal droppings, wood ashes and certain minerals helped plants thrive.
During 1800 and in early 1900 scientists identified the chemical elements that are essential for plant nutrition. Today farmers throughout the world are using billions of dollars worth of fertilizers yearly.

Increased production resulting from the use of fertilizer probably accounts for about a fourth of all crop production without fertilizer greater amount land and labour would be needed to produce the same quantity of food and fiber.

**Fertilizer Industry;**

About 95% of fertilizers produced in the world are used on farm crops. United States is one of the world's leading producers of fertilizers. Other leading fertilizer producers include Canada, China, France and India.

The first fertilizer industry in India was established in Ranipet, Tamilnadu by EID Parry Limited in 1906 to produce super phosphate from the acidulation of crushed bones with an annual capacity of 6400 tones.

Every year large amounts of fertilizer must be produced to meet the world's growing need for food. The fertilizer industry tries to match its production with this need. If it does not do so, severe food shortages might result.

After the Second World War there was an acute shortage of food and so importance was given to increase the production of food grains in the country. In this process the need for fertilizers as an essential input was realised and as a result government of India started fertilizer plant in Sindri in 1951. India is the fourth largest producer of nitrogenous fertilizer and ranked eighth in phosphoric fertilizer in the world. '

**Company Incorporation:**

Thus with the importance given to fertilizers in Indian agriculture Coromandel international limited was incorporated in the year 1964 as a private sector jointly
promoted by M/s. International Minerals & Chemical Corporation USA and Chevron Chemical Company and EID Parry India Limited but now Coromandel international limited became a part of Chennai based Murugappa Group.

Coromandel International Limited is in the business segments of Fertilizers, Speciality Nutrients, Crop Protection and Retail. Coromandel manufactures a wide range of fertilisers and markets around 2.9 million tons making it a leader in its addressable markets and the second largest phosphatic fertilizer player in India.

In its endeavour to be a complete plant nutrition solutions company, Coromandel has also introduced a range of Specialty Nutrient products including Organic Fertilizers.

The Crop Protection business produces insecticides, fungicides and herbicides and markets these products in India and across the globe. Coromandel is the second largest manufacturer of Malathion and only the second manufacturer of Phenthoate.

Coromandel has also ventured into the retail business setting up more than 425 rural retail centers in the agri and lifestyle segments.

The Company clocked a turnover of Rs.9, 823 crore in 2011-12 (USD 1.93 billion as on March 31, 2012). It was ranked among the top 20 best companies to work for by Business Today and was also voted as one of the ten greenest companies in India by TERI, reflecting its commitment to the environment and society. It is a part of the Rs. 22,314 crores (USD 4.4 billion as on March 31, 2012) Murugappa Group.

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Coromandel's Corporate Office is located at Secunderabad in Andhra Pradesh. The Company's manufacturing facilities and marketing branches are spread across India. The products are being marketed in Andhra Pradesh, Orissa, West Bengal, Madhya Pradesh, Chhattisgarh, Karnataka and Tamilnadu under the brand name of “GROMOR”

CFL now encompasses fertilizer & pesticides business

- Fertilizer Units – Vizag, Ennore & Ranipet
- Pesticide Units – Navi Mumbai, Ranipet, Ankleshwar, J&K

Acquired Godavari Fert. & Chemicals Ltd. in 2003 – Merger into CFL in progress

Business Partnership exists with Foskor, S.Africa and GCT, Tunisia

Growth and Development:

1959

Independent India realized that its largely agrarian economy needed a thrust in the right direction for its people to benefit and prosper. Prime Minister Jawaharlal Nehru invited the Ford Foundation to carry out a comprehensive study of Indian agriculture and give its recommendations. The study revealed a crucial need to produce indigenous chemical fertilizers to increase agricultural output to meet the country’s ever-increasing food demand.
1961

An industrial license was granted to three companies – IMC (the world’s largest producer of fertilizers then), Chevron Chemical Company (a major American player in fertilizers / industrial chemicals) and E.I.D.Parry (India) Limited (India’s largest private fertilizer producer with 60 years’ standing) – to set up a giant chemical fertilizer complex.

The first Board of Directors was constituted on October 16, with H V R Iengar as its Chairman. Others on the Board included J Q Cope, Charles Dennison, J K John, Dr L Bharat Ram, A W Horton, J T Gibson, S C Dholakia, V K Rao and Raja Rameswar Rao. L L Powell and P J Davies were the first Managing Director and Dy. Managing Direct respectively. Donald I Meikles was the first Company Secretary.

1962

Market development commence in the form of a “seeding programme”. E.I.D. Parry was appointed COROMANDEL principal sales agent in India for our product aptly name “GROMOR” epitomizing the idea of Growing More food for the nation.

