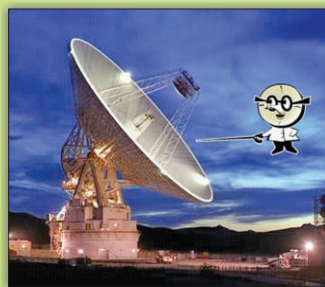


# OVERVIEW

## COMPENDIUM ON TECHNOLOGY EXPORTS

AN ILLUSTRATIVE COMPILATION OF  
EXPORTED & EXPORTABLE TECHNOLOGIES FROM INDIA

VOLUME IX



**DEPARTMENT OF SCIENTIFIC AND  
INDUSTRIAL RESEARCH  
AND  
INDIAN INSTITUTE OF FOREIGN TRADE**

**NEW DELHI**

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Exported & Exportable Technologies from India

# AN OVERVIEW

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NEW DELHI

JANUARY 2010

# Foreword

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Innovation and adoption of new technology are critical areas for sustaining high economic growth. With the advent of globalization, the world is increasingly becoming interdependent, not just in the supply of raw materials and machinery, but more so in terms of technology as well as knowledge sharing and transfer, including technology exports. In fact, science, technology and innovation are going to determine the economic and political power of the nations.

Exports have been key to economic growth in most countries. With India's technology prowess and the focus shifting to newer markets in the foreign trade policy recently announced by the Government of India, there is an excellent opportunity for our country to have a competitive advantage in technology led exports. While India has a large domestic market, it would be prudent to explore newer markets worldwide. It is wise to remember Peter Drucker's words that there is no distance in today's world economy and that everything is 'local'. We need to constantly innovate and improve technology so that India is on the global map.

Over the years, India has achieved a degree of competitiveness in knowledge and technology-intensive products. Our country has been making concerted efforts for building technology strengths and efficiency in sectors like agriculture, manufacturing, software and services, thereby improving its competitive strength and encouraging the attainment of globally accepted standards of quality. Many developing countries need technologies as well as plant & machinery relevant to their development levels. India could be one of the potential suppliers to such countries. However, these countries usually lack access to information on sourcing their requirements and thus there exists a need to disseminate the same.

The Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, Government of India has taken the initiative of documenting the technologies exported from India. Partnering with Indian Institute of Foreign Trade (IIFT), a '*Compendium on Technology Exports: An Illustrative Compilation of Exported & Exportable Technologies from India*' is being brought out since 1996 with the main objective of disseminating detailed information on export of Indian technologies, technology-intensive exports, covering projects, equipments, products and services. The publication serves as a ready source of reference to overseas customers who are looking for partnerships with India. It is also helpful to Indian exporters in taking their business beyond national boundaries. This *Compendium on Technology Exports* is widely disseminated to the organizations dealing with technology intensive trade, including policy-makers, export promotion bodies, R&D

institutions, consultants, trade & industry and foreign missions. This project is sponsored and supported by the DSIR.

The previous editions of the *Compendium* were well received and earned considerable appreciation from various quarters. Encouraged by its overwhelming response, the Institute has brought out the present volume of the *Compendium on Technology Exports (Vol.IX)*—which is the 9th edition. This volume includes data for the years 2002-03 to 2007-08. We are grateful to all those organizations who shared the export data and hope that they would continue to associate and cooperate with us in future also.

The present issue of the *Compendium on Technology Exports* has a larger coverage and deeper analysis of data compared to earlier volumes. The *Compendium* includes primary data collected by IIFT through well designed field studies for about 418 organizations and companies. The data has been analyzed based on sectors and technology intensity-yearwise. The data on R&D expenditure, number of S&T personnel, foreign collaboration, etc., has also been collected and analyzed.

This *Compendium* is prepared by a study team, comprising researchers and other supporting staff in IIFT under the overall guidance of Head, Centre for International Trade in Technology (CITT). Senior officers from DSIR have worked very closely with the IIFT Study Team and contributed significantly in the preparation of the present volume.

I am sure that this document will be useful to industries engaged in technology exports as well as to academic institutions & researchers who are conducting studies in this area.

**K.T. CHACKO**

*Director*

**Indian Institute of Foreign Trade**

January 2010

# Preface

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Indian industries have developed strong industrial and technological capabilities in several sectors, which can be used by India and other countries for mutual benefits. In today's highly competitive world, each country is trying to increase its value added exports by exporting technologies, projects & services and improve its ranking in the world trade. Global high technology exports increased to US\$1,418 billion in 2006 from US\$1,004 billion in 2000. In comparison, India's high technology exports stood at US\$3,511 million in 2006 compared to US\$1,680 million in 2001. Technology exports of India are estimated at 5 per cent of manufactured exports compared to 30 per cent in China and 54 per cent in Malaysia. India has been taking measures and steps from time to time to increase the share of its technology exports in global trade. These include integration with WTO, adoption of a patent system in accordance with TRIPs, formation of a National Manufacturing Competitiveness Council to strengthen the manufacturing sector, facilitating industries to conform to international test protocols and best quality practices and signing free trade agreements (FTAs) with target countries to boost trade with them. Recently, India signed an FTA with 10-member ASEAN setting a target of US\$10 billion trade in the first year after the agreement comes into force. The Foreign Trade Policy (FTP) 2009-2014 stipulates that India needs to encourage value addition in our manufactured exports and exporters need to be supported for technological upgradation. FTP also encourages production and export of 'green products' and technologies.

During 2008-09, India's merchandise exports were US\$168.7 billion and services exports were US\$101.22 billion. While share of merchandise exports in world exports is little below one per cent with India's rank being 28-30, the share of services exports in world exports is 2.7 per cent with India's rank being 10. Technology intensive exports (taken to be exports of capital goods, computer software services, consultancy and management technical services, turnkey projects, construction, contracts, inflows from joint ventures and wholly owned subsidiaries abroad, in this publication) from India had a share of around 25 per cent in actual exports from the country (comprising merchandise exports and RBI's miscellaneous receipts) in 2007-08 compared to a share of 19.5 per cent in overall exports in 2002-03, indicating that there is a need to take innovative steps for achieving a quantum jump in technology intensive exports from the country.

The Department of Scientific and Industrial Research (DSIR) of Government of India has been implementing an International Technology Transfer Programme, which aims at promoting transfer of technologies, projects and services from India with a view to create Indian brand image and enhance the reach of Indian industry beyond the national boundaries as well as promoting transfer of technologies from other countries to India with a view to enhance the technology export capability of Indian industry. Comprehensive data on technology exports, in respect of many countries, including India is not readily available. With a view to bridge this gap, DSIR made a beginning in 1994-95 by presenting the limited data available in the form of a *Compendium on Technology Exports from India*. Eight volumes of the *Compendium* have been published so far in collaboration with Indian Institute of Foreign Trade (IIFT), New Delhi.

The present volume of the *Compendium*, containing data for the period 2002-03 to 2007-08 is the ninth in the series, presenting data on 418 organizations. The publication also captures the list of all the 654 companies that have responded to either of the nine surveys done in the past, many of them, of course responding to more than one survey. Out of these, export data of 581 companies from 2000-01 to 2007-08 have been given and remaining 73 companies, who stopped responding to the survey beyond the year 2000 have been just listed. Out of 418 organizations covered by the recent survey, 367 organizations have reported technology intensive exports that increased from Rs. 387.49 billion in 2002-03 to Rs. 1,856.78 billion in 2007-08. UNCTAD classifies technology exports into high, medium and low technology exports and according to this survey, the share of high technology exports in technology intensive exports is in the range of 25-35 per cent and the balance share being of the medium technology and low technology exports. High Technology exports reported by the survey include exports of precision machine tools, active pharmaceutical ingredients, specialty chemicals, petroleum refining technology, biopharmaceuticals, engineering & construction projects and electronics products. Among the 367 exporting organizations covered by the survey, 180 organizations have reported foreign collaborations. Exports of these 180 organizations grew at 19.16 per cent over 2006-07 to 2007-08 and export of 187 companies without foreign collaborations grew at 25.21 per cent over the same period, signifying that foreign collaborations did not have a positive impact on technology intensive exports. However, the R&D expenditure of these 367 firms show that they have a multiplier effect on exports, with exports almost doubling during 2005-06 to 2007-08, whereas increase in R&D expenditure was just 36 per cent during the same period.

We are thankful to the Indian Institute of Foreign Trade, New Delhi for collaborating with DSIR in bringing out the *Compendium*. We also appreciate the cooperation received from concerned government departments and agencies, banks and financial institutions, particularly the Reserve Bank of India and EXIM Bank, industrial and consultancy organizations, associations, research institutions and the exporting companies, who have provided invaluable inputs in bringing out the *Compendium*.

While inadequacies usually inherent in preparation of such a volume cannot be ruled out, we are encouraged by the fact that this document is perhaps the only document in the country with primary data on technology intensive exports of as many as 418 organizations. Even then, the survey cannot be termed comprehensive since it is believed that there are many more technology intensive organizations still outside the ambit of the survey. However, a moderate sized database of technology intensive organizations has been built up for understanding the nature of our technology intensive exports. We hope the presentation of this data will be found useful. Suggestions, if any, to add further value to the *Compendium* and enrich this data resource would be most welcome.

January 2010

**Department of Scientific and Industrial Research**  
Ministry of Science and Technology  
Government of India

# Highlights at a glance

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1. World high technology exports increased from US\$1,149 billion in 2002 to US\$1,419 billion in 2006, registering an increase of 23.50 per cent. The average percentage share of high technology exports in manufactured exports remained at about 21 per cent during the same period. India's high technology exports rose to US\$3,511 million in 2006, an increase of 96.36 per cent over US\$1,788 million in 2002. However, the average percentage of high technology exports remained at 5 per cent of manufactured exports.
2. Growth of technology exports is reflected in the receipts of royalty and licence fee when know-how are licensed. India's receipts of royalty and licence fee (signifying technology exports) increased to US\$112 million in 2006 from US\$25 million in 2005, showing an increase of 348 per cent over the previous year. The royalty and licence fee payments (signifying technology imports) increased to US\$949 million in 2006 from US\$421 million in 2005, showing an increase of 125 per cent over the previous year.
3. UNCTAD's *World Investment Report 2002* categorises companies into low technology, medium technology and high technology companies. As per this classification, the 367 companies surveyed in this *Compendium* include 76 companies dealing with low technology products; 195 companies dealing with medium technology products; and 96 companies dealing with high technology products.
4. Technology intensive exports taken to be exports of capital goods, computer software services, turnkey projects & consultancy services, engineering services, joint ventures and wholly-owned subsidiaries, etc. were 19.49 per cent of the gross merchandise exports and services exports in 2002-03, which increased to 26.12 per cent in 2006-07. However, this momentum could not be maintained due to recessionary trends in developed countries and the percentage share of technology intensive exports fell to 24.72 per cent in 2007-08.
5. Time series data for the period 2002-03 to 2007-08 show that total exports of 367 surveyed companies increased from Rs. 387.50 billion in 2002-03 to Rs. 1,856.78 billion in 2007-08, registering an increase of 379.17 per cent.
6. Among the 367 surveyed companies, exports of low technology products increased approximately seven times from the period 2002-03 to 2007-08 and medium technology and high technology products increased more than three times during the same period.

7. Industry sectorwise analysis of exports of 367 surveyed companies during 2007-08 show that chemicals and allied products was the major area of exports. Other sectors showing a significant contribution include medicinal & pharma products, transport equipments, manufacture of metals, project goods, electrical machinery and consultancy services.
8. Share of exports of sectors like textiles, chemicals, machinery, metal manufactures, transport equipment, pharmaceutical product, electronic goods, plastics, machine tool, consultancy services and project goods, taken to be technology intensive exports remained at around 50 per cent of India's total merchandise exports from 2002-03 to 2007-08. Exports of the 367 surveyed companies, if classified into the same sectors show that their share in total merchandize exports increased to 28.31 per cent in 2007-08 from 15.19 per cent in 2002-03. This indicates that the quality of survey is improving and it is able to capture technology intensive exports more realistically (export of surveyed companies, coming closer to 50 per cent of total merchandize exports).



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# COMPENDIUM ON TECHNOLOGY EXPORTS AN OVERVIEW

## 1. Introduction

TRADE and globalization have brought myriad benefits to many countries. Trade has allowed countries to benefit from specialization and economies to produce at a more efficient scale. It has raised productivity and supported the new technologies. The main among the technological drivers of globalization are innovations that have improved the speed of transport and communications and lowered their cost. These include the development of the jet engine, containerization in international shipping, and the revolution in ICT (information & communication technology). Equally notable are the changes in production methods which have created new tradable products, expanded global production in food and made manufacturing more efficient. Therefore, technology and technological capabilities are recognized as a prime driving factor for growth and competitiveness in trade and industry. Share of technology intensive trade in world trade has been steeply increasing in recent years, generally dominated by developed countries. However, many developing countries including India are now emerging as competitive sources for technology based products, projects, processes, services, and are aiming at enhancing their technological and innovation capabilities for larger export share in world trade.

During the period 2003-09, India enjoyed an average 8.6 per cent growth rate but this came down heavily with the meltdown. India had 6.7 per cent growth rate in 2008-09. As the economic downturn has been arrested and the manufacturing sector is witnessing a revival it may be between 6 and 7 per cent of GDP in 2009-10. Growth has been driven by a jump in export-oriented and skill intensive manufacturing like pharmaceuticals, auto components, and services sector. These sectors have been accompanied by innovative activities in India.

Compilation, analysis and dissemination of information about our capabilities in technology intensive exports including sources of such exports, is important for enhancing awareness among the prospective importers, industry & trade, policy makers, R&D and academics, consultants, etc. This publication, *Compendium on Technology Exports (Vol.IX)* is a step forward to provide a detailed information on technology intensive exports by industry in India for the years 2006-07 & 2007-08, based on field surveys and secondary research. It contains profiles of exporting companies, technology export world trends, the policies and incentives for promoting technology intensive exports, etc. Time series export data for last five years have been given. Data related to R&D expenditures, FDI and technology intensive exports have been also examined.

## 2. International Technology Indicators

World merchandise exports in dollar terms rose by 16.29 per cent to US\$15.78 trillion in 2008 from US\$13.57 trillion in 2007. Similarly, world exports in commercial services rose by 14.42 per cent to US\$3.73 trillion in 2008 from US\$3.26 trillion in 2007.

India's merchandise exports valued at US\$169 billion in 2008-09, showing an increase of 3.68 per cent over US\$163 billion in 2007-08. Country's share in world merchandise exports remaining unchanged at 1.0 per cent between 2005 and 2006, reached 1.1 per cent in 2008.

India's commercial services exports comprising travel, transportation, insurance, software and other commercial services, rose by 12.32 per cent to US\$101.2 billion in 2008-09 from US\$90.1 billion in 2007-08, having a share of 2.7 per cent in world export of commercial services.

As per the *Global Competitiveness Report 2009-10*, India has improved on its GCI position by one rank to the 49<sup>th</sup> slot from 50<sup>th</sup> in 2008-09. Among BRIC countries, China has the best ranking at 29<sup>th</sup> place. Brazil occupied the 56<sup>th</sup> slot, and Russia came in at 63<sup>rd</sup>.

TABLE 1

GLOBAL COMPETITIVENESS INDEX: HOW INDIA FARED

	Rank (Out of 133)	Score (1-7)
GCI 2008-09	50	4.3
GCI 2007-08	48	4.3
<b>Basic requirements</b>	79	4.2
1 <sup>st</sup> pillar: Institutions	54	4.2
2 <sup>nd</sup> pillar: Infrastructure	76	3.5
3 <sup>rd</sup> pillar: Macroeconomic stability	96	4.2
4 <sup>th</sup> pillar: Health and primary education	101	4.8
<b>Efficiency enhancers</b>	35	4.5
5 <sup>th</sup> pillar: Higher education and training	66	4.0
6 <sup>th</sup> pillar: Goods markets efficiency	48	4.4
7 <sup>th</sup> pillar: Labour market efficiency	83	4.2
8 <sup>th</sup> pillar: Financial market sophistication	16	5.1
9 <sup>th</sup> pillar: Technological readiness	83	3.3
10 <sup>th</sup> pillar: Market size	4	6.1
<b>Innovation and sophistication factors</b>	28	4.2
11 <sup>th</sup> pillar: Business sophistication	27	4.8
12 <sup>th</sup> pillar: Innovation	30	3.7

Source: *Business Standard*, 9 September 2009

India's competitive performance continues to exhibit a rather reversed development pattern. It precedes many advanced economies in terms of business sophistication and innovation capacity. India also boasts of bustling financial markets and a sound banking sector, supported by well-functioning institutions, World Economic Forum (WEF) has said.

In terms of well-functioning institutions, India is at the 54<sup>th</sup> place while at 16<sup>th</sup> and 25<sup>th</sup> spots in terms of bustling financial markets and a sound banking sector supported by a vast domestic market was at 4<sup>th</sup> slot.

On the other hand, the WEF Report noted that India underperforms in some of the basic determinants of competitiveness, in particular infrastructure, health and primary education. In addition, penetration rates for mobile telephony (116<sup>th</sup>), the Internet (104<sup>th</sup>) and personal computers (96<sup>th</sup>) remain among the lowest in the world, while inefficiencies in the labour market (83<sup>rd</sup>) prevent an optimal allocation of

human capital. Improvement in these areas would place India on a stronger growth trajectory going into the future.

Expenditure on research and development (R&D) is a key indicator of government and private sector efforts to obtain competitive advantage in science and technology. Evidently, R&D comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including of man, culture and society, and the use of this stock of knowledge to devise new applications.

Liberalization of economics, breaking of barriers, movement from suppliers of material parts to suppliers of intellectual inputs, and aggressive inputs, and aggressive investments in science and technology capacity by both government and industry have all contributed to a major shift in the global R&D picture. In addition, industrial support of R&D has been relatively stable, growing steadily as the tie-in between technical advances and profitability and economic growth became more evident. Industrial investment in R&D—quite often prompted by the spin-off benefits that arose from government-sponsored efforts—helped to strengthen companies, expand markets, and support networks of internal and external research capacity. The overall R&D activities have been changing rapidly over the last one decade.

The past few years have witnessed rather considerable growth in the amount of R&D that has been funded by the US companies but performed in other countries, mostly in China and India. The rapid growth of R&D activities in these two countries, in addition to accelerated programmes in South Korea, Singapore, and other Asian countries, have resulted in a negative balance of trade.

In a recent Booz report on the flow of R&D investments between countries (*Beyond Borders: The Global Innovation 1000*), the authors note that “a number of countries have significant two-way flows of inward and outward investment. The USA is the greatest example of this; among the 184 companies subset, US companies invested US\$80.1 billion in overseas R&D, while US\$42.6 billion was invested in the USA by overseas firms. In fact, about 40 per cent of the R&D in the USA comes from firms headquartered outside the country.

Several new initiatives have been taken or proposed to be taken to promote and strengthen S&T capabilities and outputs in India. These include technology venture capital funds, public-private partnerships, centres of excellence for higher studies, improving quality of education and developing human resources in S&T, forging foreign alliances and partnerships, modernising and expanding Indian Patent Office, sectoral R&D and testing facilities in areas such as automotives, food processing, textiles, pharma, etc. Innovation and R&D in industry is also being encouraged and special attention is being given to medium and small enterprises.

India has been ranked 76<sup>th</sup> in global enabling trade index (ETI) reflecting a mixed performance on four pillars, i.e. Market Access, Border Administration, Transport & Communication Infrastructure and Business Environment. Consequently, India is ranked 116<sup>th</sup> in market access among the 121 countries surveyed in the *Global Enabling Trade Report 2009* with tariff barriers representing

more serious impediments than non-tariff barriers. Trade-related transport infrastructure and the relevant services are equally well developed in India, ranking 64. The country is well connected through maritime routes although it is developing more airports and high quality roads. On business environment, India ranks at 53<sup>rd</sup>.

### **3. World Exports of Technology**

World's high technology exports increased from US\$1,149 billion in 2002 to US\$1,419 billion in 2006, registering an increase of 23.50 per cent. The percentage share of high technology exports in manufactured exports also remained at 20.4 per cent during the same period as shown in Table 2.

World export of high technology products by major countries is shown in Table 3. In 2006, China with US\$271 billion was the leading country, followed by USA (US\$219 billion), Germany (US\$155 billion), Japan (US\$127 billion), Singapore (US\$124 billion) and the UK (US\$115 billion). But two countries, namely Philippines, and Malaysia had much more percentage share in manufactured exports, i.e. 68 and 54 per cent in comparison to other countries in 2006. The Philippines' export of high technology products was valued at US\$28 billion, and Malaysia's at US\$63 billion.

India's exports of high technology products increased from US\$1,788 million in 2002 to US\$3,511 million in 2006, registering an increase of 96.36 per cent. Its average percentage in manufactured exports remained at 5. Comparatively, China has emerged as the leading country for export of high technology products. Although as per percentage share in manufactured exports, it remained fifth at 30 per cent in comparison to select Asian economies as shown in Table 4. The Philippines (68%), Singapore (58%), Malaysia (54%) were the other Asian economies. These data clearly show that India needs to raise its share of high technology exports in manufactured exports from about 5 per cent towards the world level of 20 per cent though some of the Asian countries have a level of more than 50 per cent. However, the definition of technology exports appears to be arbitrary and is debatable in various countries.

### **4. Royalty and Licence Fee**

Growth of technology exports is reflected in the receipts and payments of royalty and licence fee in the world trade of technology in cases where know-how is licensed. Receipts and payments of licence fee and royalty are the important components, which show the intensity in the development of technology trade world over. According to the *World Development Indicators*, India's receipts of royalty and licence fee increased to US\$112 million in 2006 from US\$25 million in 2005 and 2004 and US\$29 million in 2003, while it was as low as US\$12 million in 2002.

On the contrary, India's payments for the same increased to US\$949 million in 2006 from US\$421 million in 2005 (Table 5), showing an increase of 125 per cent over the previous year. Among select countries with regard to payment of royalty and licence fee, the USA was leading, followed by Ireland, Japan, Singapore, UK, Germany, Canada, China, South Korea, the Netherlands and France. In case of China, receipts were only US\$205 million and payments were at US\$6,634 million

in 2006 increasing from US\$157 million and US\$4,398 million in 2005. In case of South Korea, receipts were US\$1,827 million and payments were US\$5,321 million in 2005 and receipts further increased to US\$2,011 million and but payment fell to US\$4,487 million in 2006. *Data show that higher the ratio between the receipts and payments, higher the technological competitiveness.* At the same time, higher the payment means higher the technology based manufacturing activity or higher the efforts to strengthen technological capabilities. In case of India, neither the technology payments are high nor is the ratio of receipts to payments high. This is a matter of concern and needs attention at policy and industry levels.

