

EXECUTIVE SUMMARY

Background

The Indian Capital Goods Industry has been witnessing a turnaround after a prolonged period of recession. Capital goods manufacturers have been experiencing excellent growth both in the top and bottom line. Their order books are in a very healthy state which indicates the beginnings of an investment cycle in India. This observation is also borne out by the upward trend seen in the BSE Capital Goods Index.

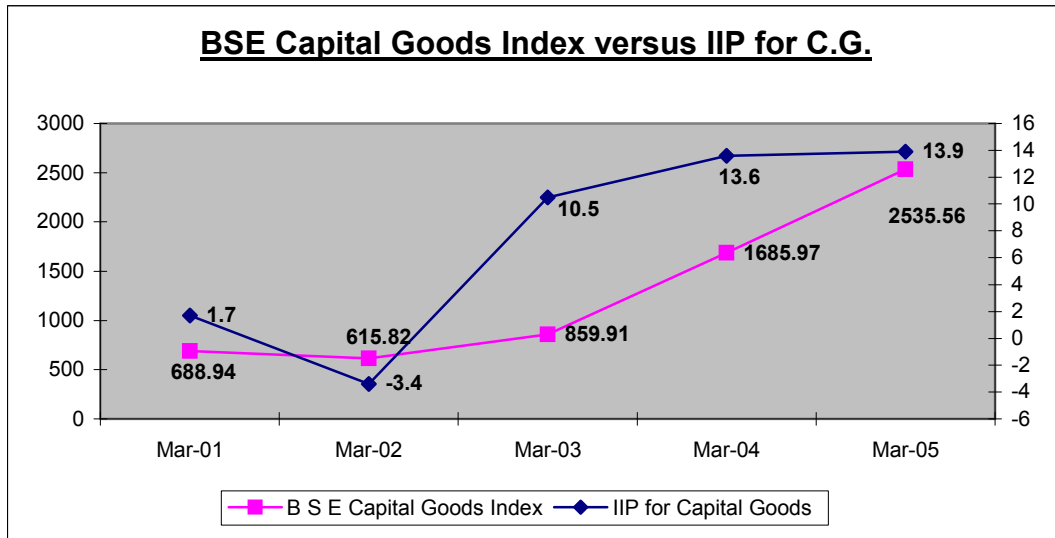


Chart 1

The capital goods industry needs to now strategize its future in order to maintain this momentum.

Over the past decade, the capital goods industry has been affected :

- By consolidation.

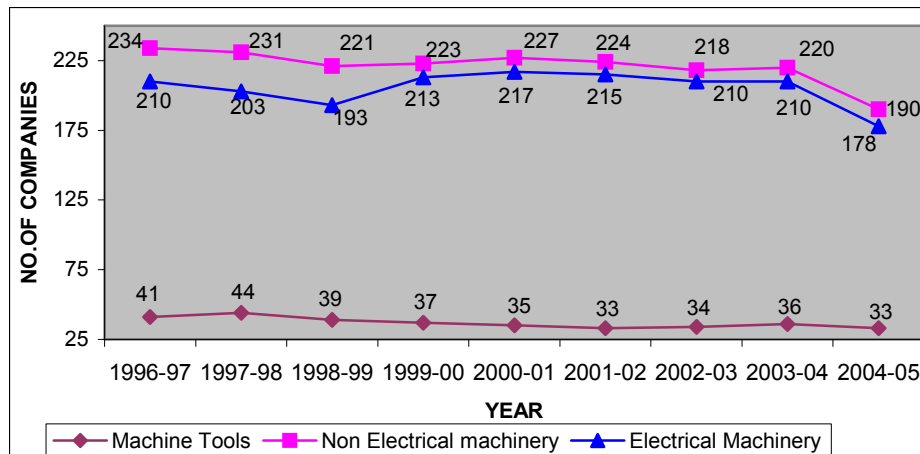


Chart 2

➤ Stagnant export to sales growth

EXPORT/SALES

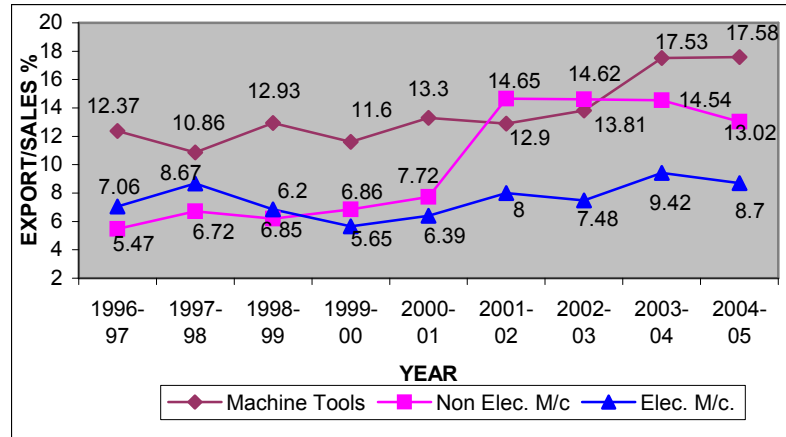


Chart 3 Source : CMIE

➤ Hence there was a need

- to identify the means of sustaining growth for this sector in the domestic market in the event of continuing reduction in custom duties and the various PTAs/FTAs entered into.
- To help India become the manufacturing hub for the world.

Against this background, the Department of Heavy Industry, Government of India invited CII to study the capital goods sector in terms of its present capabilities and its ability to make a quantum jump in production, sales and exports.

DEFINITION OF CAPITAL GOODS AND SELECTION OF COMPANIES

Capital goods are defined in various ways :

Capital goods refer to products that are used in the production of other products but are not incorporated into the new product (these are termed consumer goods).

Or

A factor of production category consisting of manufactured products used in the process of production.

For purposes of the study, CII has considered four sectors which contribute a weightage of 34 out of a total of 66 which is the weightage of the capital goods sector in the IIP. These sectors are also those which are showing a good growth momentum and have a multiplier effect in terms of enhancing employment and GDP.

The four sectors are :

- Heavy Electrical Equipment
- Mining & Construction Equipment
- Machine Tools
- Process Plant Equipment

For the survey, all companies operating in India who manufacture, or sell complete, equipment in each of the above sectors were identified.

Sectors	Electrical	Construction & Mining	Machine Tools	Process Plant Eqpt.
No. of companies surveyed	120	21	155	80
Market share of these companies	97 %	97 %	56 %	90 %

Table 1

OBJECTIVES OF THE STUDY

The objectives of the study were to focus on the international competitiveness of these sectors in terms of benchmarking of costs, measuring cost effectiveness, productivity, marketing strategies, manpower development and R&D apart from looking at technology gaps and tariff protection required.

In today's scenario, just looking inward is no longer enough for survival. A presence in the export markets as a diversification strategy has become a must. The study has therefore looked at overseas business opportunities and tried to identify potential countries and projects.

APPROACH & METHODOLOGY

This study was a combination of primary and secondary research as well as Interviews and detailed interactions with CEO's and business/departmental heads.