A 483.5 acres site was identified at Visakhapatnam along the “Coromandel” coast (India’s east coast), from where the Company derived its name. The land, taken under a 50-year lease from Visakhapatnam Port Trust, has a private jetty just 5 km from the plant site. With a capital investment of Rs.50 crores, Lumus Company undertook construction of the plant.

1967

On December 10, Mr. Korari Desai, the then Deputy Prime Minister of India, dedicated the fertilizer plant to the nation, in the presence of Mr. Kasu Brahmananda Reddy, the Chief Minister of Andhra Pradesh. Grandhi Ramamurthy, a local farmer, was given the honour of cutting the ribbon.
The 245 ft high Urea prill tower was one of the tallest industrial structures in India then. Though not operational today, it still presents a formidable sight, towering against the skyline, recalling old memories for those who were associated with its operation.

1970

The “GROMOR farmer” was developed as a marketing symbol and introduced on our bags to spread the message of “higher yields, bigger profits”. Today, farmer households across our addressable markets identify COROMANDEL brand by this symbol.

1971

The “Coromandel Lecture” was instituted to provide a forum for thinkers, economists, social and agricultural research scientists around the world to share their thoughts on issues of global concern such as food security, environment and extension activity.

The “Borlaug Award”, instituted in honour of Nobel Laureate Dr Norman Borlaug (father of the wheat revolution), honours eminent men of science and industry for their distinctive contribution to the cause of agriculture. This reflects Coromandel concern to develop a symbiotic interaction between agriculture, industry and academia.

1976

Our fertilizer retail outlet at Secunderabad got a boost with garden lovers fervently seeking small quantities of fertilizers for bigger and richer blooms and fruit.

1977

Coromandel completed a decade of participation in augmenting agricultural production for the nation. Its vital role covered soil nourishment, sharing agronomic
expertise, supporting agricultural education and rewarding research – all of which had progressively grown in width and depth during the decade.

1980 - 90

Plans to diversify were afoot. A “groundbreaking” ceremony was performed in November 1980 at Chilamkur (Andhra Pradesh), which is rich in limestone deposits, to set up a one million tonnes cement plant. The fully computerized plant (designed by world-renowned cement manufacturer Krupp Polybius of West Germany) was commissioned in 1984. It was later sold to India Cements in 1990.

1995 - 99


2000

Coromandel growth over the years has been punctuated with several path-breaking modernizations / upgradation programmes. Begun in 1975, the programmes gathered momentum in 1992-95, when the Sulphuric Acid, Phosphoric Acid and Complex Granulation plants were debottlenecked. Production capacity wends up from the original 247,000 MT to 400,000 MT. On September 29, Mr. N Chandrababu Naidu, the then Chief Minister of Andhra Pradesh, inaugurated a new complex granulation train. This further augmented capacity to 600,000 MT, a boon to the entire farming community.

2003

On July 12, Coromandel consolidated its business by acquiring controlling stake in Godavari Fertilizers & Chemicals Limited (GFCL). To optimize synergy of
operations in the Group, the Farm Inputs Division of E.I.D Parry (I) Limited was merged with Coromandel on December 1.

2004

Mr. V. Ravichandran took over as President & WTD on January 22. Mr. A.Vellayan took over as Chairman on September 1. Other Directors on the Board are Mr. J.Jayaraman, Mr. M.M.Murugappan, Mr. T.M.M Nambiar, Mr. M.K.Tandon, Mr. D.E.Udwadia, Mr. S.Viswanathan and Mr. K.A.Nair.

The first post-merger AGM of the Company was held on July 15.

2005:

Coromandel signs a business assistance agreement with Foskor Limited, South Africa. Coromandel linked a business assistance agreement with Foskor Pty. Ltd., South Africa, to provide managerial and technical assistance to Foskor. A joint venture agreement was signed between Coromandel, Group Chimique Tunisien, Tunisia and Gujarat state Fertilizer Corporation.

2006:

Plant Protection Business expands Coromandel acquired FICOM Organics Ltd.,

2007:

Innovation in Retail Marketing Coromandel launched its retail business to serve the rural markets. Today, Coromandel has a chain of over 400 outlets in rural Andhra Pradesh.

2008:

Product Innovation: Coromandel’s Speciality Nutrient range including Micro-Nutrients and water soluble products were launched a new line of organic fertilizers.
2009:

JV with Sociedad Quimicay Minera (SQM)A JV was signed on May 26 with Soquimich European Holdings, B.V., the Netherlands (a Subsidiary of SQM, Chile) a World leader in Specialty Plant Nutrition business to set up a manufacturing Coromandel plant at Kakinada to produce WSF NPK grades. The 50:50 JV Company, Coromandel SQM (India) Pvt. Ltd was incorporated on 09-10-2009.

2011:

British Safety Audit Council (BSC): Coromandel undergone for safety audit which has got significance at global level. British safety audit council has five star accredited at par with global level companies. Audit schedules from 27th Jun 2011 to 01st July 2011.