**TABLE 2**  
**WORLD EXPORT OF HIGH TECHNOLOGY EXPORTS, 1988-2006**

(US\$ million)

Year	High technology exports	High technology exports (% of manufactured exports)	Merchandise exports	Exports of goods and services
1988	207,142	11.11	2,762,231	3,551,335
1989	328,187	17.43	2,996,834	3,839,897
1990	377,850	17.19	3,432,703	4,384,471
1991	415,060	17.65	3,512,325	4,471,431
1992	462,232	17.38	3,760,710	5,001,462
1993	480,424	18.18	3,746,324	4,848,306
1994	571,882	18.59	4,243,446	5,382,298
1995	709,111	19.29	5,078,355	6,356,240
1996	753,308	19.42	5,347,203	6,660,179
1997	834,998	20.66	5,537,196	6,899,404
1998	881,625	21.42	5,446,938	6,794,415
1999	960,790	22.70	5,654,386	7,019,193
2000	1,003,791	19.97	6,355,992	7,835,392
2001	--	23.00	6,155,800	7,608,203
2002	1,149,146	21.00	6,492,000	8,086,000
2003	1,043,222	18.00	7,585,000	9,414,000
2004	1,269,586	20.00	9,220,000	11,430,000
2005	1,243,114	22.00	40,485,000	12,958,000
2006	1,418,509	21.00	12,113,000	14,891,000

Sources: World Bank, *World Development Indicators 2008* (and various issues) Washington, DC (USA) and WTO, *International Trade Statistics, 2008*, Geneva.

TABLE 3

**HIGH TECHNOLOGY EXPORTS BY MAJOR COUNTRIES**  
**According to Percentage Share of Manufactured Exports (2002 to 2006)**

(Value: US\$ million)  
 (%age: Manufactured exports)

Country	2002		2003		2004		2005		2006	
	(US\$)	(%)	(US\$)	(%)	(US\$)	(%)	(US\$)	(%)	(US\$)	(%)
USA	162,345	32	160,212	31	216,016	32	233,079	32	219,179	30
China	68,182	23	107,543	27	161,603	30	214,246	31	271,170	30
Japan	94,730	24	105,454	24	124,045	24	122,680	22	126,618	22
Germany	86,861	17	102,869	16	131,838	17	137,547	17	154,757	17
Singapore	63,792	60	71,421	59	7,742	59	05,078	57	124,133	58
UK	71,481	31	64,511	26	64,295	24	2,841	28	115,464	34
Korea Rep	46,438	32	57,161	32	75,742	33	83,527	32	92,945	32
France	52,582	21	56,336	19	64,871	19	9,673	20	80,525	21
Netherlands	33,667	28	49,546	31	55,211	29	65,758	30	69,210	28
Malaysia	40,912	58	47,042	58	52,868	55	57,376	55	63,411	54
Mexico	28,939	21	28,734	21	31,832	21	32,262	20	35,732	19
Ireland	31,624	41	27,578	34	30,239	34	-	-	31,840	34
Philippines	11,488	65	23,942	74	-	-	26,077	71	27,626	68
Switzerland	1,077	21	20,472	22	24,121	22	25,544	22	29,261	22
Thailand	15,234	31	18,203	30	18,203	30	22,480	27	26,953	27
Finland	9,139	24	10,485	24	10,625	21	13,835	25	13,990	22
Hungary	7,364	25	9,631	26	14,158	29	13,045	25	14,915	24
Israel	5,414	20	5,322	18	6,861	19	4,937	14	5,565	14
Denmark	8,089	22	8,402	20	9,686	20	11,733	22	11,455	20
India	1,788	5	2,292	5	2,840	5	2,840	5	3,511	5
Brazil	6,007	19	4,505	12	5,929	12	8,007	13	8,426	12
Hongkong, China	2,688	17	1,845	13	80,109	32	94,808	34	1,788	11

Source: World Bank, *World Development Indicators 2008* (and various issues), Washington, DC (USA).

**TABLE 4**  
**HIGH TECHNOLOGY EXPORTS BY SELECT ASIAN ECONOMIES (2001 TO 2006)**

(Value: US\$ million)

Year	India		China		Thailand		Philippines		Malaysia		Singapore	
	Value	% of mfgd. exports	Value	% of mfgd. exports	Value	% of mfgd. exports	Value	% of mfgd. exports	Value	% of mfgd. exports	Value	% of mfgd. exports
2001	1,680	6.00	49,427	20.00	15,286	31.00	21,032	70.00	40,939	57.00	62,572	60.0
2002	1,788	5.00	68,182	23.00	15,234	31.00	11,488	65.00	40,912	58.00	63,792	60.0
2003	2,292	5.00	107,543	27.00	18,203	30.00	23,942	74.00	47,042	58.00	71,421	59.00
2004	2,840	5.00	161,603	30.00	18,203	80	13,913	64	52,868	55.00	87,742	59.00
2005	2,840	5.00	214,246	31.00	22,480	27	26,077	71	57,376	55.00	105,078	57.00
2006	3,511	5.00	271,170	30.00	26,953	27	27,626	68	63,411	54.00	124,133	58.00

Source: World Bank, *World Development Indicators 2008* (and various issues) Washington, DC (USA).

**TABLE 5**  
**RECEIPTS & PAYMENTS OF ROYALTY AND LICENCE FEE OF SELECT COUNTRIES (2002 TO 2006)**  
(US\$ million)

Country	2002		2003		2004		2005		2006	
	Receipts	Payments	Receipts	Payment	Receipts	Payments	Receipts	Payments	Receipts	Payments
USA	44,142	19,258	48,227	0,049	52,643	23,901	57,410	24,501	62,378	26,433
Ireland	249	10,347	206	16,160	221	18,444	589	19,426	1,028	20,815
Japan	10,422	11,021	12,271	1,003	15,701	13,644	17,655	14,653	20,096	15,500
UK	7,701	5,993	10,245	7,382	12,019	8,368	13,303	9,069	13,588	9,962
Singapore	--	--	197	3,334	224	5,647	544	8,647	730	10,470
Canada	1,689	3,651	2,555	4,821	3,019	5,528	3,471	6,649	3,245	7,320
Germany	3,765	5,064	4,262	5,242	5,103	5,759	6,828	6,589	5,888	7,843
South Korea	826	2,979	1,325	3,597	1,790	4,450	1,827	5,321	2,011	4,487
China	133	3,114	107	548	236	4,497	157	4,398	205	6,634
Netherlands	1,962	2,612	1,885	829	4,205	3,339	3,866	3,692	4,126	3,865
France	3,241	1,956	3,942	2,436	5,070	3,142	5,924	3,230	6,230	3,298
Spain	370	1,810	539	2,505	486	3,032	561	2,864	922	2,504
Italy	539	1,273	525	1,698	770	1,751	1,131	1,942	1,116	1,840
Thailand	7	1,104	7	1,268	14	1,584	17	1,674	46	2,046
Australia	304	1,012	394	1,268	472	1,437	508	1,645	621	2,221
Russia	147	338	174	711	227	1,094	260	1,593	299	2,002
Sweden	1,505	888	2,336	1,277	3,459	1,420	3,324	1,498	3,964	1,618
Brazil	100	1,229	108	1,228	114	1,197	102	1,404	150	1,664
Malaysia	12	628	20	782	20	782	27	1,370	26	1,052
Austria	111	1,053	115	1,117	170	1,241	177	1,334	177	1,334
Hong Kong, China	196	491	196	491	341	864	218	1,111	245	1,289
Hungry	350	399	313	440	551	949	834	1,068	627	1,056
Poland	34	557	28	745	27	880	61	1,036	38	9,313
Argentina	17	225	32	342	58	483	54	635	71	807
New Zealand	89	347	118	436	98	485	101	555	123	487
Norway	171	325	195	394	242	485	364	546	760	553
Israel	389	450	425	435	493	464	610	537	596	679
India	12	350	29	356	25	421	25	421	112	949
Mexico	48	720	84	608	92	805	70	111	171	503
<b>World</b>	<b>79,611</b>	<b>82,187</b>	<b>92,116</b>	<b>936,630</b>	<b>09,808</b>	<b>20,273</b>	<b>123,690</b>	<b>34,689</b>	<b>135,278</b>	<b>148,578</b>

Source: World Bank, *World Development Indicators 2008* (and various issues), Washington, DC (USA).



## 5. Impact of Financial Meltdown on Exports

The global financial meltdown has slowed down the economic growth. It has also impaired the access to trade finance. Trade finance has been used in more than 90 per cent of trade transactions in the world.

India's sustained export growth witnessed in recent years was facilitated, *inter alia*, by conducive policy environment, changes in the commodity basket, market diversification, exchange rate stability and terms-of-trade benefits stemming from general increase in the prices of certain export items. In spite of the special policy focus accorded to the traditional sectors like textiles, leather and handicrafts, their performance during the high export phase was relatively sluggish due to structural reasons. At the same time, manufactured products like engineering goods, petroleum products and chemicals have emerged as the major drivers of exports growth.

India's high growth in 2007-08 was due to the high growth of all the three categories of export, viz. petroleum products with 53.6 per cent growth, manufactured goods with 21 per cent growth and primary products with 41.9 per cent growth. Export growth in manufactured goods was powered by the high growth of important items like gems and jewellery at 23.2 per cent and chemicals and related products at 22.1 per cent and moderate growth of engineering goods at 14.5 per cent and textiles including readymade garments at 11.8 per cent.

The slowdown in exports in 2008-09 was mainly due to demand recession in OECD as well as developing countries, both of which have major shares of about 38 per cent each in India's exports. In 2008-09 (April-February), exports growth to OECD countries decelerated mainly due to slowdown in exports to European Union, North America and Asia & Oceania. Exports to developing countries showed a decline primarily due to moderation in exports growth/decline in exports to SAARC and other Asian developing countries as also to African and Latin American developing countries. OPEC, which has about 19 per cent share in India's exports, however, maintained the high growth momentum.

In 2008-09 (April-February) as a result of global recession, the overall growth of exports in US dollar terms was only 6.6 per cent compared to 28.9 per cent in the corresponding period of the previous year. Manufactured goods with 10.4 per cent registered double digit growth. Among the manufactured goods, engineering goods registered higher growth. Petroleum exports including coal witnessed a growth rate of only 3.5 per cent. While gems & jewellery, handicrafts, agriculture and allied items and ores and minerals exports registered negative growth, textiles including RMG and leather & leather manufactures showed low growth.

Slowdown in exports of labour-intensive sectors, is a concern because of its adverse implications for employment. Thus, the concentration of export slowdown in employment intensive and relatively low technology sectors could potentially enhance the adverse effects of a global slowdown because of the loss of employment associated with such decline in exports.

## 6. India's Exports of Technology Intensive Products/Services

There is no standard definition of technology exports or technology intensive exports. In this *Compendium*, technology intensive exports are considered as capital goods, computer software services, turnkey projects and consultancy services, engineering services, joint ventures and wholly-owned subsidiaries, etc. Obviously, technology intensive exports would be more than technology or high technology exports as described earlier. India's exports of technology intensive products/

services have shown a growth over a period of six years in Table 6. Since 2002-03, technology intensive exports as defined above, increased from Rs. 631.56 billion to Rs 1,052.84 billion in 2004-05, showing an increase of 66.70 per cent. In 2004-05, technology intensive exports increased to 27.90 per cent over 2003-04.

Likewise, in 2006-07 percentage reached to 41.16 over 2005-06. In growth of exports of technology, as in 2007-08, major sectors were capital goods (Rs 518.81 billion), computer software services (Rs 1,250.00 billion), turnkey projects (Rs 155.43 billion), construction (Rs 105.31 billion), consultancy services (Rs 8.52 billion) and engineering services (Rs.101.10 billion). The share of technology intensive exports was 19.49 per cent of the gross merchandise exports and services exports (given by miscellaneous receipt recorded by RBI) in 2002-03, which increased to 23.88 per cent in 2005-06 and 26.12 per cent in 2006-07. This momentum could not be maintained due to recessionary trends in developed countries and the growth rate fell to 24.72 per cent in 2007-08.

The structure of India's economy changed over the last ten years with contribution of the services sector to GDP at well over 50 per cent. Manufactured exports constitute around 70 per cent in India's total exports. Evidently bringing technology intensive manufacturing to the centre-stage can help in increasing merchandise exports at rates substantially above the world average, to reach a higher share in world exports, and ride the value chain for long-term sustainability.

**TABLE 6**
**INDIA'S EXPORTS OF TECHNOLOGY INTENSIVE PRODUCTS/SERVICES**

(Rs. crore)

Sl. No.	Sector	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	%age change in 2007-08 over 2006-07
1.	Capital goods*	10,288	15,831	20,843	31,378	41,963	51,881	23.64
2.	Computer software service	46,500	58,240	78,230	105,000	146,000	125,000	-14.38
3.	Exim Bank export contracts							
	(a) Turnkey projects	3,122	4,032	2,340	8,771	9,380	15,543	65.70
	(b) Construction	1,696	1,458	1,490	663	4,360	10,531	141.54
	(c) Consultancy services	266	143	263	245	270	852	215.56
4.	Engineering Services <sup>1</sup>	925	960	1,100	3,623	8,050	10,110	25.59
5.	Joint Ventures & Wholly-owned Subsidiaries (Dividends, Royalty, Non-equity Exports : Domestic & Foreign)	359	1,652	1,765	3,912	7,155	12,761	78.35
	<b>Total (Technology Intensive Exports)</b>	<b>63,156</b>	<b>82,316</b>	<b>106,031</b>	<b>153,592</b>	<b>217,178</b>	<b>226,678</b>	<b>4.37</b>
6.	Merchandise exports (DGCI&S)	2,55,137 (52719) <sup>2</sup>	2,93,367 (63843) <sup>2</sup>	3,61,879 (80540) <sup>2</sup>	4,56,418 (103092) <sup>2</sup>	5,71,779 (126263) <sup>2</sup>	6,55,864 (162984) <sup>2</sup>	14.71
7.	Misc. services receipts of gross invisible receipts <sup>3</sup>	68,967	82,380	1,37,122	1,86,684	2,59,810	2,60,930	0.43
8.	Technology intensive exports as a percentage of merchandise exports plus misc. receipts.	19.49	21.91	21.25	23.88	26.12	24.72	--5.36

\* Capital Goods are part of DGCI&S merchandise exports.

<sup>1</sup>This is the part of total engineering exports: Rs. 38,093 crore (2002-03), Rs. 52,946 crore (2003-04); Rs. 71,411 crore (2004-05) Rs. 85,462 crore (2005-06), Rs. 1,19,951 crore (2006-07), and Rs 1,33,926 crore (2007-08)

<sup>2</sup>US\$ million

<sup>3</sup>Major components of miscellaneous services receipts are: Software Services, Management Services, Communication Services, Royalties, Licence Fees, etc.taken from RBI.

Note: Rs 100 crore = Rs 1 billion.

Source: Ministry of Commerce, Annual Report 2008-09, Exim Bank of India, Engineering Export Promotion Council, Electronics & Software EPC and RBI Annual Report 2007-08.

Table 7 shows India's exports in select technology intensive sectors for the period 2002-03 to 2007-08 mainly corresponding to the sectors covered in the present survey. Exports by way of consultancy services had a quantum jump (over 200%) in 2007-08 over the previous year amounting Rs. 8.52 billion.

Exports in the select sectors (Table 7) have increased from Rs 1,295.37 billion in 2002-03 to Rs 3,261.57 billion in 2007-08, showing an increase of 151.79 per cent. While exports of these sectors increased to Rs 3,261.57 billion in 2007-08 from Rs 2,971.56 billion in 2006-07, registering an increase of 9.75 per cent over the previous year.

Table 8 gives the broad-based details of India's merchandise exports for the period 2002-03 to 2007-08 showing that these are dominated by manufacturing areas like engineering goods, electronic goods, chemicals & allied products, gems & jewellery, textiles & textile products and petroleum products. Exports increased to Rs 6,558.64 billion in 2007-08 from Rs 5,717.79 billion in 2006-07, showing an increase of 14.71 per cent over the previous year. Overall exports have increased from Rs 2,551.37 billion in 2002-03 to Rs 6,558.64 billion in 2007-08, an increase of 157.06 per cent during the period.

Export data of India's merchandise exports based on technology intensity, following UNCTAD (United Nations Conference on Trade and Development) guidelines, are shown in Table 9. Export data of this Table have been analyzed and classified with respect to the intensity or levels of technologies employed in their production, according to the widely accepted eleven norms all over the world including the practices of UNCTAD. The analysis shows that resource based technology exports increased from Rs 412.82 billion in 2002-03 to Rs 1,019.46 billion in 2007-08, registering an increase of 146.95 per cent and its percentage share level remained all the years between 14 and 17 per cent in India's total merchandised exports. In this resource based technology products like agricultural & allied products and ores & minerals are important sectors.

In low technology intensity products like textiles & textile products, leather & leather manufactures, chemicals & allied products, gems & jewellery, are some of the embedded technologies in the form of products which are being exported. Its exports increased from Rs 1,318.58 billion in 2002-03 to Rs 2,576.79 billion in 2007-08, showing an increase of 95.42 per cent. However, the percentage level of these technology products in total merchandised exports has decreased from about 52 in 2002-03 to about 39 in 2007-08. The low technology products dominated the exports from India.

Medium technology broadly includes engineering goods include, *inter alia*, machinery, transport equipment, metal manufactures, iron & steel, etc. Over the period 2002-03 to 2007-08, these exports, as shown in Table 9, increased from Rs 434.74 billion to Rs 1,357.17 billion, registering an increase of 212.18 per cent in absolute numbers and increased from 17 per cent to 21 per cent in India's total merchandised exports during the period.

**TABLE 7**  
**INDIA'S EXPORTS OF SELECT TECHNOLOGY INTENSIVE SECTORS (2002-03 TO 2007-08)**

(Rs. crore)

Sector	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	% of 2007-
Textiles and textile products	53,404	56,082	53,996	68,823	74,391	74,379	
Chemicals and petrochemicals	28,583	34,123	43,066	50,730	61,152	65,681	
Machinery and instruments	972	12,757	15,695	22,480	30,420	36,750	
Manufactures of metals	8,942	11,150	14,734	18,742	22,992	28,389	
Transport equipment	6,455	8,988	12,714	19,139	22,398	28,285	
Iron ores	4,200	5,173	11,815	16,823	17,656	23,400	
Iron and steel	7,847	9,898	14,590	15,710	23,704	21,928	
Medicinal & pharmaceutical products	6,779	7,444	9,263	10,821	14,380	16,712	
Electronic goods	6,063	8,294	8,106	10,040	13,293	14,084	
Plastics & manufactures thereof	5,912	8,054	13,243	12,482	14,718	13,763	
Machine tools	585	646	728	1,020	1,160	1,350	
Consultancy services	266	143	263	245	270	852	
Project goods	239	387	221	655	622	584	
<b>Total</b>	<b>1,29,537</b> <b>(50.77)</b>	<b>1,63,808</b> <b>(58.84)</b>	<b>1,98,972</b> <b>(54.98)</b>	<b>2,47,710</b> <b>(54.27)</b>	<b>2,97,156</b> <b>(51.97)</b>	<b>3,26,157</b> <b>(49.73)</b>	
<b>India's Total Exports</b>	<b>2,55,137</b>	<b>2,93,367</b>	<b>3,61,879</b>	<b>4,56,418</b>	<b>5,71,779</b>	<b>6,55,864</b>	

Note: Figures within brackets indicate percentage share of India's total exports. Rs 100 crore = Rs 1 billion

Sources: Ministry of Commerce & Industry, *Annual Reports* (various issues); DGCI&S, Kolkata; EXIM Bank of India, Ministry of Fertilizer and Chemicals *Annual Report 2008-09* and Ministry of Finance *Economic Survey* (various issues).

In the past six years (Table 9), high technology exports increased from Rs 133.34 billion in 2002-03 to Rs 634.56 billion in 2007-08, registering an increase of 375.90 per cent during the period, comprising mainly pharmaceuticals, fine chemicals, electronic goods and precision instruments. The share of high technology exports in total merchandised exports however varied between 5 and 10 per cent during the same period.

Manufactured exports have been contributing major share in India's total exports, its percentage in India's total exports have seen declination between 1999-2000 and 2007-08 from 81 per cent to 70 per cent. Manufactured exports increased from Rs 1,987.60 billion in 2002-03 increased to Rs 4,568.52 billion in 2007-08, registering a growth of 129.85 per cent over the period.

India's project exports in the period increased by over 25 per cent. The deceleration in manufactured exports happened since margins of project exports increased mainly in ASEAN and Middle East region as these provided for larger opportunities for Indian engineering, construction, real estate players to invest in project exports.

TABLE 8

## INDIA'S SECTORWISE PRINCIPAL EXPORTS (2002-03 TO 2007-08)

(Rs. crore)

Sector	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	%age change in 07-08 over 06-07
Plantations	2,646	2,723	2,792	3,319	3,939	3,906	-0.84
Agri & allied products	22,391	24,845	27,111	31,960	39,345	54,396	38.25
Marine products	6,928	6,106	5,695	7,036	8,001	6,927	-13.42
Ores & minerals	9,659	10,885	18,842	27,288	31,686	36,717	15.88
Leather & manufactures	8,943	9,939	10,286	11,944	13,650	14,101	3.30
Gems & jewellery	36,080	48,586	61,587	68,753	72,295	79,228	9.52
Sports goods	351	455	441	596	574	540	-5.92
Chemicals & allied products	36,080	45,768	56,967	69,148	83,357	89,971	7.93
Engineering goods	37,208	48,324	65,543	85,462	1,19,875	1,35,717	13.22
Electronic goods	6,063	8,294	8,106	10,040	13,292	14,084	5.96
Project goods	239	387	221	655	622	584	-6.11
Textiles & textile products	53,404	56,082	53,995	68,823	74,391	74,379	0.02
Handicrafts	3,801	2,296	1,543	2,045	1,982	2,046	3.23
Carpets	2,578	2,691	2,679	3,775	4,199	3,795	-9.62
Cotton raw, incl. waste	50	942	364	2,904	6,108	8,865	45.14
Petroleum products	12,469	16,397	30,518	51,533	84,520	1,14,192	35.11
Unclassified exports	8,626	8,646	9,389	11,136	13,942	16,415	17.74
<b>GRAND TOTAL (including others)</b>	<b>2,55,137</b>	<b>2,93,367</b>	<b>3,61,879</b>	<b>4,56,418</b>	<b>5,71,779</b>	<b>6,55,864</b>	<b>14.71</b>

Source : Ministry of Commerce & Industry, *Annual Reports* (various issues).

