SURVIVING AGAINST THE ODDS

TURNAROUND

OF

JINDAL IRON & STEEL COMPANY LIMITED

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TURNAROUND

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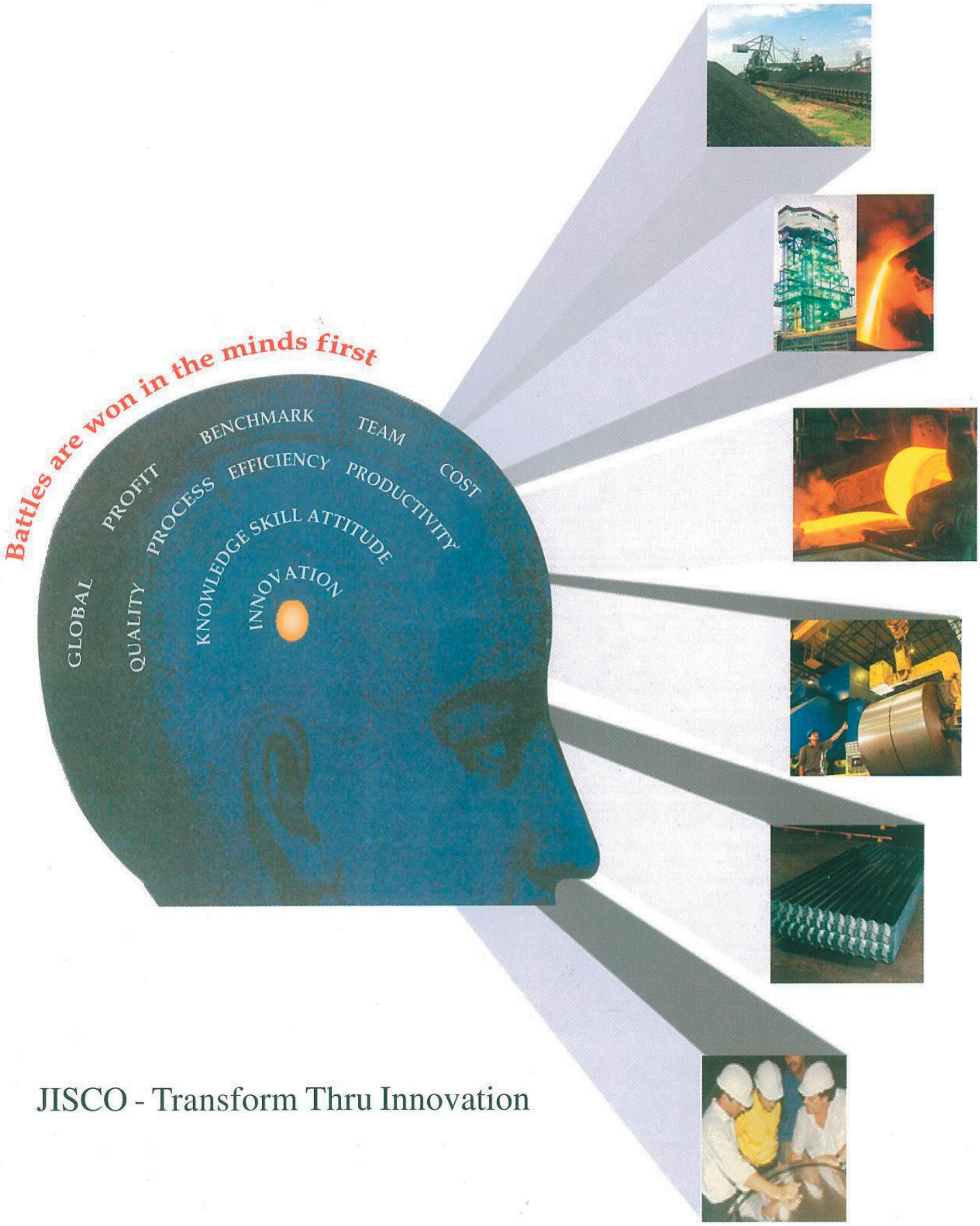
JISCO's Operating Philosophy - A Snapshot



JISCO - Transform Thru Innovation

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JINDAL IRON AND STEEL COMPANY LIMITED

P K Richardson and Raman Madhok

1. Jindal Iron and Steel Company: An Introduction

1.1 *Overview:*

Jindal Iron and Steel Company Ltd. (JISCO) was incorporated on April 12, 1983 in India. The Company's registered office is at Mumbai and it has manufacturing facilities at Tarapur and Vasind, both in Maharashtra.

The Company's business lies in the ***flat steel segment*** of the Steel Industry – it manufactures *hot rolled plates* (HR), *cold rolled coils and sheets* (CR), *galvanised plain sheets/coils and galvanised corrugated sheets* (GP/GC) [*Galvanising is the process by which steel is coated with zinc, thereby imparting corrosion resistance properties to steel*]. The Company procures HR Coils, which are converted into CR Coils / Sheets, which are then further converted into GP/GC. GP/GC is a value added product in the steel industry and is used mainly in construction, white goods and the auto sectors.

Exports, which is a major thrust area for the Company, accounted for about 58% of the Company's total sales in FY 2001- 02 and 78% in FY 2002-03. The Company is the largest exporter of galvanised products from India, accounting for about 30% of the country's total exports in FY 2002- 03.

JISCO's net sales aggregated to Rs. 15567 mn in FY 2002- 03. The Company is listed on the Mumbai and Delhi Stock Exchanges and on the National Stock Exchange.

The current head count is 1047 (as on March 31, 2003).

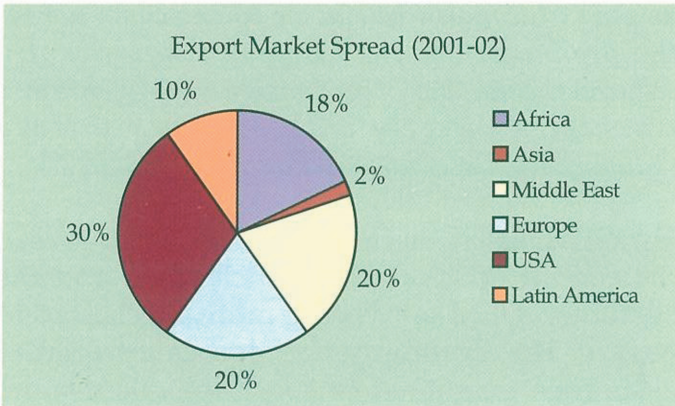
This document has been adapted for an Indian audience and hence the currency unit used is Indian Rupees (in millions). From an international perspective, the following exchange rates could be adopted to translate all the figures reported in Indian Rupees into US dollars (these are the equivalent of 1 USD in Indian Rupees): 1997-98 - 39.66, 1998-99 - 42.43, 1999-00 - 43.73, 2000-01 - 46.81, 2001-02 - 48.86, 2002-03 - 47.73.

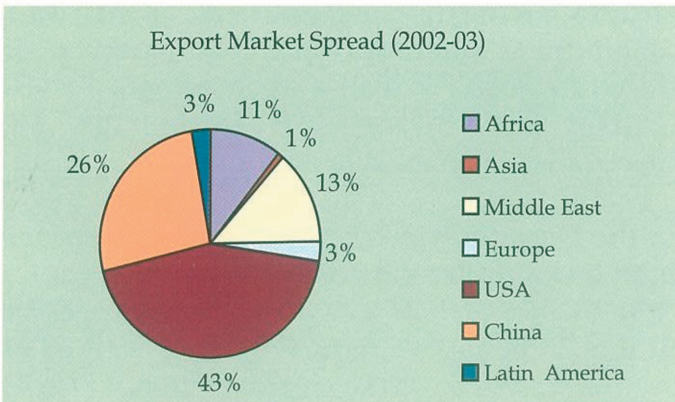
1.2 *Principal Markets and Distribution:*

- *Exports Market:*

Sales in the export markets, which are primarily of GP/GC, are to direct end users the world over, as well as to large reputed international trading houses such as *Cargill, Marubeni - Itochu, Mitsubishi, Pekari* (*these trading houses have tie ups with service centres – it is service centres which meet the demand for GP/GC end users, as this market is highly fragmented*). Some of the major customers include *Lampre* (which has a large colour coating facility in Italy), *Gabrielli* (which is one of the largest service centres in Italy), *Barcelona Metals* (a large service centre in Spain) and so forth.