Exports:

Coromandel International Limited is known in the global agrochemical market as the principal manufacturer of Endosulfan. It is represented in various markets through its agents / formulators. Coromandel International Limited is the third-largest manufacturer of Endosulfan, the second-largest manufacturer of Malathion and only the second manufacturer of Phenthoate. Coromandel's pesticide business produces over 35 types of insecticides, fungicides and herbicides that are marketed across the country and exported to many countries in South America, Western Africa, Middle East and South East Asia.

Fertilizer Plants at:

- Kakinada & Visakhapatnam in Andhra Pradesh
- Ennore & Ranipet in Tamil Nadu.
Crop Protection plants at:

- Ranipet in Tamil Nadu
- Navi Mumbai in Maharashtra
- Ankleshwar in Gujarat
- Jammu in J&K.

Coromandel Marketing:

Coromandel branches servicing the farming community across India are located at:

- Hyderabad, Kurnool, Vijayawada and Visakhapatnam in Andhra Pradesh.
- Bangalore and Raichur in Karnataka.
- Trichurapalli in Tamil Nadu
- Aurangabad in Maharashtra
- Ahmadabad in Gujarat
- Indore in Madhya Pradesh
- Raipur in Chhattisgarh
- Bhubaneswar in Orissa
- Kolkata in West Bengal
- Ghaziabad in Uttar Pradesh
- Bhatinda in Punjab

Vision, Mission and Philosophy:

Vision:

To be the leader in the phosphatic fertilizer industry, producing high quality fertilizers at low cost and giving satisfaction to all stake holders.

It should have:
1. High quality products and brand image
2. Modern, cost effective and energy efficient manufacturing facility
3. Profitable operations
4. High level of satisfaction to stake holders.

Mission:
To enhance the prosperity of farmer through the supply of quality farm inputs and related services to ensure value for money.

Philosophy:
The fundamental principal of economic activity is that no man you transact with will lose then you shall not.

Values and Belief: The Five Lights Adhere-To ethical norms in all dealings with shareholders, employees, customers, suppliers, financial institutions and government.

Provide:
Value for money to customers through quality products and services.

Treat:
Our people with respect and concern provide opportunities to learn, contribute and advance, recognize and reward initiative, innovativeness and creativity.

Maintain:
An organisational climate conducive to trust, open communication and team spirit a style of operation, benefiting our size, but reflecting moderation and humility.

Manage:
Environment effectively for harnessing opportunities.
Discharge:

Responsibilities to various sections of society thereby preserve environment.

Grow:

In an accelerated manner, consistent with values and benefits, by continuous organisation renewal. The spirit of Coromandel has shown in fig (4.1)

**Figure 4.1: The Spirit of the Murugappa Group**

**Integrity:** We value professional and personal integrity above all else. We achieve our goals by being honest and straightforward with all our stakeholders. We earn trust with every action, every minute of every day.

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Passion: We play to win. We have a healthy desire to stretch, achieve personal goals and accelerate business growth. We strive constantly to improve and be energetic in everything that we do.

Quality: We take ownership of our work. We unfailingly meet high standard of quality in both what we do and the way we do it. We take pride in excellence.

Respect: We respect the dignity of every individual. We are open and transparent with each other. We inspired and enable people to achieve high standard and challenging goals. We provide everyone equal opportunities to progress and grow.

Responsibility: We are responsible corporate citizens. We believe we can help make a difference to our environment and change lives for the better. We will do this in a manner that befits our size and also reflects our humidity.

Objectives of Coromandel:

- To enable the farmers "grow more" by producing and supplying highly nutritious complex fertilizers at minimum cost.
- To maximize, the efficiency of both the men and machinery through continuous up gradation of technology and providing training investment.
- To satisfy shareholders by giving them handsome returns on their investment.

SWOT Analysis:

Strengths:

- Very long experience in the field of producing and selling fertilizers.
- Up-to-date technology and continuous up gradation.
- Optimum capacity utilization
- Enjoying great brand and corporate image
- Dealer and farmer loyalty.
- Financially strong and firm.
- Niche Marketing.
- Strong promotional attractive
- Widespread sales network
- Minimum Labor problem
- Well-trained employees and good work culture.

**Weakness:**

Neglecting study based on sales promotion of retail outlets. Marketing by intermediaries poor availability of product. Import of major raw materials

**Opportunities:**

- Increasing trend in using complex fertilizer areas.
- Large areas under each and oil seed crops
- Growing awareness and education among farmer's community
- Modern farming practices
- The wide gap between demand and supply in Indian fertilizer market
- Giving more emphasis the use of complex fertilizer for balanced fertilization.
- Government subsidy reduction on urea for facilitating the use of complex fertilizer.