**TABLE 9**  
**TECHNOLOGY INTENSIVE EXPORTS AS PERCENTAGE OF**  
**TOTAL MERCHANDISE EXPORTS FROM INDIA (2002-03 TO 2007-2008)**

(Rs. crore)

Sector	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	%age change in 2007-08 over 2006-07
Resource Based Technology	41,282 (16.18)	50,942 (17.36)	60,501 (16.72)	70,436 (15.43)	82,971 (14.51)	1,01,946 (15.54)	22.87
Low Technology	1,31,858 (51.68)	1,44,010 (49.08)	1,63,749 (45.25)	1,96,514 (43.05)	2,43,693 (42.62)	2,57,679 (39.29)	5.74
Medium Technology	43,474 (17.04)	56,617 (19.30)	74,648 (20.63)	94,369 (20.68)	1,19,875 (20.97)	1,35,717 (20.69)	13.21
High Technology	13,334 (5.22)	16,084 (5.48)	22,738 (6.28)	30,001 (6.57)	57,308 (10.02)	63,456 (9.67)	10.73
<b>Total (including others)</b>	<b>2,55,137</b>	<b>2,93,367</b>	<b>3,61,879</b>	<b>4,56,418</b>	<b>5,71,779</b>	<b>6,55,864</b>	<b>14.71</b>

Note : Figures within brackets indicate percentage of the total merchandise exports. Rs 100 crore = Rs 1 billion.

Source : Compiled from the Ministry of Finance, *Economic Survey* (various issues) and the Ministry of Commerce, *Annual Report, 2008-09*.

Concentration of Indian business is higher on project exports also because input costs less considerably for them and space acquisition remained not a large problem in aforesaid countries, while competition grew in manufacturing sector and saturation in demand started happening in economies of scale, which adversely manufacturing exports.

Technology intensive exports as a percentage of total manufactured exports from India are shown in Table 10. This Table shows that low technology intensive exports amounted to Rs 1,318.58 billion in 2002-03 and increased to Rs 2,576.79 billion in 2007-08, registering an increase of 95.42 per cent over the period. As a percentage of total manufactured exports, their share decreased from 66.34 to 56.40 per cent.

Medium technology exports increased from Rs 434.74 billion in 2002-03 to Rs 1,357.17 billion, registering an increase of 212.18 per cent. Their percentage increased from 21.87 to 29.71 of total manufactured exports from 2002-03 to 2007-08.

High technology exports percentage also increased from 6 to 14 per cent of total manufactured exports (Table 10) over the six-year period 2002-03 to 2007-08. Exports of high technology products increased from Rs 133.34 billion in 2002-03 to Rs. 634.56 billion in 2007-08, showing an increase of 375.90 per cent over the period.

TABLE 10

**TECHNOLOGY INTENSIVE EXPORTS AS PERCENTAGE OF  
TOTAL MANUFACTURED EXPORTS FROM INDIA (2002-03 TO 2007-2008)**

(Rs. crore)

Sector	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	%age change in 2007-08 over 2006-07
Low Technology	1,31,858 (66.34)	1,44,010 (63.82)	1,63,749 (61.43)	1,96,514 (59.82)	2,43,693 (57.90)	2,57,679 (56.40)	5.74
Medium Technology	43,474 (21.87)	56,617 (25.09)	74,648 (28.00)	94,369 (28.73)	1,19,875 (28.48)	1,35,717 (29.71)	13.21
High Technology	13,334 (6.71)	16,084 (7.13)	22,738 (8.53)	30,001 (9.13)	57,308 (13.62)	63,456 (13.89)	10.73
<b>Total of Manufactured Exports</b>	<b>1,98,760</b>	<b>2,25,639</b>	<b>2,66,552</b>	<b>3,28,507</b>	<b>4,20,876</b>	<b>4,56,852</b>	<b>8.55</b>

Notes : (i) Figures within brackets indicate percentage share of the total manufactured exports.  
(ii) Rs 100 crore = Rs 1 billion.

Source : Compiled from the *Economic Survey* and the Ministry of Commerce *Annual Reports* (various issues).

## 7. Policies and Initiatives for Export Promotion

A variety of economic reforms and policy measures were initiated in 1991 with a view to enhance India's export capabilities in manufacturing, service industries, and also strengthening the infrastructure. Policy measures have given an impetus to the Indian economy, the GDP increased by 7.5 per cent, 9.4 per cent and 9.6 per cent in first three years, resulting in an unprecedented average growth rate of 8.8 per cent in 2007-08. The drivers of growth continue to be "services" and "manufacturing" sectors. Globalization has given an investment boom in the country. To realise the optimum advantages from globalization, India is focusing on its competitiveness, since it needs to be more "competitive" as an investor in both domestic and foreign fields. Foreign Direct Investment (FDI) continues to play an important role in India's economy estimating that FDI inflows increased from US\$ 20.34 billion in 2006 to US\$25.13 billion in 2007. In 2008, FDI inflows amounted to US\$41.55 billion, registering a growth of 65.34 per cent over the previous year. The cumulative FDI inflows from 2006 to 2008 totalled to US\$87 billion. The FDI inflows in 2008 constituted 9.6 per cent of its gross fixed capital formation, against first 1.9 per cent annual average or US\$ 1.7 billion in 1990-2000.

India's overseas investment amounted to US\$ 18.73 billion in 2007-08. It fell to US\$16.78 billion in 2008-09, a decrease of 11.62 per cent over the previous year. It is roughly 4.1 per cent of its gross fixed capital formation in contrast to its meagre overseas investments of US\$110 million for the whole of 1990-2000, when such outward investment comprised 0.1 per cent of its gross capital formation (Table 11).

TABLE 11

INDIA'S DIRECT INVESTMENT ABROAD

(US\$ million)

Industry	2006-07	2007-08	2008-09*
Manufacturing	4,185	5,409	8,096
Financial Services	28	88	143
Non-Financial Services	7,527	1,748	1,154
Trading	659	1,050	937
Others	1,499	10,435	6,450
<b>Total</b>	<b>13,898</b>	<b>18,730</b>	<b>16,780</b>

Notes : 1. Data include equity and loan component.

2. Data pertains to proposals for Indian Investment abroad (US\$5 million and above).

\*Based on the latest reported revised data. Therefore, these data may differ from the data published under the Balance of Payments.

Source: RBI, Annual Report 2008-09.

Indian companies—big or small—after making a mark in the domestic markets are now reaching for the overseas destinations to tap new markets and acquire technologies. A major portion of the Indian overseas investment went into acquiring companies abroad. Indian companies are shopping overseas for acquisitions as part of a strategy meant to announce India's arrival on the global stage. Reasons for the deals varied from access to high growth markets, technology & knowledge, enhancement of own positioning in the value chain, obtaining economies of size and scale of operations to tapping of natural resource banks and leveraging international brand names for own brand building.

Apropos FDI, stocks of India, which were US\$1,657 million in 1990, increased to US\$123.3 billion in 2008, constituting 9.9 per cent of GDP, against a paltry 0.5 per cent of GDP in 1990.

FDI was mainly channeled into manufacturing sectors with a share of 21.0 per cent, followed by financial services with a share of 19.5 per cent. Investments routed through Mauritius remained the largest, with a share of 44.8 per cent, followed by Singapore with a share of 14.8 per cent (Table 12). In a major break from the past, the spurt in FDI flows to India in the recent period has been accompanied by a jump in outward equity investments, as Indian firms tend to establish production, marketing and distribution networks overseas to achieve global scale along with access to new technology and natural resources.

Despite the deepening of the global financial crisis and pressures on the foreign exchange market, the overseas investment by the Indian corporate increased in the second half of 2008-09. Thus, despite the deterioration in global credit markets, Indian companies, particularly in the manufacturing sector continued their overseas expansion by taking recourse to the liquidity from domestic foreign exchange markets. The specific measures taken in 2008-09 intended to liberalize outbound investment included raising the investment limits of Indian corporate, mutual funds registered with SEBI and permitting registered trusts and societies engaged in manufacturing/ educational/ health sector to make investment in the same sector(s) in a Joint Venture or Wholly Owned Subsidiary outside India.



The performance of major economies in South-East Asia and South Asia FDI varied significantly. China became the third largest FDI recipient country after the USA and France in 2008, amounting its inflows to US\$108 billion. FDI inflow to India surged to US\$41.55 billion. These flows were driven by investments by leading transnational corporations in a range of manufacturing and service industries. The strong performance of the two largest emerging economies, even during the current crisis, has helped reshape the landscape of FDI flows to the region as well as to the world at large; they accounted for half of regional FDI inflows and for about one tenth of global inflows.

**TABLE 12**  
**FDI INFLOWS TO INDIA: COUNTRYWISE AND SECTORWISE\***

(US\$ million)

<i>Source</i>	2006-07	2007-08	2008-09P	<i>Industry</i>	2006-07	2007-08	2008-09P
<b>Country-wise Inflows (Total)</b>	<b>9,307</b>	<b>19,427</b>	<b>22,697</b>	<b>Sector-wise Inflows (Total)</b>	<b>9,307</b>	<b>19,427</b>	<b>22,697</b>
Mauritius	3,780	9,518	10,165	Manufacture	1,641	3,726	4,777
Singapore	582	2,827	3,360	Financial Services	1,330	3,850	4,430
USA	706	950	1,236	Construction	967	2,551	2,237
Cyprus	58	570	1,211	Communication Services	423	66	2,067
United Kingdom	1,809	508	690	Real Estate Activities	431	1,336	1,886
Netherlands	559	601	682	Computer Services	824	1,035	1,647
Germany	116	486	611	Miscellaneous Services**	298	1,901	1,458
France	100	136	437	Electricity and other Energy related	174	829	669
Spain	62	48	363	Business Services	2,425	1,158	643
Russia	25	1	306	Transport	165	816	401
Japan	80	457	266	Trading	82	176	400
Italy	57	21	249	Restaurants & Hotels	153	280	343
UAE	215	226	234	Retail & Wholesale Trade	47	200	294
Hong Kong	60	106	155	Education, Research & Development	43	156	243
Switzerland	57	192	135	Mining	42	461	105
Others	1,041	2,780	2,597	Others	262	886	1,097

\* Data in this table relate to only equity capital under Automatic route and Approval route. Acquisition of shares of Indian Company by non-residents under Section 6 of FEMA, 1999 and equity capital of unincorporated bodies are not included.

\*\* Miscellaneous services include services related to community, cultural activities, personnel, public, sanitation, health, repairing, international and others.

P : Provisional.

Source : RBI, *Annual Report 2008-09*.

## 8. Mergers & Acquisitions

The year 2007 was accredited as the year of mergers and acquisitions (M&As) for corporate India. But M&As activity slowed down considerably in 2007-08 (April-January). It was the impact of general slowdown in M&As globally. The acquisition deals decelerated in value terms to 34.8 per cent in 2007-08 (April-July) over the corresponding period of the previous year. The value of M&As increased to Rs. 2,045.97 billion in 2006-07 from Rs.1,006.12 billion in 2005-06, registering an increase of 103.35 per cent (Table 13)

TABLE 13

INDIA'S MERGERS AND ACQUISITIONS

Year	Total Acquisitions		Total Mergers Number
	Number	Amount (Rs crore)	
2002-03	843	23,785	381
2003-04	830	35,073	291
2004-05	797	60,282	272
2005-06	874	1,00,612	394
2006-07	924	2,04,597	358
2006-07*	688	1,16,893	321
2007-08*	687	76,229	173

\* April-January

Note : Deals include preferential allotments, buy-back of shares and disinvestment proposals amongst others.

Source: RBI, Annual Report 2007-08.

The total number of M&A deals in the first eight months of 2009 totalled 183, with an announced value of Rs 328 billion, against 344 amounting to Rs. 1.06 lakh crore during the corresponding period in 2008 according to Grant Thornton.

M&As are back on the radar for Indian companies but with two vital changes. First, the average size of the deals are much smaller compared to the earlier years; and second, overseas acquisitions have taken a backseat.

Of late, experts say most of the acquisitions by Indian companies in the past were heavily leveraged and now a majority of these predators are struggling to service the loans for acquisitions. The big Indian companies now realize it is not easy to integrate facilities bought from outside, owing to serious cultural and regulatory issues in moving production to India. Instead, domestic companies are looking at lower-risk small acquisitions to boost business.

In 2007-08, maximum mergers were witnessed in financial services followed by trade, chemical industry, industry producing machinery, textiles and non-metallic mineral products. Acquisition activity was the largest in financial services sector, followed by non-metallic mineral products, construction, chemicals, transport equipment and mining.

India's M&As scorecard signals a new level of participation by Indian firms in global business and its arrival on the global map. Indian businessmen and businessmen from other developing countries have turned tradition on its head by investing abroad through M&As.

Manufacturing in India seems to be getting attention as an attractive investment option. The country's competitiveness in manufacturing is more broad-based and it is largely due to labour cost advantage, skilled manpower and effective use of capital. For international competitiveness, policy measures are designed to increase exports, though not so much in terms of technology intensive products and markets.

In a market driven environment, policies are being continuously reviewed and progressively liberalized so that the standards of educational management, technical capabilities and requirements are adapted as per the need of the industry as well as at the global level. Some of the notable reforms relate to encouraging Indian companies in acquisition of technological capability in various sectors of the industry through a liberal foreign technology collaboration regime. Foreign technology induction is facilitated both through FDI and foreign technology collaboration agreement.

With the setting up of the World Trade Organization (WTO), intellectual property rights, productivity, standards and quality have been identified as some of the important measures for protection and promotion of products. The WTO Agreement on Intellectual Property Rights relating to patents, designs, trademarks and geographical indication of goods, is an important tool for industrial protection. Apart from these, understanding of the two WTO Agreements on Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary (SPS) measures are important for the trade and industry people. The TBT Agreement applies to the methods which affect the quality, standards (both voluntary and mandatory) and other characteristics of traded products. Other Agreement on SPS is applied to protect human, animal or plant life or health. The TBT and SPS Agreements provide for formulating such standards and regulations which do not create any undue and illegitimate barriers to trade. It has now been recognised that while the applied tariffs of all the WTO members are declining, application of non-tariff measures (NTMs) is on the rise. Indian exporters faced with this challenge have to address them in order to ensure market access, because almost all of these NTMs are in the form of TBT and SPS measures.

The Science & Technology Policy 2003 also seeks to promote technology intensive exports among other issues, and recommends necessary development and support mechanisms for this purpose.

## **9. Importance of Regional/Foreign Trade Agreements (RTAs/ FTAs)**

Multilateral trade system allows the formation of RTAs as an exception to the non-discriminatory treatment. This exception got incorporated on the belief that increased trade would result in development. The basic objective of both the regional economic groupings and the WTO is essentially the same, i.e. enhancing trade between countries and the same is explained in Article XXI of GATT 1994. The Article XXIV provides the necessary legal grounds for certain arrangements to be exempted from the principle of non-discrimination. The new RTAs extend much beyond mere reduction in tariffs and granting preferential treatment to members in the group. RTAs are cross regional in nature spanning different continents to build new agreements on creating existing ones. 150 plus members of the WTO are party to at least one of the RTAs.

The trend towards the conclusion of FTAs, which require a lesser degree of integration and fasten to conclude, has intensified in recent years. Of late many countries are contemplating on Comprehensive Economic Partnership Agreement (CEPA) with the objective of enhancing the economic, trade and investment cooperation to improve the efficiency and competitiveness of their

manufacturing and services sectors. India has been going by this trend in recent past.

#### *India's Initiatives on RTAs / FTAs*

There are more than 300 RTAs in the world. The most common category is the FTA. There are 212 FTAs signed worldwide, accounting for 72 per cent of all FTAs contain commitments on trade in services in addition to tariff concessions on goods.

India is currently engaged in discussing about 25 RTAs/FTAs with many countries and with regional groupings with the objective of trade diversion. This country has so far implemented eight FTAs, viz. India-Singapore Comprehensive Economic Agreement (CECA), FTA between India and Thailand, PTA between India and Chile, Asia Pacific Trade Agreement (APTA), Agreement on South Asia Free Trade Area (SAFTA), PTA between India and Afghanistan, India-Nepal Treaty of Trade and FTA between India and Sri Lanka. These agreements cover particularly tariff reduction of goods. The protocol signed between India and Singapore on 20 December 2007 which amended the Comprehensive Economic Cooperation Agreement (CECA). Its objective is to enhance economic, trade and investment cooperation to improve the efficiency and competitiveness of their manufacturing and services sectors. This CECA includes Science & Technology, which covers areas like Marine / Biotechnology, Space Research, Advanced Materials and IT. The form of cooperation include, *inter alia*, exchange of scientists, technical cooperation or exchange of experts, participation in scientific & technology (S&T) conference & seminar, commercialization of technology in other countries or any third country including participation, joint venture and protection & distribution of IPR and other right of a proprietary nature.

The CEPA (Comprehensive Economic Partnership Agreement) between India and South Korea, signed on 7 August 2009, is to expand trade and strengthen economic relations between the two countries. According to the Korea Institute for International Economic Policy, the agreement would boost bilateral trade by US\$3.3 billion a year.

A Joint Study Group was formed to examine the feasibility of CEPA between the two countries. The Group concurred that there remains huge potential in all areas to be exploited to develop the existing bilateral economic relation into a more comprehensive and future-oriented one. It recommended coverage of areas, viz. industrial cooperation, intellectual property rights, small and medium enterprises (SMEs), civil aviation, environment, forestry and forestry products, mining, energy and sub-regional development. The CEPA between the two countries would include the areas like promotion and facilitation of trade in goods and services, and investment; increasing the competitiveness of SMEs; promotion of electronic commerce; capacity building; technology transfer, trade in goods and services; measures for trade facilitations; promotion, facilitation and liberalization of investment flows; and measures for promoting bilateral economic cooperation in identified sectors.

This recent Indo-Korean CEPA would promote trade in industrial and farm goods but also boost exchanges of manpower, particularly in the services sector between the two countries. Under the CEPA, tariffs would be reduced or eliminated on 93 per cent of Korea's tariff lines and 85 per cent of India's tariff lines. The *de facto* FTA would allow computer engineers, consultants, public relations experts, English teachers and other professionals in various services domain to freely enter each other's country.

India has agreed to open its telecommunication, accounting, medical, advertising and banking sectors to South Korea. On Rules of Origin, India and South Korea have agreed that the level of foreign content should be a maximum 65 per cent. India would also allow South Korean firms to invest in the machinery, auto, manufacturing and electronics sector.

On India-Japan CEPA, a India-Japan Study Group was set up in June 2005. It includes focusing on measures required for a comprehensive expansion of trade in goods, trade in services, investment flows and other areas of economic relations between the two countries. A joint Task Force was also launched to finalise the modalities for tariff liberalization for trade in goods, services, investment, IPRs, Sanitary & Phytosanitary (SPS) and Technical Barrier to Trade (TBT). Evidently the objective is to furthering the interchange and use of scientific and technical knowledge, particularly in economic development and improved standards of living in both the countries.

The objective of Strategic Partnership Agreement between India and European Union is to co-sponsor collaborative Activities & Research Projects in the areas like: IT, Genomics and Biotechnology for Health, Nanotechnology & Functional Materials, Road Transportation R&D, and High Energy Physics and Acceleration in S&T.

The Strategic Partnership would include agro & marine products, textiles, IT & communications, environment, food processing, pharmaceuticals & biotechnology, TBT and SPS.

Another S&T Cooperation Agreement of 2002 between India and the European Commission is on science and technology, which would organise joint workshops on research fields of mutual interest. This agreement would also promote participation by Indian researchers in the Research and Technological Development Framework Programme.

It would also explore with India other scientific and technical collaboration possibilities, such as joint research in the areas of frontier technology/cutting edge technology and seek to increase, exchanges and access of researches between India and Europe.

There would be co-sponsored Collaborative Activities and Research Projects, namely Information Science and Technology, Genomics and Biotechnology for Health, Nanotechnology and Functional Materials, Road Transport R&D, High Energy Physics (Accelerator Science and Technology).

India and Thailand have agreed to install a free trade regime by 2010. Both the countries have signed the FTA, with a view to create favourable condition

for greater economical cooperation, promote fair competition and explore new areas of development. The scope of cooperation included in the FTA comprises Information & Communication Technology, Space Technology, and Biotechnology.

India signed the FTA with 10-member ASEAN on 14 August 2009. This FTA has set the target of US\$10 billion worth of trade in the first year after the agreement comes into force from January 2010. India's bilateral trade with the ASEAN bloc is currently worth US\$40 billion.

The FTA would eventually eliminate duty on 80 per cent of the goods traded at present by 2016. The tariffs would be brought down on electronics, chemicals, machinery and textile goods. In this FTA, 489 items excluded from the list of tariff concessions and 590 items from the list of tariff elimination to address sensitivities in agriculture, textiles, auto, chemicals, crude and refined palm oil, coffee, tea, pepper, etc.

Asian countries' enthusiasm for bilateral agreements is palpable, and they have reason to want to bolster intra-Asian trade. The growth of global supply chains means that parts made in one Asian country from raw materials imported from another are re-exported to a third country for final assembly. These countries hope that more bilateral agreements will enable more specialization. India, for example, hopes that its new FTA will allow it to become a hub for Korean electronics companies seeking to exploit lower labour costs to make goods destined for markets in the Middle East.

Added to all this is the fact that Asia's big economies are set to provide the world with most of its growth this year, and emerging Asia will continue to be the world's fastest-growing region for several years. Strategic rivalries complete the list of incentives. Many think that India has jumped into the fray because China has been signing one pact after another.

## **10. Special Economic Zones/100% EOUs**

The Special Economic Zones (SEZs) policy was announced in April 2000 with the objective of making the SEZs an engine for economic growth, supported by quality infrastructure and an attractive fiscal package both at the Central and State level with a single window clearance. Evidently, SEZ concept recognizes the issues related to economic development and provides for developing self-sustaining industrial townships so that the increased economic activity does not create pressure on the existing infrastructure.