GP/GC is used in housing for roofing, panelling, struts, HVAC (Heat Ventilated Air Conditioning) duct work etc.





Two distinctive aspects of the Company's export performance bear mention. The first is that ***export volumes have grown at a compounded annual growth rate of 54%*** over the last seven years - from *32870MT* in 1996-97 to *435155 MT* in the year 2002-03. Also, the other ***major achievement is broad basing of the market spread*** to reduce dependence on any one particular market, even while consistently catering to the requirements of existing customers, as shown in the graphs above.

In the *Export Market*, the Company transacts exclusively on *secured credit basis* (i.e. against letter of credit).

- *Domestic Market:*

The Company distributes its products in the domestic market through a network of dealers (Trade Sales) and direct to the original equipment manufacturers (OEM's). Orders are executed from the central office in Mumbai, while procurement of orders is done at the regional levels. The Company has branch offices in six cities across the country and has appointed consignment agents in a few cities. It has a network of dealers all over India. ***In FY 2001-02, as part of a major initiative to cut costs across the organisation, the Company significantly reduced the number of its consignment agents and transacted directly with dealers - thereby reducing its distribution channel cost in trade.***

For OEM sales, there is direct contact between the central office or the branch office and the customer. OEM sales being more specialised in nature, the Company has dedicated quality assurance personnel to serve the client more effectively. In the OEM segment, the Company serves auto giants like Bajaj Auto, Bajaj Tempo, Honda, Kinetic Engineering, LML Ltd, Mahindra & Mahindra, and TVS Suzuki etc. In the white goods industry, its customers include Godrej and Boyce, IFB Industries, LG Electronics, Voltas, Whirlpool, etc.

In the *Domestic Market*, the Company transacts both on credit (credit control is exercised at the time of despatch as per credit limits specified in the Company's Credit Policy) as well as on secured credit basis (i.e. against letter of credit).

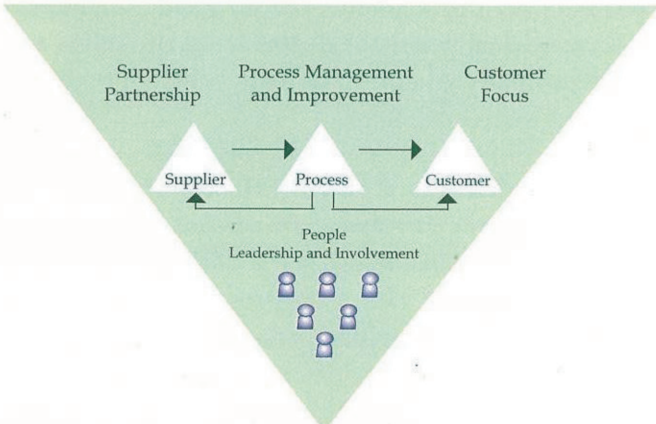
1.3 *Distribution Strengths:*

A major selling point with JISCO is its ***effective order execution capability*** - *both in the export and domestic sectors*. This, coupled with strong product quality attributes, distinguishes it from the competition. In exports however, ***JISCO is the preferred supplier as it meets delivery commitments in time*** (the *lead time between order acceptance and order execution for exports could be as little as two weeks*) and has the ***flexibility to accommodate small order sizes*** as well.

1.4 *JISCO's Total Quality Paradigm & Process Management:*

JISCO is an **ISO 9001: 2000** certified Company. Besides, an application has also been made for certification under **EMS 14001: 1996** for both the plants.

JISCO's Total Quality Paradigm permeates all its business processes and is based on the following postulates:



- Customers are our driving force,
- Results happen through people,
- Every function is a part of a process,
- Suppliers are partners in our business,
- Strategic planning is of key importance,
- Quality improvement is an ongoing process.

In the case of exports, the *trend of accepted customer complaints as a ratio to total despatches has significantly gone down from 0.157% to 0.004%* in the period 1999-00 to 2002-03 - **Annexure I** provides illustrative details of

Customer complaints (Exports) received by CSD division, Tarapur.

The Coated Strips Division galvanising line (CSD III) commissioned in April 1999 is a **state of the art line**, dedicated primarily to exports. This line is equipped with an on line skin pass mill, tension leveller, electrostatic oiler, thin organic coating facility and an infra- red oven, in order to produce special applications with stringent surface and shape requirements. The product range is wide i.e. 0.30 mm to 2.5 mm and this is in fact ***the first line in India to produce galvanised steel in thicknesses of 2.0 mm to 2.5 mm***.

The Company has a research centre at Vasind for the development of new grades. JISCO actively pursues new product development opportunities - where long term potential is perceived. *Major product development initiatives in GP/GC* include development of structural grade and skin pass - zero spangles *for exports*, where substantial quantities have been shipped out. A beginning has also been made in supply of oiled material (GP/GC) *for exports*. In the case of HR, IRS grade (IRS: Indian Registrar of Shipping) has been developed for the ship building industry - however only small quantities have been supplied so far.

1.5 *Raw Material Sourcing:*

The main raw materials used are HRC, CRC and Zinc. The Company has its own facilities to convert HRC into CRC. HRC is procured from *Jindal Vijayanagar Steel Limited* (JVSL), a leading manufacturer of HRC.Zinc is procured locally from *Hindustan Zinc Ltd.*, the main producer in the country, with whom the Company has a strategic tie-up.

1.6 *Human Resources:*

The *overall focus* of human resources initiatives has been and will continue to be to *build a strong sense of belonging* with the organisation in each employee, to *create a seamless organisation* whereby there is *close bonding* between the employees and a *strong performance management system* which is entirely goal oriented and *rewards merit*.

A distinctive feature at JISCO, over its past 20 years of existence, ***is the absence of any employees union*** since inception.

JISCO's value system has been enshrined in its Guiding Principles. *Considerable time has been spent by human resources personnel in holding communication meetings across all levels of the organisation to ensure that these guiding principles are properly understood, imbibed and become a way of life for JISCO's employees.*

1.7 *Leadership:*

JISCO believes in encouraging employees to take independent decisions relating to issues strictly within their sphere of influence. Whenever issues come up which relate to more than one department, the preferred solution is to sort these out through group interactions with those directly concerned.

Three cross-functional committees have been constituted for decision-making i.e. the ***Executive Committee,*** the ***Management Committee*** and the ***Operating Committee.*** *The objectives and the composition of all the committees have been spelt out in order to ensure that the Committees deliberate on issues within their sphere of influence.*

The process of **mentoring** within JISCO began about two years ago. In the intervening period, the process was considerably refined. Initial results are encouraging and the process would be cascaded down to other levels of management.

Realising the value of Strong Leadership at all levels within the organisation, JISCO is actively laying its Leadership Pipeline through in-house development initiatives in the form of Accelerated Development Programme (ADP) and Business Results Achievement through Competence and Ethics (BRACE) for employees.

People selected are required to go through various sessions, some of which include Supply Chain Management, Rural Marketing and Channels of Marketing, Accounting and Finance, World Class Manufacturing, Human

Resource and Values. This has helped to leverage optimum output from our human assets.

1.8 *Governance Processes:*

The Company has ***six Sub-Committees of the Board of Directors*** i.e. Audit Committee, Share Transfer Committee, Shareholders / Investors Grievance Committee, Remuneration Committee, Committee of Directors - Finance Committee and Committee of Directors - Issue of Duplicate Share / Debenture Certificates - the first four Committees are mandated by Clause 49 of the Listing Agreement. Statutory Compliances are reviewed by each head of department on a monthly / quarterly basis and a global compliance status reported at each Board Meeting.

The Company has a detailed Budgetary Control System to ensure adequate control on all expenditures of the Company. Actual performance is reviewed with reference to budgets on a monthly basis by the management. Also, the Company has a proper and adequate system of internal controls to ensure that all transactions are authorised, recorded and reported correctly. The Company has an integrated **Enterprise Resource Planning (ERP) Software - RAMCO 3.03**, which has in-built controls for authorisation.

The COSO Framework is adopted as the benchmark for internal controls / governance processes within JISCO [COSO: Committee of Sponsoring Organisations of the Treadway Commission, USA, commonly known as the Treadway Commission. The COSO report, which also contains an evaluative framework which can be adopted to benchmark internal control processes by Companies, *is widely adopted by the Securities and Exchange Commission* and other Regulatory and Law Enforcing Agencies in the USA *as a reference document on Internal Control*]. Also, from a Governance point of view, the Company places great emphasis on authority structure / delegation of powers and policies / procedures.

