

## **CHAPTER II**

### **WORKING OF INDAL**

- I] Profile of INDAL
- II] Its Origin and Sequences of Events
- III] Organisational Structure

# INDAL IN INDIA

**New Delhi ●**

**Hirakud Smelter (✓), Power (✓▲)**  
**Lohardaga Mines ▲**  
**Muri Alumina (✓)**

**Belur Sheet (✓)**

**Calcutta ●●**  
**Balasore Extrusions ■**  
**Bhubaneswar ●**  
**Rayagada Alumina ■**

**Hyderabad Foll ●■**  
**Chennai ●**  
**Coimbatore ●**

**Kalwa Foll (✓)**

**Taloja Sheet (✓), R&D Centre (✓✓)**

**Mumbai ●**  
**Pune ●**  
**Chandgad, Durgmanwadi (✓▲) Mines**

**Goa ■**  
**Lamitubes**

**Belgaum Alumina (✓), R&D Centre (✓✓), Carbon/Casting (✓)**

**Alapuram Smelter (✓), Extrusions (✓)**

**Bangalore ●■**

- ◆ Corporate Office
- Regional Sales Office
- Related Companies

*Anapuram Foils Limited, Hyderabad*  
*Cartons & Packaging (India) Limited, Goa*  
*Indal India Extrusions Limited, Bangalore*  
*Trisco Extrusions Limited, Balasore*  
*Ukal Alumina International Limited, Rayagada*

- ✓ ISO 9000 Certification
- ▲ ISO 14000 Certification

**Registered & Corporate Office :** 1 Middleton Street, Calcutta 700 071. Tel : (033) 240 22 10 **Regional Sales Offices :** Bangalore Indal House, 140 Field Marshal K.M. Cariappa Road, Bangalore 560 025. Tel : (080) 558 50 51 • Bhubaneswar 1295 Forest Park, Bhubaneswar 751 009. Tel : (0674) 53 23 86 • Calcutta 1 Middleton Street, Calcutta 700 071. Tel : (033) 240 22 10 • Chennai No. 1, Golden Enclave, 184 Poonamallee High Road, Kilpauk, Chennai 600 010. Tel : (044) 643 10 53 • Coimbatore No. 22 Rajkamal Estate (semi basement), 216 Thadagam Road, Coimbatore 641 025. Tel : (0422) 44 44 15 • Hyderabad 413A Minerva House, 94 Sarojini Devi Road, Secunderabad 500 003. Tel : (040) 81 00 87 • Mumbai Air India Building, Nariman Point, Mumbai 400 021. Tel : (022) 202 35 37 • New Delhi UCO Bank Building, Sansad Marg, New Delhi 110 001. Tel : (011) 371 14 11 • Pune M-11 Heera Motee Complex, Off Bombay-Poona Road, Wakdewadi, Shivajinagar, Pune 411 003. Tel : (0212) 581 65 28

## Chapter II - Working of INDAL

### 1] PROFILE OF INDAL:

Aluminium plays vital role in various fields in day to\_ day life. INDAL has been pioneer in the field of development of Aluminium industry in India, and has developed most of the uses of the metal in the country today.

INDAL was incorporated as Private Limited Company in December 1938, under the name "Aluminium Production Company of India Ltd.,". Since its inception Alcan Aluminium Ltd., Canada has been its principles Shareholder that holds 54.6% of the company equity<sup>1</sup>. A world leader in the Aluminium business with sales and operating revenues of over US \$ 9 billion. Alcan has operations and sales in about 30 countries and manages nearly US\$10 billion of assets, INDAL benefits form a continuous technology and personnel exchange with Alcan. Professionally managed, INDAL has around 30000 shareholders and 8000 employees. 11 9

INDAL is one of the largest Public Sector Company in India and first to embark on the production of Aluminium in the country. With a nation wide networking of production facilities and offices, INDAL is engaged in all phases of the Aluminium industry form Bauxite mining through Smelting to manufacturing of wide rang of finished Aluminium product.