The SEZ Act 2005, supported by SEZ Rules, came into effect on 10 February 2006. The main objectives of the SEZ Act are generation of additional economic activity, promotion of exports of goods and services, promotion of investment from domestic and foreign sources, creation of employment opportunities and development of infrastructure facilities. Various incentives and facilities are offered to units in SEZs for attracting investment into SEZs (including foreign investment) as well as for SEZ developers. These incentives and facilities are expected to trigger a large flow of foreign and domestic investment in SEZs, particularly in infrastructure and productive capacity, leading to generation of additional economic activity and creation of employment opportunities.

According to the Act of SEZ, substantial amount of FDI has already been invested. Some SEZs with major FDI component of investment are:

- Apache SEZ Development India Private Limited, Andhra Pradesh
- Brandix India Apparel City Private Limited, Andhra Pradesh
- Amaar Hills Township Private Limited, Andhra Pradesh
- Zydus Infrastructure Private Limited, Gujarat
- Essar Hazira SEZ Limited, Gujarat
- DLF Limited, Haryana
- Tanglin Development Limited, Karnataka
- M/S Information Technology Park Ltd, Karnataka
- Quarkcity India Pvt. Ltd., Punjab
- Flextronics Technologies (India) Private Limited, Tamil Nadu
- SIPCOT SEZ, Tamil Nadu {Foxconn & Motorola (as co-developer) – Dell (unit)}

As on 13 May 2009 as many as 568 SEZs have been accorded formal approval and 318 SEZs have been notified. The benefits derived from SEZs are evident from the export, employment and investment generated as shown in the following Table 14.

**TABLE 14**  
**PERFORMANCE OF SEZs**

Export from SEZs in 2008-09	Rs. 99,688 crore
Export Growth in 2008-09	36%
Projection of export for 2009-10	Rs. 1,10,000 crore
Total employment generated as on 31.03.2009	3,87,439 persons
Total incremental employment generated since February 2006	2,52,735 persons
Total private investment as on 31.03.2009	Rs. 98,498 crore
Incremental private investment after coming into force of SEZ Act 2005	Rs. 98,498 crore

Source: [www.indiabudget.nic.in](http://www.indiabudget.nic.in)

As on 31 March 2009, 91 SEZs have commenced exports. Exports from these zones increased from Rs. 228.40 billion (2005-06), Rs. 346.15 billion (2006-07), Rs. 666.38 billion (2007-08), to Rs. 996.89 billion (2008-09) (Table 15).

**TABLE 15**  
**EXPORTS FROM SEZs (2003-04 TO 2008-09)**

Year	Value (Rs. crore)	Increase (%) (Over previous year)
2003-2004	13,854	39
2004-2005	18,314	32
2005-2006	22,840	25
2006-2007	34,615	52
2007-2008	66,638	93
2008-2009	99,689	50

Source: Department of Commerce.

Studies in SEZs were conducted to ascertain the performance of the functioning of SEZs. According to a study conducted by the Institute of South Asian Studies (SAS), the fiscal environment available to SEZ developers and units have played a vital role in attracting export-oriented foreign investment in areas such as hardware, apparel and shoes, which would have normally headed for other Asian destinations in its absence.

The Indian Council for Research on International Economic Relations (ICRIER) has undertaken a study on SEZs, which concluded that if the opportunities thrown open by globalization are to be grabbed, policies ensuring a business environment that is predictable and is in tune with the needs of the private sector need to be the top priority of the policy agenda. The SEZ policy has been described as an attempt by the Government to turn around the domestic economy and find a niche in the global economy. According to this study, if implemented successfully, SEZs can play a crucial role in promoting the manufacturing sector. While highlighting the incremental benefits in terms of employment, the study goes on to state that the SEZ policy will make a positive impact on regional employment and human development by creating economic opportunities, especially for those without high levels of schooling. The fact that the SEZ Policy has encouraged many of the developers such as Nokia, Apache, etc. for setting up of their operations in India has been brought out in the study. SEZ Policy has also encouraged Indian companies like Mahindra, Wipro, Infosys, etc. to set up SEZs and units.

Another study by the CUTS International reveals that the new generation of SEZs have created a tremendous local area impact in terms of direct employment, emergence of new activities, changes in consumption pattern, social activities, and human development facilities (such as for education, healthcare).

Yet another report of CLSA states that SEZs will help build up local infrastructure and reduce the burden on urban areas by housing 12.5 per cent of the growth in the urban population. It projects generation of 14 million new jobs and support annual exports of US\$350 billion on a cumulative investment of US\$213 billion.

The Export Oriented Units (EOUs) scheme introduced in early 1981, is complementary to the SEZ scheme. It adopts the same production regime but offers a wide option in locations with reference to factors like source of raw materials, ports of export, hinterland facilities, availability of technological skills, existence of an industrial base and the need for a larger area of land for the project. As on 31 March 2009, there were 2,546 units in operation under the EOU scheme.

Exports in 2008-09 from EOUs were of the order of Rs. 1,626.48 billion as compared to the export of Rs. 1,622.66 billion in 2007-08 registering a growth of 0.24 per cent (Table 16). EOUs are mainly concentrated in textiles and yarn, food processing, electronics, chemicals, plastics, granites and minerals/ores.



TABLE 16

EXPORT PERFORMANCE OF THE EOU<sub>s</sub>

(Rs. crore)

Year	Exports
2005-06	49,462.35
2006-07	69,964.60
2007-08	1,62,265.60
2008-09 (P)*	1,62,647.82

\* (P) : Provisional data

Source: Ministry of Commerce, *Annual Report 2008-09*.

## 11. Foreign Trade Policy–Highlights

The Foreign Trade Policy (FTP) 2009-2014 has been announced for the next five years with the immediate objective to reverse the decline in exports and provide succour to exporters. The FTP's objective is to achieve an annual export growth of 15 per cent with an annual export target of US\$200 billion by March 2011. For the rest three years of the FTP, India should be able to come back on the high export growth path of around 25 per cent per annum. It is expected that India's export of goods and services would be doubled by 2014. The long-term policy objective for the Government is to double India's share in world trade by 2020.

In order to meet these objectives, the Government would follow a mix of policy measures including fiscal incentives, institutional changes, procedural rationalisation, enhanced market access across the world and diversification of world markets. Improvement in infrastructure related to exports, bringing down transaction costs and providing full refund of all indirect taxes and levies, would be the three pillars, which will support the country to achieve this target.

The FTP would provide adequate confidence to exporters to maintain their market presence even in a period of stress. A special thrust needs to be provided to employment intensive sectors which have witnessed job losses in the wake of this recession, especially in the areas of textiles, leather, handicrafts, etc.

The Duty Entitlement Passbook Scheme, which neutralises the incidence of customs duty on the import content of export products, has been extended by a year to December 2010. The income-tax benefits under Section 10(A) for IT industry and under Section 10(B) for 100% Export Oriented Units have also been extended till 31 March 2011. The Export Credit Guarantee Corporation (ECGC) scheme, which provides credit risk insurance cover to exporters, will continue till 31 March 2010

### 11.1 Higher Support for Market and Product Diversification

The Government has identified 26 new markets to which exports would be eligible for sops. These include 16 new markets in Latin America and 10 in Asia-

Oceania. While increasing the incentive under schemes like Focus Product and Focus Market, the FTP extends such schemes to more products.

The incentive available under Focus Market Scheme (FMS) has been raised from 2.5 to 3 per cent. The incentive available under Focus Product Scheme (FPS) has been raised from 1.25 to 2 per cent. A large number of products from various sectors have been included for benefits under FPS. These include Engineering Products (agricultural machinery, parts of trailers, sewing machines, hand tools, garden tools, musical instruments, clocks and watches, railway locomotives, etc.), Plastics (value added products), Jute and Sisal Products, Technical Textiles, Green Technology Products (wind mills, wind turbines, electric operated vehicles etc.), Project Goods, Vegetable Textiles and certain Electronic Items.

Market Linked Focus Product Scheme (MLFPS) has been greatly expanded by inclusion of products classified under as many as 153 ITC(HS) Codes at 4 digit level. Some major products include Pharmaceuticals, synthetic textile fabrics, value added rubber products, value added plastic goods, textile made-ups, knitted and crocheted fabrics, glass products, certain iron & steel products and certain articles of aluminium, among others. Benefits to these products will be provided, if exports are made to 13 identified markets (Algeria, Egypt, Kenya, Nigeria, South Africa, Tanzania, Brazil, Mexico, Ukraine, Vietnam, Cambodia, Australia and New Zealand).

MLFPS benefits also extended for export to additional new markets for certain products. These products include auto components, motor cars, bicycle and its parts, and apparels, among others. A common simplified application form has been introduced for taking benefits under FPS, FMS, MLFPS and Vishesh Krishi and Gram Udyog Yojana (VKGUY).

### ***11.2 Technology Upgradation***

To aid technological upgradation of India's export sector, EPCG Scheme at Zero Duty has been introduced. This Scheme will be available for engineering & electronic products, basic chemicals & pharmaceuticals, apparels & textiles, plastics, handicrafts, chemicals & allied products and leather & leather products (subject to exclusions of current beneficiaries under Technological Upgradation Fund Schemes–TUFS, administered by Ministry of Textiles and beneficiaries of Status Holder Incentive Scheme in that particular year). The scheme shall be in operation till 31 March 2011.

Jaipur, Srinagar and Anantnag have been recognised as 'Towns of Export Excellence' for handicrafts; Kanpur, Dewas and Ambur as 'Towns of Export Excellence' for leather products; and Malihabad for horticultural products.

### ***11.3 EPCG Scheme Relaxations***

To increase the life of existing plant and machinery, export obligation on import of spares, moulds, etc. under EPCG Scheme has been reduced to 50 per cent of the normal specific export obligation.

Taking into account the decline in exports, the facility of Re-fixation of Annual Average Export Obligation for a particular financial year in which there is decline in exports from the country, has been extended for the 5-year policy period 2009-14.

#### ***11.4 Status Holders***

To accelerate exports and encourage technological upgradation, additional Duty Credit Scrips shall be given to Status Holders @ 1% of the FOB value of past exports. The duty credit scrips can be used for procurement of capital goods with Actual User condition. This facility shall be available for sectors of leather (excluding finished leather), textiles and jute, handicrafts, engineering (excluding iron & steel and non-ferrous metals in primary and intermediate form, automobiles & two wheelers, nuclear reactors & parts, and ships, boats and floating structures), plastics and basic chemicals (excluding pharma products) [subject to exclusions of current beneficiaries under TUFs]. This facility shall be available up to 31 March 2011.

#### ***11.5 Green Technology***

India aims to become a hub for production and export of green products and technologies. In this context, special initiative will be taken to promote development and manufacture of such products and technologies for exports. To begin with, focus would be on items relating to transportation, solar and wind power generation and other products as may be notified which will be incentivized under Reward Schemes of Chapter 3 of the FTP. It would encourage production and export of "green products" through measures such as phased manufacturing program for green vehicles, zero duty EPCG Scheme and incentives for exports.

Transferability for the Duty Credit Scrips being issued to Status Holders under paragraph 3.8.6 of FTP under VKGUY Scheme has been permitted. This is subject to the condition that transfer would be only to Status Holders and Scrips would be utilized for the procurement of Cold Chain equipment(s) only.

#### ***11.6 Thrust to Value Added Manufacturing***

To encourage value added manufactured exports, a minimum 15 per cent value addition on imported inputs under Advance Authorization Scheme has now been prescribed. The FTP also has the coverage of Project Exports and a large number of manufactured goods under FPS and MLFPS.

#### ***11.7 Flexibility Provided to Exporters***

Payment of customs duty for Export Obligation (EO) shortfall under Advance Authorisation / DFIA / EPCG Authorisation has been allowed by way of debit of Duty Credit Scrips. Earlier, the payment was allowed in cash only.

Import of restricted items, as replenishment, shall now be allowed against transferred DFIA's, in line with the erstwhile DFRC scheme.

Time limit of 60 days for re-import of exported gems and jewellery items, for participation in exhibitions has been extended to 90 days in case of USA.

Transit loss claims received from private approved insurance companies in India will now be allowed for the purpose of EO fulfillment under Export Promotion schemes. At present, the facility has been limited to public sector general insurance companies only.

## 12. Field Survey & Analysis

### 12.1 Methodology

With a view to study the trends in technology intensive exports from India, and to provide a database to the overseas potential importers, to industry, government and other relevant agencies, IIFT has been bringing out this *Compendium* since 1994-95. An attempt has been made to gather data on technology intensive exports for last eight years (2000-01 to 2007-08) from exporting companies, R&D organizations, and public sector undertakings through a structured Questionnaire and also personal field visits to select units in different places in India, viz. Delhi, Bangalore, Chennai, Hyderabad, Mumbai and Pune during 2007-08. A total number of 615 units were identified which responded in the past and were known to have been engaged in the manufacture and exports of technology and technology intensive products. This was a deviation from the methodology followed previously when questionnaire were sent to over 3000 organisations. The citywise distribution of these units appears in Table 17.

**TABLE 17**  
**CITYWISE DISTRIBUTION OF IDENTIFIED UNITS FOR**  
**QUESTIONNAIRE BASED SURVEY (2007-08)**

<i>Place</i>	<i>Number of Units</i>
Mumbai	100
Bangalore	75
Chennai	80
Delhi	100
Kolkata	20
Pune	80
Hyderabad	40
Ahmedabad	20
Vadodara	20
Others	80
<b>Total</b>	<b>615</b>

In addition to mailing a Questionnaire, personal visits were also undertaken to the units to elicit information/data on technology and technology intensive exports. About 418 companies/organizations responded with the required information. The data thus received were compiled and analyzed taking into account the views and issues verbally expressed by organizations. The internet search was also carried for information and data including that for identified

exporting companies. Some of the profiles thus prepared were sent to the concerned companies for their validation, updating, and the revised profiles are included in this *Compendium*. Most of the profiles have been validated by the companies/ organisations.

Also given in Table 23 in the trend in survey responses since 1994-95. It was also thought prudent to compile the list of all companies which have responded to survey since 1994-95. Accordingly, Table 24 gives a list of 654 companies in two parts, wherein Part 1 gives data on 581 companies with export figures from 2000-01 to 2007-08 and Part 2 gives list of 73 companies that stopped responding after 2000.

### **12.2 Survey Data**

The data collected during the field survey and through desk research as well as the analytical data relating to technology intensive exports were compiled and analyzed, and are presented in 11 Annexures in this *Compendium*. Annexure I contains copy of the questionnaire, which was used to obtain information from the companies. Annexure II gives details of the respondents for the period 2000-01 to 2007-08. Annexure III provides survey export data for the period 2002-03 to 2007-08. Annexure IV provides turnover data for the period 2002-03 to 2007-08 for 367 companies, survey conducted in 2008-09. Annexure V gives technology intensitywise classification of 367 responding companies to this survey conducted in 2008-09. Annexure VI provides export of 367 responding companies classified according to technology intensive products, capital goods, consultancy services, turnkey & project exports, technology know-how, computer software & hardware services. Annexure VII provides sectorwise classification of the 367 companies for the period 2002-03 and 2007-08. Annexure VIII gives details of the companies having foreign collaborations during the period 2006-07 and 2007-08. Annexure IX gives company profiles of the companies/organizations exporting technology/projects/services/capital goods during the period 2000-01 to 2007-08. Annexure X provides detailed information about the company profiles of the companies exporting technology intensive products during the period 2000-01 to 2007-08. Annexure XI provides information on companies having exportable technology/projects/services/capital goods/technology intensive products.

## **13. Technology Intensitywise Classification of Exports**

The technology intensity wise classification of 367 companies/organisations, surveyed and reported in the *Compendium* has been done on the basis of *WIR 2002*, and is shown in Table 18, i.e. Low Technology, Medium Technology and High Technology companies/organisations. These included 76 companies low technology, 195 medium technology and 96 high technology enterprises.

TECHNOLOGY INTENSITYWISE CLASSIFICATION OF MANUFACTURES

<i>Sector</i>	<i>Product Coverage</i>
Low Technology Manufactures	Textiles, garments, footwear, other leather products, toys, simple metal and plastic products, furniture and glassware. These products tend to have stable, well-diffused technologies largely embodied in capital equipment, with low R&D and skill requirements and low economies of scale.
Medium Technology Manufactures	Labour costs tend to be a major element of cost at least in the segments in which developing countries specialize in terms of medium technology manufactures. These are heavy industry products such as automobiles, industrial chemicals, machinery, and standard electrical & electronic products. They tend to have complex but not fast-changing technologies, with moderate levels of R&D but advanced engineering and design skills and large scale of production.
High Technology Manufactures	These are complex electrical & electronic (including information and communication technologies) products, aerospace products, precision instruments, fine chemicals and pharmaceuticals. Most of these products call for advanced manufacturing capabilities, large R&D investments, advanced technology infrastructures and close interactions between firms, universities and research institutions. However, many activities, particularly electronics, have final assembly processes with simple technologies where low wages are important competitive factor.

TABLE 18

TECHNOLOGY INTENSITYWISE CLASSIFICATION OF COMPANIES

<i>Intensity of Technology Products</i>	<i>No. of Companies</i>
Low Technology	76
Medium Technology	195
High Technology	96
<b>Total</b>	<b>367</b>

(Based on *Compendium on Technology Exports (Vol. IX)* – Annexure IV)

**TABLE 19**  
**TECHNOLOGY INTENSITYWISE CLASSIFICATION OF COMPANIES**  
**SURVEYED, 2002-03 TO 2007-08**

Technology Intensity	Exports of 367 Companies Surveyed (Rs crore)						% change in 2007-08 over 2006-07
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	
Low Technology	16896.17 (43.60)	24745.85 (47.83)	41784.08 (56.28)	52510.59 (54.53)	92599.41 (61.07)	113326.77 (61.03)	22.38
Medium Technology	8403.21 (21.69)	10786.62 (20.85)	13224.00 (17.81)	17206.84 (17.87)	22280.53 (14.69)	26744.07 (14.40)	20.03
High Technology	13450.17 (34.71)	16203.97 (31.32)	19237.95 (25.91)	26579.65 (27.60)	36749.12 (24.24)	45607.15 (24.56)	24.10
<b>TOTAL</b>	<b>38749.55</b> <b>(100.00)</b>	<b>51736.44</b> <b>(100.00)</b>	<b>74246.03</b> <b>(100.00)</b>	<b>96297.08</b> <b>(100.00)</b>	<b>151629.06</b> <b>(100.00)</b>	<b>185677.99</b> <b>(100.00)</b>	<b>22.46</b>

(Based on *Compendium on Technology Exports (Vol. IX) – Annexure IV*)

- Notes: (i) Figures within brackets indicate percentage shares of the total.  
(ii) Technologywise classification has been made on the basis of *World Investment Report 2002*.  
(iii) Rs. 100 crore = Rs. 1 billion

Source: Field Survey

The time series data for the period 2002-03 to 2007-08 for the companies are analysed based on the above-mentioned criteria is given in Table 19. It shows that total exports of these surveyed companies increased from Rs 387.50 billion in 2002-03 to Rs 1,856.78 billion in 2007-08, registering an increase of 379.17 per cent. Total exports of these companies amounted to Rs 1,856.78 billion in 2007-08, registering an increase of 22.46 per cent over the previous year's exports of Rs 1,516.29 billion. The number of companies however has varied on year to year basis, and hence these data are not comparable except that there has been an increasing trend in responses and also in technology intensive exports.

Export of low technology products increased from Rs 168.96 billion in 2002-03 to Rs 1,133.27 billion in 2007-08, showing an increase of 570.73 per cent. Percentagewise an increase of 22.38 was registered over the previous year 2006-07 when exports amounted to Rs 925.99 billion. This low technology product exports increased from 43.60 per cent to 61.03 per cent and dominated in total exports of surveyed companies in 2007-08.

Exports of medium technology increased from Rs 84.03 billion in 2002-03 to Rs 267.44 billion in 2007-08, registering an increase of 218.27 per cent. An increase of 20.03 per cent was registered of its previous year exports of Rs 222.81 billion. It contributed 14.40 per cent to total exports of surveyed companies in 2007-08. Medium technology intensity percentage varied between 14 and 22.

However, high technology intensity exports, slided down from 34.71 per cent in 2002-03 to 24.56 per cent in 2007-08 in total exports of surveyed companies, though exports increased from Rs. 134.50 billion in 2002-03 to Rs. 456.07 billion in 2007-08 in absolute numbers, registering an increase 239.09

**TABLE 20**  
**EXPORTS OF RESPONDING COMPANIES CLASSIFIED ACCORDING TO TECHNOLOGY INTENSIVE PRODUCTS, CAPITAL GOODS, CONSULTANCY SERVICES, TURNKEY & PROJECT EXPORTS, TECHNOLOGY KNOWHOW, COMPUTER SOFTWARE & HARDWARE SERVICES**

Sector	No. of Companies	Manpower Employed (Nos.)	R&D Expenditure (Rs.crore)		Annual Turnover (Rs.crore)			Exports (Rs.crore)			
			2005-06	2006-07	2007-08	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08
Consultancy Services	13	130498	83.83	97.69	133.23	33869.89	40673.61	47467.32	1352.85	1533.93	1674.20
Turnkey & Project Exports	22	116596	214.73	268.58	338.19	80309.82	100203.18	123196.01	9334.78	12615.78	16109.43
Capital Goods	43	60499	223.69	226.15	291.80	15002.11	18541.17	17658.78	770.39	869.10	1357.13
Computer Software & Hardware Services	7	51814	77.30	90.09	79.59	3865.10	4733.22	5733.18	3493.61	4407.94	5338.46
Technology Knowhow	7	6147	11.12	13.46	20.32	1562.26	2604.19	3424.91	328.59	616.13	786.35
Technology Intensive Products	275	510466	4765.03	5929.46	6462.35	394030.71	501714.07	585837.06	81016.86	131586.18	160412.42
<b>Total</b>	<b>367</b>	<b>876020</b>	<b>5375.70</b>	<b>6625.43</b>	<b>7325.48</b>	<b>528639.89</b>	<b>668469.44</b>	<b>783317.26</b>	<b>96297.08</b>	<b>151629.06</b>	<b>185677.99</b>

(Based on Compendium on Technology Exports (Vol. IX) –Annexure V)

Note: Rs 100 crore = Rs 1 billion

Source: Field Survey



per cent. Thus, valuwewise export of low technology products increased approximately seven times over the period 2002-03 to 2007-08, medium technology and high technology products increased more than three times during same period.