1.9 *Awards / Recognition Received:*

JISCO was awarded the "National Quality Award" amongst the Pig / Iron Plant / DR Unit / Major Re-Rolling Unit Category for the year 2002 by the Indian Institute of Metals supported by the Ministry of Steel, Government of India.The Company also received the Best Raw Material Supplier Award from Honda Motorcycle and Scooters India Ltd. in FY 2002-03.

Going down memory lane, we have received various awards from time to time such as "Highest Export of Engineering Products" by Directorate of Industries-Government of Maharashtra, "Niryat Shree" by Federation of Indian Export Organisation, "Top Exporters Award" by Engineering Exports Promotion Council and "Innovative HR Practices Award" by All India HRD Congress.

2. **Industry Profile:**

The total domestic installed capacity for GP/ GC is estimated at about *2.98 million tons* per annum. ***JISCO is the largest producer of GP/ GC in India, with an installed capacity (GP/ GC) of over half a million tons,*** accounting for roughly *17%* of the total domestic industry. The other major suppliers are Bhushan, Ispat, National, SAIL, TISCO and Uttam.

The total production in FY 2002-03 was estimated at about *2.60 million tons,* of which domestic consumption was about *1.40 million tons* and exports about *1.20 million tons.*

In India, construction and white goods sectors are the main markets. Some quantities also go to the auto sector.

In the post-war period to the early 1970s it was great to run a steel company. Demand was strong and growing and it did not require a genius to manage. Steel was big business and carried the prestige and the perks that made CEOs the envy of others. Not any more. Synchronisation of steel recessions in most of the developed world and the concomitant problem of continuing overcapacity coupled with declining of steel intensity in industrialised countries and the creation of capacity in many developing nations have created a managerial nightmare in the industry *"It is an area where creativity in management is the only guarantee* *of business success". "One has to run to stand still," the Chairman & Managing Director, Jindal Iron and Steel Company Ltd. (JISCO), Mr. Sajjan Jindal observed.*

3. The Economics of Steel Supply and Demand:

Steel is basically an intermediate commodity product that goes into the manufacture of final products and construction projects. It is considered a vital ingredient of industrialisation and for long its strategic nature as a material required for the implements of war had made it important to national governments. These attributes make steel demand a derived demand, very much linked to the level of overall economic activity. It therefore has a high income elasticity of demand. This also means that it is price inelastic, with a price elasticity of typically –0.3 to –0.5.

What is more, in view of steel's commodity nature and the existence of worldwide over-capacity and, in consequence, the "need" to achieve volumes, cross-elasticities between producers, both domestic and foreign tend to be high, except in certain very narrow ranges. Achievement of high capacity utilisation rates induces the need to sometimes seek export markets. Imports therefore tend to be readily available. Thus even in times of high income-induced demand, price rises are mitigated by the inflow of imports, unless there is total import exclusion. In general, steel product prices in the international market depend entirely on what the market can bear. For this large-scale, high fixed cost industry, operating profits deteriorate very rapidly with declining capacity utilisation rates. Exporting may be undertaken to maintain high operation rates in the face of weak domestic demand, even at prices below cost.

4. Jindal – A Success Story:

JISCO is part of the Jindal Organisation, which is ranked the sixth biggest business house in India with annual turnover in excess of $2.5 billion. Its growth has been truly remarkably. In twenty years from its incorporation it grew fifty times to reach a turnover of US$340 million by 2003 and to become one of the leading manufacturers of downstream steel products – hot rolled plates, cold rolled plates and galvanised steel sheets – with capacities of 280,000, 600,000 and 550,000 tonnes per year respectively. The galvanising plant is being expanded to a capacity of 1 million tonnes by 2005.

Raw steel supply to JISCO is provided by a group company, Jindal Vijayanagar Steel Limited (JVSL) which is reckoned to be one of the world's most modern, efficient and eco-friendly integrated steel plants. This reputation arises from the use of a revolutionary new iron-making COREX technology, which creates a competitive edge over suppliers dependent on older technologies.

JISCO's growth and success have been the result of several competitive strategies. Firstly, it has focused on a narrow range of products – HR Coils, CR Coils and galvanised sheets. This has enabled the company to achieve excellence in these via a focused R & D strategy. The galvanised segment is a high value-added and specialised product. JISCO has the biggest production capacity (17% of India's total output and currently over 30% of total Indian exports in this segment).

Secondly, the company in recognition of the low cross-elasticity of demand has pursued a strategy of focusing on quality products, made possible on account of its fully computerised process control. ISO 9001: 2000 quality approval has propelled JISCO into many an international market. In a world of demanding customers and specialised orders, JISCO's production set-up has built-in manufacturing flexibility to supply products in customised sizes. The hot rolled manufacturing facilities have the lowest variable cost in the world, thereby affording the company the ability to take up even the smallest order without any significant cost disadvantage. What is more, the company takes customer satisfaction very seriously. ***It is an excellent example of a "listening" company.*** Many of the improvements and innovations undertaken by the firm have been the result of a need to cater to the requirements of its numerous customers.

The result of this pursuit of excellence in the marketplace is easy to see. Not only did turnover grow year on year, profitability also improved up to 2000 and once again had a record profit in 2003 after two bad years **(refer Annexure II)**.

5. Difficulties Set In – JISCO Turns a Loss in 2000:

In fiscal 2000 JISCO went into the red for the first time in its history. Until then management had steered the company through the idiosyncratic steel market. Fiscal 2000 proved a very challenging year and the company went into a loss **(refer Annexure II)**. The reasons were more due to industrial and environmental factors.

In 1999 and 2000, steel demand worldwide fell sharply on the back of a general global slowdown. The steel industry in India was particularly affected as it lost export sales as a result of increased tariff barriers on imports to protect domestic industries. Closure of export markets thus exacerbated an already slowing domestic Indian market leading to excess supply and weakening prices. As **Annexure II** clearly shows, the result was negative profitability in fiscal 2000 and 2001.

6. Turnaround Strategies:

The difficulties JISCO experienced in 2000 and 2001 meant that urgent and drastic actions were required to stem the tide. These included, inter alia, cost reduction and productivity improvement measures. ***Also, the cost reduction as well as productivity improvement measures were strongly facilitated by the Company's RAMCO ERP Suite of applications.***

6.1 *The How of Turnaround (FY 2002-03):*

For a company to succeed even in the best of times, it is extremely important to have a clear agenda. This is why, given the backdrop of FY 2000-01 having been an adverse year, JISCO had to take decisive initiatives. In 2001-02, to arrest the downslide, the agenda that was adopted was **EARN (Empowerment, Accountability, Results, No to decisions being pushed up)** - the need of the hour. Also, an activity based costing review was carried out, facilitated by an external consultant, to take a hard look at costs. The cumulative result of the **EARN** agenda was cost savings aggregating to **Rs. 293.70 mn**.

In 2002-03, the agenda that was adopted was **TURNAROUND (Target orientation, Urge integrity, Respond quickly, Never panic, Assertive behaviour, Respect individuals, Open minded, Uniform Excellence, Nurture Meritocracy, Display energy)**. In this initiative, all the learnings from the **EARN** agenda were progressed further and a determined attempt made to create an *ethos of cost austerity* across the entire organisation. The cost savings under **TURNAROUND** aggregated to **Rs. 290 mn** against a target of Rs. 200 mn.

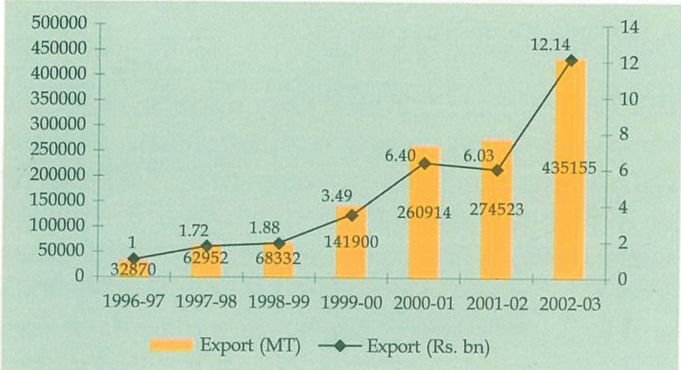
In 2003-04, having achieved a total turnaround, the need was felt to consolidate all the benefits achieved and hence the agenda is **FOCUS (F – Find opportunities; O – Overcome obstacles; C – Care for customers; U – Unique approach and S – Shaping the change)**.