Part I

- Internal industry survey through questionnaire
- Analysis of primary and secondary data sources
- Interactions & interviews with CEO's
- Interactions / interviews with department / business heads of companies
- Interactions & interviews with CII sectoral associations
- Major user sectors surveyed.

PART II – INTERNATIONAL BENCHMARKING

- A benchmarking exercise based on key operational parameters was conducted with major international companies in each sector and the domestic industry average

PART III – EXPORTS

- Trade country data collated & analyzed
- Products with higher competitive advantage and the related markets identified based on the projects with a relatively longer lead time

SYNOPSIS & FINDINGS OF THE REPORT

The development of a strong and vibrant engineering and capital goods sector has been at the core of the industrial strategy in India since the planning process was initiated in 1951.

The Indian capital goods sector is characterized by a large width of products (almost all major capital goods are domestically manufactured) – a legacy of the import substitution policy. Even nations with advanced capital goods sectors do not produce the entire range of capital goods, but instead focus on segments, or sub segments. The range of machinery produced in India includes heavy electrical machinery, textile machinery, machine tools, earthmoving and construction equipment including mining equipment, road construction equipment, material handling equipment, oil & gas equipment, sugar machinery, food processing and packaging machinery, railway equipment, metallurgical equipment, cement machinery, rubber machinery, process plants & equipment, paper & pulp machinery, printing machinery, dairy machinery, industrial refrigeration, industrial furnaces etc. However, the raw materials used are largely domestic in origin and in many instances, the quality of domestic raw materials is not up to the international standards in terms of dimensional tolerances and metallurgical properties, which in turn affects the quality of the final product.

Current Status

The capital goods industry's annual production stood at Rs.500 billion in 2003-04. Its contribution to the exchequer in terms of customs, excise and sales tax are estimated to be in excess of Rs.150 billion. From CMIE data it is noticed that though there was a 15% increase in the market size in 2003-04, the production growth of 2003-04 over 2002-03 was only negligible at 2.7%. Consequently there was a 55% jump in imports .

The growth in capital goods exports has gained momentum from 2001 to 2004 but has shown a sharp decline in 2004-05 reflecting a growth in demand in the domestic market, which led to a fall in exports.

Capital Investment in the Capital Goods Sector

The investment pattern in the capital goods sector under implementation from April 1995 to April 2005 has shown an overall rising trend

The capital goods sector is at the core of the development of sectors like infrastructure, mining & metals, electricity and manufacturing. Any investment impact on the capital goods sector will have a multiplier effect in terms of employment generation.

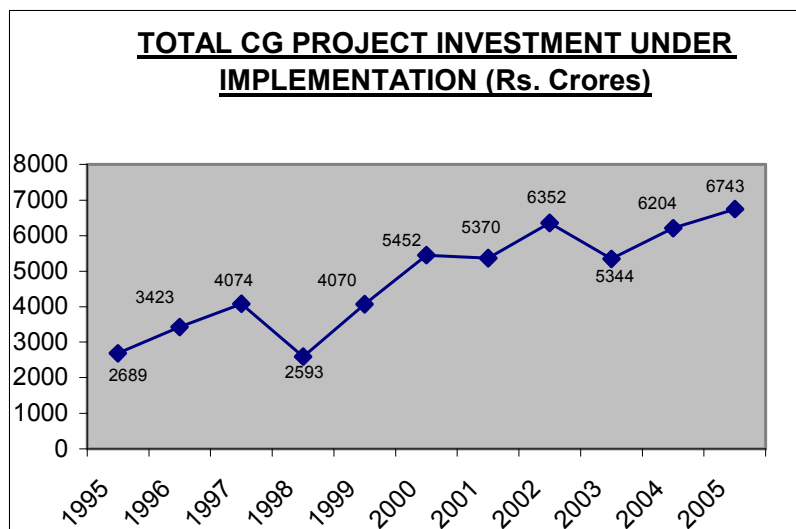


Chart-4 Compiled by CII based on CMIE and CSO data

Multiplier Effect of the Sector

As per the last data published by the Planning Commission in 1998-99, the multiplier effect of investment in this sector on employment can be visualized from the following table.

Sector	Employment Multiplier	Investment expected as of 2006 –2007 (In Rs. Crores)	Effect (Man years)
Machine Tools	.84	350	29400
Electrical Industrial Machinery	.7	2000	140000
Industrial machinery (Others)	.76	1200	91200

Table 2

SURVEY RESULTS

➤ Structure

The feedback from the respondents has revealed that the machine tools sector is the most fragmented in terms of ownership as well as turnover.

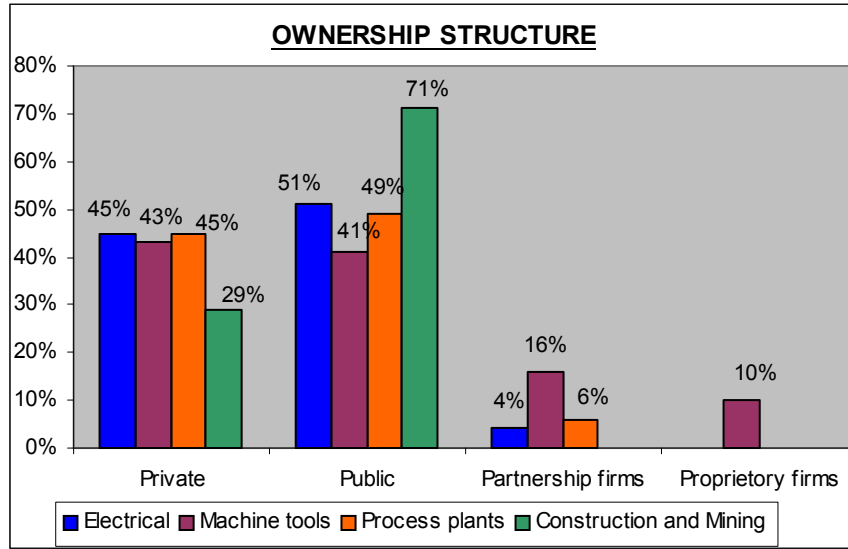


Chart 5

The construction and mining equipment sector is more consolidated because of the high value nature of each equipment. The turnover of some companies is lower than the average turnover since these companies are involved in the material handling business only, where the cost of individual equipment may not be as high as that of construction, or mining equipment.

The process plant and electrical equipment sectors are evenly placed since both these sectors have a variety of equipment and there are companies who manufacture only a particular range.