Exports of technology and technology intensive products are shown in Table 20 for 367 survey units. Exports of these units amounted to Rs. 1,856.78 billion in 2007-08, compared to Rs. 1,516.29 billion in 2006-07, registering a growth of 22.46 per cent. Technology intensive products emerged as the major sector of exports in 2007-08, having a share of 86.39 per cent in the total exports of technology and technology intensive products. Their exports amounted to Rs. 1,604.12 billion in 2007-08, registering an increase of 21.91 per cent over the previous year. Share of other sectors in 2007-08 was turnkey & project exports (8.68%), computer software & hardware services (2.88%), consultancy services (0.90%), capital goods (0.73%), technology know-how (0.42%), from the total exports of 367 units.

#### **14. Sectorwise Exports of the Survey Units**

Sectorwise analysis of the exports of technology intensive products of responding units for the period, 2002-03 to 2007-08, is shown in Table 21. Valuwewise, chemicals and allied products have emerged as the major sector of exports. In 2007-08, their exports registered a growth of 28.87 per cent to Rs 1,012 billion. Other sectors showing a significant growth included, *inter alia*, Project goods (43.52%), Machinery and Instruments (30.72%), Electrical machinery apparatus and appliances (30.08%), Professional instruments (21.88%), consultancy services (18.91%), Medicinal & Pharmaceutical products (17.78%), Transport equipment (14.73%) and Iron ores and iron & steel (7.09%). Four sectors, namely Textiles and Textile products (-78.29%), Plastic Materials (-9.08%), Electronic goods (-2.38) and Manufactures of metals (-0.20%) had declined.

Comparing India's total merchandise exports of select technology intensive sectors *vis-à-vis* exports of surveyed companies (Table 21), analysis shows that share of select technology intensive sector remained around 50 per cent of India's total merchandise exports from the year 2002-03 to 2007-08 (Table 7) and on the other hand sectorwise exports of all surveyed companies' share increased to 28.31 per cent in 2007-08 from 15.19 per cent in 2002-03 in India's total merchandise exports. This implies that the studies being carried out at IIFT are gaining ground and rate of responses has been better than the yester years.

**TABLE 21**  
**SECTORWISE EXPORTS OF SURVEYED ORGANIZATIONS FROM 2002-03 TO 2007-08**

Sector	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	% change in 2007-08 over 2006-07
Textiles and textiles products	78.65	90.14	101.73	246.13	536.67	116.51	-78.29
Chemical & allied products	14377.28	18012.12	30374.36	42414.93	78552.57	101228.82	28.87
Machinery and instruments	101.77	157.03	203.58	288.99	302.00	394.79	30.72
Manufactures of metals	3580.71	5465.02	6730.83	7673.96	11198.10	11176.05	-0.20
Transport equipment	3282.61	4834.84	6634.36	8125.36	10670.53	12242.53	14.73
Iron ores and iron & steel	555.84	1119.20	3353.43	3057.72	3947.00	4226.98	7.09
Medicinal and pharmaceutical products	6471.63	8435.63	9325.57	11126.36	16296.57	19194.45	17.78
Electronic goods	1373.76	1863.49	1779.74	2230.18	2739.73	2674.54	-2.38
Plastic materials	12.46	42.58	47.11	119.70	129.00	117.29	-9.08
Non-electrical machinery, apparatus and appliances including machine tools	398.66	594.97	904.47	914.78	1392.86	1412.14	1.38
Electrical machinery apparatus and appliances	808.12	1073.37	1750.43	2999.03	5294.36	6886.75	30.08
Consultancy services	1743.75	2089.55	2563.83	4370.75	5551.51	6601.21	18.91
Project goods	4022.80	3336.89	4004.96	4198.43	4897.17	7028.38	43.52
Professional instruments	22.18	27.20	37.38	45.78	79.57	96.98	21.88
Others	1919.32	4594.41	6434.25	8484.99	10041.42	12280.56	22.30
<b>Total</b>	<b>38749.55</b> <b>(15.19)</b>	<b>51736.44</b> <b>(17.64)</b>	<b>74246.03</b> <b>(20.52)</b>	<b>96297.08</b> <b>(21.10)</b>	<b>151629.06</b> <b>(26.52)</b>	<b>185677.99</b> <b>(28.31)</b>	<b>22.46</b>
<b>India's Total Exports</b>	<b>2,55,137</b>	<b>2,93,367</b>	<b>3,61,879</b>	<b>4,56,418</b>	<b>5,71,779</b>	<b>6,55,864</b>	<b>14.71</b>

(Based on *Compendium on Technology Exports (Vol. IX) – Annexure VI*)

Notes: (i) Figures in brackets show percentage share of the survey units in India's total exports.  
(ii) Rs 100 crore = Rs 1 billion

Source: Field Survey

## 15. Technology Intensity Based Foreign Collaborations

An analysis of the data of the 180 responding companies/organizations out of the 367 companies engaged in exports and having foreign collaborations reveals that exports of these companies/organizations in 2007-08 registered an increase of 19.16 per cent over the previous year when the same reached a level of Rs. 823.27 billion as against Rs. 690.87 billion in the previous year (Table 22). This indicates increasing trend in companies' exports having some foreign collaborations. For detailed data of exporting companies having foreign collaborations, see Annexure VIII. 93 companies/organizations were engaged in the exports of Medium technology products followed by 59 having High technology products and 28 with Low technology products. In the year 2007-08, share of Low technology exports was 19.58 per cent in total exports as compared to Medium technology (26.53%) and High technology (53.90%).

Likewise, 187 companies without foreign collaborations registered an increase in exports by 25.21 per cent over the previous year when the same reached a level of Rs. 1,033.51 billion as against Rs. 825.42 billion in the previous year. Among these, 102 companies/organizations were engaged in the exports of Medium technology products followed by 37 having High technology products and 48 with Low technology products. In the year 2007-08, share of Low technology exports was 94.06 per cent in total exports as compared to Medium technology (4.75%) and High technology (1.20%). One may infer that, companies without foreign collaborations are mostly exporting Low technology products; while on the other hand, companies with foreign collaboration have a major stake on High technology products.

Comparing exports of companies with foreign collaborations *vis-à-vis* without foreign collaborations from the year 2006-07 to 2007-08 (Table 22), we find the following trend. Medium technology exporting companies having foreign collaborations have increased their exports by 24.59%, while companies without foreign collaborations have shown increment of only 3.24% in their exports. The same trend is seen with High technology exporting companies having foreign collaborations have increased their exports by 24.41% and companies without foreign collaborations have increased their exports only by 13.89%. However, comparing overall technology intensive export growth of companies with and without foreign collaborations, it is seen that export growth in case of companies with foreign collaborations is 19.16 per cent and that of companies without foreign collaborations is 25.21 per cent, signifying know impact of foreign collaborations on technology intensive exports.

## 16. Closing Remarks

From above studies, following trends emerge as far as technology intensive exports are concerned:

- (i) There has been a significant increase in India's technology intensive exports over the last five years, though its share remains low in manufactured exports compared to the world level or even compared to other advanced developing countries.

**TABLE 22**  
**EXPORTS OF COMPANIES/ORGANIZATIONS HAVING FOREIGN COLLABORATION**  
(Rs. crore)

Level of Technology	No. of Companies		2006-07		2007-08		% change in 2007-08 over 2006-07	
	With Foreign Collaboration	Without Foreign Collaboration	With Foreign Collaboration	Without Foreign Collaboration	With Foreign Collaboration	Without Foreign Collaboration	With Foreign Collaboration	Without Foreign Collaboration
Low Technology	28	48	15893.83 (23.01)	76705.58 (92.93)	16116.62 (19.58)	97210.15 (94.06)	1.40	26.73
Medium Technology	93	102	17529.09 (25.37)	4751.44 (5.76)	21838.65 (26.53)	4905.42 (4.75)	24.59	3.24
High Technology	59	37	35664.23 (51.62)	1084.89 (1.31)	44371.50 (53.90)	1235.65 (1.20)	24.41	13.89
<b>TOTAL</b>	<b>180</b>	<b>187</b>	<b>69087.15</b>	<b>82541.91</b>	<b>82326.77</b>	<b>103351.22</b>	<b>19.16</b>	<b>25.21</b>

(Based on *Compendium on Technology Exports (Vol. IX) - Annexure VII*)

Notes: (i) Figures within brackets indicate percentage share in total.

(ii) Rs 100 crore = Rs 1 billion

Source: Field Survey

- (ii) The exporting companies are becoming more R&D oriented. There is a positive relationship of exports with R&D expenditure.
- (iii) Foreign collaborations do not seem to have any significant impact on the high technology exports or in enhancing the domestic technological capabilities directly, though there might be spillover advantages, which varies from sector to sector.
- (iv) Responding companies in the survey are dominated by small and medium technology intensive companies.
- (v) The foreign trade policies and other policies need to focus on technology export capability building and encouraging more effective FDI.
- (vi) Foreign technology transfers through licensing are very small in India, compared to other developing countries such as China and South Korea, and need to be encouraged.
- (vii) Technology intensive exports may be encouraged through a new /additional policy, incentives and support mechanisms.

## **17. Views & Suggestions of Respondents**

During the field surveys, some of the units voiced their suggestions and constraints faced by them in technology intensive exports, which are briefly mentioned below.

1. Assistance is required for transfer of technology, particularly information regarding development or innovation needs of appropriate technology in industry and foreign technology sources. Materials & technologies developed through R&D may also be made accessible to consultants who could appropriately adapt the same for application in projects. Also exporters are facing difficulty in finding or identifying technically and commercially suitable customer or clients.
2. India is known for its computer software including BPO world over, likewise India should be promoted as a manufacturing hub. Propagate India's manufacturing hub as India's strength, particularly in engineering sector with neighbouring countries. Policy initiatives are underway.
3. Need for facilitating access to new technologies in India or abroad, for exports from micro, small and medium enterprises (MSMEs), information and support for testing, quality standards, approvals, etc., in the importing countries, was highlighted.
4. Need for Government support for promoting and marketing of new technology products and services such as buffered coco beat which may even be unknown in the domestic market in order to encourage new entrepreneurs, was also highlighted.
5. Information about potential importing buyers and interactive seminars or workshops, etc. for MSME sector on export marketing were desired. Technology Information Exchanges as in China, Korea, Japan and Philippines, and Technology Transfer Act were suggested by some of the organizations.

6. Easier access to finance for technology development and technology led manufacturing appeared to be a major need for the first generation of technopreneurs of MSME sector.
7. Indian consulting companies having low finance base are finding it difficult to compete with international giants, which may not have constraints of finance. Therefore, promoting a consortium approach or an active fund for this purpose may be considered.
8. Consultancy services, know-how transfer on designing & manufacturing, on-job training to professionals in various aspects of civil construction like highway, bridge engineering, airport & other infrastructure, were some of the preferential areas for exports.
9. Some of the units wanted assistance for wide publicity of their export capability. Many units participate in international exhibitions to publicise their capability of exports and building of their brands. Many Trade Promotion Organizations support only medium enterprises and marginalized micro and small ones was mentioned by units. Private companies registered with the DSIR, at least they should be encouraged and funded for expositions held abroad where the technology developer can foresee potential market of its products.
10. Exports of IT hardware products, is perceived as very cumbersome and time consuming in Customs proceedings. Customs Department policies are outdated on simple issues like warranty support, spares and return of defective units. Any amount of complaints made on these issues has been ignored. Customs Deptt. does not have any concrete incentive to process exports, like in imports where a 'duty amount collected' is a huge incentive. There should be an appropriate incentive like 'value of exports' handled or a separate "Export Promotion Customs Department" to be created.
11. MSMEs appear to be increasingly conscious of building their Brands for sustainable exports. Institutional Business (B2B) "Most preferred supplier in focused segment" and in Retail Business (B2C) "Market leadership by creating unique differentiation" have to be focused in their brand strategy. A Brand Equity Fund should help them.
12. "AYUSH"—Ayurvedic, Yoga, Unani, Siddha and Homoeopathy – is now a buzz word in the alternative system of treatment of ailment. Such units want that Government should take effective steps to promote the concept of Ayurvedic / Herbal products for use in human and animal healthcare in foreign countries and persuade the authorities to formulate appropriate procedures so that prospective buyers can import and buy herbal products or their technologies without any difficulty.
13. More fund allocation towards Alternative System of Medicines should be created not only for registration with various government departments as well in abroad. Many units of this sector feel that registration is cumbersome and costly. These units want that 75 per cent of the total exhibition cost should be borne by the Ministry of AYUSH for creating awareness of AYUSH in American and European people.
14. India is considered as source of low cost technology and low quality technology, creating a poor image that become constraints for export of technology intensive products from India. International buyers get latest technology from the world

and to be competitive with them, which call for high investment. Setting up a Technology Upgradation Fund from the Government is needed.

15. Infrastructure has been the bottleneck in India's foreign trade, though initiatives have been taken, despite many units have been facing problems specially road connectivity, power shortage, congestions at ports and some logistics problem, corrective measures are desired expeditiously.
16. Many units felt that there is a great role of Commercial Representatives in Indian Embassies abroad to provide market intelligence to MSMEs on a regular basis.
17. Making MSMEs more competitive in export business, units of this sector need enhancement of DEPB (Duty Entitlement Pass Book) rates, simplification of payment of duty drawback, introduction of 80HHC benefits in the case of export earnings.
18. Many units outside the area of SEZ/EPZ or 100% EOUs are unable to compete with them as they get tax holidays. Such units engaged in export business should be treated equally with them.
19. Consultancy should be given the status of an industry just as it has been granted to software industry.

TABLE 23

## TRENDS IN SURVEY RESPONSES (1994-2008)

<i>Year</i>		<i>No. of Companies/Organizations contacted through questionnaire</i>	<i>No. of Companies/Organizations responded / Visited</i>	<i>% of Response</i>
2007-08	Covered in Vol. IX	615*	418	67.97
2006-07	Covered in Vol. VIII	3,800	335	8.82
2005-06				
2004-05	Covered in Vol. VII	3,000	375	12.50
2003-04				
2002-03				
2001-02	Covered in Vol. VI	3,000	377	12.56
2000-01				
1999-00	Covered in Vol. V	2,300	250	10.87
1998-99	Covered in Vol. IV	1,550	120	7.74
1997-98	Covered in Vol. III	1,275	57	4.47
1996-97				
1995-96	Covered in Vol. II	1,028	55	5.35
1994-95	Covered in Vol. I	774	34	4.39

Note : Survey for the years 1996-97 and 1997-98 was done together. Similar was the case for the years 2002-03 to 2005-06 and 2005-06 to 2006-07.

\* Questionnaire sent to units which had responded to survey in the past.

TABLE 24  
PART 1 - EXPORTS OF SURVEYED ORGANIZATIONS FROM 2000-01 TO 2007-08

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
1.	A.V. Thomas & Co. Ltd.	--	--	--	0.32	0.41	15.12	43.07	46.73			
2.	ABRO Technologies Pvt Ltd.	0.61	0.46	0.54	0.53	0.62	0.63	0.70	1.80			
3.	ACC Ltd.	--	--	58.49	92.78	85.10	69.18	89.58	103.47			
4.	Accurate Engineering Co. Pvt. Ltd.	0.12	0.18	0.15	0.15	0.16	--	--	--			
5.	Accurate Products Corpn. Pvt. Ltd.	10.00	10.00	2.77	3.01	9.07	7.91	9.47	--			
6.	Ace Designers Ltd.	--	--	--	4.75	3.92	5.15	7.93	14.02			
7.	Ace Hardware Pvt Ltd.	--	--	6.06	8.48	10.59	12.07	20.27	23.76			
8.	Action Construction Equipment Ltd.	--	--	--	--	0.58	4.29	4.62	9.70			
9.	Addison And Company Limited	14.35	11.85	14.34	13.07	14.12	17.02	15.33	15.00			
10.	Aditya Auto Products & Engg. (I) Pvt. Ltd.	2.02	2.45	3.14	3.92	3.99	15.44	27.62	41.11			
11.	Ador Powertron Limited	1.50	2.50	0.19	3.38	4.51	10.84	8.64	14.13			
12.	Adroit Industries (India) Ltd.	--	--	--	15.60	18.40	--	--	--			
13.	Advance International	--	--	2.50	2.50	2.50	--	--	--			
14.	AIA Engineering Limited	--	--	--	39.38	72.18	135.65	175.08	--			
15.	Ajanta Pharma Ltd.	30.52	36.10	57.82	67.36	134.89	116.42	99.10	134.35			
16.	Ajay Industries	7.77	9.92	10.90	13.17	16.70	15.09	16.13	14.68			
17.	Aker Kvaerner Powergas Private Limited	35.60	30.40	17.80	24.30	52.30	80.30	96.70	178.50			
18.	Alembic Ltd.	--	--	117.77	124.29	106.66	131.42	150.41	--			
19.	Alfa Transformers Limited	0.64	2.06	6.37	7.26	3.78	3.81	9.39	--			
20.	Alidia Powertronics Private Limited	--	--	--	1.02	2.25	0.80	0.30	0.15			
21.	Alkali Metals Ltd.	--	--	30.00	24.00	24.00	36.00	30.00	--			
22.	Allengers Medical Systems Ltd.	--	--	0.61	1.59	3.68	3.93	4.71	6.74			
23.	Aman Machine Tools Pvt. Ltd.	--	--	1.38	2.78	3.87	16.37	5.70	13.56			
24.	Amco Batteries Ltd.	0.90	0.66	--	--	--	--	--	--			
25.	Amines And Plasticizers Ltd.	--	--	35.84	18.17	33.52	30.83	31.53	40.61			
26.	Amrutanjan Healthcare Limited	3.15	2.87	2.67	2.51	3.72	5.14	4.96	2.65			
27.	Amsar Private Ltd.	--	1.25	1.63	1.57	--	1.05	1.81	1.51			
28.	Anandha Fabrications (CBE) Pvt. Ltd.	--	--	--	0.27	2.42	0.49	3.05	1.55			
29.	Anant Industries	--	--	--	1.00	1.00	1.50	2.00	--			
30.	ANG Auto Ltd.	--	--	7.81	8.03	14.88	31.28	63.64	60.95			
31.	Ankur Scientific Energy Technologies Pvt. Ltd.	2.68	2.39	--	0.58	0.58	3.13	3.24	14.59			
32.	Apollo Tyres Ltd.	--	--	4.83	40.69	2.20	0.88	41.70	--			
33.	Applied Electro-Magnetics Pvt. Ltd.	0.07	0.74	0.44	0.16	0.01	--	--	0.27			
34.	Aprotech Engineers Pvt. Ltd.	0.07	--	--	0.03	0.02	--	--	--			
35.	Aqua Alloys Pvt Ltd.	--	0.003	0.67	0.82	1.45	1.53	3.51	7.40			
36.	Areva T&D India Ltd.	31.78	57.16	87.76	46.51	69.84	154.60	329.36	329.36			
37.	Arrk Tooling Sermo India Pvt. Ltd.	--	--	2.50	5.00	8.00	10.00	9.00	5.60			



Sl. No.	Companies/Organizations	Exports (Rs crore)												
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08					
38.	Ashok Leyland Limited	163.12	159.13	209.80	302.90	545.20	472.40	658.32	812.77					
39.	Ashok Pharma Chem	--	--	96.69	6.77	59.17	6.50	93.38	0.28					
40.	Ashtavaidyan Thaikattu Mooss Vaidyaratnam Oushadhasala	--	--	0.10	0.10	0.10	0.30	0.60	--					
41.	Asian Paints Ltd.	--	--	7.18	10.26	13.19	20.40	23.81	17.30					
42.	Asian Wire Forming & Springs (P) Ltd.	--	--	--	--	--	0.50	0.80	0.80					
43.	Asiatic Electronic Industries	10.79	9.49	14.90	19.72	11.63	--	--	--					
44.	Associated Engineering Works	0.03	--	--	--	--	--	0.07	--					
45.	Astra Microwave Products Ltd.	0.08	0.13	0.03	0.01	0.29	0.01	0.13	0.44					
46.	Atlas Cycles (Haryana) Ltd.	17.97	19.85	--	--	--	--	--	--					
47.	Atul Ltd.	--	--	290.90	287.10	340.25	414.54	463.89	--					
48.	Auma (India) Pvt. Ltd.	--	--	--	--	--	0.90	0.95	1.00					
49.	Aurobindo Pharma Ltd.	545.18	486.89	565.17	644.87	562.72	832.95	1161.29	--					
50.	Automatic Electric Ltd	2.81	2.38	--	--	--	--	--	--					
51.	Avasarala Tungsten Limited	0.12	0.13	--	--	--	--	--	--					
52.	Avery India Ltd.	2.05	1.46	--	--	--	--	--	--					
53.	Bajaj Auto Ltd.	--	--	357.98	564.47	729.14	943.91	1718.48	2048.00					
54.	Bajaj Electricals Ltd.	1.94	4.96	0.51	2.13	3.71	2.16	0.28	2.63					
55.	Batliboi Ltd.	--	--	5.35	5.68	5.66	7.76	8.39	8.54					
56.	Bejo Sheetal Seeds Pvt. Ltd.	--	--	2.00	3.80	4.00	5.20	6.00	8.00					
57.	BGR Energy System Ltd.	7.00	19.70	--	13.10	50.44	96.35	97.00	130.57					
58.	Bhagwati Filters Pvt. Ltd	0.18	0.13	--	--	--	--	--	--					
59.	Bharat Bijlee Limited	0.13	0.10	--	--	--	--	--	--					
60.	Bharat Earth Movers Ltd.	45.24	36.55	21.45	52.59	58.56	61.49	110.73	200.62					
61.	Bharat Electronics Ltd.	30.50	30.40	48.12	41.30	43.32	61.00	50.08	60.76					
62.	Bharat Forge Ltd.	--	110.80	282.40	346.49	534.86	718.75	836.10	1013.91					
63.	Bharat Fritz Werner Limited	0.01	0.02	0.16	3.12	4.93	8.04	4.85	4.80					
64.	Bharat Gears	--	--	7.37	2.58	13.12	19.22	28.51	39.97					
65.	Bharat Heavy Electrical Ltd.	--	--	441.23	469.31	799.60	709.63	1095.91	--					
66.	Bharat Petroleum Corpn. Ltd.	--	--	1191.31	731.30	1183.98	3726.86	4932.73	7440.16					
67.	Bharti Teletech Ltd.	--	--	9.40	13.00	19.00	25.00	28.00	27.04					
68.	Bhavani Industries	--	--	--	--	--	--	4.20	5.60					
69.	Bhilai Engineering Corporation Ltd.	--	--	18.00	20.00	25.00	50.00	35.00	--					
70.	Bhoruka Gases Ltd.	0.12	0.12	--	--	--	--	--	--					
71.	Bilcare Ltd.	--	--	7.61	4.97	5.29	26.80	23.63	32.77					
72.	Biocon Ltd.	--	46.57	108.52	300.57	378.04	358.95	480.04	522.62					
73.	Blue Star Ltd.	20.50	21.20	21.61	51.20	76.64	82.47	113.84	165.16					
74.	Bosch Chassis Systems India Ltd.	--	--	10.60	17.60	34.60	51.52	25.38	35.60					
75.	Bosch Ltd.	--	--	249.00	325.60	399.70	423.10	627.00	673.00					
76.	BPL Limited	--	--	69.67	140.69	28.77	3.20	2.94	0.06					
77.	Brakes India Limited	60.47	71.49	112.74	138.10	171.47	206.39	302.78	368.94					