**Threats:**

- The heavy competition in fertilizer market.
- Frequent/subsequent changes in government policies.
- Shifting of demand from the company's products to competitor's DAP
- Huge consumption of urea cover complex that is offered at lesser cost in the market.

Temperance of the Agricultural sector by the present government. Almost complete dependence on import of raw materials which will affect the company performance if the import prices are increased.
Organisational Structure:

The supervisory board of Murugappa group supervises the organisation of Coromandel International Limited. The top most authority of the whole Coromandel International Limited is administered and controlled by the president and managing director. The main registered office of Coromandel International Limited is located at Hyderabad. Organisation structure shown in figure (4.2).

Figure 4.2: Organisation Structure

Murugappa Supervisory Board (Executive Board)

Chairman

President and MD

GM (Marketing)  VP (Manuf & PT/ROJ)  VP (Finance)

GM  DGM  DGM IT  Sr. Mg.  Sr. Mgr.  Mg.
(Marketing) Commercials  IR & PA  Maintenance  (SH & E)

DGM Account  Mgr. (SH & E)
Functions:

The vice president manufacturing and projects is overall in charge of manufacturing Fertilizers at plant and in implementation of all the projects in time with a workforce of around 205 officers and 435 technicians.

The vice president finance is in charge of overall fund management, internal audit secretarial functions. ‘A work force of around 30 Executives and 35 officers are under his control.

The Sr. Vice President marketing is in charge of overall marketing of Coromandel International Limited finished products as well as the by-products like gypsum, fluorine etc. The functions of other executives are:

**General Manager - Operations:**

General Manager - Operations is responsible for smooth running of all Process plants including operations. One AGM & other process plant Heads will directly report to him.

**AGM Operations:**

Asst. General Manager of operations is responsible for efficient running of Bagging & Product Handling Plants in addition to Management Information System of all Operations Department about 8 Executives and 100 workmen report to him.

**Sr. Manager - Accounts:-**

Sr. Manager of accounts is responsible for maintaining statutory accounts and other fund records, 10 officers and 36 office assistants assist him.

**AGM-IT:**

Asst. General Manager of IT is responsible in building skill gap of all the human resources of the organisation by requisite training and development. 3 officers
assist him and 2 workmen who execute all HR philosophies and administer officers wage administration.

**AGM - Purchase and Stores:**

Asst. General Manager - Purchase & Stores is responsible for all purchase activities, raw material purchases and maintenance of stores at an optimum level. 5 officers and 20 assistants who look after the effective distribution of finished products and by-products assist him.

**AGM - Maintenance:**

Asst. General Manager - Maintenance is responsible for preventive maintenance of plant and machinery and buildings. He looks after the timely executives of all the capital projects at the plant. 30 officers and 165 technicians assist him.

**AGM & RH – HR:**

AGM & RH - HR is responsible for recruitment of technicians and office assistants. He is also responsible for execution of all welfare measures and for security arrangement of plant and machinery. 8 officers and 40 workmen assist him.

**Asst. General Manager - Safety, Health and Environment:**

AGM - safety, health and environment is responsible for identification of hazardous areas and in suggesting remedial safety measures and its effective compliance. He also arranges medical checkups etc. 4 officers and 3 assistants assist him.

The employees of the organisation are divided into three grades. They are:

1. **Technical:** The technical employees are again sub divided into highly skilled, semiskilled and unskilled people. The labour comes under unskilled workmen. Technical staff is graded into SI to S7 ranks.
2. **Clerical:** The clerical staff is graded into Cl to C3 ranks where Cl grade is for assistant, C2 for junior assistant and C3 for senior assistant.

The clerical staff mainly looks after the office work.

3. **Managerial:** The management staff is graded into CI1 to CI 3 and from MG3 to MG 10 grades.

Thus according to the ranks the employees of Coromandel International Limited are graded and the company runs round the clock. The employees work in shift timings. The timings of the three shifts are. 0700hrs to 1500hrs 1500 hrs to 2300 hrs 2300 hrs to 0700 hrs

The general shift is from 0800 hrs to 1630 hrs. Thus the employees working under all the shift timings receive all the welfare facilities like canteen, transport, drinking water etc.

**Location:**

The plant is situated in 500 acres of site about 5 km from the harbour. The site is located on the east coast of Visakhapatnam and has been leased from Visakhapatnam port trust for a period of 50 years with renewal options, at the port; Coromandel International Limited operates its own bulk freight raw material unloading berth, which is an added advantage as they import many for Coromandel International Limited Company.

The plant uses a lot of seawater in the process for cooling purpose Vizag being a seacoast provides the facility. Coromandel International Limited is serving the farming community of India for the past 3 decades by producing around 1 million tonnes of complex Fertilizers per annum and catering to the needs of agricultural society.
Achievements:

Coromandel International limited a. reputed Fertiliser Company in India stood first in achieving the following:

1. First in India achieved to commercially manufacture high analysis complex fertilizer, which is urea ammonium phosphate 28:28:0 with high nitrogen and phosphate content in 1:1 ratio.