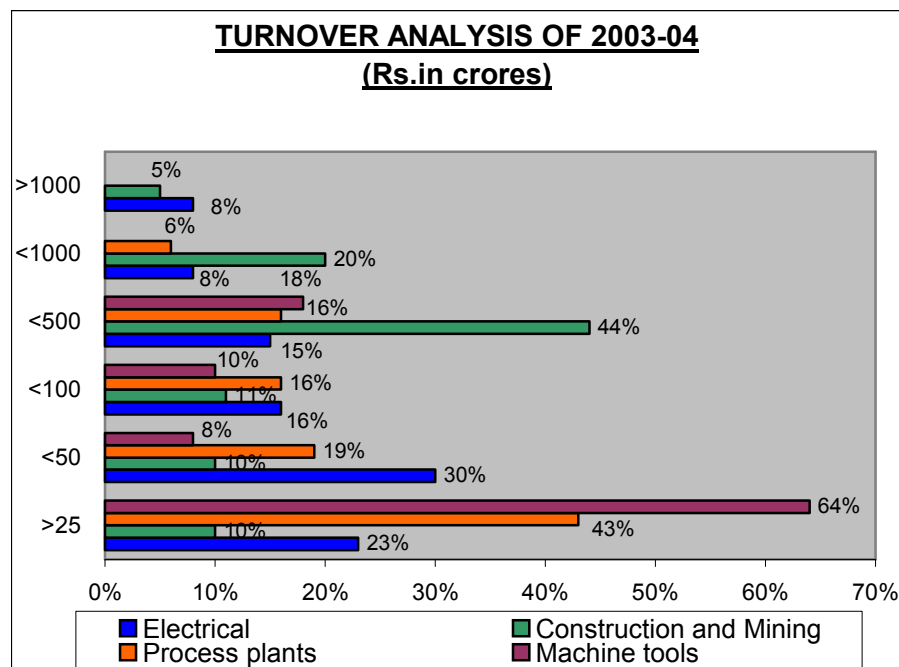


Chart 6

➤ **Technology**

The manufacturers and users of heavy electrical equipment felt that technology was available in India for most of the products barring a few products required for high voltage lines.

The technology leaders in the construction and mining equipment sector are: Komatsu, Caterpillar, Hitachi, Terex, Volvo, Case, Ingersoll-Rand, HAMM, Bomag, John Deere, JCB, Poclain, Bitelli, Kobelco, Hyundai and Daewoo. Except for the last 3, all these companies are present in India either as joint ventures, or have set up their own manufacturing facilities, or marketing companies.

The technology available internationally is being made available in India through joint ventures. However, the equipment currently being manufactured in India is not of the same size. For example for a 15 Cu.M. hydraulic shovel, the manufacturers do not feel the need to bring in the technology due to low volumes and uncertain demand though the companies have the manufacturing facilities and design capabilities to manufacture the same in India.

The machine tools industry can be divided into metal cutting and metal forming sectors. The metal cutting sector can be further classified into conventional and computer numeric control (CNC) machines, while the metal forming sector can be segregated into conventional and numeric control (NC) machines. The Indian industry manufactured its early products through technical collaborations from world-renowned manufacturers. From the mid eighties onwards the industry has relied entirely on its own R&D efforts to develop and market a contemporary range of CNC machine tools. The present turnover of the industry is totally from products developed by the industry in the last decade.

The technology for the manufacture of process plant equipment depends on whether it is static like reactors, columns tanks, heat exchangers etc. or moving like pumps, compressors and rotary equipment, or special unit operation packages. Capabilities of Indian manufacturers of these equipment are at par with their international competitors. Most of the technology required by the user sector are available and the ones which are not, are by choice due to lack of economies of scale, or profitability.

➤ **Design & Engineering**

As is evident, the majority of the players in the capital goods sector have their own design and engineering set up. The process plant equipment sector being primarily a jobbing industry, the smaller players are largely subcontractors to larger companies and cannot afford to have a design & engineering set up.

The capital goods sector should capitalize on its strength in design and engineering and make India the hub for the world’s design and engineering needs.

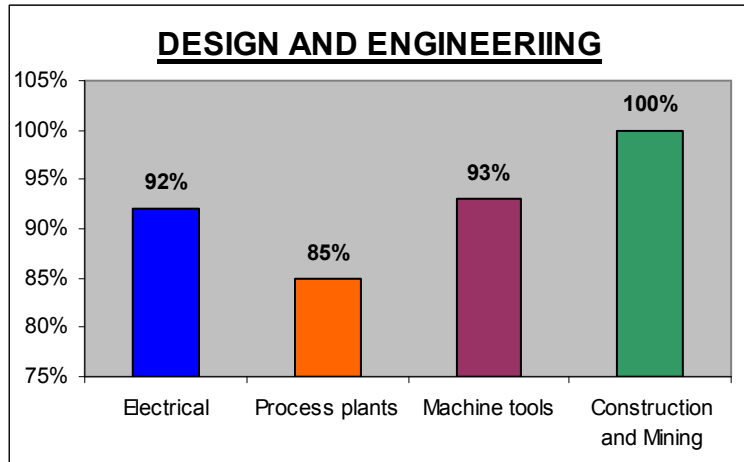


Chart 7

➤ **Research & Development**

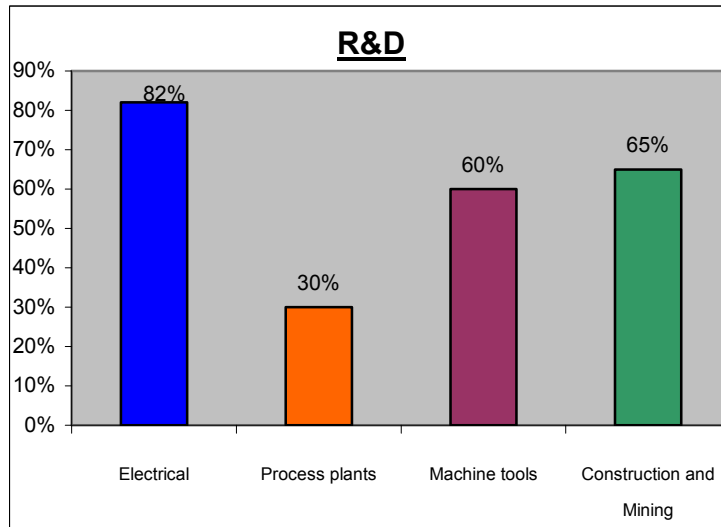


Chart 8

The electrical and the machine tools sectors are the ones which are more innovative and have to rely on internal R&D to develop new products and improved features to compete in the domestic, as well as the international markets. Since the construction and mining sector has a smaller base, the percentage seems to be high but these are all the bigger players and are more often than not, subsidiaries of international companies.

The graph below shows the difference between the spending in R&D among the domestic companies and international companies. In India due to the lack of incentives, companies do not spend even one tenth of what

international companies spend, in terms of percentage of sales and in absolute terms it is negligible.