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
78.	Bridge and Roof Co. (India) Ltd.	0.12	0.93	0.71	1.31	0.63	0.45	--	--	--	--	--
79.	Bright Burnishing Tools (P) Ltd.	--	--	0.10	0.10	0.10	--	--	--	--	--	--
80.	Britex Industries	0.50	0.60	0.62	0.68	0.72	--	--	--	--	--	--
81.	Buhler (India) Pvt. Ltd.	2.98	2.70	--	--	--	--	--	--	--	--	--
82.	C&S Lighting & Wiring Accessories Pvt. Ltd.	--	--	4.77	7.96	13.27	31.88	43.88	50.17	--	--	--
83.	Cadila Healthcare Ltd.	60.10	84.80	103.70	177.30	138.80	219.00	309.70	437.90	--	--	--
84.	Camphor & Allied Products Ltd.	--	17.40	14.98	15.13	14.42	22.94	32.02	29.15	--	--	--
85.	Carborundum Universal Ltd.	32.00	35.00	22.90	28.70	33.70	46.50	70.70	87.00	--	--	--
86.	CEAT Limited	--	--	161.00	205.00	258.00	393.00	429.00	505.00	--	--	--
87.	Central Manufacturing Technology Institute	--	0.16	0.04	0.03	0.04	--	--	--	--	--	--
88.	Chemito Technologies Pvt. Ltd.	1.50	2.00	3.20	0.80	--	--	--	--	--	--	--
89.	Chemplast Saumar Ltd.	29.38	24.82	29.66	23.69	17.30	21.66	18.72	72.20	--	--	--
90.	Chemtex Consulting Of India (P) Ltd.	0.85	3.85	2.36	4.35	6.36	8.59	12.03	8.10	--	--	--
91.	Chemtrols Industries Ltd.	5.00	4.00	2.00	3.00	3.00	3.50	4.00	52.92	--	--	--
92.	Chemtrols Samil (India) Pvt. Ltd.	--	0.20	0.20	3.30	7.70	--	--	--	--	--	--
93.	Chopra Retec Rubber Products Ltd.	--	--	2.00	3.00	4.00	5.00	6.00	6.50	--	--	--
94.	Cipla Ltd.	--	--	572.93	870.62	1097.95	1565.63	1865.07	2255.21	--	--	--
95.	Clariant Chemicals India Ltd.	--	--	118.84	113.73	104.54	242.65	186.66	--	--	--	--
96.	Clutch Auto Limited	--	--	14.23	15.59	23.22	48.24	50.10	18.06	--	--	--
97.	CMC Ltd.	--	--	75.51	76.74	123.24	80.95	121.90	--	--	--	--
98.	Colgate-Palmolive India Ltd.	--	--	22.69	19.98	20.14	14.48	37.19	65.58	--	--	--
99.	Concast (India) Limited	1.14	2.84	2.77	4.43	9.18	16.19	25.90	38.73	--	--	--
100.	Conex Avioauto Pvt. Ltd.	--	--	--	--	--	2.99	0.03	4.20	--	--	--
101.	Consulting Engineering Services (I) Pvt. Ltd.	17.63	16.30	11.85	26.08	18.28	18.00	28.10	37.81	--	--	--
102.	Crane-Bel International Pvt. Ltd.	--	0.20	--	--	--	--	--	--	--	--	--
103.	Crompton Greaves Ltd.	--	--	197.66	181.65	251.10	440.94	567.50	731.63	--	--	--
104.	Cummins India Ltd.	--	--	176.21	227.40	402.39	544.90	619.74	742.05	--	--	--
105.	Cyano Pharma Pvt. Ltd.	0.27	0.31	0.45	0.45	0.48	0.56	0.69	0.12	--	--	--
106.	D&H Secheron Electrodes Pvt. Ltd.	0.66	7.83	5.49	1.73	--	20.22	42.44	43.00	--	--	--
107.	D.B. Power Electronics Pvt. Ltd.	0.14	0.10	0.70	0.65	0.95	0.79	0.80	3.90	--	--	--
108.	Dabur India Ltd.	--	--	67.91	28.91	36.83	26.32	69.19	94.10	--	--	--
109.	Dabur Pharma Limited	--	--	--	79.34	104.41	118.22	171.65	184.58	--	--	--
110.	Dalmia Cement (Bharat) Ltd.	1.10	2.78	2.60	2.20	4.20	3.70	7.50	10.30	--	--	--
111.	Deccan Mechanical & Chemical Industries Ltd.	--	1.23	--	3.73	4.15	3.04	3.49	3.36	--	--	--
112.	Deepak Nitrite Limited	45.82	55.00	74.18	105.10	132.76	164.76	177.90	202.56	--	--	--
113.	Devendra Exports Pvt. Ltd.	3.35	2.73	10.00	10.00	10.00	8.70	7.50	8.00	--	--	--
114.	DGP Windsor India Ltd.	38.00	42.00	--	--	--	--	--	--	--	--	--
115.	Dishman Pharmaceuticals & Chemicals Ltd.	--	50.28	93.21	90.28	117.47	154.81	199.30	239.58	--	--	--
116.	Divgi Metalwares Pvt Ltd	1.42	0.43	--	--	--	--	--	--	--	--	--
117.	Divi's Laboratories Ltd.	168.40	181.60	220.91	261.43	308.19	338.39	674.26	981.60	--	--	--
118.	Dr. Reddy's Laboratories Ltd.	447.90	953.70	925.26	985.44	919.73	1210.00	3092.53	2259.90	--	--	--

Sl. No.	Companies/Organizations	Exports (Rs crore)											
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08				
119.	Dr. Sabharwal's Bulk Drugs Ltd.	3.19	2.56	--	--	--	--	--	--	--	--	--	--
120.	Dr. Sabharwal's Manufacturing Labs Ltd.	--	--	1.63	1.80	2.01	1.80	2.01	0.92	1.23	0.85	0.85	0.85
121.	Dr. Sabharwal's Medicals Pvt. Ltd.	--	--	--	1.73	3.77	1.73	3.77	6.02	3.28	2.53	2.53	2.53
122.	Dr. Sabharwal's Wound Care	--	--	--	--	--	--	--	--	0.15	4.00	4.00	4.00
123.	Dyna Hitech Power Systems Ltd.	0.59	0.48	--	--	--	--	--	--	--	--	--	--
124.	Dynamatic Technologies Limited	0.63	2.05	3.59	4.43	7.33	4.43	7.33	10.46	10.84	24.62	24.62	24.62
125.	East Coast Enterprises Ltd.	--	--	2.69	2.48	2.68	2.48	2.68	0.97	1.73	--	--	--
126.	Eclipse Systems Pvt. Ltd.	0.80	0.85	0.90	0.95	1.00	0.95	1.00	--	--	--	--	--
127.	EEL India Limited	0.95	3.97	4.75	2.23	3.52	2.23	3.52	9.85	15.48	16.49	16.49	16.49
128.	Eesha Tools	0.75	1.00	--	--	--	--	--	--	--	--	--	--
129.	Eicher Motors Ltd.	--	--	64.19	11.72	54.41	11.72	54.41	122.78	155.66	170.22	170.22	170.22
130.	EID-Parry (India) Limited	--	--	89.20	25.90	17.90	25.90	17.90	152.89	32.73	223.00	223.00	223.00
131.	Ekta Telecommunication & Systems	--	--	--	--	--	--	--	0.12	0.17	--	--	--
132.	Elcomponics Sales Pvt. Ltd.	--	--	--	1.33	19.73	1.33	19.73	64.15	120.70	120.35	120.35	120.35
133.	Electro Crimp Contacts (India) Pvt. Ltd.	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.0062	0.059	0.02	0.02	0.02
134.	Electro Plastics Private Ltd.	--	--	--	0.07	0.13	0.07	0.13	--	--	--	--	--
135.	Electro Systems Associates Pvt Ltd.	--	--	--	--	0.15	--	0.15	0.31	0.08	0.05	0.05	0.05
136.	Electromech Engineers	--	--	5.00	5.00	5.00	5.00	5.00	5.08	2.41	6.50	6.50	6.50
137.	Electromech Material Handling Systems (I) Pvt. Ltd.	--	--	1.35	2.26	2.67	2.26	2.67	3.14	5.96	7.70	7.70	7.70
138.	Electronica Machine Tools Ltd.	4.39	6.36	5.20	10.46	10.10	10.46	10.10	14.06	27.97	21.60	21.60	21.60
139.	Electronics Corporation of India Ltd.	2.97	1.40	--	--	--	--	--	--	--	--	--	--
140.	Electropneumatics & Hydraulics (I) Pvt. Ltd.	0.43	1.18	1.48	3.92	2.29	3.92	2.29	1.15	0.38	2.14	2.14	2.14
141.	Electrosteel Castings Limited	41.08	82.64	--	--	--	--	--	--	--	--	--	--
142.	Electrotherm (India) Ltd.	4.60	3.61	4.48	24.58	34.77	24.58	34.77	40.29	48.68	123.23	123.23	123.23
143.	Elegant Apparels Pvt. Ltd.	0.002	0.001	0.01	0.08	--	0.08	--	--	--	--	--	--
144.	ELGI Equipments Pvt. Limited	12.91	15.45	19.00	28.00	55.00	28.00	55.00	61.00	80.00	103.00	103.00	103.00
145.	ELICO Limited	--	--	6.40	8.40	10.00	8.40	10.00	--	--	--	--	--
146.	Elkay Chemicals Pvt. Ltd.	--	--	0.52	1.32	4.70	1.32	4.70	9.06	3.13	6.50	6.50	6.50
147.	Elmex Controls Pvt. Ltd.	--	--	1.00	--	--	--	--	--	--	--	--	--
148.	Elpro International Ltd.	3.06	6.18	5.46	6.25	10.66	6.25	10.66	11.17	11.66	6.01	6.01	6.01
149.	Emkay Tools	--	--	--	14.00	10.50	14.00	10.50	--	--	--	--	--
150.	Emmessar Biotech & Nutrition Ltd.	0.49	1.18	0.72	0.73	0.42	0.73	0.42	0.21	1.30	0.48	0.48	0.48
151.	Encon Thermal Engineers (P) Ltd.	--	--	0.35	0.30	0.05	0.30	0.05	--	--	--	--	--
152.	Engineering Enterprise Ltd.	0.46	0.52	0.41	0.39	0.36	0.39	0.36	0.40	0.32	0.36	0.36	0.36
153.	Engineers India Limited	--	--	49.52	58.45	78.34	58.45	78.34	80.77	126.70	100.11	100.11	100.11
154.	Enmas Process Technologies Pvt. Ltd.	0.16	10.84	--	--	--	--	--	--	--	--	--	--
155.	Envirotech Instruments Pvt. Ltd.	0.06	0.22	0.86	0.56	0.25	0.56	0.25	0.23	0.22	0.21	0.21	0.21
156.	Escorts Construction Equipment Ltd.	--	--	--	1.00	2.00	1.00	2.00	3.00	5.00	5.50	5.50	5.50
157.	Escorts Ltd.	--	--	121.34	117.99	140.49	117.99	140.49	226.72	247.49	247.49	247.49	247.49
158.	Essar Oil Limited	164.44	309.11	393.97	5.17	7.19	5.17	7.19	2272.18	12234.27	12276.17	12276.17	12276.17
159.	Essar Projects	--	--	--	--	--	--	--	21.62	4.48	1.33	1.33	1.33

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
160.	Essar Steel Limited	--	420.93	499.19	1040.23	2174.12	1774.68	3108.43	3225.07			
161.	Essel Propack Limited	29.49	20.21	19.58	29.50	29.36	46.45	63.04	28.10			
162.	Euroflex Transmission (India) Pvt. Ltd.	0.20	0.35	--	--	--	--	--	--			
163.	Exide Industries Ltd.	--	--	43.39	49.00	56.33	69.40	83.69	135.97			
164.	Fabionix (India) Pvt. Ltd.	--	--	--	--	--	5.00	4.00	6.00			
165.	Fal Industries Ltd	7.54	9.06	--	--	--	--	--	--			
166.	FDC Ltd.	--	--	35.00	48.00	84.00	42.00	42.00	40.62			
167.	Fenwick and Ravi	--	--	--	0.21	0.40	--	--	--			
168.	Ferro Industries	--	--	--	--	--	0.30	0.40	0.50			
169.	Ferromatik Milacron India Ltd.	14.26	15.79	14.10	19.16	30.49	29.24	37.70	43.82			
170.	Fichtner Consulting Engineers (India) Pvt. Ltd.	6.06	5.09	5.48	6.46	3.65	5.92	8.72	15.68			
171.	Fiem Industries Ltd.	--	--	--	0.13	0.64	6.46	8.27	9.69			
172.	Finolex Industries Ltd.	--	0.17	--	1.51	--	--	--	--			
173.	Fleetguard Filters Private Limited	1.56	1.36	2.54	3.16	3.86	--	--	--			
174.	Flow Tech Instruments Services	--	--	--	--	0.04	0.05	0.10	0.03			
175.	Fluidomat Limited	0.07	0.04	--	--	--	--	--	--			
176.	Forbes Marshall Pvt. Ltd.	5.24	6.48	9.80	11.00	18.00	23.23	30.00	35.00			
177.	Force Motors Ltd.	--	--	12.33	11.70	10.96	16.12	28.56	38.59			
178.	Forsberg Agritech (I) Pvt. Ltd.	--	--	--	--	--	0.50	0.78	1.25			
179.	Gammon India Limited	--	--	--	41.11	36.53	39.99	40.92	12.67			
180.	GCL India (P) Limited	--	--	--	--	--	7.00	7.60	8.00			
181.	General Industrial Controls P. Ltd.	--	--	--	0.76	0.99	--	--	--			
182.	Geneva Finepunch Enclosures Ltd.	2.60	7.40	--	--	3.00	4.00	8.00	3.58			
183.	Genus Power Infrastructures Ltd.	--	--	0.69	0.85	2.33	3.28	6.76	4.17			
184.	Gharpure Laboratories Pvt. Ltd.	0.51	0.14	0.14	0.22	0.45	0.0001	0.006	0.002			
185.	Gilard Electronics Pvt. Ltd.	--	--	0.22	0.55	0.36	0.12	0.40	--			
186.	Givi Misure Pvt. Ltd.	--	--	--	--	0.13	0.18	0.18	0.15			
187.	GKDITR – Tooling Centre	--	--	--	--	0.21	0.86	0.66	--			
188.	GKN Sinter Metals Ltd.	6.30	8.22	8.77	10.88	11.66	14.53	--	--			
189.	Glaxosmithkline Consumer Healthcare Ltd.	--	--	39.85	54.30	56.45	60.92	69.78	138.43			
190.	Glenmark Pharmaceuticals Ltd.	--	--	18.32	48.96	130.14	152.34	319.15	684.21			
191.	Global Calcium Pvt. Ltd.	10.55	12.80	9.56	7.70	14.73	--	--	--			
192.	GMR Industries Limited	--	--	30.58	98.97	143.20	91.08	--	--			
193.	Godfrey Phillips India Ltd.	--	--	52.47	69.50	72.53	60.20	80.63	117.89			
194.	Godrej & Boyce Mfg. Co. Ltd.	10.00	10.00	48.86	117.39	134.96	185.31	348.17	--			
195.	Goliya Electricals Pvt. Ltd.	--	--	--	0.03	0.10	0.03	0.21	0.03			
196.	G-Plast (P) Limited	1.00	1.31	1.20	2.29	2.57	5.32	1.15	7.11			
197.	Grauer & Weil (I) Limited	--	--	8.00	10.00	15.25	17.50	21.00	26.51			
198.	Greaves Cotton Ltd.	--	--	18.00	21.61	21.56	14.32	21.22	37.48			
199.	Grind Master Machines Pvt. Ltd.	--	--	5.00	5.00	5.00	--	--	--			
200.	Grindwell Norton Ltd.	10.86	9.40	24.39	29.45	34.82	42.92	46.86	--			

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
201.	Gujarat State Fertilizers & Chemicals Ltd.	--	--	65.16	80.86	176.48	206.76	71.83	33.71	--	--	--
202.	Guru Nanak Engineering Works	--	--	0.09	0.20	0.30	--	--	--	--	--	--
203.	Guruji Products Pvt. Ltd.	--	--	--	--	0.03	--	--	--	--	--	--
204.	GW Precision Tools India Pvt. Ltd.	--	--	--	6.00	7.20	--	--	--	--	--	--
205.	Hamdard (WAKF) Laboratories	0.70	1.50	1.70	1.80	2.00	2.50	3.00	3.50	--	--	--
206.	HBL Power Systems Limited	13.50	22.00	19.06	22.64	44.21	61.66	81.81	83.44	--	--	--
207.	HCL Consulting Limited	744.73	736.73	875.13	1147.54	1428.12	2994.27	3726.09	4545.89	--	--	--
208.	HCL Hewlett Packard Limited	100.77	88.35	65.10	42.27	47.01	78.60	86.91	97.79	--	--	--
209.	HCL Technologies Ltd.	--	--	875.13	1147.54	1428.12	2994.27	3726.09	4545.89	--	--	--
210.	Hero Honda Motors Ltd.	--	--	94.91	118.21	181.70	253.61	263.50	243.64	--	--	--
211.	Hi Tech Gears Ltd.	--	--	8.94	12.78	17.16	30.24	57.98	--	--	--	--
212.	Himachal Futuristic Communications Ltd.	--	--	1.58	3.14	3.93	4.08	30.93	--	--	--	--
213.	Hindalco Industries Ltd.	--	--	1028.26	1295.10	2607.38	3650.16	6977.54	6435.00	--	--	--
214.	Hindustan Antibiotics Ltd.	19.00	20.00	20.00	25.00	30.00	38.70	55.80	4.45	--	--	--
215.	Hindustan Wire Products Ltd.	0.04	0.07	--	--	--	--	--	--	--	--	--
216.	HMT (International) Limited	28.65	41.12	29.11	17.18	14.62	8.94	13.88	22.12	--	--	--
217.	HMT Machine Tools Limited	6.70	18.80	13.20	5.20	9.80	--	--	--	--	--	--
218.	Holtec Consulting Pvt. Ltd.	1.48	6.85	--	9.04	15.68	30.00	52.00	43.50	--	--	--
219.	Horizon Industrial Products Pvt. Ltd.	0.56	1.38	2.05	0.76	0.45	8.75	11.07	7.89	--	--	--
220.	Hospital Services Consultancy Corporation (I) Ltd.	--	0.13	--	--	--	--	--	--	--	--	--
221.	Hughes Software Systems Ltd.	192.89	231.65	213.96	337.92	442.59	763.35	634.93	--	--	--	--
222.	Hyderabad Flextech Limited	1.01	0.46	0.38	0.14	0.07	0.08	0.15	--	--	--	--
223.	Hyderabad Industries Limited	--	--	11.61	8.28	4.53	3.77	6.44	7.00	--	--	--
224.	Hy-Power Clamps Pvt. Ltd.	--	--	--	0.75	1.00	1.30	1.36	1.69	--	--	--
225.	Hytech Micro Measurements (P) Ltd.	--	0.04	--	--	--	--	--	--	--	--	--
226.	I.H. Engineers	--	--	0.20	0.20	0.30	--	--	--	--	--	--
227.	IBP Co. Limited	13.53	1.69	1.12	1.12	2.45	1.69	--	--	--	--	--
228.	Ichalkaranji Textiles Pvt. Ltd.	0.08	0.08	0.08	0.08	0.13	0.13	0.13	0.10	--	--	--
229.	IFB Industries Ltd.	--	--	--	1.86	0.71	1.19	2.03	2.32	--	--	--
230.	Igarashi Motors India Ltd.	--	--	--	46.13	92.09	163.34	220.41	259.36	--	--	--
231.	Imeco Cleaning Welding Equipments Pvt. Ltd.	0.08	0.05	0.17	0.16	0.12	0.08	0.06	0.04	--	--	--
232.	Indabrat Ltd.	0.55	1.00	0.13	0.01	--	--	1.31	1.96	--	--	--
233.	India Pistons Ltd.	--	--	20.00	--	--	--	--	--	--	--	--
234.	Indian Aluminium Company Limited (Indal)	374.70	349.20	--	--	--	--	--	--	--	--	--
235.	Indian Herbs Research & Supply Co. Ltd.	1.12	1.87	--	2.44	4.30	4.44	5.80	6.39	--	--	--
236.	Indian Institute of Chemical Technology	2.99	2.88	0.72	1.20	2.30	--	--	--	--	--	--
237.	Indian Institute of Packaging	0.03	0.01	--	--	0.08	--	--	--	--	--	--
238.	Indian Oil Corporation Ltd.	--	--	675.07	1526.76	2147.18	3463.27	7780.11	--	--	--	--
239.	Indian Petrochemicals Corpn. Ltd.	--	--	424.70	2743.14	1608.52	1604.29	--	--	--	--	--
240.	Indian Toners & Developers Ltd.	--	--	--	--	--	17.00	18.00	20.00	--	--	--
241.	Indo-Air Compressors Pvt. Ltd.	--	0.03	0.004	0.04	0.04	2.00	2.20	2.80	--	--	--