2. First in India achieved to install a large sulphuric acid plant based on DCDA technology to control sulphur dioxide emission.

3. First in India achieved successfully to implement total recycling of seawater for its effluent recifculation system attached to phosphoric acid plant.

4. First in India achieved to install a terminal for import and handling of molten sulphur in environment friendly project.

Functional Areas:

Coromandel International limited comprises of four functional areas. They are:

1. Manufacturing and production

2. Marketing

3. Finance

4. Human Resources

Manufacturing and Production:

The main objectives of manufacturing unit of Coromandel International Limited are

1. To be a low cost Fertilizer manufacturer

2. Emphasis on safety and environment improvement

3. Trust on energy conservation
The plant has planned to undertake manufacturing of single super phosphate with estimated production volume of 0.7 lakh tones per annum. The basic raw materials used for manufacturing are phosphoric acid, urea and ammonia. They buy naphtha to make ammonia from HPCL. Rock phosphate is imported from USA and Sulphur is imported from USA and gulf countries.

**Manufacturing Process:**

Sulphur
Heat & Ail
Sulphur Oxides
Water Sulphur Acid
Rock Phosphate Phosphoric Acid
Ammonia
Ammonium Phosphate
Urea prills 28-28-0

**Products:**

1. Coromandel International Limited sells its product under the brand name 'GROMOR'. Gromor (28:28:0) urea ammonium phosphate is one of the best products of Coromandel International Limited. It has a unique granule configuration Urea Prill Coated with ammonium Phosphate, which ensures nitrogen availability to the crop over a longer duration of time.

2. Gromor (14:35:14) ammonium phosphate potash, Npk is a scientific Fertilizer with the highest nutrient content of 63% among NPK complex available in India.

3. Gromor (20:20:0) and parampos (16:20:0) ammonium phosphate sulphate
gives 15% sulphur for the soil apart from their ammonia and phosphate content.

4. The products of Coromandel International limited are sold in Andhra Pradesh, Orissa, west Bengal and Madhya Pradesh.

Products and customers of Coromandel international limited shown in table (4.1)

Table (4.1): Products and Customers

<table>
<thead>
<tr>
<th>Product/service</th>
<th>Segment</th>
<th>Top Key Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>28-28-0</td>
<td>High Analysis</td>
<td>Farmers by Government Institution in AP, Orissa, and West Bengal use these products for soil application.</td>
</tr>
<tr>
<td>14-35-14</td>
<td>Complex Fertilizers</td>
<td></td>
</tr>
<tr>
<td>20-20-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-26-26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gypsum</td>
<td>By-products</td>
<td>Cement Industries -As a Retarder in Cement manufacture. Farmers in AP, Orissa, West Bengal, Madya Pradesh use this product as a neutralizer for Acidic Soils</td>
</tr>
<tr>
<td>Hydrofluosilistic Acid</td>
<td>By-products</td>
<td>M/s Alufluoride Ltd-use this product for the manufacture of Aluminium Fluoride which in turn is used for the manufacture of Aluminium.</td>
</tr>
<tr>
<td>Gromor Bentonite Sulphur</td>
<td>Speciality Nutrients</td>
<td>Farmers in AP, Orissa, West Bengal, and Madya Pradesh use this product as a soil conditioner in lowering PH of soils and to bring down alkalinity in Saline/calcareous soils.</td>
</tr>
<tr>
<td>Gromor Spray 19:19:19</td>
<td>Speciality Nutrients</td>
<td>Farmers in AP, Orissa, West Bengal, and MadyaPradesh use this product for foliar application, for better absorption of nutrient from leaves and to counteract adverse soil conditions.</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Gromor Power 19:19:19</td>
<td>Speciality Nutrients</td>
<td>Farmers in AP, Orissa, West Bengal, and MadyaPradesh use this product for Drip irrigation.</td>
</tr>
</tbody>
</table>

**Plants:**

Coromandel International limited has mainly three plants. They are:

1. **Sulphuric Acid Plant:**

   This plant is designed and constructed by M/s. Simon Carves India Limited. It has a rated capacity of 1200 million tonnes per day. Sulphur is the raw material, which is imported from abroad from countries like USA, Japan and Gulf.

2. **Phosphoric Acid Plant:**

   This plant is designed and constructed by M/s. Dorr Oliver of USA is used in manufacturing of cement. It has a rated capacity of 400 million tonnes per day. Rock phosphate a mineral from foreign countries such as USA, Africa and Australia and is still looking for other sources. Rock phosphate and sulphuric acid are reacted to give phosphoric acid and gypsum. Filtering separates gypsum and it is a by-product, which is a good source of income by sales.