6.2 *Restructuring:*

One of the first priorities for JISCO was to embark on a business and financial restructuring process, with the assistance of Deloitte, Haskins and Sells (DHS). Also, ICICI Bank, in consultation with DHS compiled a comprehensive restructuring proposal for the Company in October 2001, which reckoned the effective date of restructuring as April 1, 2001, with the plan period extending over 15 years and interest ceiling @ 12.5% p.a. The long and the short of restructuring is that interest costs have come down from Rs. 1194 mn in fiscal 2001-02 to Rs. 1036 mn in fiscal 2002-03 (Budgetary estimate for fiscal 2003-04 is Rs. 751 mn).

6.3 *Thrust on Exports:*

JISCO's exports have grown phenomenally since 1996, from meagre Rs 1 bn to Rs 12.14 bn in the period 1996-97 to 2002-03. This represents a



compound annual growth rate of over 54% in volume terms and 52% in sales terms. In the same period, exports as a percentage of total revenues has also gone up from 13% to 78%. A key objective of exporting or seeking international markets was to diversify geographically, thereby spreading risk. Although exporting became an important strategy from 1996, the downturn experienced in the late 1990s led to a broadening of overseas markets, thereby reducing the company's dependence on the hitherto European Market. The company ventured into new unexplored markets including Latin America, USA and Asia. The result has been that by fiscal 2002-03, exports had grown to represent 78% of total turnover. In the area of galvanised steel, the company had become the biggest producer in India, with a share of 17% and the biggest exporter, with a share of about 30%.

6.4 *Cost Reduction:*

A major cost reduction drive was undertaken in fiscal 2001 (2001-02). This was given the acronym EARN. This resulted in a cost saving of Rs. 293.7 million, comprising improvements in operational efficiency and better supply chain management. With regard to operational efficiency, actions were taken to reduce power consumption, improve yield and reduction zinc consumption. An innovative process for the application of zinc by the use of low cost Prime Western Zinc, instead of a combination of high grade zinc and lead alloy with same quality output, was implemented. In the area of supply management, use of consignment agents and branches was discontinued and direct relationships were set up with dealers. Efforts were also made to reap economies in the supply of inputs. Elimination of shipping agents from clearing and forwarding processes and the reduction in the cost of export freight also led to substantial savings. A spin-off of the decision to eliminate intermediaries in the supply of products has been a better understanding of customer requirements, demand-supply situations in the market and issues involving customer price sensitivity. It has also improved the company's ability to respond quickly to market developments.

What is more, JISCO executives were sent to British Steel of the UK as part of Project **PACE** (**Planned Action for Continued Excellence**) to undertake a benchmarking study involving various operational, finance, human resources and other bottom line - enhancing techniques for transfer to their respective functional areas. Also, cost reduction recommendations made by external consultants, Andersen Consulting (now Accenture), involving fifty two areas aggregating to annual savings of over Rs 53 mn were implemented.

Significant savings were also made on the international front. These arose from reductions in the time taken for negotiation of export documents, reduction in freight costs (setting up long-term deals) and reductions in prices on re-negotiation of clearing charges.

6.5 *"Sweating" the Assets:*

In what is basically a commodity market where price competition is intense, improved asset turn is the best way of improving profitability (ROCE). This strategy came to the fore as the fortunes of the firm turned for the worse. Painstaking efforts were made in fiscal 2001 and 2002 to improve operational efficiencies through increased inventory and debtor's turnover and asset utilisation.

6.6 *Product Strategy:*

The downturn in the global steel industry had a disproportionate effect on HR coils/plates. The market downturn and the drastic fall in the prices of HR products was taken as an opportunity for modification of the company's HR production set-up. A decision was taken to suspend the manufacture of HR plates in fiscal 2001, and although total corporate turnover fell from Rs 15,366 mn in fiscal 2000-01 to Rs 11,141 mn. in fiscal 2001-02, profitability improved. The HR plant resumed operations in December 2002. On the contrary, the company decided to concentrate on galvanised products, whose prices and demand baulked the general downward trend.

A strategy of new product development was also brought to the fore. A full-fledged R & D Centre has been established at Vasind for the development of new grades of product. The centre also works towards identifying methods for improving the properties of existing products on a continuing basis. On top of this, it aims to cater for new markets as well as respond to customer requirements involving existing products.

6.7 *Manpower Rationalisation:*

One of the major objectives of TURNAROUND was to carry out a manpower rationalisation exercise across all levels in the organisation. Considering that JISCO already had a strong performance management system, which had been significantly strengthened as far back as 1995, the entire exercise was a databased one. The exercise was carried out with great care and concern so as to not bring about distress to the affected employees or their families. The entire process was carried out without any problems solely due to the Company's proactive humane approach.

6.8 *HR Initiatives:*

Notwithstanding the downturn, some unique HR initiatives were taken in fiscal 2001 and 2002 to strengthen the performance ethics of JISCO and build skills across the rank and file of the organisation. A comprehensive competency mapping exercise was carried out for members of JISCO's three committees. ***The basic objective was to identify a career progression plan for these individuals as well as the training inputs necessary.***

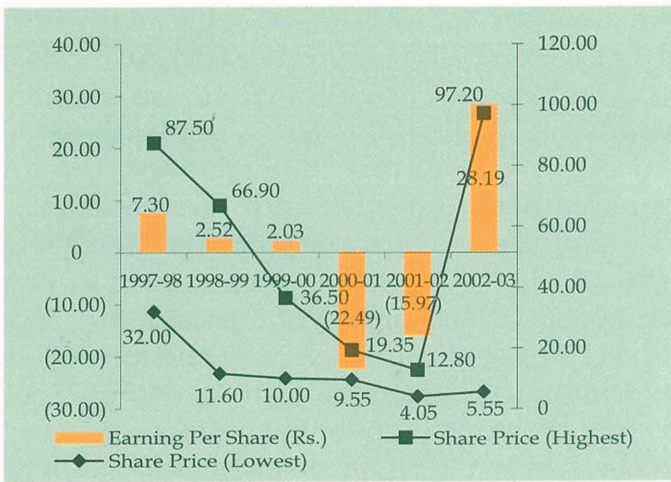
Another initiative was to run the accelerated development program for junior and middle level management. Here the objective was to identify individuals for marked growth in the organisation and prepare them for higher responsibilities through a mix of classroom inputs and business related projects. ***The general idea was to leverage the tremendous drive and initiative of these youngsters and foster prudent risk taking in them.***

7. The Results of Turnaround:

Annexure III shows the quarter wise profit and loss record pertaining to FY 2002-03 for the Company. As can clearly be seen, the company experienced a remarkable reversal of fortunes from a loss of Rs 685 mn in FY 2001-02 to a profit of Rs 1210 mn in FY 2002-03. Not only has export growth been high, the market has also been broadened. This has been done without loss of any existing customers as the company has striven to maintain value for money. New markets in Latin America, the USA and Asia have been established as represented in para 1.2.

Results of Turnaround – (Financial Statement of the Year 2002-03)

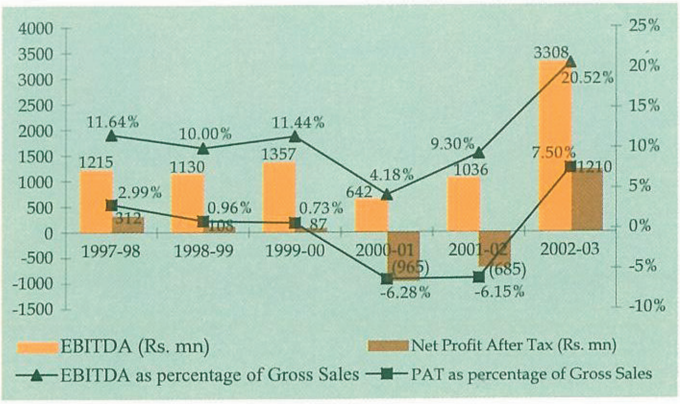
- *Net Sales up by 49% viz. from Rs. 10435 mn of FY 2001-02 to Rs. 15567 mn in the FY 2002-03.*
- *Exports had increased to Rs. 12135 mn from last year's Rs. 6030 mn (up by 101%).*
- *EBITDA increased by 219% to Rs. 3308 mn from last year's level of Rs. 1036 mn.*