All business units of Indian Aluminium Company Ltd., (INDAL) are ISO 9002 <sup>2</sup> certified and the company's bauxite mines and power plant have also attained ISO 14001 Environment Management System Certification.

INDAL is today vertically integrated through all stages of the business form Bauxite mining, Alumina refining, Aluminium smelting to semi\_fabricate products, INDAL has moved form being metal maker to a value creator.

This commitment to value creation has also manifested itself in the growth of new business ventures, professional grade electronics, captive power generation and exports. INDAL's plants, mines and offices are spread across eight states in India. INDAL also holds equity in related companies in extrusions and foils.

### II] SEQUENCES OF EVENTS: (ITS ORIGIN):

17 <sup>th</sup> December 1938	Established as private Ltd., company under the name of Aluminium Production Company of India Ltd.,
1941	A small sheet rolling mill was started at Belur near Calcutta with imported ingots as raw materials Initial capacity was 2500 tonnes and the present capacity is 18000 tonnes p.a.
1943	India's first primary aluminium ingots was produced by INDAL at Alupuram in Kerala where it had put up a 2500 tonnes a year capacity smelter. Present capacity is 20000 tonnes a year.
1944	Name was charged to INDIAN ALUMINIUM COMPANY LTD.,

1945	Company went public.
1948	Backward integration of company operations. Company started producing alumina at its plant at Muri in Bihar, from bauxite mined near Lohardaga in the Chotanagpur Hills about 130 kms from Muri present capacity is 75000 tonnes p.a.
1952	Country's first aluminium paste and powder plant was commissioned in Kalwa in Maharashtra.
1959 & 1961	Second smelter at Hirakud in Orissa was built and its capacity has been increased to 24000 tonnes p.a.
1961	Second extrusion press in Alupuram.
1965	A foil plant was established at Kalwa in Maharashtra that produces a wide array of plan & converted foil products.
1966	A properzi unit in Alupuram.
1968	Bauxite mines were opened at Chandagad Maharashtra.
1969	Another Aluminium plant smelter installed at Belgaum Karnataka with a capacity to produce 160000 p.a. alumina and 73000 tonnes of metal.
1992	Belgaum smelter plant is de-energised.
1993	Hirakud power comes online.
1996	India's first large scale aluminium recycling plant commences operation at Taloja.

Source: INDAL's magazine.

The Organisation of the company is structured with autonomous business divisions, each responsible for its own production, technology development and marketing, drawing upon centralised service function in corporate finance, human resource development, legal and communication.