3. **Complex Plant:**

   Complex plant has rated capacity of 1400 million tonnes per day. Ammonia and phosphoric acid are reacted in a reactor to form ammonium phosphate and urea is added to this mixture. The complex plant utilizes ammonia, phosphoric acid, urea to
make Ammonia phosphate 28:28:0. Whereas for manufacturing complex NPK 14:35: 14, ammonia and phosphoric acid are used along with Potash, which is a bought out raw material, mixed with the outer feed stocks in the complex plant. In case of manufacture of 16:10:0,20:20:0 Ammonia phosphoric acid and sulphuric acid are used as feeds.

Due to increase in prices of Hydrocarbons, Operations of Urea and Ammonia production facilities have been suspended. Alternate arrangements are in place. Ammonia and liquid sulphur are being imported at an economical rate. Urea too is being imported. The production material is bagged in 50 kg and dispatched by rail/road. Image of the complex plant shown in figure(4.3)

**Figure (4.3): Image of the Complex Plant**

![Image of the Complex Plant](image)

**Capacities:**

- Ammonia : 1,05,000MT/Yr
- Urea : 74,000 MT/Yr
- Sulphuric : 3,65,000 MT/Yr
- Phosphoric : 1,13,050MT/Yr
- Complex(28:28:0) : 4,00,000MT/Yr

Plant capacities are all given in Metric Tons.
**Personnel Department:**

Coromandel International limited gives importance to human resources and it lays emphasis on human safety and welfare. Presently the company comprises of about 640 employees among whom about 435 employees are non managerial and about 205 employees are managerial.

**Objectives:**

The main objectives of personnel department in Coromandel International Limited are:

1. Organisational restructure through re-skilling and re-deployment
2. Training in core competency areas
3. Employee cost reduction through manpower rationalization and optimum utilization.

Personnel department at Coromandel International Limited is classified into two departments. They are:

1. **Human Resource Department:**

   This department deals with the matters pertaining to managerial staff and is headed by Asst. General Manager & Regional Head - HR who looks after the matters like recruitment, career planning, training and development, performance appraisal and smooth administration of remuneration and policies of all categories of employees of Visakhapatnam Plant as well as Marketing Branches of in the States i.e., Andhra Pradesh, Assam, West Bengal, Orissa, Madhya Pradesh, and Chhattisgarh.

   A total of 40 non-managerial staff is working in this Department. Vice president in consultation with HRD and ERD reviews carefully and finalizes the manpower planning.
**HR Policy:**

This human resource policy was drafted in the year 2000 in May and it is considered to be the corporate commitment.

1. To create and nurture an organisation culture committed to multi-disciplined teamwork in order to meet the customer's needs with high quality products and services.
2. To facilitate and provide an environment congenial for continual learning aimed at increasing proactivity, creativity and adaptability.
3. To devise and sustain an appraisal and reward system based on performance and merit.

**Recruitment:**

The company has a policy that the new employee should be carefully chosen as he has to handle the job not only for his ability but also for his suitability of future advancement. The requirements of the job shall be the determining factor in the selection and placement of the applicants and employees who satisfy the required qualifications and requirements of the job shall be preferred.

The main manpower sources of the organisation are:

1. Resumes or the applications received in personal or by mail.
2. Local employment exchange.
3. Advertisements in local press.
4. Direct interviews from colleges, universities and poly-technical colleges.

Coromandel International Limited also complies with the statutory requirement of informing employment exchange vide form ER-1 under the Employment Exchange Act 1959.
Selection:

The received applications will be reviewed by the ERD and HRD in consultation with the concerned head of the department and suitable applicants will be invited to meet the preliminary evaluation panel at employee relations department or the human resource department. The process of selection at Coromandel International Limited is done as follows:

1. Conducting written examination and its critical evaluation
2. Personal interview by the selection panel and its appraisal
3. Appointment order will be issued to the candidate and it contains the placement, commencement of service, remuneration, benefits, compensation review, age of retirement, notice of termination etc.

Thus when the person is selected for a particular job he is sent for training to know the work correctly so that he performs the job effectively.

2. Training and Development:

Training and Development at CIL is being given much importance. It is a systematic approach and its objectives are to:

1. Upgrade and maintain the technical and functional skill levels of employees
2. To match the company's present as well as envisaged requirements.
3. Improve the understanding commitment and general effectiveness of employees through appropriate workers education, supervisory development and management development programmes.

Normally organisation will try to achieve the training man days up to a maximum of 7 days that is considered-to be the best. As against the normal standard,
Coromandel International Limited (CIL) already achieved 9.28 and 5.57 man days for their managerial and non-managerial staff. Presently Training is being done at the rate of 6.75 man days/employee/year.

