

**Ministry of Commerce & Industry**

**Department of Commerce**

**Report of the Working Group**

*on*

**‘Boosting India’s  
Manufacturing Exports’**

**Twelfth Five Year Plan (2012-17)**

**Report of the Working Group on  
'Boosting India's Manufacturing Exports'**

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## **Preface**

The realization that there is need to boost the manufacturing output in the country to effectively address the problems of unemployment and underemployment and ensure inclusive growth is reflected in the earnestness with which the National Manufacturing Policy is being formulated by the government. Manufacturing production and exports have been driving the rapid growth of many dynamic emerging economies. However, it has not contributed perceptibly to India's growth story; nor has it been up to the urgent task of shifting surplus work force from the agriculture sector.

Manufacturing exports constitute the lion's share of merchandise exports of countries. In the case of P.R. China, for example, the share is 93 per cent against India's 61.5 percent. While India's exports have picked up very well in recent years (during 2006-10 India's exports rose by 15.4 per cent (CAGR) against global export growth of 5.9 per cent), with our share in global exports moving up from around 0.5 per cent in 1990 to 1.3 per cent in 2009. However, imports have been rising faster, driven largely by the demands of a growing economy. With the result the trade balance has been widening and in 2004-05 the current account balance turned negative and has remained in the deficit zone ever since. This has important implications for macroeconomic balance on the external front, which invariably affects the internal balance and price stability in the economy, with resultant adverse effects on growth and welfare. Substantial increase in invisibles has not been able to help. Foreign investment flows have limitations since a substantial part of it comes in as short term flows, adding to volatility. There cannot be any close substitute for trade surpluses.

Department of Commerce recognized the un-sustainability of the emerging scenario and prepared a Strategy paper for Doubling India's Exports in three years (2010-11 to 2013-14). The paper recognized that widening trade deficit is unsustainable and that there is urgent need to accelerate exports from the current level of US\$ 246 billion (2010-11) to US\$ 500 billion in three years (in 2013-14). Merchandise exports need to grow at Compounded Annual Growth Rate(CAGR) of 26.7 % to achieve this target. The Working Group on Boosting India's Manufacturing Exports was constituted by the Planning Commission to build further on the strategy prepared by the Department, but confining to the manufacturing sector.

The Working Group has considered manufactured exports in an inclusive manner covering sectors like Engineering and Electronics; Drugs, Pharma, Fine Chemicals, Other Basic Chemicals; Plastic & Linoleum; Textiles - Cotton Yarn/Man-made Yarn/Fabrics/Made-ups, RMG of all Textiles; and Leather, Gems & Jewellery, Jute, Carpets and Handicrafts. The Group has explored the steps required to improve the export potential in these sectors. The Micro, Small and Medium Enterprises (MSME) sector which have substantial employment and export potential were also looked at closely. The Group has also considered certain cross cutting themes which have vital bearing on manufacturing export performance. These are Brand India, Non Tariff Measures, Free Trade Agreements and Technology Intensity. Accordingly six Sub-Groups viz. on (i) Engineering and Electronic Goods, (ii) Chemicals, Pharma and Plastic, (iii) Textiles, (iv) Employment intensive sectors (Leather, Gems & Jewellery, Jute, Carpets and Handicrafts), (v) Micro Small and Medium Enterprises (MSME) and (vi) Technology Intensity in India's Manufacturing Exports were constituted.

Manufacturing exports grew by a compounded annual rate of 16.2 per cent during the first four years of XI Plan (2007-08 to 2010-11). Engineering products emerged as the most dynamic sector with its share in total manufacturing exports increasing from 35 per cent in 2007-08 to 39.8 per cent in 2010-11.

A number of constraints faced by the various manufacturing sub-sectors are common, and include stiff competition from other emerging market economies, especially China, high cost of funds, low technology intensity, inadequate infrastructure, scarcity of skilled and semi-skilled manpower, high input costs, high transaction costs and the slowing down of world demand.

The major recommendations of the Working Group are summarized in the Executive Summary.

Any efforts at boosting exports have to take into account the realities that are emerging at the international and domestic levels. These include the emergence of the South from the periphery to closer to the central stage of the global economy, the ongoing diversification of India's export destinations and the need for meeting the employment objective and for addressing the sensitive issue of inclusive growth.

The global economic outlook is a major determinant of export performance. The outlook is currently subdued and the west is struggling to recover from the effects of the financial crisis and is faced with the prospects of a double dip. Inflationary pressures are weighing heavy on the growth prospects of emerging economies in general.

However, the current subdued international environment has not been allowed to overly influence the outlook for export performance projected by the Working Group. Some degree of optimism has to be imbued in any projections for a five year period. The Working Group recognizes that India continues to be

competitive in certain sectors and our wage rates have not yet caught up with our competitors.