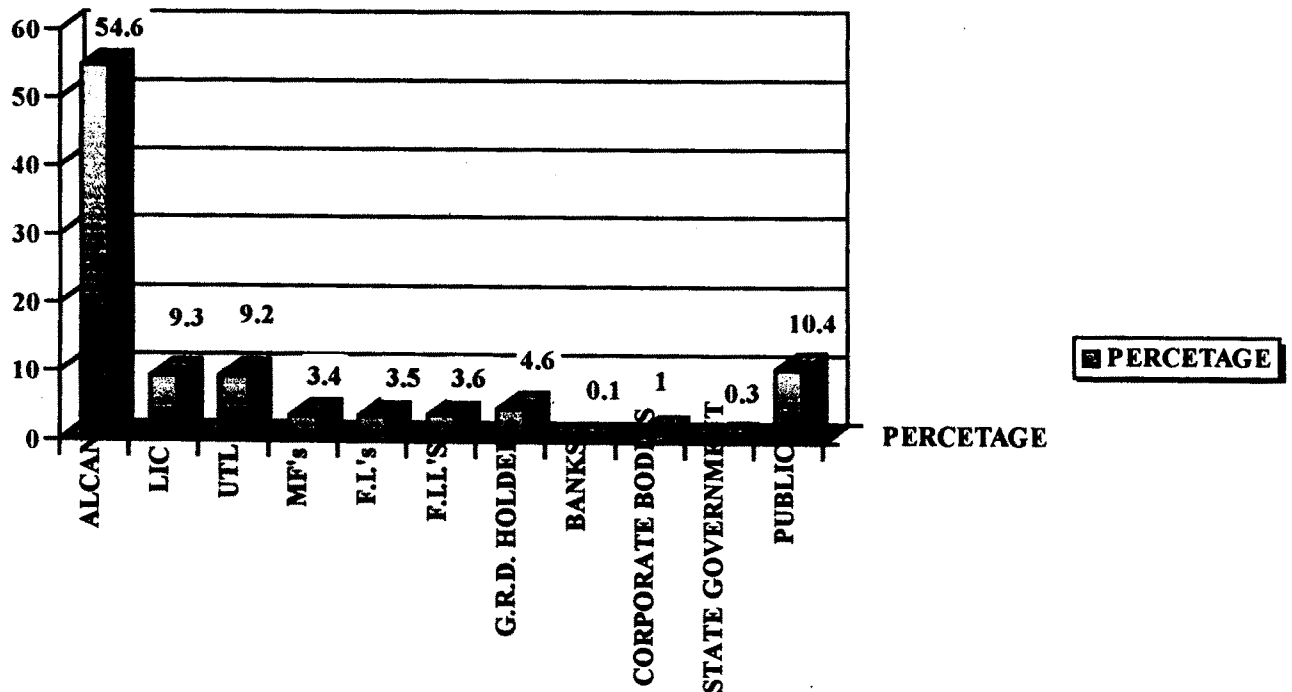
Each business is headed by a chief executive, who together with service functional chiefs constitute the management committee, headed by the managing director. The managing director interacts with a 16 member board of directors, headed by the chairman.

Table 2.1

**SHARE HOLDING PATTERN OF INDAL AS ON 31-3-1999**

SHAREHOLDER	PERCENTAGE (%)
ALCAN	54.60
LIC	9.30
UTI	9.20
MUTUAL FUNDS	3.40
F.I.'s	3.50
F.I.I's	3.60
GDR HOLDERS	4.60
BANK	0.10
CORPORATE BODIES	1.00
STATE GOVERNMENT	0.30
PUBLIC	10.40
<b>TOTAL</b>	<b>100.00</b>

Source: INDAL's Annual Report, 1998-99.



## **INDAL's OBJECTIVE:**

INDAL recognises that the conduct and effectiveness of an organisation are mainly anchored to the quality of its workforce. In order to fulfil its purpose and to achieve its objectives, the company requires commitment and dedication of its employees who would place high value not only on the interests of the company but also on the interests of other individuals and entities with whom they interact both inside and outside INDAL.<sup>3</sup>

### **The objectives are:**

1. To operate at a level of profitability which will ensure the long-term economic viability of the company by providing a return on equity which compares favourably with other industries of similar capital intensity and risk and which will enable the company to attract adequate to support its growth.
2. To aspire towards a high level of operating, technical and marketing excellence, and to make the optimum use of assets, which will ensure a strong competitive position in the markets served by the company.
3. To strive to satisfy customers by integrating their needs into the company's products and services with efficiency and professionalism and give the best value to them by promoting quality products.
4. To improve the process of managing the companies affairs through proper planning, timely implementation of plans and regular performance reviews.



5. To sustain an organisation of able and committed employees and to provide them with opportunities for growth and advancement.

6. To foster a culture of innovation with the application of new ideas and methods to solve business problems and seize opportunities.

7. To recognise and seek to balance the interest of shareholders, employees, customers, suppliers, the government as well as the public at large while achieving INDAL's business objectives.