The training policy of Coromandel International Limited is to facilitate and provide an environment congenial for continual learning aimed at increasing proactivity, creativity and adaptability.

**Functions of Training Department:**

Effective coordination with various departments aiming at alignment of training needs and training activity.

1. Preparation of training calendars and obtaining sufficient budget from the top management.
2. Organising the training effectively in line with the training calendar.
3. Collection of feedback from the participant about the effectiveness.

Thus training and development at Coromandel International Limited is playing an important role on the employees by upgrading their skills and knowledge.

**Performance Appraisal:**

When an employee's performance is excellent it is the result of a number of circumstances that work together to make his excellence possible. The level of performance of an employee is influenced by six factors. They are; Aptitude, degree of effort, Level of skill, Motivation, Understanding the task, other factors

Performance appraisal systems at Coromandel International Limited are at 180° and 90° in cases of managerial staff and non-managerial staff. Performance appraisal is mainly used as tools to access the individual's competency, potential and performance and based on these factors increments; compensation reviews and promotions are affected. It improves the performance of the employee so that
he performs well in future. Coromandel International Limited has a very good performance appraisal system through which their performance is evaluated and compensation is awarded.

**Manpower Profile:**

<table>
<thead>
<tr>
<th>Department</th>
<th>Management</th>
<th>Non-Management</th>
<th>Total</th>
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<tr>
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<td>4</td>
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<td>UP-Office</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>205</strong></td>
<td><strong>435</strong></td>
<td><strong>640</strong></td>
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</table>

Manpower in the organisation total number of employees in the Coromandel International Limited are 640 in which comprising of 205 management and 435 non-
management employees put together total number of employees in the organisation 1 is 640 members. The profile of manpower has shown in table (4.2)

**Welfare Facilities:**

Management makes the welfare policies at the plant and the welfare programmes are executed to the workers through their union. The union nominates its members and negotiates about modalities of execution of welfare programmes. The following are some of the welfare facilities provided to the employees:

**1. Drinking Water:**

Drinking water facilities is provided to the employees in and around the plant. There are about 20 drinking water points at suitable places for supply of wholesome cool drinking water.

**2. Canteen:**

Canteen facility is also provided and in each shift at a time 60 to 70 persons can be accommodated. Mobile and non-mobile canteen services are provided round the clock. Every month company spends 4.5 lacks approximately on canteen and the food is ordered on subsidized rates.

**3. Recreational facilities:**

Recreational facilities at Coromandel International Limited are organized through two clubs, which are Coromandel recreation centre for non-managerial staff, and Coromandel club for managerial staff. The clubs organize various cultural and entertainment programmes for recreation of its members and their members. The subscriptions of the clubs are Rs. 5/- for CRC and RS. 40/- for CC per month.
4. Transport:

Coromandel International Limited provides subsidized home transport to the employees. Rs. 15/- is recovered by the management per month from the employee’s salary. Company operates almost 6 routes of Visakhapatnam in all the shift timings.

5. First Aid:

Coromandel International Limited provides first aid and medical facilities to the employees. 30 first aid boxes are located at various locations and around 33 numbers of managerial and non-managerial employees are trained in first aid in the factory during the year. Ambulance rooms' works around the clock and a full pledged medical officer is provided by the management.

The company also provides facility for house loan, consumer stores, educational allowance for employee children, maternity leave, and sick leave and bathroom facilities. These are some other important welfare facilities provided by the company.

Safety and Environmental Factors:

Coromandel International Limited has given safety as the prime importance. Senior manager takes care of the implementation of safety measures in the plant. He imparts safety education through posters, slogans, and safety training on continual basis.

The company has so far achieved one million safe working man hours record 28 times, two consecutive safe million man hours 8 times, three consecutive safe million man hours 4 times. The company maintains an excellent safety records and achieved many national and international awards. All the employees at Coromandel International Limited are provided with personal protective equipment like safety shoes, helmet, mask, fire protective clothing etc. The company spends nearly Rs. 40
lacks per year for providing safety measures. Coromandel International Limited adopted a policy of "safety to take precedence over expediency of jobs". The following is the safety policy at Coromandel International Limited.

**Safety Policy:**

It is the policy of the company to achieve high standards for professional safety and create healthy work environment for its employees, contractors and neighboring communities.

- It is the obligation of every employee to KNOW safety rules;
- FOLLOW safety procedure;
- WARN others of unsafe conditions;
- REACT positively to emergency property;
- PERFORM his or her task to ENSURE total safety

**CSR Activities:**

Coromandel International Limited's business interest is not limited to commercial profit alone. Its corporate responsibility does not stop with merely increasing shareholder value. The company has a stakeholder base that goes far beyond its shareholders. Displaying conspicuous social responsibility, it associates with various community development activities in the villages around its facilities.