The Working Group has projected growth of manufacturing exports from the current level of US\$ 151 billion to US\$ 534 billion by the final year of the 12<sup>th</sup> Plan. This gives a CAGR of 28.7 per cent. Assuming that the share of manufacturing in total merchandise exports remains at the same level as at present (61.5 per cent) over the 12<sup>th</sup> Plan period and assuming that the rest of the merchandise trade basket also grows at the same rate as manufacturing exports, the total merchandise exports are likely to be near the US\$ 900 billion mark during 2016-17.

(Rahul Khullar)  
Commerce Secretary &  
Chairman of the Working Group  
on 'Boosting India Manufacturing Exports'

New Delhi

Dated 9 September, 2011



# **Executive Summary**

## **Introduction**

Many advanced and developing countries followed a path of classical transformation of their economies from primary (agriculture and allied) to secondary (manufacturing) and tertiary (services) in successive stages. The share of the manufacturing sector in GDP increased over time and in the process the sector absorbed people migrating from agriculture for better employment prospects. However, in the case of India the development process appears to have skipped the second stage of economic transition (industrial sector growth), moving directly to growth in the services sector. The share of India's manufacturing sector in her GDP has remained stagnant at 15-17 percent. Manufacturing has not contributed perceptibly to tackling the problem of unemployment and underemployment in the unorganised sector.

India has set the target to raise the share of manufacturing from the current level of about 15 per cent to 25 percent of GDP by 2025 and the National Manufacturing Policy aimed at achieving this objective is expected to be finalised in the near future. Competitive and efficient manufacturing, besides serving the employment objective, would also enable India to push up exports of manufactured goods befitting her potential.

## **Strategy Paper on doubling of exports**

The Department of Commerce finalised in May 2011, a Strategy Paper on Doubling of Exports from US\$ 246 billion to US\$ 500 billion in the next three years (2011-12 to 2013-14),. Merchandise exports need to grow at CAGR of 26.7 % to achieve this target in 2013-14. The Paper recognizes that in our fast growing economy, rapid increase in exports is the only option available to manage the current account deficit at reasonable levels.

## **Global scenario**

Global economic scenario continues to be volatile. Sovereign risks and insufficient pace of progress in banking system repair in the euro area periphery are aggravating the volatility. A large number of advanced economies are grappling with fiscal challenges. The recent downgrading of the credit rating of US and political developments in the Middle East and in North Africa, have raised questions about the sustainability of the high rates of growth of our exports in the recent past. FDI flows have also remained subdued and have not recovered to the pre-crisis levels.

India's economy is now much more globally integrated as merchandise trade is currently (2010-11) 37 per cent of her GDP. Global economic outlook is a major determinant of export performance of any country. Export growth cannot, therefore, be viewed in isolation from economic outlook in the world economy.

## **Export markets**

During 2011 to 2016, growth in the advanced economies is projected to average at about 3.7 percent while developing and emerging economies are projected to grow at 8.9 percent<sup>1</sup>. As a proportion of the global GDP, the share of GDP of emerging and developing economies is projected to increase by six percentage points at the expense of advanced economies. Within emerging economies, the relative share of GDP in world GDP of Developing Asia, Sub Saharan Africa, West Asia and North Africa and Latin America and Caribbean is expected to increase.

India's exports have to take note of the projected trends in world growth and the past trends of our export markets for our goods. Our policies have to be geared to take advantage of the growth potential in emerging and developing economies.

### **Working Group and Sub Groups**

The Working Group on 'Boosting India's Manufacturing Exports' set up under the umbrella of the Planning Commission Steering Committee on Industry for the XII Plan constituted four sector specific Sub Groups, viz. (i) Engineering and Electronics, (ii) Chemicals, Pharmaceuticals and Plastics, (iii) Textiles and (iv) Labour intensive sectors like Gems and Jewellery, Leather, Handicrafts etc. Two other Sub Groups, viz. on (a) MSMEs and (b) Technology Intensity in manufacturing Exports were also constituted.

### **Manufacturing Export growth during the XI Plan**

The share of the manufacturing sector in total merchandise exports remained largely same during the period 2007-08 to 2010-2011 moving from 59.2 per cent to 61.5 per cent (Annex. 0.1). The realization of the need to substantially increase the share of manufacturing in India's GDP from the current levels of around 15 per cent to 25 per cent by 2025 to address the problem of unemployment and under employment in the country has as its natural corollary the strategy to 'boost India's manufacturing exports' as well during the XII Five Year Plan.