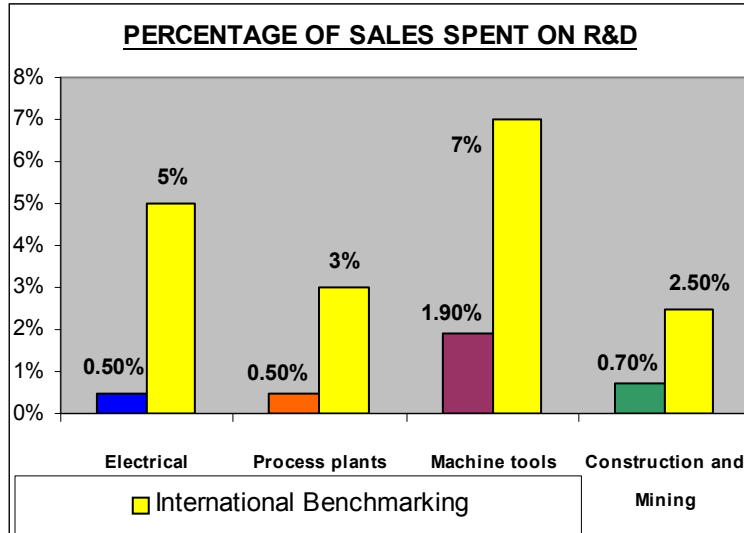


Chart 9

➤ **MANAGEMENT EFFICIENCIES**

The study revealed that very few companies in each of the sectors have high management efficiencies. Very few indigenous companies i.e companies which are not subsidiaries, or JVs of international companies have really achieved international levels of management efficiency.

The various aspects studied were the strategies adopted for the growth of the company, quality consciousness, adaptation to new technologies and importance of training.

Competitive Strategy

Competitive strategy involves positioning a business to maximize the value of the capabilities that distinguish it from its competitors. It follows that a central aspect of strategy formulation is perceptive competitor analysis.

However these four sectors of the capital goods industry are well behind international trends of not only being aware, but also implementing these strategies. The study highlighted the low awareness of the industry on these key management issues and their benefits/outcome.

The graph below highlights the lack of awareness of the majority of the domestic companies, specially in the SME category, on the impact of strategic planning on business plans in providing the vision and the direction.

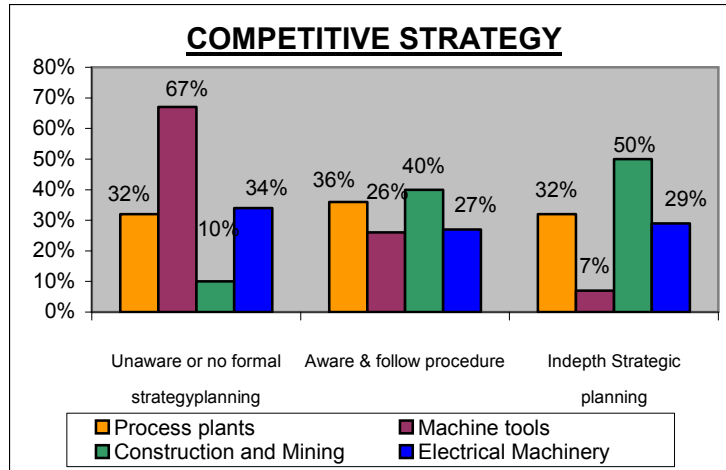


Chart 10

Quality Consciousness

The level of quality consciousness is fairly high in the construction & mining machinery sector as well as in the electrical machinery sector. However the other two sectors being fragmented in nature need to pay a lot more attention to these matters.

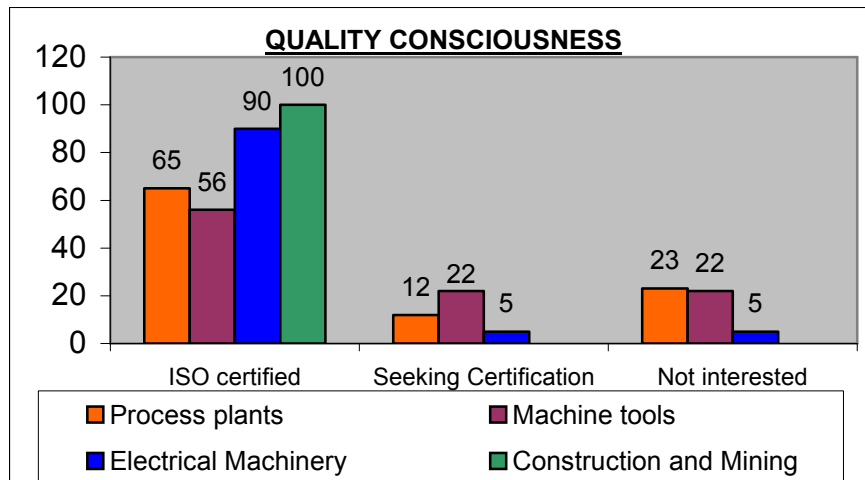


Chart 11

The larger companies in these sectors can play a proactive and constructive role in enhancing the quality consciousness of the industry on an overall basis by educating and supporting their sub suppliers.

Level of Computerization

Information & communication technology (ICT) can act as a powerful enabling technology to significantly improve the global competitiveness of the Indian manufacturing sector.

Though IT application in India today is gaining very rapidly, the majority of the small companies do not even have basic computer email facilities for their employees. Computerization is perceived by many companies as necessary only in the accounting activities.

Favorable government policies as detailed in the recommendations can improve these levels.

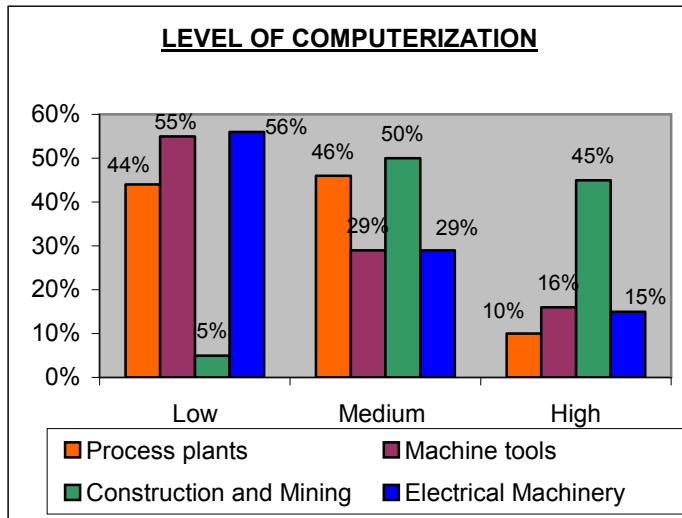


Chart 12

Soft Technologies In Use

As is evident, except for the construction & mining equipment sector a tremendous amount still needs to be done in spreading awareness and inculcating the benefits of soft technologies.

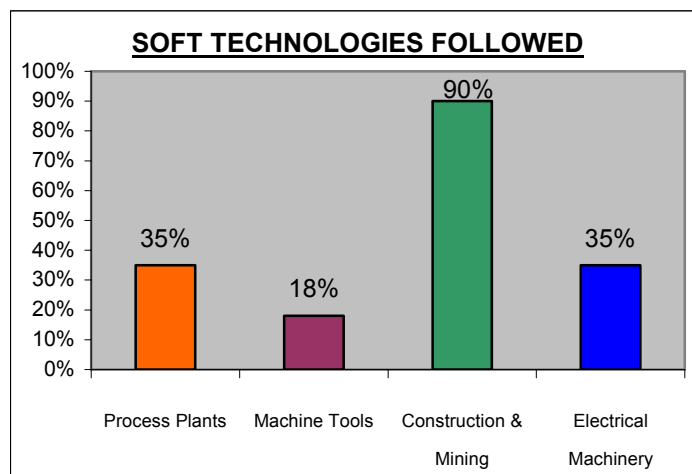


Chart 13

Training and Manpower Development

The costs involved in training have prevented many companies from spending on training. Very few companies are really training their employees to enable them to achieve world class benchmarking.