	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Return on Capital Employed (%)	*11.80*	*8.73*	*10.33*	*7.59*	*9.50*	*47.40*
Share Price (Highest)	*87.50*	*66.90*	*36.50*	*19.35*	*12.80*	*97.20*
Share Price (Lowest)	*32.00*	*11.60*	*10.00*	*9.55*	*4.05*	*5.55*
Earning Per Share (Rs.)	7.30	2.52	2.03	(22.49)	(15.97)	28.19

- *Profit before Tax for FY 2002-03 was Rs. 1794 mn.*
- *Profit after Tax is Rs. 1210 mn against last year's Loss of Rs. 685 mn.*
- *Earning per Share is Rs. 28.19, which is an all time high over the previous six years.*

8. Key Performance Indicators - trend over the last 6 years:

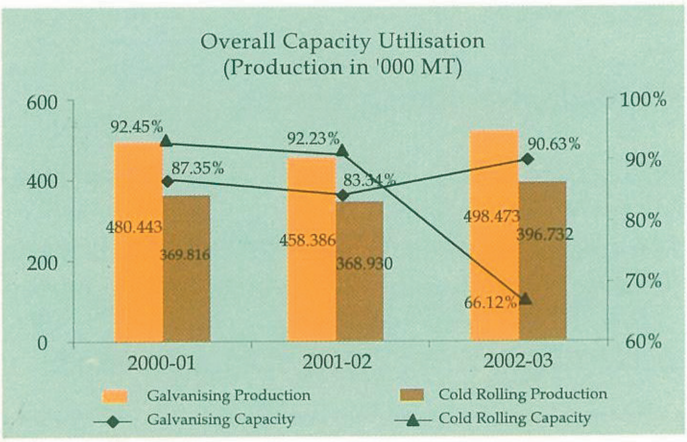


- The Company's Operational Efficiency in terms of EBITDA has been depicted in the pictorial alongside. During FY 2001-02 EBITDA has improved by 61% over the previous financial year. In FY 2002-03 however, EBITDA has surged by 219% over the previous year.
- Net Profit after Tax stood at Rs. 1210 mn in FY 2002-03 as compared to previous year's loss of Rs. 685 mn.

	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Gross Sales (Rs.mn)	10434	11299	11861	15367	11141	16123
EBITDA (Rs.mn)	1215	1130	1357	642	1036	3308
Net Profit After Tax (Rs.mn)	312	108	87	(965)	(685)	1210
EBITDA as percentage of gross sales (%)	11.64	10.00	11.44	4.18	9.30	20.52
PAT as percentage of gross sales (%)	2.99	0.96	0.73	(6.28)	(6.15)	7.50

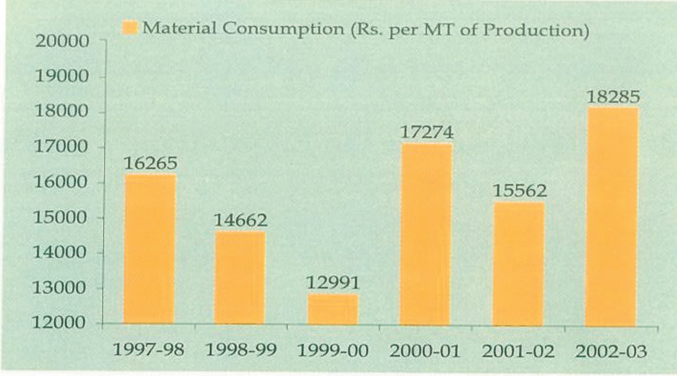
• Capacity Utilisation and Material Consumption

The overall capacity utilisation of manufacturing facilities registered a marginal decline in the year 2001-02 i.e. utilisation of galvanising facilities reduced from 87.35% in FY 2000-01 to 83.34% in FY 2001-02.



In the FY 2002-03 however, the Company's decision of exploring new markets has helped to improve the capacity utilisation of plants. In the FY year 2002-03, utilisation of galvanising facilities increased to 90.63%. Although, production of cold rolled steel also went up from 3,68,930 MT in FY 2001-02 to 3,96,732 MT in FY 2002-03, capacity utilisation dropped to 66% due to addition of 2 Lacs MT of cold rolling capacity in March 2003 at Tarapur plant.

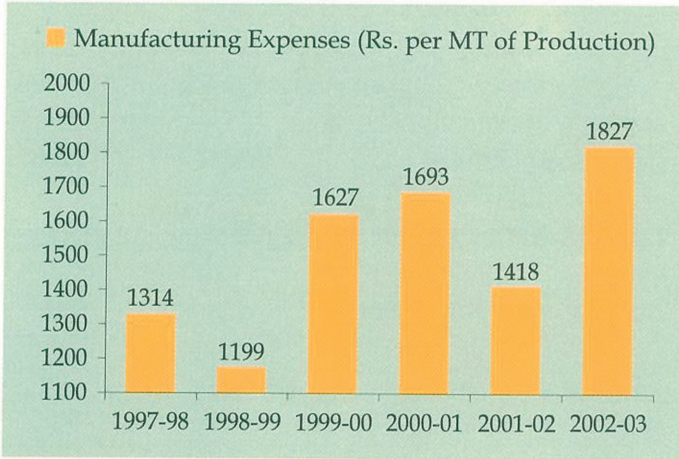
Various initiatives taken on account of improvement in yield of rolling mills as well as galvanising lines. are reflected in reduced consumption of raw materials. Improvement in the operational efficiency as well as reduction in consumption of stores and spares was part of the prime agenda of EARN as well as TURNAROUND. Material Consumption reduced by 10% in FY 2001-02, over the previous financial year. However, consequent to firming up of HR prices, consumption cost went up by 17.50% in the FY 2002-03.



	1997-98	*1998-99*	*1999-00*	*2000-01*	*2001-02*	*2002-03*
Material Consumption (Rs. per MT of production)	*16265*	*14662*	*12991*	*17274*	*15562*	*18285*

- **Manufacturing Cost**

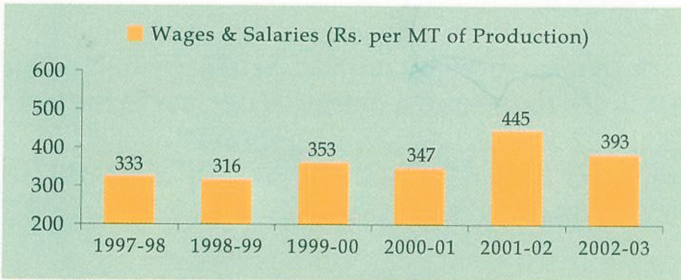
Manufacturing cost, mainly comprising the cost of Power & Fuel and Maintenance Cost, reduced by 16% during the FY 2001-02 (vis-à-vis the previous year). This cost however went up by around 35% in the FY 2002-03, ***mainly on account of revamping of processes to improve operational efficiency.***



	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Manufacturing Expenses (Rs. per MT of Production)	*1314*	*1199*	*1627*	*1693*	*1418*	*1827*

- **Manpower Rationalisation**

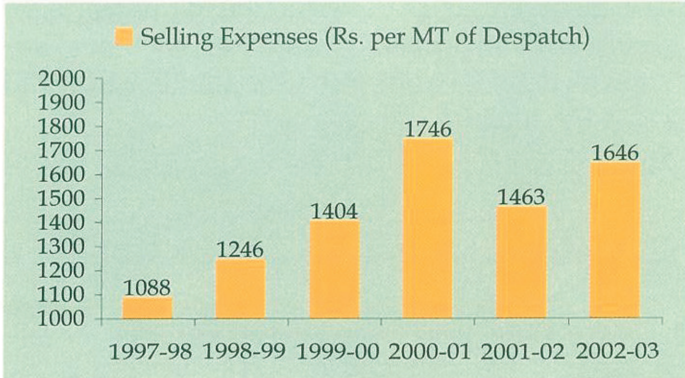
The Company has undertaken various Manpower rationalisation programs over the last two fiscals. As a result, in FY 2002-03 there was a 11.68% reduction in the salary cost over the previous financial year notwithstanding a 48% increase in turnover during the same period.