The company constantly seeks out avenues where it can help the community, and has contributed generously to several social causes, such as providing drinking water to villages, scholarships to meritorious students, free notebooks, fans and computers to government schools, construction of additional classrooms for poor
schools, veterinary camps for cattle, free health / blood donation camps for villagers, pulse polio programmes for children, helping in the government's mid-day meal scheme, etc.

**Records:**

Coromandel has constantly taken up modernization and up gradation programs. The modern programs undertaken by the company during the year 75, '80, and '92 has helped to increase the volume of production from the original level of 2,50,000 Mt per annum to the current level of 3,38,000 Mt per annum with a considerable gain in energy and material usage efficiently over the years. The various projects include primary reformer revamp phosphoric acid plant de bottle - necking molten sulphur for loading facilities at berth and atmospheric storage tank ammonia handling etc.,

Coromandel has enjoyed excellent track records in production and industrial relations, energy and environment since inception largely due to progressive policies of the company with regard to Labour management.

Ever since the production commenced in 1967, Coromandel has been an active partner of the Indian farmer in the field, helping him in his efforts to produce more from small land holdings and played a crucial role in assisting India achieve self-sufficiency in food grain production.

**Role of CIL in Indian Agriculture:**

From the very beginning Coromandel proved to be a boon to the Indian farmers. It brought to India the world-class production facilities with a new generation of fertilizer products. Coromandel vision had started playing a vital role in the resurgence of Indian Agriculture.
Coromandel introduced a branded product Gromor, which is a high analysis NP complex fertilizer. It is the first in the world to produce high analysis NP complex fertilizers in the highest 1:1 ratio. This was implemented when most of the fertilizer products available in India were not balanced in nutrient contents.

Gromor in a short span of time established itself as a popular brand where and entire generation of farmers has grown up with it in a number of states using it wide variety of crops.

Gromor 28:28:0 is one of the best of its kind in the world. It has unique granule configuration where in a urea prill at the centre is coated with ammonia phosphate, which ensure nitrogen availability to the crop over a longer duration of time.

**Coromandel Major Competitors:**

- The Fertilizers and Chemicals Travancore Ltd (FACT).
- Godavari Fertilizers and Chemicals Ltd., (GFCL).
- Gujarat Narmada Valleys Fertilizers & Chemicals Ltd., (GNFCL)
- Gujarat State Fertilizers Company Ltd., (GSFCL)
- Hindustan Lever Ltd., (HLL)
- Indian Farmers Fertilizers Co-operation Ltd (IFFCO)
- Madras Fertilizers Ltd., (MFL)
- Pyrites and Phosphates Ltd., (PPL)
- Rastriya Chemical and Fertilizers Ltd., (RCF)
- Southern Petrochemical Industries Co'rp Ltd., (SPIC)
- Zuari Agrochemicals Ltd., (ZAL)
- Osklal Chemicals and Fertilizers Ltd., (OCFL)
Awards and Accolades:

- Coromandel received ‘Significant Achievement’ in the CII-EXIM Bank Business Excellence Award 2011.

- Kakinada Plant received the FAI award for ‘Best Overall Performance’ of an Operating Fertilizer Unit for Complex Fertilizers.

- Visakhapatnam Plant received the CII’s National Water Management Award for the best water-efficient unit.

- Coromandel received the FICCI award for the Best Brand - ‘Godavari Gold’.

- Kakinada and Visakhapatnam plants awarded 5 star rating by the British Safety Council for their Health and Safety Management systems.

- Awarded the prestigious Industrial Economist - Business Excellence Award 2012 in recognition of maximum shareholder value addition in the last five years.

- Best Talent Managed Company by Asian Confederation of Business.

- Best L&D Strategy award by Indian Human Capital Summit-2011.

- National Award, 1st Prize, by Public Relations Society of India, New Delhi for Coromandel in-house magazine-The VOICE’ (for the sixth time).

- National Award, 1st Prize, for the Corporate Film by Public Relations Society of India, New Delhi.

- Awards for
  
  a) Most effective use of interactive rural marketing
  
  b) Best brand loyalty marketing campaign and
c) Holistic marketing for rural brand deployment for Mana Gromor Retail at CM Asia and world Brand Congress during the Asia Retail Congress in Mumbai

MURUGAPPA GROUP:

The Murugappa Group is one of the largest family-promoted, professionally managed conglomerates in India. The group has, over the decades, maintained its salience with leadership in its chosen lines of business. The group has always been discharging its responsibilities to the satisfaction of all its stakeholders as summed up in its guiding philosophy.

"The fundamental principle of economic activity is that no man you transact with will lose; then you shall not."
References:

1. Coromandel Annual report 2011-12
2. Coromandel Financial Reports 1,2,3,4 of FY 2011-12
3. Reports and Records of Coromandel International Limited
4. www.fertilzers.org
5. www.coromandel.biz