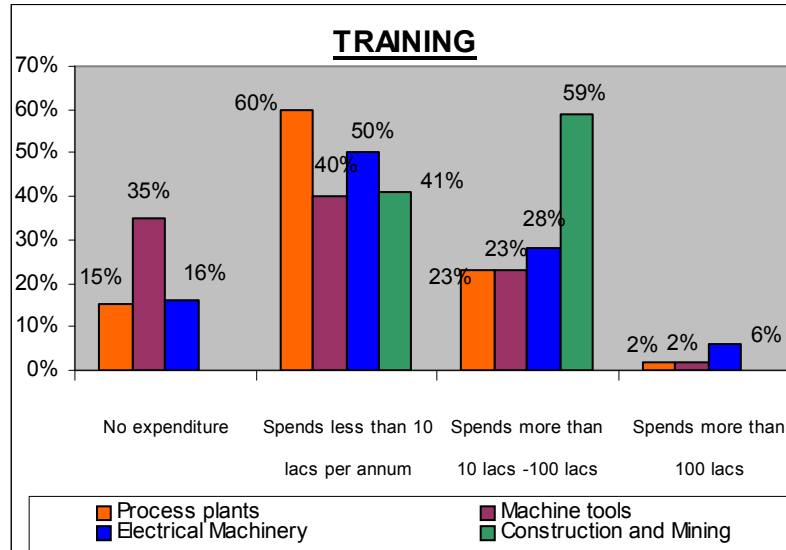


Chart 14

Ignoring this aspect will have important implications for domestic companies since international companies entering India or operating in India will attract customers on the strength of their sales & service support which are increasingly being outsourced.

Operational Efficiencies

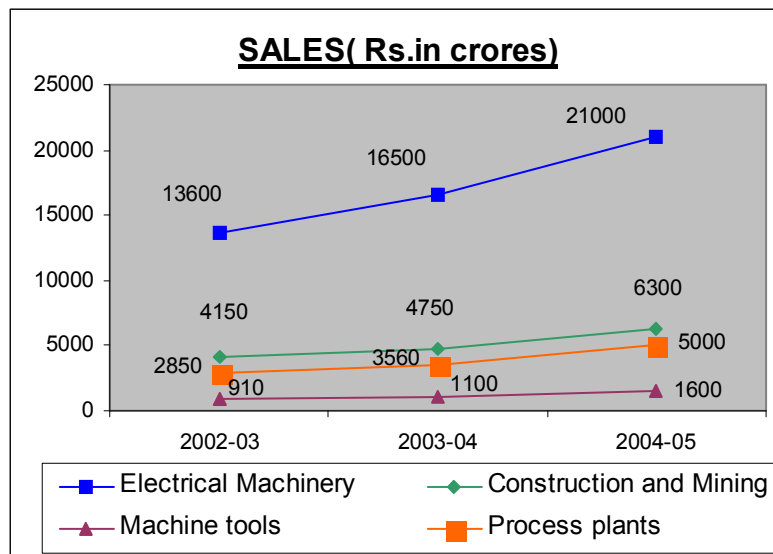


Chart 15

The operational efficiencies in terms of production, sales, profitability have been found to follow a similar pattern in all the four sectors over the past three years. This pattern is also similar to the IIP pattern seen for the total capital goods sector.

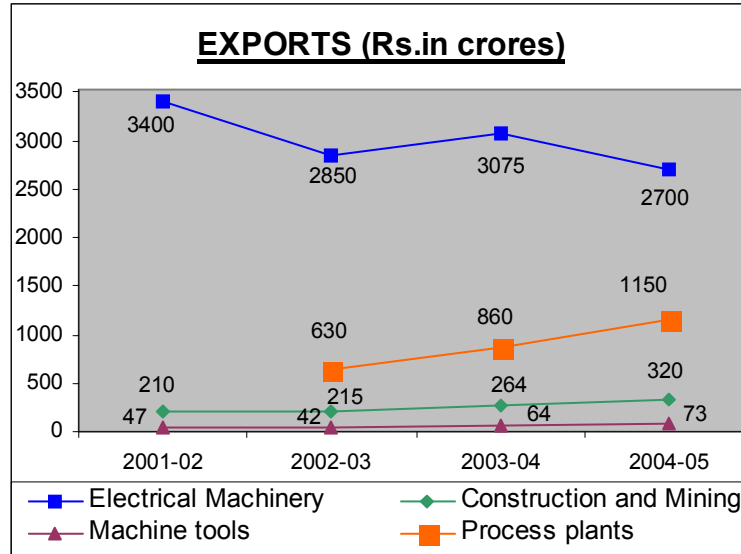


Chart 16

Except for the electrical industry which was reeling under the shortage of raw material as well as lack of implementation of projects, all other sectors have maintained a marginal growth in exports. Process plant equipment was the exceptional case which saw an unprecedented rise in exports as well as domestic sales.

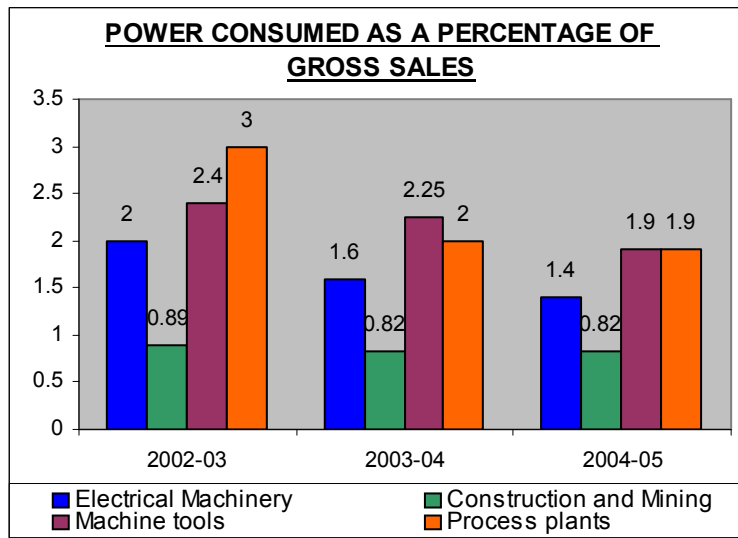


Chart 17

Companies have tried and succeeded in reducing their cost of energy though the cost per unit of energy has gone up.

Availability of reliable and cheaper power/fuel will help these sectors in becoming cost competitive as a significant percentage of sales is being spent on power and fuel.