	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Wages & Salaries (Rs. per MT of Production)	*333*	*316*	*353*	*347*	*445*	*393*

Manpower Rationalisation has resulted not only into reduction in the excess manpower cost but also improvement in the plant efficiency. Employee cost as a percentage of gross sales for FY 2002-03 reduced sharply to an all time low over the previous four years (i.e. 1.36% for FY 2002-03), while employee productivity in FY 2002-03 was at an all time high over the last four years i.e. 533 MT / employee (i.e. 12.21 % increase over FY 2001-02). Please refer **Annexure IV** for details.

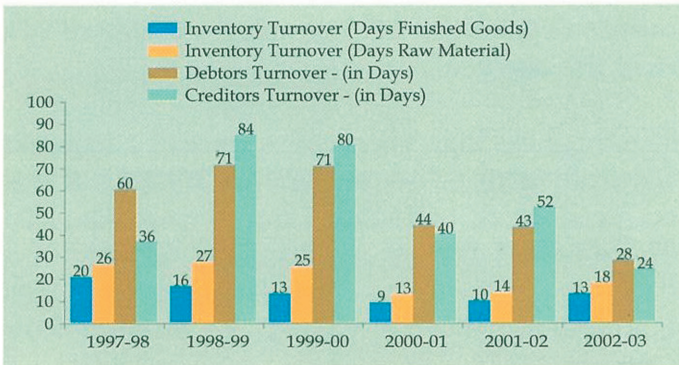
- **Selling Expenses**



Elimination of consignment agents in the domestic market and resorting to direct marketing are some of the major initiatives taken in last two fiscals. Significant savings on the international front were achieved in FY 2001-02 over the previous year due to reduction in ocean freight on account of entering into long terms arrangements with shipping companies and reduction in prices on re-negotiation of clearing charges. Selling expenses increased in FY 2002-03 (in comparison with the previous year) as exports as a percentage of total sales were higher (in comparison with the previous year).

	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Selling Expenses (Rs. per MT of despatch)	*1088*	*1246*	*1404*	*1746*	*1463*	*1646*

- **Management of Working capital**

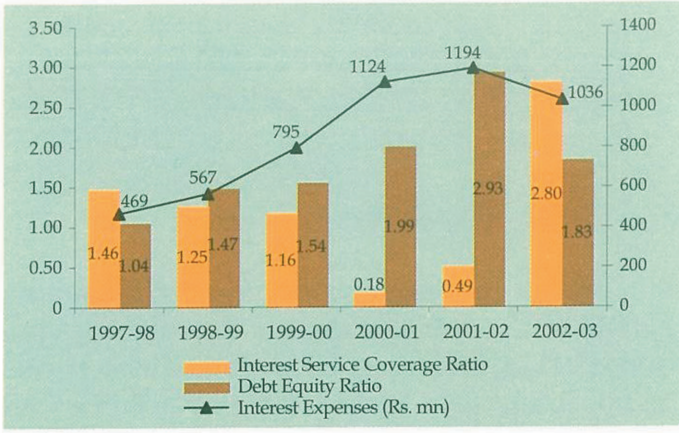


During the FY 2001-02 & 2002-03, JISCO has taken firm steps to closely monitor the inventory turnovers. This, clubbed with an improvement in debtors turnover, has contributed to efficient management of working capital.

	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Finished Goods Turnover (Days)	*20*	*16*	*13*	*9*	*10*	*13*
Raw Material Turnover (Days)	*26*	*27*	*25*	*13*	*14*	*18*
Debtors Turnover - (in Days)	*60*	*71*	*71*	*44*	*43*	*28*
Creditors Turnover - (in Days)	*36*	*84*	*80*	*40*	*52*	*24*

- **Financial Restructuring**

To avail the benefits of reduction in interest cost, JISCO has carried out restructuring of its debt portfolio. As a result, Interest burden has been reduced from previous year's Rs. 1194 mn to Rs. 1036 mn in FY 2002-03. Reduction in interest rates jointly with improved operational efficiency, has improved ISCR from last year's level of 0.49 to 2.8 in FY 2002-03.



	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Interest Service Coverage Ratio	*1.46*	*1.25*	*1.16*	*0.18*	*0.49*	*2.80*
Debt Equity Ratio	*1.04*	*1.47*	*1.54*	*1.99*	*2.93*	*1.83*
Interest Expenses (Rs. mn)	*469*	*567*	*795*	*1124*	*1194*	*1036*

9. Major Sign Posts for Fiscal 2003-04:

The Business Plan for FY 2003-04 envisages a GP / GC output of 0.625 mn MT, a 24% growth over the last year and in case of CR, an estimated output of 0.715 mn MT, again an increase of 24% over the last year.

The Business Plan takes cognisance of additional CR Rolling of 0.144 mn MT for 2003-04 due to commissioning of TM5 at Tarapur from April '03. There would also be an additional GP output of 0.072 mn MT due to commissioning of a new Galvanising line i.e. CGL II, at Vasind, from October 2003.

For the FY 2003-04, EBITDA is targeted at Rs. 4040 mn, an increase of 22% over the previous financial year (Rs 3308 mn at actuals).

In FY 2003-04, exports would continue to be a major focus area. JISCO already has an established presence in over 40 markets worldwide and the basic objectives would be to consolidate / build market share in existing markets - primarily USA and China and to further strengthen the network of business associates in markets where JISCO operates through intermediaries. Also, we hope to achieve certification under EMS 14001: 1996 by September 2003.

JISCO's Business Plan would really be the action plan for achievement of JISCO's Corporate Objectives.

JISCO also has a novel initiative lined up for the new fiscal, which has been christened *"Faculty / Manager Exchange Program"*, in association with **Narsee Monjee Institute Of Management Studies**.

JISCO would also re-dedicate itself to certain core values that it cherishes as an organisation i.e. *ethical business practices and placing the Company above the individual at all times*. It would be of relevance to mention here that JISCO participated in a Performance Ethics Survey facilitated by McKinsey, the results of which are provided in **Annexure V**.

10. Business Environment in India:

Today undoubtedly businesses are competing with each other in turbulent times. **Professor CK Prahalad** has gone on record to state at the ***Partnership Summit 2003*** organised by India's

Confederation of Indian Industry that:

" Growth at 10-15% is absolutely essential for India in the next 10 years for it become an economic super power of the world. It is not only important for India to grow at 8% or 10%, what is essential is a sustainable growth rate for the next 10-15years".

Against this backdrop, India , in 2002-03 grew at an annual rate of 5.6%. Earlier estimates of 6% growth were hampered due to poor monsoons affecting the agricultural sector. The slow down of the US and European economies and Japan experiencing its fourth year of economic recession will probably increase the possibility of a continuing slow down in the world. In the wake of the current situation, India not only should find innovative methods to sustain its current level of growth but also must discover means to achieve its desired level of growth. The key is in balancing domestic growth along with exports through increase in productivity and per capita income.

It is a notional belief that exports is the main factor for stimulating growth. Recent studies by McKinsey on China disprove this myth. China today has a growth rate of close to 10% and this among other things is contributed through increase in both domestic market and exports.

Over the next few years, the world will see a continuing breakdown of the trade barriers between countries. This move towards one global market under the auspicies of WTO will set a level playing field across the world. Countries such as India that have used protectionist measures for their domestic industry through tariff barriers and high taxes and duties will now find themselves competing on international standards.

The lowering of tariff barriers will see a sudden increase in the volume of trade in the world. For countries like India, it will mean large inflow of goods and services given its vast domestic market with exports increasing simultaneously.

In this context JISCO's strategic emphasis on exports places it in an advantageous position, as Companies that do not meet global standards will not only lose their shares in the domestic market but will not find a viable market outside the country either.

Power reforms and labour reforms and a growth stimulated through manufacturing as well as rationalisation of taxes and duties will see India through these difficult times.

In India, the process of lowering customs duty to meet the requirement of the WTO has already begun. Though this is undertaken in a phased manner, India will have to embrace WTO rates by 2005. This will make Indian industry vulnerable if they do not meet tomorrow's challenges today.

Another aspect which will have an important bearing on India's industrial growth is Value Added Tax. The introduction of VAT will reduce the incidence of tax and remove the cascading effect of taxation. It will bring homogeneity in rate structure and classification of products among states and is a step towards creating a common market in India. A truncated form of VAT which takes cognizance only of sales tax is expected to be introduced shortly in India and a full fledged VAT i.e. an aggregate of all indirect taxes would probably happen in the short to medium term thereafter.