Manufacturing exports grew by a compound annual rate of 16.2 per cent during the first four years of XI Plan (2007-08 to 2010-11). Engineering products emerged as the most dynamic sector with its share in total manufacturing exports increasing from 35 per cent in 2007-08 to 39.8 per cent in 2010-11. The sector has also registered accelerated growth during the first quarter of 2011-12. The second major contributor to India's manufacturing export performance is Gems and Jewellery, with a share of 22.2 per cent. Textiles is at the 3<sup>rd</sup> place accounting for around 13.9 per cent in the total manufacturing exports, a fall from over 17.8 per cent in 2006-07.

#### **I. Export of Engineering and Electronic Goods**

Export of engineering and electronic goods increased from US\$ 37.07 billion in 2007-08 to US\$ 67.6 billion in 2010-11, an increase of 22.2 per cent (CAGR) (Graph: 0.1).

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<sup>1</sup> IMF's World Economic Outlook database (April 2011)

## I.1 Engineering

The engineering sector is the largest segment of the overall Indian industrial sector accounting for 3 per cent of India's GDP. The share of engineering products such as manufactures of metals, machinery and instruments and transport equipments in total manufacturing exports has increased from 35 per cent in 2007-08 to 39.8 per cent in 2010-11. Still, there is need to boost engineering exports as India accounts for only a mere 0.8 per cent share of world engineering exports (in 2008).

The sector faces a number of problems like stiff competition from China, high cost of capital, low technology, inadequate infrastructure, trade barriers, transactions costs, slowing down of world demand etc. The Working Group has set an overall export target for engineering exports at the end of the XII Plan, of US\$ 222 billion. To achieve this target, emphasis should be on strategies to (i) create a more competitive domestic engineering sector and (ii) promote engineering exports through strengthening or modifying the existing set of policy instruments.

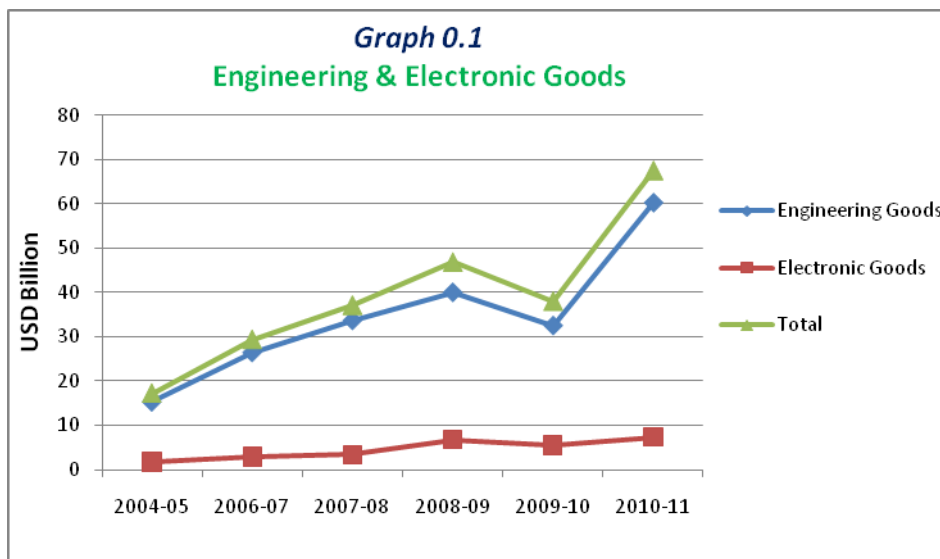
### **Strengthening Engineering Production: Recommendations**

The suggestions for a more competitive domestic engineering sector by strengthening the base of the general engineering segment are given below:

- Technology Upgradation Fund Scheme for the Engineering Sector, particularly, the MSME Sector
- Increase the inflow of FDI in manufacturing sector,
- Focus on R&D and Innovation,
- Credit at internationally competitive rates for investment in Capital Goods/Equipment and Capacity Addition,
- Expansion of capacities to enable MSMEs reap economies of scale and lower the cost of credit for term loans
- Improve Power availability
- Policies for availability of raw materials for the Engineering industry at competitive prices
- Initiate labour reforms
- Promote skill development
- Introduce a full GST which implements the notion of one Common Market

The proposed strategy also highlights the need to encourage production and export of specific engineering industries such as automobile industry and auto components. Setting up of two dedicated berths for handling automobile export cargo , one on the East coast preferably in and around Chennai and the other on the West coast, waving of MAT obligation on export earnings, promotion of hybrid and electric vehicles and Technology Upgradation & Development Scheme (TUDS) for auto components and casting are the crucial elements of

the strategy. To harness the US\$ 91 billion manufacturing opportunity in the defence sector during 2010–2014, the recommendations are short term procurement plan by the Ministry of Defence, liberalization of the off set policy and FDI in the Defence sector.