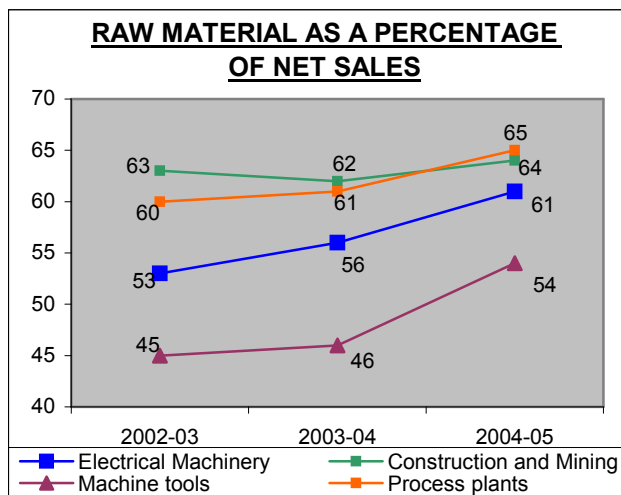


Chart 18

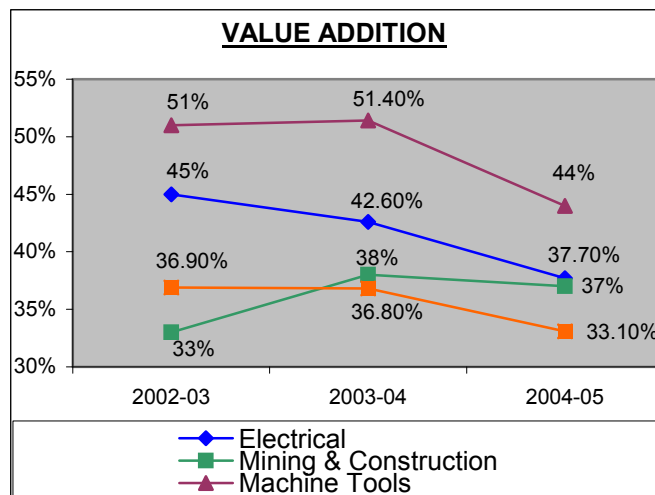


Chart 19

Machine tools and the electrical equipment sector have witnessed an exceptionally high increase in raw material costs due to the increase of CRGO and other metal prices and in the case of the machine tools sector, it is being attributed to more bought outs being added for sophistication of the machines.

Inability to increase the price of the equipment despite increase in the cost of raw material, due to intense competition has resulted in a fall in value addition.

Level of outstanding as number of days sales

Sector	2002 -2003	2003-2004	2004 -2005	Global standard
Electrical	158	150	153	55 -75
Process Plant	110	100	88	Not available
Construction & Mining Equipment	85	81	83	85
Machine Tools	59	58	48	39 -138

Table 3

The heavy electrical equipment sector and the process plant equipment sector have high levels of outstanding, possibly because the major end users of both these sectors are Government organizations.

As detailed in the recommendations Government should mandate release of payment to the industry within a timeframe to help improve working capital situations.

Inventory Turnover

Sector	2003 – 2004	International standard(average)
Construction & Mining equipment	4	5 –7
Machine Tools	4.2	3.4 – 4.4
Electrical equipment	4.6	6.5 – 8
Process Plant equipment	5.75	Not available

Table 4

Investment in ICT and business process reengineering can improve these figures further and help companies in minimizing their working capital requirement.

CAPITAL INVESTMENT

The capital investment levels divulged by the companies under survey show that the industry is not very confident of the continued growth of the economy, or maintaining the growth rates.

The figures given by the four sectors are as follows :

- Electrical equipment sector - Rs. 2000 Crores
- Construction & Mining eqpt. - Rs. 300 Crores
- Machine Tools sector - Rs. 350 Crores
- Process plant equipment - Rs. 900 Crores.

It is important to note that many large Indian companies are investing abroad to take advantage of the lower costs and then take advantage of the zero duty rates as a result of the FTA/PTAs to cater to the Indian market.

The inherent danger of this lies in the loss of employment opportunities and diversion of investment overseas.

PRODUCTIVITY PARAMETERS

Low productivity is a common factor across all the sectors. If we consider sales per employee as one of the productivity parameters, the following figures when compared with the international company norms reflect the differences :

Sector	Sales per employee for domestic companies	For International companies
Electrical	Rs 26 lakhs	Rs. 60 –90 Lakhs
Construction & Mining equipment	Rs. 35 Lakhs	Rs 160 – 175 Lakhs
Machine Tools	Rs. 14 Lakhs (Rs 30 Lakhs)*	Rs 81 – 146 Lakhs
Process Plant equipment	Rs 26 Lakhs	Not available

Table 5

* IMTMA Figure

It is evident that the Indian average of sales per employee is between Rs. 25 – Rs. 35 Lakhs whereas the international benchmark is above Rs 60 Lakhs.

➤ **MARKET SITUATION & DEMAND**

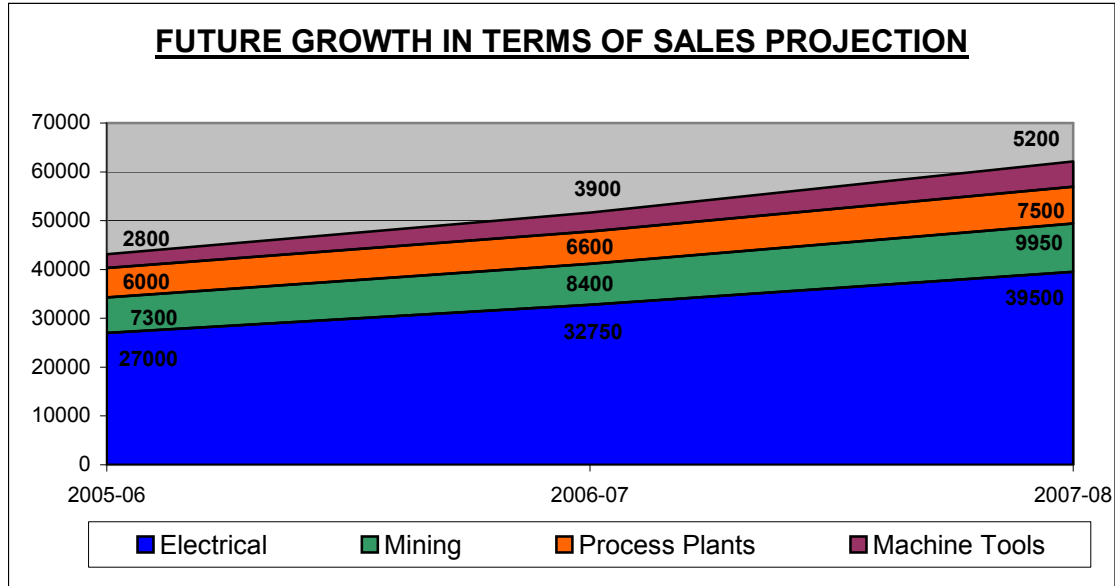


Chart 20

The Indian economy is projected to grow at the rate of around 8.1 % in 2006–07. This is reflected in the healthy order book position of the respondent companies which show an optimistic picture in the short and medium terms.