11. Concluding Observations and Future Direction:

Two major strategic initiatives were taken by JISCO some time in the mid 90's. *The first was to promote Jindal Vijayanagar Steel Ltd. in 1994, to meet its requirement for a dependable source for raw material supply* i.e. HR coils. JISCO and its promoters hold about 62% of the equity, which is considered a strategic investment by JISCO for backward integration. The *second major initiative was to identify exports as a major thrust area.*

Both these initiatives have borne fruit. JVSL is today the major supplier of raw material to JISCO (of HR Coils). Also, the ***Company has earned recognition as a Star Export House*** *(owing to fulfilment of the eligibility criteria specified in the Export and Import Policy issued by the Ministry of Commerce and Industry, Government* *of India)* owing to its consistent thrust on exports in the last few years.

In retrospect, the market downturn, both in the domestic and export sectors, which was particularly accentuated in fiscal 2000 and 2001, put severe pressure on the Company. This was baptisation by fire so to speak and the Company emerged stronger in the process - due to its inherent strengths of a highly motivated and committed work force, a good product and high operational efficiencies (i.e. yield, high productivity and decisive energy management measures such as maintaining the power factor close to unity, running of high power consumption activities in the time zones of lowest tariff etc.).

JISCO has set itself the goal of becoming a global player in the steel industry. It hopes to achieve this through a mixed bag of strategies, including consolidation in the Indian market, international expansion, new product and market development, new customer generation and retention and collaboration with other suppliers, where mutual benefit can accrue.

Brand promotion and meeting customer needs constitutes the heart of any business. The use of internet technology for promotion as well as for transacting business has long been recognised by senior management at JISCO.

In late 2000, JISCO set up a steel portal, Steel*e*mart.Com as an addition to other sales efforts. This was made available for on-line trading in April 2001.

JISCO is continuing its drive to maintain international quality standards, efficient delivery schedules, competitive prices and excellent after-sales service. In the coming years the company plans to increase production capacities in its Indian plants as well as by setting up facilities at strategic international locations. Significantly, it hopes to export expertise, developed in India, to meet overseas needs.

In the ultimate analysis *JISCO's gameplan* as a Company would continue to be ***"to create, nurture, sustain and add to shareholder value on a continuous basis"***. Perhaps, in the immediate future, JISCO would certainly be a Company to emulate in all facets of its activities.

Afterword: About the Contributors:

Dr. P K Richardson:

Dr. Pikay Richardson is Fellow in Business Economics and Strategy and Director of the Indian Research and Development Unit at the Manchester Business School, Manchester, UK.

Mr. Raman Madhok:

Raman is an alumnus of IIT Delhi, XLRI Jamshedpur and Manchester Business School. He is currently the Joint Managing Director & CEO of Jindal Iron and Steel Company Ltd. He has earlier worked with Taj Group of Hotels, Pfizer, Parke-Davis, and Cyanamid (Now Wyeth Lederle).

References :

JISCO Annual Reports.

Jindal Iron and Steel Company Limited - Paper for the Application for Indian Institute of Metals Quality Award.

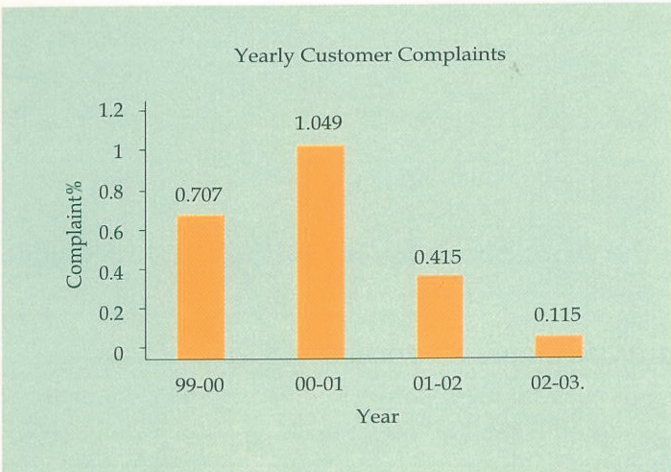
Interviews with key company personnel.

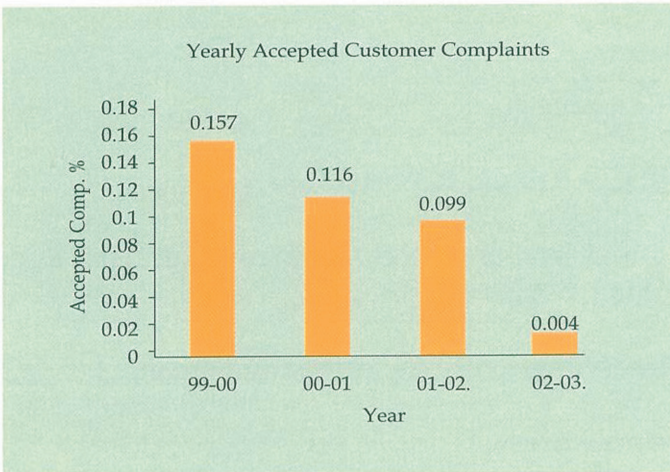
Annexures :

1. Customer Complaints - Exports
2. Financials - abstract for the last 6 years.
3. Quarter wise Performance – FY 2002-03
4. Employee Cost & Productivity
5. McKinsey Study – Performance Ethics.

Annexure I – Customer Complaints Summary: Export Segment

YEAR	DISPATCH QTY (Mt) (a)	CUSTOMER COMPLAINTS QTY (Mt) (b)	% (c) = (b*100/a)	ACCEPTED COMPLAINTS QTY (Mt) (d)	% (e) = (d*100/a)
99-00	66220.89	468.25	0.707	104.04	0.157
00-01	151693.89	1591.53	1.049	175.87	0.116
01-02	169153.81	701.59	0.415	167.62	0.099
02-03	273654.87	314.54	0.115	11.63	0.004





MAJOR REASONS FOR EXPORT COMPLAINTS FOR THE PERIOD APRIL 2002 TO MARCH 2003

Nature of Complaint	Customer Complaints Qty (Mt) (a)	Accepted Complaints Qty (Mt) (b)	% (d) = (b*100/c)
White rust	237.00	0.00	0.000
Adherence	11.39	0.00	0.000
Blemishes on Material	4.20	0.00	0.000
Chromic stain	22.40	6.08	0.004
Coil Break Lines	1.34	0.00	0.000
Edge wavy	11.47	2.30	0.005
Gauge variation	4.35	0.00	0.000
Over width	7.82	0.00	0.000
Ridge	3.17	0.00	0.000
Rough coating	8.15	0.00	0.000
Saw tooth edge	3.25	3.25	0.002
TOTAL	**314.54**	**11.63**	**0.004**

Dispatch Qty (Mt) (c) = 273654.87

Over all Accepted Complaints (02-03) = 0.004 %

Annexure II – Six Year Performance

Rs. in million

Sr.	Particulars	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
A	INCOME						
1	Gross sales	10,433.76	11,298.80	11,861.28	15,366.39	11,141.04	16,122.58
	Excise Duty	(1,090.43)	(1,223.47)	(1,031.60)	(1,248.15)	(705.55)	(555.56)
	Net Sales	9,343.33	10,075.32	10,829.69	14,118.24	10,435.49	15,567.02
2	**Other Income**	226.27	68.60	98.10	61.47	76.17	67.31
	Total (1 to 2)	**9,569.60**	**10143.92**	**10,927.79**	**14,179.71**	**10511.65**	**15,634.34**
B	EXPENDITURE						
1	Consumption of Materials	7,174.95	7,238.53	7,481.65	10,912.83	7,584.12	10,294.00
2	Increase / Decrease in Stock	(147.30)	235.25	200.16	46.70	129.70	(458.41)
3	Manufacturing Expenses	579.45	591.17	839.08	1,069.42	678.96	1,018.62
4	Employees' Remuneration & Benefits	147.05	155.72	182.29	219.29	212.94	218.98
5	Administration Cost	131.10	191.24	181.15	185.23	164.34	345.69
6	Selling Expenses	473.57	616.76	688.16	1,104.39	705.92	909.58
7	Interest & Finance Expenses	468.80	567.49	795.32	1,124.45	1,193.85	1,035.99
8	Depreciation	386.25	416.07	439.62	447.97	448.19	421.06
9	Miscellaneous Expenditure written off	15.40	27.08	29.36	33.58	128.63	125.21
10	Transferred to Capital Asset Accounts	(4.06)	(14.90)	(1.95)	(0.49)	-	(2.48)
	Total (1 to 10)	**9,225.20**	**10,024.42**	**10,834.83**	**15,143.37**	**11246.65**	**13908.23**
C	**Profit / (Loss) before exceptional items**	**344.40**	**119.50**	**92.96**	**(963.66)**	**(735.00)**	**1,726.10**
D	Exceptional items	-	-	-	-	(242.84)	67.69
E	**Profit / (Loss) before Tax**	**344.40**	**119.50**	**92.96**	**(963.66)**	**(977.84)**	**1,793.79**
F	Provision for Tax - Current	(32.00)	(11.50)	(6.00)	(1.50)	(1.50)	(37.00)
	- Deferred	-	-	-	-	293.96	(547.00)
G	**Profit / (Loss) after Tax**	**312.40**	**108.00**	**86.96**	**(965.16)**	**(685.38)**	**1,209.79**
H	**Earnings Per Share**	**7.30**	**2.52**	**2.03**	**(22.49)**	**(15.97)**	**28.19**