8. To uphold the highest standards of integrity in the conduct of all phases of business.

#### **INDAL's PURPOSE:**

INDAL's purpose is to continue to be the most innovative and diversified aluminium company in India. INDAL intends to consolidate and further its status as the only aluminium company that does business in the widest range of products and specifications and related items in aluminium, aluminas and carbons. At the same time, INDAL will utilise profitably the risk capital, voluntarily invested by the shareholders as a financial base, not only for the production and distribution of chosen aluminium products, but also to established new business with superior growth and profit potential.

## **INDAL's MISSION:**

The completion of sixty years is more than just a numerical milestone for INDAL. It is the attainment of the commitment to the development of the aluminium industry in India.

INDAL formulated a Mission Statement in 1987, and the mission states:

“INDAL will be most innovative, diversified Aluminium Company in India. To achieve this, INDAL will be a customer oriented enterprise committed to excellence and cost effectiveness in its chosen aluminium business”.

“Significant resource will be devoted to diversifying into hi-tech and market oriented businesses with superior growth and profit potential”.

“Consistent with National goals, INDAL will significantly improve the return on share holder equity”.

## **INDAL'S BUSINESS OPERATION:**

INDAL's operating business broadly divided into:

- A) **Upstream** : which consists of
  - a) Chemicals (including mining),
  - b) Metal and power.

B) **Downstream** : which consists of

- a) Sheets,
- b) Foil,
- c) Packaging,
- d) Extrusion.

A) **Upstream**: -

a) **Chemical**:

The overall capacity is 3,72,000 t.p.a chemical business comprises of bauxite mining at Lohardoga ( Bihar ), Durgamanwadi ( Maharashtra ), Alumina refining at Muri ( Bihar ) and Belgaum ( Karnataka ), including facilities for specialty grade alumina chemicals. A major business objective is marketing of hydrates and alumina, both in domestic and international levels.

Standard and speciality alumina capacities have been recently expanded at Belgaum and Muri. Further expansion plans includes increasing capacity at Belgaum from 3,65,000 tonnes to 5,10,000 tonnes and at Muri to go up initially to 1,01,000 tonnes and eventually to 2,50,000 tonnes p.a.

b) **Metal and Power**:

INDAL, is the first to set-up aluminium smelting operation in India, has its smelter at Alupuram [Kerala] and Hirakud [Orissa]. **The smelter at Belgaum has been shut down for lack of power.** INDAL also produces and markets wire rods, alloy rods and ingots, cathode electrode paste and cathode carbon blocks.

**B) Down Stream: -**

**a) Sheet :**

Sheet business contributes to half of INDAL turnover and is one of the major forms in which aluminium is consumed in India. INDAL holds a significant share of the rolled products market with annual production of 60,000 tonnes. The sheet rolling mills are located at Belur [West Bengal] and Taloja [Maharashtra]. Major product included litho sheet, foil stock, fin stock, lamp cap, closure stock, sleeves, heavy gauge circle, flooring sheet, general engineering quality (GEQ) sheet coil and strong alloy sheet.

**b) Foil and Package :**

INDAL is one of the leading supplier of all types of foil laminates plain, lacquered and printed. The foil plants is located at Kalwa ( Maharashtra ). The main aim is to increase market share and strengthen its leadership position in foil supply to Pharma, cigarette and food industry.

**c) Extrusions :**

INDAL's extrusion operation, based at Alupuram ( Keraka ). A pioneer in aluminium extrusion in India. Major products include bus bar flats, luggage trims, transport structural moulding and architectural section. Over last few years the business has developed new product lines like truck body set, alloy rods for tanks, wheel etc.<sup>4</sup>

## INTERNATIONAL TRADE:

Exports initially to neighbouring countries like, Bangladesh and Srilanka have helped in paving the way for INDAL's current reach into demanding and competitive international market around the Indian Ocean Rim, West Asia, the Far East, Europe and Africa.