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
242.	Indo-Euro Exports	--	--	7.37	3.78	6.33	8.97	10.71	9.41			
243.	Indore Colour Organics Ltd.	--	--	--	--	--	--	0.18	0.01			
244.	Ind-Swift Laboratories Ltd.	--	--	41.76	67.01	107.57	154.24	156.10	181.00			
245.	Infos Industries Ltd.	--	0.10	0.49	0.81	0.38	--	--	--			
246.	Infosys Technologies Ltd.	--	--	3377.87	4532.56	6105.00	8655.00	12156.00	--			
247.	Infotech Enterprises Limited	54.41	90.77	--	--	--	--	--	--			
248.	Infotrans Design & Engineering	--	--	--	--	--	0.03	0.15	--			
249.	Instrument Research Associates Pvt. Ltd.	0.16	0.20	--	--	--	--	--	--			
250.	Instrumentation Engineers Pvt. Ltd.	--	--	--	--	--	--	--	--			
251.	Intas Pharmaceuticals Ltd.	12.34	21.97	30.35	32.15	108.43	131.86	151.28	272.99			
252.	Integral Coach Factory	--	--	0.03	0.24	3.50	--	17.54	38.21			
253.	Intercontinental Consultants and Technocrats Pvt. Ltd.	18.45	21.16	16.10	16.22	17.36	16.08	29.34	32.49			
254.	International Tractors Ltd.	--	--	3.10	2.63	14.19	61.30	85.48	24.49			
255.	Intra Vidyut Ltd	0.38	0.62	--	--	--	--	--	--			
256.	ION Exchange (India) Ltd.	12.27	15.78	15.04	30.53	38.66	34.90	0.63	69.20			
257.	IP Rings Ltd.	--	--	0.05	0.16	0.35	0.65	0.02	0.25			
258.	IPCA Laboratories Ltd.	--	--	266.07	342.39	390.97	385.77	467.31	519.84			
259.	IRCON International Ltd.	392.30	569.34	372.37	240.41	160.09	110.33	159.66	221.45			
260.	ITC Ltd.	--	--	1294.00	1077.51	1268.65	1793.51	2283.21	2168.41			
261.	ITI Limited	3.68	0.85	2.80	8.36	43.78	4.36	19.58	8.12			
262.	ITL Industries Ltd.	--	--	0.03	0.01	0.45	0.06	0.99	9.49			
263.	ITW India Limited	19.40	15.60	--	17.30	35.40	--	--	--			
264.	J.B. Chemicals & Pharmaceuticals Ltd.	101.97	124.17	139.17	157.76	197.85	244.76	287.72	319.49			
265.	J.K. Industries Ltd.	134.49	149.38	--	--	--	--	--	--			
266.	J.P. Industries	--	--	40.00	40.00	40.00	--	--	--			
267.	J.R. Fabricators Ltd.	--	0.63	--	--	--	--	--	--			
268.	Jacobs H&G Private Limited	15.89	11.86	25.05	27.95	49.26	--	--	--			
269.	Jain Irrigation Systems Ltd.	--	--	106.87	128.38	210.37	269.08	372.77	408.26			
270.	Jainsons Industries	0.17	0.07	--	--	--	--	--	--			
271.	Jawla Engg. Pvt. Ltd.	--	--	--	0.90	0.80	0.10	0.12	0.15			
272.	Jayaswals Neco Limited	12.00	15.25	--	--	--	--	--	--			
273.	Jayem Manufacturing Company	0.30	0.40	0.50	0.60	0.80	--	--	--			
274.	Jindal Steel & Power Limited	0.24	3.37	3.61	83.10	329.04	371.85	676.40	--			
275.	Jindal Strips Limited	164.00	394.83	--	--	--	--	--	--			
276.	JK Tyre & Industries Ltd.	--	--	310.92	349.52	387.95	382.95	474.38	746.26			
277.	John Fowler (India) Limited	0.95	0.03	--	--	--	--	--	--			
278.	Jolly Videotronics	--	--	--	--	--	--	--	--			
279.	Jubilant Organosys Ltd.	--	--	182.91	216.17	339.69	465.40	633.52	856.30			
280.	Jyoti Structures Ltd.	111.36	130.47	94.29	53.72	94.15	102.30	85.06	355.34			
281.	K.K. Electronics	--	0.13	0.26	--	--	0.04	--	1.52			
282.	K.U. Sodalamuthu and Co. Pvt. Ltd.	3.06	2.41	2.07	4.04	6.38	--	--	--			

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
283.	Kalpataru Power Transmission Ltd.	103.42	101.97	121.14	54.44	129.49	203.64	321.23	379.22	--	--	--
284.	Kalpaka Handmade Paper Industries	--	0.03	--	--	--	--	--	--	--	--	--
285.	Kalyani Brakes Limited	2.20	5.30	10.60	17.60	34.60	--	--	--	--	--	--
286.	Kansai Nerolac Paints Ltd.	0.08	0.16	0.24	0.30	0.96	3.53	2.10	5.49	--	--	--
287.	Kartik Steels Limited	0.01	0.03	0.01	0.45	--	--	--	--	--	--	--
288.	Kaveri Agricare Pvt. Ltd.	--	--	0.20	0.54	1.16	--	--	--	--	--	--
289.	Kaveri Telecom Products Limited	--	0.27	0.15	0.27	0.62	5.22	0.66	0.55	--	--	--
290.	KCP Biotech Limited	--	--	--	--	0.14	31.02	4.79	12.53	--	--	--
291.	KEC International Limited	393.41	403.76	--	--	--	--	--	--	--	--	--
292.	Kilburn Chemicals Ltd.	--	--	0.11	0.22	0.49	7.45	20.96	19.50	--	--	--
293.	Kinetic Engineering Ltd.	0.93	0.99	13.04	17.11	19.48	27.58	30.00	16.73	--	--	--
294.	Kingsley Industries Ltd.	--	--	0.10	0.58	0.22	0.17	0.60	0.59	--	--	--
295.	Kirloskar Consultants Limited	--	2.33	1.83	1.58	1.35	--	--	--	--	--	--
296.	Kirloskar Electric Co. Ltd.	9.16	7.50	6.48	3.39	11.22	14.88	18.57	36.88	--	--	--
297.	Kirloskar Oil Engines Ltd.	--	--	38.00	61.01	91.76	130.22	138.98	163.89	--	--	--
298.	Kopran Ltd.	56.55	43.66	37.70	65.92	30.73	66.62	61.44	46.33	--	--	--
299.	Krone Communication Ltd.	--	--	3.42	6.18	6.66	6.62	7.02	8.63	--	--	--
300.	KSB Pumps Ltd.	19.70	27.10	--	26.50	31.80	--	--	--	--	--	--
301.	Kumar Metal Industries	6.85	11.17	--	--	--	--	--	--	--	--	--
302.	Kwality Pharmaceutical (P) Limited	--	--	--	--	5.50	6.00	7.00	17.00	--	--	--
303.	L&T - Komatsu Limited	--	--	2.28	4.72	6.86	4.37	6.34	--	--	--	--
304.	Lagan Engineering Company Limited	--	--	2.44	1.02	0.71	1.29	3.24	1.80	--	--	--
305.	Lakshmi Auto Components Limited	--	1.21	--	--	--	--	--	--	--	--	--
306.	Lakshmi Machine Works Ltd.	--	--	54.41	91.21	107.38	132.55	82.28	129.49	--	--	--
307.	Lamina Suspension Products Ltd.	--	--	7.38	9.04	12.96	12.59	19.22	20.24	--	--	--
308.	Larsen & Toubro Ltd.	711.08	1151.60	1552.42	1366.38	2667.37	3177.99	3770.59	5656.59	--	--	--
309.	LD Power Transformers Pvt. Ltd.	--	--	--	--	0.02	--	--	--	--	--	--
310.	Litex Electricals Private Limited	0.28	0.16	--	--	--	--	--	--	--	--	--
311.	Lloyds Steel Industries Limited	39.26	28.30	37.85	112.74	158.65	127.29	276.22	34.36	--	--	--
312.	LMJ International Ltd.	--	--	160.88	567.99	456.77	246.72	324.85	564.74	--	--	--
313.	Lokesh Machines Limited	1.77	0.63	0.03	2.30	5.95	3.45	4.38	8.50	--	--	--
314.	Lucas-TVS	--	--	17.88	19.52	29.00	34.71	57.88	102.82	--	--	--
315.	Lumax Industries Limited	--	--	2.08	2.11	5.01	8.04	11.91	10.45	--	--	--
316.	Lupin Ltd.	--	--	414.39	576.44	558.06	789.39	1093.94	1508.51	--	--	--
317.	M.R. Morarka GDC Rural Research Foundation	--	--	--	--	2.50	--	--	--	--	--	--
318.	Madhya Pradesh Transformers	--	--	--	0.38	2.19	--	--	--	--	--	--
319.	Madras Cements Ltd.	--	--	8.35	15.58	25.48	68.24	17.80	--	--	--	--
320.	Mahindra & Mahindra Ltd.	--	--	214.07	228.41	339.06	508.08	712.86	883.56	--	--	--
321.	Maini Precision Products Pvt. Ltd.	--	26.00	--	--	--	--	--	--	--	--	--
322.	Mak Controls & Systems (P) Ltd.	--	--	0.53	1.08	6.00	3.25	15.64	27.58	--	--	--
323.	Mamata Machinery Pvt. Ltd.	--	--	13.87	17.41	21.32	23.07	21.84	23.75	--	--	--

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
324.	Maniar & Co.	--	--	0.67	0.42	0.17	3.11	--	0.84			
325.	Maruti Suzuki India Ltd.	--	--	620.50	941.80	983.00	583.90	578.10	741.30			
326.	Master Industries	--	--	--	0.10	0.20	--	--	--			
327.	Matrix Laboratories Ltd.	4.56	20.84	281.98	297.59	340.42	417.11	526.27	639.31			
328.	Mediatronix Pvt. Ltd.	0.002	0.08	0.81	0.91	0.55	19.18	20.58	30.74			
329.	Merck Limited	12.26	7.70	21.29	16.22	18.80	19.18	20.58	30.74			
330.	Mercury Laboratories Ltd.	--	--	--	1.97	2.34	4.25	5.20	3.50			
331.	Metal Impregnations (India) Pvt. Ltd.	1.61	0.97	3.80	1.74	2.89	3.21	2.98	4.81			
332.	MIC Electronics Limited	--	--	--	--	0.58	--	--	--			
333.	Micromatic Grinding Technologies Ltd.	1.15	1.43	1.03	0.30	0.75	0.79	1.33	2.34			
334.	Mikronix Gauges Pvt. Ltd.	--	--	1.00	1.00	1.00	--	--	--			
335.	MI. Industries Limited	2.90	1.82	1.19	0.89	2.44	1.43	2.44	3.22			
336.	Minda Industries Ltd.	--	--	2.22	5.18	5.82	20.31	17.06	--			
337.	MITCON Consultancy Services Ltd.	--	0.05	0.08	0.08	0.06	0.13	0.33	0.74			
338.	Mitsuba Systems	0.70	0.47	--	--	--	--	--	--			
339.	MM Forgings Limited	--	--	47.04	67.10	96.80	85.30	99.00	110.09			
340.	Modern Lock Mfg. Co.	10.00	10.00	10.00	6.50	6.50	--	--	--			
341.	Moog Controls (India) Pvt. Ltd.	11.50	12.30	--	19.40	41.20	30.19	39.15	47.19			
342.	Moser Baer India Limited	--	588.20	926.90	1234.70	1002.80	1404.50	1589.20	1480.20			
343.	Motor Industries Co. Ltd.	199.80	192.80	256.53	346.18	439.52	464.64	678.74	--			
344.	Mouldcraft Industries	--	--	--	--	--	0.10	0.10	0.10			
345.	Movers (India) Private Ltd.	3.75	0.45	1.50	2.23	2.99	2.36	2.68	8.12			
346.	Mphasis BFL Limited	267.87	303.32	--	--	--	--	--	--			
347.	MRF Ltd.	--	--	319.75	355.53	427.22	504.10	493.41	--			
348.	MRO-TEK Ltd.	--	--	--	8.03	1.61	3.72	4.09	7.78			
349.	Mukul Enterprises	0.002	0.002	0.17	0.07	0.09	0.04	0.02	0.19			
350.	NATCO Pharma Ltd.	29.59	28.86	58.48	61.67	91.85	80.58	84.83	92.96			
351.	National Film Development Corporation Ltd.	2.90	2.52	1.72	1.41	1.33	0.67	--	0.63			
352.	Natural Remedies Private Limited	10.00	10.00	10.00	6.50	6.50	9.60	11.20	12.10			
353.	Neel Controls	0.01	--	0.01	0.01	0.003	2.52	0.08	0.06			
354.	Neeru Enterprises	--	--	--	--	--	10.00	15.00	22.00			
355.	Nesco Limited	0.55	1.00	0.02	0.01	0.07	--	--	--			
356.	Nestle India Ltd.	--	--	243.86	184.06	206.39	221.75	326.69	--			
357.	Nicholas Piramal Healthcare Ltd.	--	--	46.00	123.00	163.00	327.00	1021.00	1275.00			
358.	Nichrome India Limited	4.88	5.78	--	8.00	10.00	10.33	15.79	14.71			
359.	Nikasu Frozen Foods International	--	--	0.92	1.49	4.16	3.43	4.00	4.32			
360.	Nivedita Chemicals Pvt. Ltd.	1.37	2.30	1.44	2.28	2.28	3.77	4.43	4.34			
361.	NKP Engineers & IPRs Consultants	0.01	0.03	0.09	0.20	0.45	--	--	--			
362.	NMDC Ltd.	591.49	749.71	139.06	117.77	151.26	21.38	0.72	875.28			
363.	NRB Bearings Ltd.	6.22	6.91	9.80	11.75	18.09	19.77	25.70	37.11			
364.	NTPC Ltd.	--	--	0.40	0.30	0.50	0.70	1.00	--			



Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
365.	O/E/N India Ltd.	--	--	3.53	5.45	5.86	8.59	7.95	4.60			
366.	Obeetee Pvt Ltd.	--	--	72.03	84.27	103.45	136.87	177.82	151.19			
367.	OHM Energy Management System Pvt. Ltd.	--	--	--	--	--	--	1.50	2.00			
368.	Oil and Natural Gas Corpn. Ltd.	--	--	159.20	374.42	1210.48	2609.38	2990.66	3794.72			
369.	Opto Circuits (India) Limited	--	--	36.87	47.80	69.06	63.42	148.91	264.02			
370.	Orchid Chemicals & Pharmaceuticals Ltd.	318.00	353.70	447.60	531.50	520.04	621.04	701.08	1008.56			
371.	Orient Abrasives Ltd.	--	--	1.73	3.62	11.13	13.95	22.44	29.12			
372.	Otis Elevator Company (India) Ltd.	0.62	0.96	1.87	1.97	2.94	3.82	2.98	8.10			
373.	Overseas Carpets Ltd.	--	--	41.60	38.90	40.68	42.45	38.28	38.57			
374.	Panacea Biotech Ltd.	--	--	13.57	14.88	14.40	46.06	174.97	642.06			
375.	Paramount Conductors Ltd.	2.65	0.83	--	--	--	--	--	--			
376.	Parveen Industries Pvt. Ltd.	9.10	21.64	--	--	--	--	--	--			
377.	Patel Furnace & Forging Pvt. Ltd.	--	--	--	0.72	0.46	0.90	2.24	2.33			
378.	PBJ Industrial Electronic Pvt. Ltd.	--	--	0.70	1.03	0.63	0.72	0.27	0.75			
379.	PEC Ltd.	577.20	659.10	2243.80	1685.00	910.00	382.63	356.77	--			
380.	Peninsula Electronics Ltd.	1.41	2.11	2.82	6.73	6.43	7.42	9.23	9.34			
381.	Pennar Industries Ltd.	--	--	--	1.49	3.31	4.05	4.89	18.69			
382.	PEP Infotech Ltd.	--	--	0.47	1.40	1.22	2.28	0.49	--			
383.	Petron Engineering Construction Ltd.	--	--	0.08	0.54	45.62	64.69	74.49	52.00			
384.	Pfizer Ltd.	--	--	27.08	24.05	26.97	28.54	22.07	--			
385.	Phoenix Yule Limited	--	--	26.47	48.88	38.34	30.61	34.17	29.50			
386.	Pix Transmissions Ltd.	--	--	36.89	47.04	52.15	70.75	78.76	90.58			
387.	Plethico Pharmaceuticals Ltd.	12.00	11.00	21.46	128.94	87.08	184.64	--	--			
388.	PMT Machine Tool Automatics Ltd.	4.40	3.80	--	--	--	--	--	--			
389.	Powergear Limited	10.50	21.90	38.50	52.50	70.00	8.00	8.50	8.75			
390.	Prabha Engineering Pvt. Ltd.	2.57	3.12	--	--	--	32.90	23.38	24.00			
391.	Praga Tools Ltd.	--	--	0.12	--	--	--	--	--			
392.	Pragya Equipment Pvt. Ltd.	--	--	--	--	0.50	1.00	1.50	1.09			
393.	Praj Industries Ltd.	5.50	7.60	32.74	24.70	125.95	87.03	185.50	320.76			
394.	Precitech Turnings Pvt. Ltd.	--	--	0.46	0.89	1.04	1.40	2.22	1.24			
395.	Prem Industries	--	--	--	0.34	0.10	0.32	0.70	--			
396.	Premier Explosives Ltd.	--	--	12.25	5.98	4.19	5.69	8.22	4.45			
397.	Premier Polytronics Pvt. Ltd.	7.80	15.37	--	--	--	--	--	--			
398.	Pricol Ltd.	27.49	18.72	34.84	41.35	60.22	60.31	103.71	126.09			
399.	PSI Data System Ltd.	--	--	35.65	31.98	50.48	45.72	59.72	65.49			
400.	PSI Hydraulics	--	--	--	0.60	0.70	0.03	0.03	--			
401.	Pune Techtrol Pvt. Ltd.	0.002	0.02	0.01	0.13	0.61	0.19	0.24	0.12			
402.	Punj Lloyd Ltd.	--	--	189.14	107.85	655.49	512.71	779.89	--			
403.	Punjab Tractors Ltd.	--	--	6.24	5.08	37.46	45.57	20.77	--			
404.	QMAX Test Technologies Pvt. Ltd.	--	--	24.00	30.00	36.00	5.00	3.30	3.60			
405.	R&D Engineers	0.60	1.30	--	2.94	2.00	5.99	5.20	3.26			

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
406.	RA Chem Pharma Ltd.	--	--	--	16.00	17.00	28.00	30.00	--	--	--	--
407.	Ragheer Machinery Private Ltd.	--	--	6.70	9.23	18.32	24.71	25.30	--	--	--	--
408.	Rajamane Industries Private Ltd.	16.00	0.20	0.22	0.30	0.44	0.40	0.38	0.42	--	--	--
409.	Rajendra Mechanical Industries Ltd.	4.02	6.45	9.61	11.87	11.08	12.05	13.21	16.54	--	--	--
410.	Rajesh Exports Ltd.	--	--	--	2372.40	4023.22	5217.39	6383.15	8063.96	--	--	--
411.	Rajoo Engineers Limited	--	--	10.43	12.45	21.26	16.21	16.47	13.75	--	--	--
412.	Rallis India Ltd.	--	--	140.00	99.28	119.53	147.71	152.77	163.92	--	--	--
413.	Ramco Systems Ltd.	--	--	21.81	32.32	59.12	38.64	46.58	46.01	--	--	--
414.	Ranbaxy Laboratories Ltd.	801.96	1029.08	2015.62	2559.14	2513.96	2357.75	2755.86	2810.98	--	--	--
415.	Rane Brake Linings Limited	--	--	5.40	6.73	6.72	9.80	12.11	15.26	--	--	--
416.	Rane Engine Valves Limited	--	--	29.37	34.12	43.40	45.41	56.79	66.68	--	--	--
417.	Rashtriya Ispat Nigam Ltd.	--	--	600.22	769.23	248.82	442.56	424.32	554.73	--	--	--
418.	Rasoya Proteins Limited	--	--	0.06	--	--	0.90	15.05	27.83	--	--	--
419.	Raunaq Automotive Components Ltd.	0.20	0.09	0.23	0.29	0.44	2.55	2.13	4.12	--	--	--
420.	RDB Rasayans Ltd.	--	--	--	--	--	70.80	72.00	75.00	--	--	--
421.	Reliance Industries Ltd.	--	--	11510.00	14969.00	25352.00	32691.00	66627.00	83492.00	--	--	--
422.	Renuka Plasti Crafts Pvt. Ltd.	--	--	0.34	0.45	1.04	2.85	5.45	0.61	--	--	--
423.	Rico Auto Industries Limited	--	--	16.85	16.40	43.00	89.00	120.00	142.23	--	--	--
424.	RITES Ltd.	62.00	151.00	91.74	109.26	51.56	137.54	289.83	295.47	--	--	--
425.	Rolta India Limited	--	--	35.98	64.78	119.26	106.35	96.30	112.72	--	--	--
426.	Roots Multiclean Limited	2.36	3.33	6.42	9.49	16.30	17.22	18.48	18.47	--	--	--
427.	Roto Pumps Ltd.	--	--	4.99	5.74	8.90	10.92	15.70	24.42	--	--	--
428.	RPG Cables Limited	376.89	333.38	--	--	--	--	--	--	--	--	--
429.	S. Duraisamy & Sons	--	--	--	0.70	1.00	3.77	12.60	10.11	--	--	--
430.	S.R.P. Tools Ltd.	0.58	0.93	--	--	--	--	--	--	--	--	--
431.	S.S. Foundry Chemical Industries Pvt. Ltd.	0.02	2.00	5.00	1.83	6.27	6.00	2.31	2.57	--	--	--
432.	Sahajanand Laser Technology	--	2.31	3.81	12.05	14.53	--	--	--	--	--	--
433.	Sai Machine Tools Pvt. Ltd.	--	1.21	--	--	--	--	--	--	--	--	--
434.	Sai Surface Coating Technologies	--	0.01	--	--	--	--	--	--	--	--	--
435.	Saint Gobain Crystals & Detectors India Pvt. Ltd.	9.58	18.34	23.00	30.00	29.00	20.82	40.12	54.72	--	--	--
436.	Saj Test Plant Private Limited	--	--	0.59	1.04	1.45	1.30	1.48	2.38	--	--	--
437.	Salora International Ltd.	--	--	6.19	7.16	10.20	15.74	14.29	70.11	--	--	--
438.	Salzer Electromics Ltd.	--	--	1.60	1.74	3.04	5.11	7.14	--	--	--	--
439.	Sami Labs Ltd.	--	--	--	61.15	96.44	152.19	109.56	77.91	--	--	--
440.	Samkrg Pistons and Rings Ltd.	0.34	1.16	3.46	8.08	12.63	17.20	21.53	23.55	--	--	--
441.	Samtel Color Ltd.	10.00	10.00	107.27	145.82	232.53	157.91	185.92	36.51	--	--	--
442.	Santech Hydrofluid Engineers	--	0.60	0.80	1.00	3.00	--	--	--	--	--	--
443.	Sanwa Diamond Tools Pvt. Ltd.	--	--	--	0.08	1.00	--	--	--	--	--	--
444.	Saraf Impex (P) Ltd.	--	--	10.22	12.57	24.92	31.43	57.39	46.87	--	--	--
445.	Sarda Magnetics Pvt. Ltd.	--	--	--	--	0.31	1.44	0.88	--	--	--	--
446.	Saru Copper Alloy Semis (P) Ltd.	--	--	--	1.40	1.90	3.80	7.00	7.22	--	--	--