SECTORAL FINDINGS

Electrical Sector

- Though India has the advantage of availability of highly skilled manpower, the sector is experiencing difficulties in technology transfer since foreign companies can now participate directly in infrastructure projects.
- Companies need to upgrade their present range of products since a new range of products with the latest technologies catering to gas based and nuclear power projects will be in greater demand.
- The level of R&D & technology innovation is low by international standards with technology tie-ups being difficult.
- Companies need to continue focusing on operational excellence, cost optimization and exports. Operational excellence can be achieved by improving processes through benchmarking and adaptation to new technologies.
- More emphasis on strategic planning and aggressive marketing to secure a greater share of the world market.
- Providing world-class services and reliable products since these caters to a sector which is very sensitive in terms of reliable and quality power.
- Investment in Information technology to match international standards of procurement and inventory levels.

Construction & Mining Sector

- Evolved primarily on the basis of domestic demand generated over the various plan periods.
- Process of consolidation expected in the industry.
- With significant investments being made in India as well as worldwide, on the back of the rising metal prices, a longer term buoyancy of demand is expected to continue.
- Need to strengthen after sales service and customer relationship since these products are subjected to high wear and tear.
- Companies need to increase their spending on training and research and development.
- Focus on high productive machines requiring low level of maintenance and operating costs.
- Companies need to re-look at their business processes for cost efficiencies and invest in information technology for faster supply chain management.

Machine Tools

- The industry has reinvented itself in terms of its product range with a greater focus on NC and CNC machines.
- Lowering of duty over the years has helped the industry by easy availability of imported components at a lower cost.
- This has also had a negative effect on the industry in terms of strong competition for the high end technology machines from abroad.
- Indian companies with financial resources and risk appetite should try to get into the manufacturing of items not manufactured in India, (details provided in the study) since they are critical to the industry.
- There is a huge market for retrofitting of conventional and NC machines to CNC machines and this market will evolve only when customers perceive that they can get the products and services at a lower cost. Therefore companies should position themselves to get the first move advantage.
- Companies need to enhance their production capacities to meet the delivery requirements of the customers and focus more on improving further quality and after sales service.
- To look at operational efficiencies and build companies with financial power to spend on marketing and R&D.
- The industry, with exception of course, lacks vision and the strategies to propel the industry to the next level. The problem lies in the fact that when the business is good, the industry does not find time for innovation and when the business is bad, there are financial pressures. This is especially the case with the small and medium sized units. This attitude needs to be changed to be successful in the longer run.
- The industry suffers from low productivity because the manufacturing model is more labour intensive. With companies trying to be cost competitive, they need to look into the production methodologies, managing the supply chain, with greater outsourcing required to reduce costs. For standard products enhancing volume is a must to raise cost competitiveness.

- Indian companies lack adequate capabilities in terms of export marketing and this fact was amply clear in the survey. Hence it needs to build an international marketing network to make its presence felt.

Process Plant Equipment

- The process plant equipment industry has evolved primarily on the basis of the requirement to set up core process industries in India after Independence. The demand today is also from these process industries being set up but the size of the plants have increased and are at times comparable, or larger than global capacities.
- The industry suffered due to lack of investments in the domestic market however the sector is receiving and will continue to receive good order inflows from the Middle East because of the huge investments taking place in the oil & gas sector.
- The domestic demand for process plant equipment is also on the rise.
- The industry can help itself by adopting the following measures which are being carried out by some of the big players
 - A few sub-suppliers should be adopted as an extension of the company and help extended to them in terms of training in engineering, welding, planning, quality systems and standards and upgradation of technology.
 - Assistance in terms of finance can be extended along with assured workload.
 - Training of a large number of labour apprentices many of whom find employment with the smaller units who cannot afford such training.
- The process plant equipment manufacturers have the right mix of talent, expertise and opportunity to grow at a fast pace if the much-needed investment in the core infrastructure industry takes place and they relook at their own operational and management inefficiencies.
- Companies need to focus more on HRD since they can leverage the human resource expertise especially in the design and engineering fields as well as in R&D. Attracting and retaining talent will be a major constraint in this sector.
- The average wages per employee is quite low in this sector which needs to be looked at by the industry.
- Companies need to focus more on best practices to reduce their manufacturing costs and improve upon quality standards. Since raw materials are a major component in the cost of the equipment, companies need to invest more in IT to integrate their supply chain systems, thereby reducing the inventory levels and allowing for cost effective methods of procurement to be introduced.
- Companies should diversify their product range to counter the problem of cyclical downturns.

RECOMMENDATIONS FOR THE GOVERNMENT

Government Actions (Short Term)

1. Provide a level playing field to the domestic manufacturers by

- Removing import of capital goods under 0% category for project imports and others.
 - ❑ *The Indian Capital Goods manufacturers have been at a disadvantage as compared to the Foreign suppliers due to various reasons which when translated in percentages are as high as 15.28 to 24.58 % for equipment been imported at 0% duty.*
 - ❑ *For Priority Sector – All exemptions of Zero / 5% / 10% should be removed. Impose minimum custom duty of 10% + CVD - NIL and grant full deemed export benefits covered under Sr. No. 8.3(a) (b) and (c) of Foreign Trade Policy.*

OR

- ❑ *Custom duty – 5% + CVD - NIL and grant full deemed export benefits covered under 8.3 (a) and (b) of Foreign Trade Policy.*

This will help:

- In maintaining Uniform tax system and reduce the cascading effect of the taxes.
 - Domestic industry can compete with the foreign companies in India and create reference from Indian projects, which can be used for qualifying and securing business in overseas market.
 - Domestic industry's presence will increase competition and ultimately reduce the cost of the project.
 - In long term maintenance of the project at economical cost.
 - Generate Multiplier effect on employment generation & GDP growth.
- Customs duty of special components and some raw materials required by the four sectors covered under the study (list has been detailed out in the report) to be brought down to 5% to make the indigenously manufactured equipment cost competitive. For example CRGO steel, an important raw material for the manufacture of transformers, is not manufactured in India and has to be imported by the manufacturers. This should attract only 5% duty. Other such raw materials and components are mentioned in detail under each section of the report.

Revenue Impact of Reduction in Customs Duty (An example)

Sl. No.	Description		Revenue Impact (Rs Crores)	
			Loss	Gain
1	Production of CNC Machines, all types (2005-2006)	4000 Nos		
2	Production and sales of CNC machines, all types in 2006 - 2007	5500 Nos		
3	Total expected value of CNC machines to be produced in 2006 -07	Rs 900 Crores		
4	Estimated cost of imported critical components	Rs 300 Crores		
5	Revenue Loss due to 7.5% reduction in CD ($300 \times .075$) (Rs Cr)		23.00	
6	Additional Sales Turnover at nominal 5% increase ($900 \times .05$)	Rs 45 Crores		
7	Additional Customs duty revenue to the Govt. at 5% = $45 \times .33 \times .05$			1.00
8	Additional Excise duty revenue to Govt at 16% = $45 \times .16$			7.00
8	Expected additional output after installation of these machines (at a nominal 5 times of value)= 45×5	Rs 225 Crores		
9	Additional Excise duty collection from increased output = $225 \times .16$			36.00
	TOTAL LOSS /GAIN (Rs Crores)		23.00	44.00
	NET REVENUE GAIN FOR THE GOVERNMENT(approx)			21.00