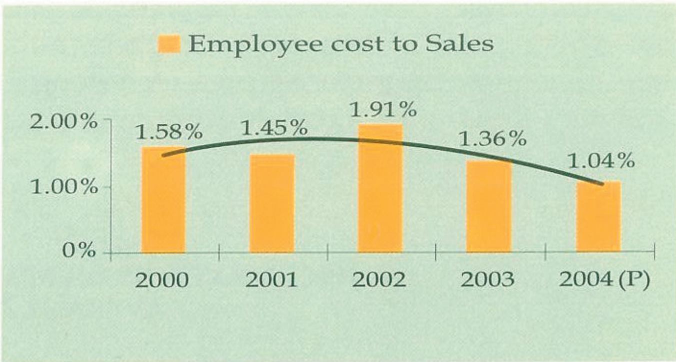
Annexure III– Quarter wise Performance (FY 2002 – 03)

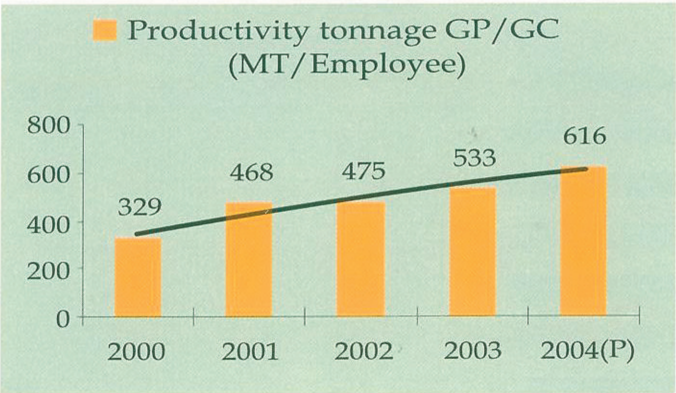
Rs. in million

Sr.	Particulars	Q-1	Q-2	Q-3	Q-4	2002-03
A	INCOME					
1	Gross sales	2,873.40	3,502.00	4,247.70	5,499.48	16,122.58
	Excise Duty	(184.20)	(117.10)	(123.60)	(130.66)	(555.56)
	Net Sales	2,689.20	3,384.90	4,124.10	5,368.82	15,567.02
2	**Other Income**	7.80	7.00	15.70	36.81	67.31
	Total (1 to 2)	**2,697.00**	**3,391.90**	**4,139.80**	**5,405.64**	**15,634.34**
B	EXPENDITURE					
1	Consumption of Materials	1,968.10	2,436.50	2,878.10	3,011.3	10,294.00
2	Increase / Decrease in Stock	(294.30)	(238.00)	(227.60)	301.49	(458.41)
3	Manufacturing Expenses	159.90	194.20	316.50	348.02	1,018.62
4	Employees ' Remuneration & Benefits	49.90	52.00	53.70	63.38	218.98
5	Administration Cost	42.00	55.30	10.40	237.99	345.69
6	Selling Expenses	176.20	218.60	229.90	284.88	909.58
7	Interest & Finance Expenses	286.80	281.80	253.00	214.39	1,035.99
8	Depreciation	107.00	105.30	102.40	106.36	421.06
9	Miscellaneous Expenditure written off	31.30	31.30	35.70	26.91	125.21
10	Transferred to Capital Asset Accounts	(1.10)	-	-	(1.38)	(2.48)
	Total (1 to 10)	**2,525.80**	**3,137.00**	**3,652.10**	**4,593.33**	**13,908.23**
C	**Profit / (Loss) before exceptional items**	**171.20**	**254.90**	**487.70**	**812.30**	**1,726.10**
D	Exceptional items	-	-	-	67.69	67.69
E	**Profit / (Loss) before Tax**	**171.20**	**254.90**	**487.70**	**879.99**	**1,793.79**
F	Provision for Tax - Current	-	-	-	(37.00)	(37.00)
	- Deferred	(74.20)	(102.30)	(189.10)	(181.40)	(547.00)
G	**Profit / (Loss) after Tax**	**97.00**	**152.60**	**298.60**	**661.59**	**1,209.79**
H	**Earnings Per Share**	2.26	3.56	6.96	15.41	**28.19**

Annexure IV – Employee Cost & Productivity

- Employee Cost as a percentage of Gross Sales in FY 2002-03 has significantly reduced to an all time low for the previous four years i.e. 1.36% in fiscal 2002-03 from 1.91% of the previous year. Budgeted Employee Cost as a percentage of Gross Sales for FY 2003-04, is pegged at 1.04%.



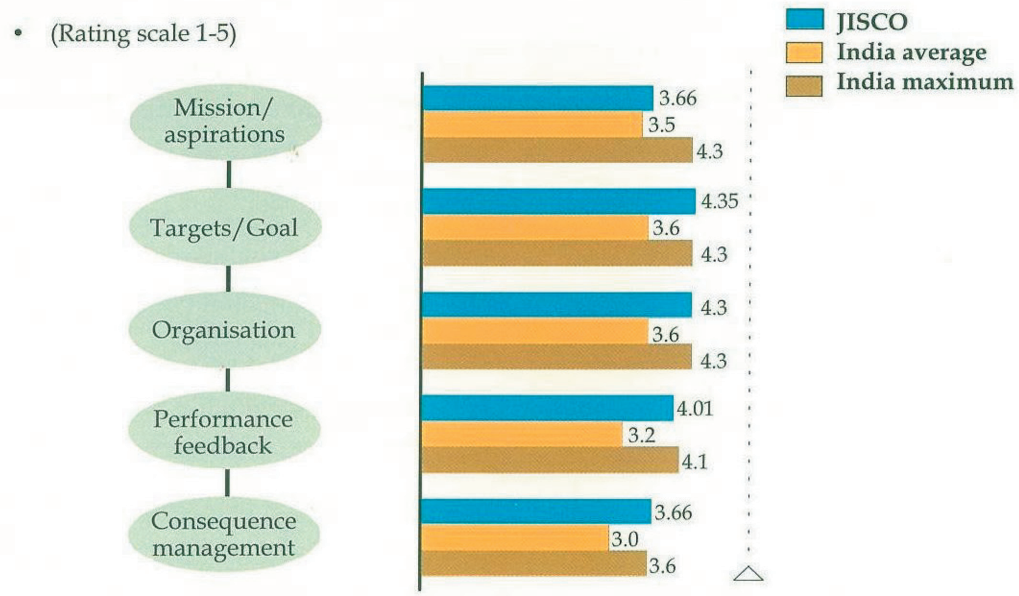


- Employee Productivity in FY 2002-03, was at an all time high of 533 MT per employee over the last 4 years (an increase of 12.21% over the previous year's level of 475 MT per employee). Budgeted productivity for the FY 2003-04 is Rs. 616 MT per employee.

Annexure V – McKinsey Study

JISCO had participated in a Performance Ethics Survey carried out by McKinsey & Co., where 40 large companies from diverse industrial sectors like Manufacturing, FMCG, Paints, and Chemicals etc. participated. From each company, about 15 to 25 executives were asked to fill up the questionnaires. The pictorials presented along side indicate that we are far ahead of the India Average and very close to the Indian Maximum in practically *all* the parameters.

JISCO's RATINGS ON MUST DOs COMPARED TO INDIA AVERAGE AND INDIA BEST



• Distinctive
• (4.5)

Source: Performance Ethic practice database; Team analysis