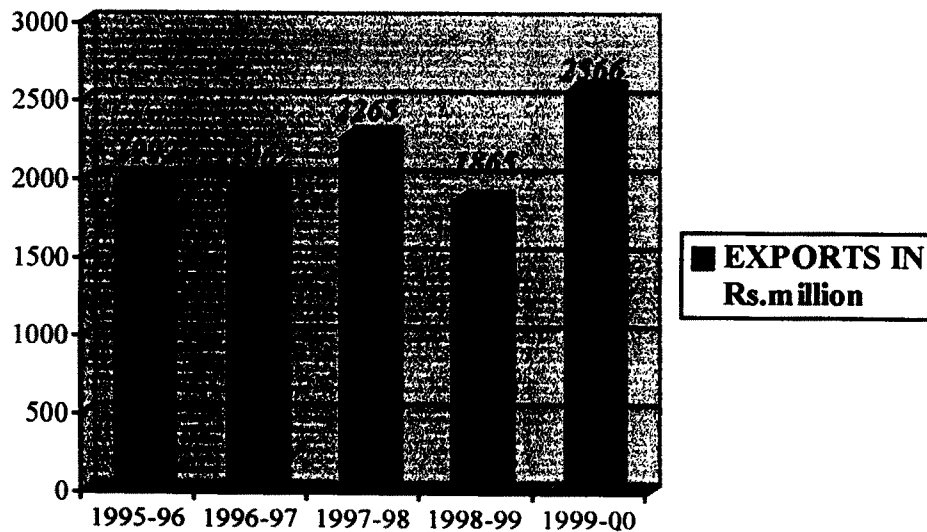
Table 2.2

### GROWTH IN EXPORTS.

Year	Exports in Rs million	Growth Index
1995-1996	1992	100.00
1996-1997	1969	99.85
1997-1998	2265	113.70
1998-1999	1825	91.62
1999-2000	2566	128.82

Source: Internet: [www.indal.com](http://www.indal.com)

Growth Index = Current year value / Base year value X 100



As shown in table no. 2.2 the exports of INDAL have decline to 99.85% in the year 1996-97(taking 1995-96 as base year). But again they jumped to 113.70% in the year 1997-98 followed by sharp decline to 91.62% in the year 1998-99. But the year 1999-2000 reordered the highest export at 128.82%. To sum up the exports performance of INDAL is fluctuating with over all increasing trend.

Consistent standards in quality and service have resulted in repeated exports awards form the Engineering Exports Promotion Council and the Chemicals and Allied Products Exports Promotion Council.

#### **RESEARCH AND DEVELOPMENT AT INDAL:**

Research and Development has always been accorded prime importance. INDAL's two-principal Research and Development centres at Belgaum, Karnataka and Taloja, Maharashtra are recognised by the Government of India Department of Scientific and Industrial Research. Moreover, every plant is fully equipped with its own analytical research centre. The Research & Development establishments have contributed significantly in upgrading manufacturing process and ensuring environment friendly operation.

But most of all it is the technical expertise and of INDAL Scientists, engineers and technicians that have made the difference. Earning recognition

with an ISO 9001 certification for process / product developed and ISO 9002 certification for testing and analysis.

### **COMPETITORS ANALYSIS:**

Major Competitors of INDAL in India are as follows:

1] **National Aluminium Company [NALCO]:**

It is a public Sector Company under the Govt. of India, located at Angul in Orissa.

2] **Hindustan Aluminium Company [HINDALCO]:**

It is the largest private sector producer of aluminium in the country. It is a part of Aditya Birla group of company. It has a fully integrated plant located at Renukot in Madhya Pradesh. This plant has its own power supply derived from its own thermal plant, this makes it one of the cheapest producer of aluminium in India and second cheapest producer of aluminium in the world.

3] **Bharat Aluminium Company [BALCO]:**

This is also a public Sector Company located in Kobra, Uttar Pradesh.

4] **Madras Aluminium Company limited [MALCO]:**

MALCO was a state own company run by the Govt. of Tamil Nadu later on this company was undertaken by sterlite industry one of the leading players in the metal industry in India.