- Extending deemed export benefits to coal mining projects, LNG regassification plants, aerial passenger ropeway projects, fertilizer projects, crude petroleum refinery in the 10th Plan and specified equipment for high voltage power transmission projects, as all these attract basic customs duty of 5%.
- For any item imported under the Early Harvest Scheme, inputs for the manufacture of the item in India should be allowed at 5% rate of duty.
- Imposing a 4% additional CVD on all capital goods and project imports attracting nil or 5% duty to counter balance CST/VAT on indigenous capital goods. Imposing a CVD equivalent to the prevailing VAT rates on all imports and on the revenues for reimbursing the States that have provided VAT credit to manufacturers importing these inputs.
 - ***This has been partially granted in the Budget 2006-2007 through notification No. D.O.F. No. 334/3/2006-TRU dated 28.2.06 on the basis of this recommendation being forwarded to the Ministry of Finance by the Ministry of Heavy Industry. However, this is not applicable to the electrical sector including mega power projects and transmission and distribution projects and this requires further consideration.***
- The Excise Duty on machine tools should be exempted for the small scale sector, who do not pay excise duty on their terminal products and hence cannot avail modvat, to encourage them to modernize their manufacturing facilities.

- **This will generate more investment by the SME's and in turn more employment generation.**
- Excise duty on earthmoving and construction equipment should be brought down from 16% to 8% since the excise duty on these equipment are not eligible for CENVAT set off and the manufacturers have to absorb the excise duty, thereby increasing the price of the equipment.
 - **This will increase the sales of equipment which will in turn result in more excise and sales tax collection and increasing mining/construction activity and consequently generation of more employment.**

2. Enhancing Operational Efficiencies

- To help domestic companies specially those in the SME category a Modernization Fund to be constituted to help upgrade technology, retool, install balancing equipment & achieve international benchmarking through absorption of soft technologies.

The Modernization Fund Scheme should have the following three components:

- Technology Upgradation & Modernization (TUM) to assist the industry in installing modern machinery. The objective should be to make the funds available to the industry at globally competitive rates and thereby encourage technology upgradation and modernization.
- Business Development Services (BDS) to assist the industry in availing of competent techno-commercial services. The objective should be to make the globally acknowledged best practices and know-how available to the industry through accredited service providers, which would enable the industry in sharpening its competitive edge.
- Common R&D Facilities (CRDF) to address the critical R&D needs. The objective should be to address the critical needs with respect to common R&D facilities in the identified sub-sectors on a Public-Private-Partnership (PPP) model that would favourably impact the competitiveness of the industry.
- **This will help SME's reach the efficiency levels existing in the larger domestic companies, which will further help the industry to become cost competitive and generate more revenue through export earnings.**
- Higher depreciation on IT hardware and software to encourage more companies to use ICT.

Computer software is present attracting a 60% rate of depreciation under Rule 5, Clause III (5) of Appendix I to I.T. Rules. However, since the product

life of software is very short and software is very expensive yet essential in today's competitive world, it is therefore proposed that the depreciation rate be increased.

- **This will enhance the operational and management efficiencies of the companies and help them improve their topline and bottomline, which will encourage more investments and with the multiplier effect generate more employment.**

3. Higher depreciation rates on CAPITAL GOODS;

It is proposed that rate of depreciation be enhanced from 35% (15% + 20%) to 45% (25% + 20%) in the first year and 25% in the subsequent years across capital goods sector for an initial loading dose of investment for a BIG PUSH to the economy. The government has removed benefits like Investment Rebate which existed earlier to encourage fresh investment and modernization in manufacturing. As Indian industry aspires for global competitiveness, it is appropriate to consider fiscal measures which are in consonance with current technology and practices.

- **Higher depreciation rates can be one important incentive for investment.**

3. The testing facilities at CPRI, which can test equipment of very large capacities and higher voltages, needs augmentation since the present capacity of CPRI is inadequate both in terms of capacity and voltage class. The facilities if not augmented on a war footing may be a constraint for production of electrical equipment to cater to the ambitious plan of adding 60000 MW of power generating capacity during the 11th plan period.

- **Will enable companies to deliver quality equipment at a lower cost.**

3. Provide the State Electricity Boards with a mandate of releasing payments within 70 days from receipt and clearance of material.

- **This will enhance the profitability of companies to enable them to spend more on their employees.**

4. Import of second hand machinery is leading to unhealthy price competition, indirectly affecting quality and productivity. The policy on this needs to be re-looked at as suggested in the report.

The Industry feels there is an urgent need to monitor and curb the imports of second hand equipment in the machine tools industry and the construction and mining equipment industry. To allow Industry to effectively monitor the type and quality of machines being imported, it is proposed that imports of second hand equipment may be restricted to a few ports. This will enable not only effective

data collection, monitoring but also training can be imparted to the Customs officials for proper evaluation of the machines.

The other measures are detailed in each section of the relevant industry like homologation, permitting only Machines of CIF value more than Rs 1 Cr and machines having “CE Mark”.

- **Restriction of ports will help in effective monitoring and building of database for analysis.**
- **This will not only help the smaller domestic companies but will also stop imports of junk machinery / machinery creating environmental hazards.**

GOVERNMENT ACTIONS (LONG TERM)

1. Indigenous companies with the capability of developing 765Kv substation equipment should be assured orders in sufficient quantity.
2. National campaign to create awareness on next generation practices & awareness among manufacturing companies.
3. To encourage transfer and assimilation of the latest technology, a National Technology Policy for critical areas should be introduced.
4. Research & Development
 - Review existing policies relating to R&D funding, incentives for supporting generic technologies, engineering & physical sciences.
 - i. 150% weighted deduction on R&D expenditure should be allowed to all capital goods manufacturers under the Income Tax Act Section 35 to full fledged R&D departments.
 - ii. Customs duty or excise duty for laboratory testing equipment should be reduced to 5 %, or exempted respectively. (A separate notification giving details of laboratory and testing equipment may be issued.)
5. GOI to ensure procurement of a certain percentage of products from Indian companies wherever GOI provides a line of credit to another country thereby generating demand and the experience required for pre-qualification for future orders.
6. GOI should ensure that one of the steel plants caters to the CRGO requirements of the electrical equipment industry.
7. GOI should also ensure that the domestic steel industry tries to meet the requirements of the process plant equipment sector in terms of availability of quality raw material for the manufacturers.

8. To remove regional disparities, VAT should be applicable across all States and CST should be removed in a phased manner by 2010.

9. Infrastructure Issues

The manufacturing sector and in particular the four sectors under study are facing disadvantages when compared to their International competitors due to the poor infrastructure available in India in terms of

- Unreliable power and high cost per unit.
- Port congestion and high turnaround time
- High cost of fuel and poor road connectivity of port/airports with hinterland leading to higher transportation cost.

10. To encourage companies to enhance exports and to compensate them for the infrastructural disadvantages faced, the Government of India should consider extending the SEZ legislation to Virtual SEZ companies. This is similar in concept to the current EOU scheme.

Any unit with exports more than 50% of its production in a block of three years, wherever it may be located, can be considered to be a deemed VSEZ. Further detailing of the proposal is provided in the report.