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
447.	Sasken Communication Technologies Ltd.	--	--	108.38	164.77	217.99	259.58	356.41	381.70	--	--	--
448.	SBEM Pvt. Ltd.	0.02	0.01	0.08	0.10	0.20	--	--	--	--	--	--
449.	Scientech Technologies Pvt. Ltd.	0.10	0.29	0.23	0.49	0.67	1.77	2.72	3.74	1.60	1.80	2.00
450.	Selec Controls Pvt. Ltd.	--	--	--	--	--	--	--	--	0.03	0.35	--
451.	Senso Medi Systems	--	--	--	--	--	--	--	--	--	--	--
452.	Septu India Pvt Ltd.	0.19	0.58	--	--	--	--	--	--	--	--	--
453.	Sermo-Arkk India Pvt. Ltd.	--	--	2.50	5.00	8.00	10.00	9.00	--	--	--	--
454.	Servokon Systems Pvt. Ltd.	--	0.03	0.05	0.07	0.08	--	--	--	--	--	--
455.	Seto Teknolog Pvt. Ltd.	0.01	0.04	--	--	--	--	--	--	--	--	--
456.	Shailesh Machines International	--	--	0.15	0.11	0.09	0.70	1.47	0.21	--	--	--
457.	Shantha Biotechnics Limited	5.60	5.80	44.20	12.60	46.30	72.57	85.08	115.82	72.57	85.08	115.82
458.	Sharp Electrodes Pvt. Ltd.	--	62.50	--	1.94	4.37	3.09	3.79	4.42	3.09	3.79	4.42
459.	Sharp Tools	--	--	0.57	1.54	0.38	1.53	1.31	1.53	1.53	1.31	1.53
460.	Shasun Chemicals & Drugs Ltd.	--	--	153.72	180.10	239.04	251.93	249.94	287.70	251.93	249.94	287.70
461.	Shilpa Chem	--	--	--	0.05	0.10	--	--	--	--	--	--
462.	Shivalaya Machinery Mfg. Co.	--	0.08	--	0.02	0.02	--	--	--	--	--	--
463.	Shoma Enterprises	--	--	--	--	0.02	0.07	0.17	--	0.02	0.07	--
464.	Shree Precoated Steels Ltd.	--	--	135.17	308.21	481.79	677.61	1045.34	--	677.61	1045.34	--
465.	Shriram Fuel Injection Industries Ltd.	10.52	9.96	10.99	13.88	19.18	14.39	17.46	18.43	14.39	17.46	18.43
466.	Shyam Telecom Ltd.	6.33	2.56	--	--	--	--	--	--	--	--	--
467.	Siemens Ltd.	--	--	89.25	156.31	418.74	1056.10	2671.41	3095.68	1056.10	2671.41	3095.68
468.	Siemens VDO Automotive Limited	8.57	18.99	--	--	--	--	--	--	--	--	--
469.	Simpson & Co. Ltd.	0.68	0.61	1.50	1.82	1.94	4.19	1.79	2.41	4.19	1.79	2.41
470.	Sindia Steels Ltd.	--	--	15.13	10.50	12.91	29.22	34.49	48.83	29.22	34.49	48.83
471.	SK Dynamics Pvt Ltd.	1.62	1.87	1.83	2.07	7.40	--	--	--	--	--	--
472.	Skytech Engineering	--	--	--	--	--	--	0.22	--	--	0.22	--
473.	Slick Auto Accessories P. Ltd.	--	--	--	--	--	--	0.08	--	--	0.08	--
474.	Southern Petrochemical Industries Corporation Ltd.	36.10	168.70	200.81	69.12	51.88	44.28	--	45.60	51.88	44.28	45.60
475.	Speck Systems Limited	3.90	2.58	1.76	0.28	12.55	--	--	--	--	--	--
476.	Spel Semiconductor Ltd.	--	--	51.87	25.41	36.32	46.07	52.88	72.86	46.07	52.88	72.86
477.	SRF Ltd.	--	--	99.48	128.32	150.58	328.86	788.32	578.06	328.86	788.32	578.06
478.	Sridevi Tool Engineers Pvt. Ltd.	--	--	0.80	1.66	--	0.86	1.96	--	0.86	1.96	--
479.	SSP (Pvt) Limited	3.87	2.77	6.49	15.11	11.67	10.05	10.82	--	10.05	10.82	--
480.	Steel Authority of India Ltd.	--	--	1076.60	1688.39	1335.43	1091.64	1169.55	1234.41	1091.64	1169.55	1234.41
481.	Steelworth Pvt. Ltd.	6.35	3.38	--	--	--	--	--	--	--	--	--
482.	Sterling Tools Limited	0.12	--	1.97	--	3.62	3.78	4.62	5.85	3.78	4.62	5.85
483.	Sterlite Technologies Ltd.	--	--	29.56	22.74	34.27	84.79	296.44	518.01	84.79	296.44	518.01
484.	Sti Sanoh India Limited	--	1.00	--	--	--	--	--	--	--	--	--
485.	Stone Age Ltd.	--	--	12.96	14.08	18.07	25.96	36.51	46.76	25.96	36.51	46.76
486.	Stumpp, Schuele & Somappa Pvt. Ltd.	2.59	2.63	3.46	3.29	2.92	10.99	8.45	9.20	10.99	8.45	9.20
487.	STUP Consultants (P) Ltd.	0.34	2.06	2.15	0.59	2.39	2.18	2.21	6.33	2.18	2.21	6.33

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
488.	Subros Ltd.	--	--	0.19	0.01	0.001	0.01	0.03	0.01	0.03	--	--
489.	Sudal Industries Ltd.	--	--	0.63	0.35	0.49	0.10	1.49	0.10	1.49	0.91	0.91
490.	Sun Agrigenetics Pvt. Ltd.	--	--	--	--	--	--	--	--	0.02	0.03	0.03
491.	Sun Pharmaceutical Industries Ltd.	--	--	140.39	205.75	286.65	404.85	523.18	404.85	523.18	895.07	895.07
492.	Sundaram - Clayton Ltd.	8.30	9.80	9.80	33.88	64.95	90.94	145.72	90.94	145.72	165.89	165.89
493.	Sundaram Auto Components Limited	--	--	--	3.18	6.57	--	--	--	--	--	--
494.	Sundaram Brake Linings Limited	32.30	42.80	53.20	50.40	56.00	54.82	54.90	54.82	54.90	58.76	58.76
495.	Sundaram Fasteners Limited	75.70	81.80	96.00	172.00	257.40	325.63	362.46	325.63	362.46	344.92	344.92
496.	Supa Sales and Services Pvt. Ltd.	0.50	0.50	--	--	--	--	--	--	--	--	--
497.	Suprajit Engineering Ltd.	0.65	1.20	--	3.63	7.88	9.51	6.48	9.51	6.48	6.10	6.10
498.	Suraj Impex (India) Pvt. Ltd.	--	--	100.60	231.22	293.73	584.17	370.50	584.17	370.50	481.15	481.15
499.	Suraj Stainless Ltd.	--	--	26.36	39.44	64.89	86.46	167.77	86.46	167.77	217.55	217.55
500.	Surya Pharmaceutical Ltd.	--	--	63.17	83.07	66.01	89.57	98.29	89.57	98.29	165.21	165.21
501.	Switching Techno Gunther Ltd.	--	--	4.41	4.99	6.08	3.69	7.49	3.69	7.49	7.96	7.96
502.	Synergy Telecom (P) Ltd.	--	--	--	--	--	--	0.20	--	0.20	0.15	0.15
503.	Syngenta India Ltd.	--	--	23.08	63.37	145.84	327.45	272.38	327.45	272.38	509.18	509.18
504.	Talbro Automotive Components Ltd.	10.00	10.00	9.29	9.77	13.60	12.47	13.65	12.47	13.65	25.11	25.11
505.	Target Engineering Co.	--	--	--	--	0.01	--	--	--	--	--	--
506.	Tata BP Solar	--	131.00	141.37	219.21	329.41	308.14	491.68	308.14	491.68	680.11	680.11
507.	Tata Elxsi Ltd.	--	--	53.63	74.21	108.70	152.27	219.63	152.27	219.63	291.54	291.54
508.	Tata International Ltd.	1965.42	1786.67	2224.08	2662.27	3620.80	2676.26	691.77	2676.26	691.77	--	--
509.	Tata Motors Limited	--	--	444.60	998.27	1436.56	2196.69	2687.29	2196.69	2687.29	2844.12	2844.12
510.	Tata Projects Limited	27.99	8.34	22.88	23.92	27.66	46.16	52.88	46.16	52.88	55.78	55.78
511.	Tata Refractories Ltd.	--	--	23.00	34.50	37.35	51.50	51.30	51.50	51.30	68.60	68.60
512.	Tata Steel Ltd.	--	--	1332.15	1501.31	2189.89	2110.19	2103.89	2110.19	2103.89	2288.61	2288.61
513.	TCF Consulting Engineers Ltd.	10.68	16.52	16.75	10.42	9.80	8.35	12.97	8.35	12.97	14.45	14.45
514.	Tecumesh Products India Ltd.	9.35	31.00	--	--	--	--	--	--	--	--	--
515.	Tejaswani	--	--	--	--	0.01	--	--	--	--	--	--
516.	Telecommunications Consultants India Ltd.	378.07	383.03	355.08	370.44	279.66	223.10	185.68	223.10	185.68	--	--
517.	Texmaco Limited	3.34	14.26	3.77	21.51	28.78	62.42	182.63	62.42	182.63	315.32	315.32
518.	The Anup Engineering Ltd.	0.24	0.28	--	--	--	0.01	--	0.01	--	1.02	1.02
519.	The Eimco-Kcp Ltd.	--	0.20	1.16	0.43	0.09	1.25	0.12	1.25	0.12	0.04	0.04
520.	The KCP Limited	--	--	4.53	2.07	8.75	13.04	16.00	13.04	16.00	29.84	29.84
521.	Thermax Limited	101.00	107.00	120.91	113.08	180.87	242.00	305.63	242.00	305.63	678.20	678.20
522.	Thirumalai Chemicals Ltd.	--	--	39.16	26.78	35.30	33.22	85.24	33.22	85.24	91.50	91.50
523.	Thyssenkrupp Industries India Private Limited	14.84	3.97	--	--	--	--	--	--	--	--	--
524.	Titan Biotech Limited	--	--	0.03	0.14	1.06	1.21	--	1.21	--	--	--
525.	Tool Aids Pvt. Ltd.	--	--	--	--	--	0.02	0.03	0.02	0.03	--	--
526.	Torrent Pharmaceuticals Ltd.	31.16	36.52	38.27	48.83	99.89	138.25	173.67	138.25	173.67	232.75	232.75
527.	Toshiba (India)	--	--	--	--	0.01	--	--	--	--	--	--
528.	Toshniwal Instrumnts (India) Pvt. Ltd.	1.45	2.00	--	--	--	--	--	--	--	--	--

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
529.	Transpek Industry Ltd.	16.93	1.16	2.13	3.48	10.04	17.50	26.87	58.55			
530.	Tribology India Ltd.	--	--	0.20	0.06	--	0.10	0.11	0.35			
531.	Triveni Engineering & Industries Ltd.	--	--	8.51	21.75	11.19	19.88	62.38	78.06			
532.	TT Limited	--	--	57.85	67.96	75.82	219.22	482.79	51.20			
533.	TTK Pharma Ltd.	2.35	1.59	2.26	1.99	1.22	1.93	1.80	2.36			
534.	TTK-LIG Ltd.	--	--	111.34	--	103.98	110.84	110.34	150.70			
535.	Tube Investments of India Ltd.	48.10	35.40	52.90	82.70	180.20	152.12	146.57	154.82			
536.	Turbomachinery Engineering Industries (P) Ltd.	0.16	0.25	--	--	--	--	--	--			
537.	TVS Electronics Limited	22.00	29.40	33.70	33.50	44.40	36.76	52.58	8.64			
538.	TVS Motor Co. Ltd.	15.60	16.70	24.97	69.48	122.20	180.68	258.10	334.47			
539.	Tyco Electronics Corporation India Pvt. Ltd.	62.20	67.80	--	83.10	--	--	--	--			
540.	UB Engineering Ltd.	86.40	25.55	33.78	10.60	55.68	112.86	63.96	8.96			
541.	Ucal Fuel Systems Ltd.	--	--	24.84	33.12	29.97	32.27	29.08	35.49			
542.	Uday Computer Aided Manufacturing (P) Ltd.	--	--	0.37	0.22	0.35	1.00	2.25	2.53			
543.	Ultratech Metals (I) Pvt. Ltd.	--	--	20.48	24.49	20.83	25.08	32.96	49.80			
544.	Unichem Laboratories Ltd.	--	--	26.94	45.02	68.90	94.73	123.90	116.27			
545.	Unicorn Engineers	--	--	--	--	--	0.01	0.01	--			
546.	Unitech Limited	8.82	4.96	7.39	4.29	3.40	0.96	2.16	--			
547.	United Phosphorus Ltd.	--	--	10.66	479.17	601.00	742.20	765.60	2500.00			
548.	Universal Ferro & Allied Chemicals Ltd.	53.17	25.17	50.42	138.74	--	--	--	--			
549.	Upadhaya Valves Manufacturers Private Limited	2.84	2.32	--	--	--	--	--	--			
550.	Usha Engineering Works	0.57	0.26	1.90	0.20	2.20	--	--	--			
551.	Usha International Ltd.	--	--	--	75.50	93.20	74.00	53.80	44.31			
552.	Usha Martin Limited	--	--	187.00	213.30	435.84	327.91	365.74	--			
553.	UT Limited	--	--	0.10	0.07	0.28	0.11	0.38	1.00			
554.	V. Automat & Instruments (P) Ltd.	0.01	0.02	--	--	0.08	0.14	0.042	0.003			
555.	Vacuum Plant & Instruments Mfg.Co. Ltd.	0.54	1.09	0.62	1.70	2.02	1.71	6.77	0.80			
556.	Vanaz Engineers Limited	--	--	0.66	0.69	2.01	1.89	2.48	1.50			
557.	Vasantha Tool Crafts Pvt. Ltd.	--	--	0.92	0.86	0.83	4.08	3.39	6.68			
558.	Ved Sassomeccanica (India) Pvt. Ltd.	--	0.03	--	--	--	--	--	--			
559.	Vetal Textiles of Electronics (P) Ltd.	0.04	0.001	--	--	--	--	--	--			
560.	Vikrant Auto Suspensions	--	--	6.32	5.60	6.31	6.26	5.31	6.14			
561.	Visaka Industries Limited	17.89	12.25	19.09	17.87	19.00	16.07	36.49	47.72			
562.	Visualsoft Technologies Ltd.	--	--	122.97	153.86	188.18	160.25	--	--			
563.	Vivimed Labs Limited	--	--	9.62	14.15	24.39	30.97	24.63	38.98			
564.	Voltas Limited	14.84	9.05	27.02	27.21	42.38	83.86	52.84	152.05			
565.	VXL Instruments Ltd.	14.60	16.90	6.07	23.03	40.53	30.56	62.96	81.35			
566.	W.S. Industries (India) Ltd.	33.62	--	55.03	27.79	36.12	34.80	40.42	51.09			
567.	Wadia Technical Services Pvt. Ltd.	12.50	--	--	--	--	--	--	--			
568.	Walchandnagar Industries Ltd.	8.90	1.11	3.05	7.58	30.04	61.02	113.92	111.05			
569.	Water & Power Consultancy Services (I) Ltd.	--	--	--	6.04	5.31	4.17	27.27	36.31			

Sl. No.	Companies/Organizations	Exports (Rs crore)										
		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08			
570.	Wheels India Ltd.	1.20	2.90	54.35	68.56	106.90	147.21	182.77	223.51			
571.	Windsor Machines Ltd.	--	--	34.02	16.80	31.04	29.75	34.96	27.83			
572.	Wiperdrive Engineering	0.02	0.04	0.04	0.05	0.05	--	--	--			
573.	Wipro Ltd.	1813.40	2349.48	2886.58	3835.75	5373.69	7083.29	10954.60	12885.20			
574.	Wipro Infrastructure Engineering Limited	--	--	30.00	30.00	30.00	--	27.10	29.30			
575.	Wockhardt Ltd.	--	--	230.78	283.25	327.49	358.49	406.16	--			
576.	Wyeth Ltd.	--	--	--	23.64	0.09	0.23	1.26	7.62			
577.	Yamuna Cable Accessories (P) Ltd.	--	--	--	--	1.18	5.84	3.81	4.73			
578.	Yamuna Gases and Chemicals Ltd.	4.91	2.30	--	--	--	--	--	--			
579.	Yamuna Power & Infrastructure Ltd.	--	--	8.42	6.75	6.21	4.62	11.44	4.66			
580.	Yuken India Limited	--	--	0.14	1.00	2.00	1.70	2.20	1.50			
581.	Zandu Pharmaceutical Works Limited	1.27	1.99	3.03	2.27	1.04	1.73	2.36	1.94			

Note: Some of these companies (around 20%) also participated in the survey prior to 2000.

TABLE 24

**PART 2—COMPANIES WHICH PARTICIPATED IN SURVEY DURING 1994-2000  
BUT STOPPED PARTICIPATING AFTER 2000**

<i>S.No.</i>	<i>Company</i>	<i>S.No.</i>	<i>Company</i>
1.	Aeronautical Development Agency	39.	Modern Communication & Broadcast Systems Pvt. Ltd.
2.	Agricultural Finance Corporation Ltd.	40.	Modern Malleables Ltd.
3.	Alfa Geo (India) Ltd.	41.	Modi Hoover International Ltd.
4.	Amtech Electronics (India) Ltd.	42.	Mogora Cosmic Pvt. Ltd.
5.	Appropriate Technologies Ltd.	43.	MVD Auto Components Pvt. Ltd.
6.	Autopins (India) Ltd.	44.	National Aerospace Laboratories
7.	Aventis Pharma Ltd.	45.	National Heavy Engineering Co-operative Ltd.
8.	B.S. Industries	46.	National Research Development Corporation
9.	Bhari Information Technology Systems Pvt. Ltd.	47.	NGEF Ltd.
10.	Bhaskara Advanced Automation	48.	NSP Electronics Ltd
11.	Biofil Chemicals & Pharmaceuticals Ltd.	49.	Nulab
12.	Central Electrochemical Research Institute	50.	Oriental Structural Engineers Ltd.
13.	Central Leather Research Institute	51.	P.C. Exports
14.	CIMMCO International	52.	P.S. Electricals Pvt. Ltd. (R&D Centre)
15.	Continental Device India Ltd.	53.	Parshwnath Dyechem Industries Pvt. Ltd.
16.	Crossworld Corporation	54.	Price Waterhouse Associates Pvt. Ltd
17.	Dewan Chand & Co. (P) Ltd.	55.	Rajshi Steering Pvt. Ltd.
18.	Eddy Current Controls (India) Ltd.	56.	S.K. Dynamics Pvt. Ltd.
19.	Electronica Switchgears Pvt. Ltd.	57.	Santoni Electric Co. Pvt. Ltd.
20.	Geoservices Ltd.	58.	Saw Pipes Ltd.
21.	Gharpure Associates	59.	Scooters India Ltd.
22.	Gharpure Consulting Engineering Pvt. Ltd.	60.	Sensortronics Sanmar Limited
23.	Gherzi Eastern Ltd.	61.	SM Overseas Limited
24.	Hical Magnetics Private Ltd.	62.	Somdutt Builders
25.	Hi-Rel Electronics Pvt. Ltd.	63.	Structwel Designers & Consultants Pvt. Ltd.
26.	HITECH Drilling services (I) Ltd.	64.	Sudershan Drugs & Intermediates Limited
27.	Hivoltrans Electricals Pvt. Ltd	65.	Swatantra Auto Ind. Pvt. Ltd.
28.	Hoechst Marion Roussel Limited	66.	Tapan Preci Tec Limited
29.	HTL Ltd.	67.	Technicast Engineers Ltd.
30.	Humphreys & Glasgow Consultants Ltd.	68.	Telco Automation Ltd.
31.	Hydraulics Ltd.	69.	The National Industries Development Corporation Ltd.
32.	Indfos Industries Ltd.	70.	TRF Ltd. (A Tata Enterprise)
33.	Indiana Dairy Specialities Ltd.	71.	Unipatch Rubber Ltd.
34.	Integral Development Engineers Pvt. Ltd.	72.	Valvoline Cummins Ltd.
35.	Jhalani Tools (India) Ltd.	73.	Win-Medicare Ltd.
36.	Kateel Engineering Industries Pvt. Ltd.		
37.	Krupp Industries India Limited		
38.	Metallizing Equipment Co. Pvt. Ltd.		

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Recognizing the role of innovations, R&D and technology for the growth and competitiveness of trade and industry on knowledge based economy; the **Centre for International Trade in Technology (CITT)** was set up at Indian Institute of Foreign Trade (IIFT) in 2001 jointly by the efforts of Department of Scientific & Industrial Research, Ministry of Science & Technology, Government of India and IIFT.

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