## **ABOUT BELGAUM WORKS:**

The INDAL plant at Belgaum was established in 1968 and started operation on 7<sup>th</sup> November 1971. It was situated about 6 kms from Belgaum City, beside the national highway. It has a total area of 1,100 Acres. And the amount of initial capital invested when the Belgaum plant was started was Rs 100 cr.

This is the only unit of INDAL with both the facilities, i.e. Alumina plant and Smelter plant. The main products of this unit are Alumina powder and aluminium ingots respectively. The aluminium ingots are used to produce sheets at Taloja. But now the smelter plant at Belgaum has been shut down for lack of power at economical viable cost.

The aluminium plant had a capacity of 2,90,000 tonnes of alumina powder pre year. The smelter plant had a capacity of 73,000 tonnes of metal p.a. The special alumina capacity is being expanded from 2,500mt to 50,000mt p.a. The raw material bauxite is brought from Durgamanwadi and Malkapur (Maharashtra) mines. The entire alumina powder production is exported to the Gulf countries.

INDAL has initiated plans to expand refinery capacity of alumina plant at its Belgaum plant to 3.65 lakh tonnes from 2.90 lakh tonnes and eventually take it up to 5.10 lakh tonnes. Belgaum plant reports that from September 1999 to January 2000, aluminium saving of Rs 19.6 million has been achieved through better efficiencies based on action plans to control soda losses, lower



specific energy consumption and furnace oil consumption in both boiler and kiln.

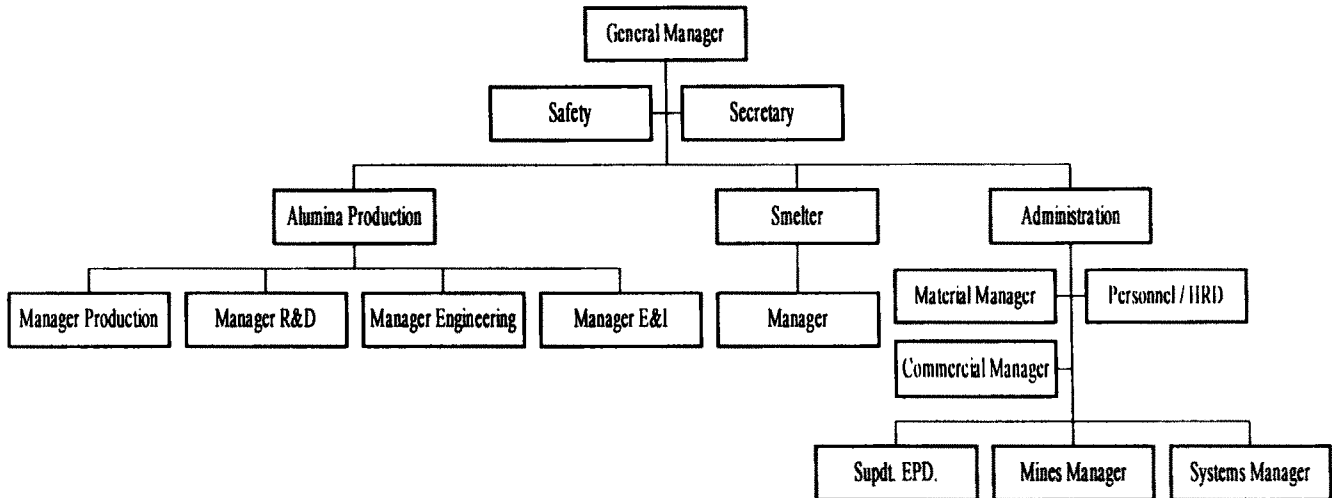
Belgaum plant has achieved a higher hydrate production of 2,700mt and higher calumination of 6260 Mt. through better utilisation of kiln during the last year. INDAL's Research & Development centre at Belgaum is recognised by the Department of Scientific and Industrial Research.

No of employees both operative and managerial at Belgaum are 980, of which Salary roll supervisors are : 97

Office staff : 248

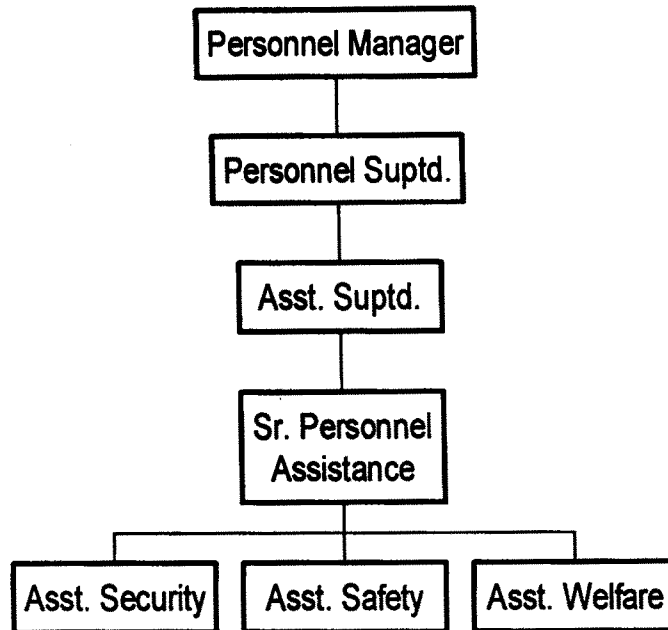
Workers : 635

## ORGANISATION STRUCTURE ( BELGAUM)



The organisation chart at INDAL follows line and staff organisation headed by General Manager and the authority is delegated into alumina production, smelter (metal) and administration. Further three main department are assisted by production manager, commercial manager, HRD manager, etc., Since the plant is concentrating on production of alumina powder and the metal, the overall organisation is simple and closely knit and the working becomes easy.

## Personnel Department



The personnel/HRD is section in the administration looking after the entire personnel, managerial, office staff and the workers. It assists the General Manager at the plant level by taking responsibilities of wage and salary, promotions and transfers, training and development, safety measures, welfare and security aspects. As number of personnel is around 1,000, the HR department can effectively monitor and implement the HUMAN RESOURCES MANAGEMENT policies. This department is headed by the Personnel manager, who is assisted by Personnel superintendent, Assistant superintendent and Sr. Personnel Assistance and he is assisted by Assistant Security, Assistant Safety and Assistant Welfare officers.

## **INDAL THE FUTURE:**

INDAL's strategic objective over the next 5 years is to increase and strengthen its market presence towards building world competitive in cost, quality and service standards. The over all aim would be to give best value to the customer.

Focus areas are:

- \* Forging strategic alliances with international partners for value \_ added down \_ stream aluminium products.
- \* Launching the joint venture for a world scale export alumina refinery project \_ Utkal Alumina International Ltd.,
- \* Consolidating INDAL's market leadership in the value \_ added rolled products business.
- \* Strengthening INDAL's leadership in the special alumina chemicals market through further capacity expansions and technology up \_ gradation.
- \* Remaining a socially conscious company through pollution control and afforestation of mined areas with environment accreditation through BS 7750 / ISO 14100 certification.
- \* Fulfilling its corporate commitment towards the socio-economic development of the host communities around its plants and mines.

## References

1. INDAL's Annual Report, 1998-99, p. 2.
2. ISO, is a transformation of the acronym for the International Organisation for Standardisation. ISO 9000 is designed to provide a flexible structure that ensures the identification and enforcement of Quality Assurance principles for R&D organisations. This is based on taking care of means by which end results would be better. ISO 9000 is completely based on better inputs of efforts by which the end result would be the better one.
3. INDAL's Manual
4. Website, [www.indal.com](http://www.indal.com)