### **Promoting Engineering Exports: Recommendations**

Policy recommendations by the Working Group for promoting engineering exports include:

- i) Ensure Policy Stability during the XII Plan period
- ii) Lower rate of export credit for the Engineering Sector
- iii) National Shipping Regulator (Some Members of the sub Group have reservations on this)
- iv) Upgrading Export Infrastructure
- v) Promotion and Strengthening of Brand Image of Indian Engineering Goods
- vi) Expanding FMS, FPS and MLFPS Benefits and Identification of Thrust Markets and Thrust Products
- vii) Create a Fund to develop Service and Distribution Outlets in Difficult Markets

## **I. 2 Electronic Goods**

India has a share of 1.44 per cent in the world Electronics market estimated at US\$ 1.8 trillion. The growth of the electronics manufacturing has sorely lagged behind consumption. Electronics as a meta resource is the second largest item in the import basket after petroleum, a fact which largely goes unnoticed. The strengths in the form of a healthy electronic components industry and strong design expertise have to be positioned to attract manufacturing investments.

Important features of the strategy for bolstering growth in electronics manufacturing include (a) change in strategy from ‘Design led Manufacturing’ to ‘Demand led

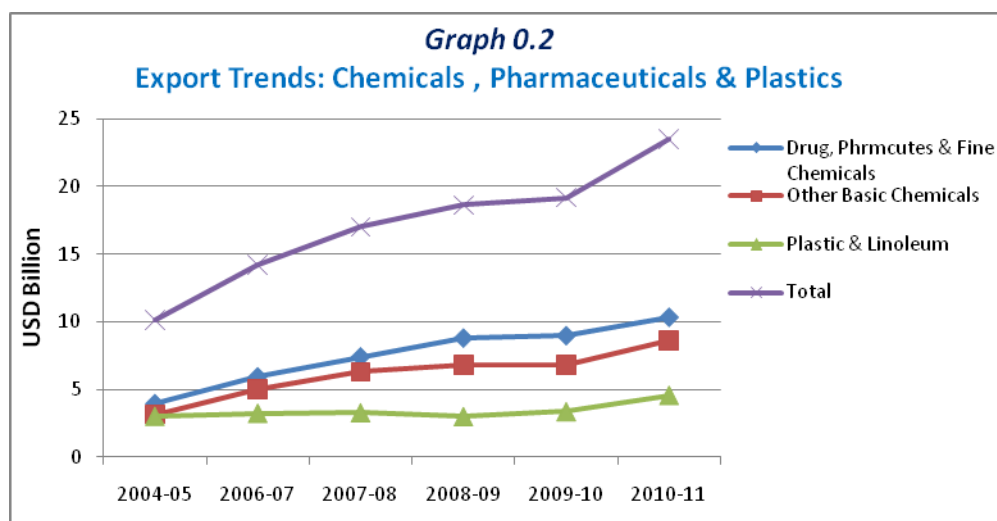
Manufacturing, (b) promotion of Export incentives to create an environment for electronics exports, (c) development of clusters for Electronics – ‘design to marketing’ clusters, (d) promotion of tax holidays and incentives for EMS companies investing in the country and (e) policy to attract investment in setting up of ecosystem companies.

The target for electronics export at the end of the 12<sup>th</sup> Plan is US\$ 29.3 billion. Strategies for achieving this target include:

- Identification of new opportunities Repair, Reconditioning and Refurbishing of Electronics Hardware Goods,
- Set up two Semiconductor Wafer Fabs
- Preferential access to “Manufactured-in-India” Electronics Products and “Indian Electronics Products” for all government procurements and procurement by Government Licensees.
- Set up a dedicated Electronic Development Fund
- Providing Capital grant and creation of electronic manufacturing clusters to encourage manufacture of specific high priority electronic product line in India
- Skill Development
- Relocation
- Intelligent manufacturing

## II. Chemicals, Pharmaceuticals and Plastics

Exports of chemicals, plastics and pharma have done relatively well in the last four years with a CAGR of 11.4 per cent during 2007-08 to 2010-11(Graph 0.2). After an average performance in 2009-10 exports have rebounded in 2010-11. The problems and challenges faced by the sector have been examined separately from the production and export related angles and specific strategy to address these have been made. Beginning with the targets indicated in the Strategy paper on doubling of exports in three years (2010-11 to 2013-14), the growth rate in the subsequent three years for chemicals and plastics have been moderated at 15 per cent, in stipulating the export target for the XII Plan. Pharma sector’s target for 2016-17 is an ambitious US\$ 42 billion.



## II.1 Chemicals

For the chemical sector, production related strategies include on time availability of feed stock at competitive rates, consolidation under Petroleum, Chemicals and Petrochemical Investment Regions (PCPIR) - mother plant producing feed stock, enhancement of manufacturing capacities, common facility for compliance of environment norms. Development of scientific regulatory framework, and concessional availability of export finance/packing credit are the prominent export related strategies for chemicals.

## II.2 Plastics

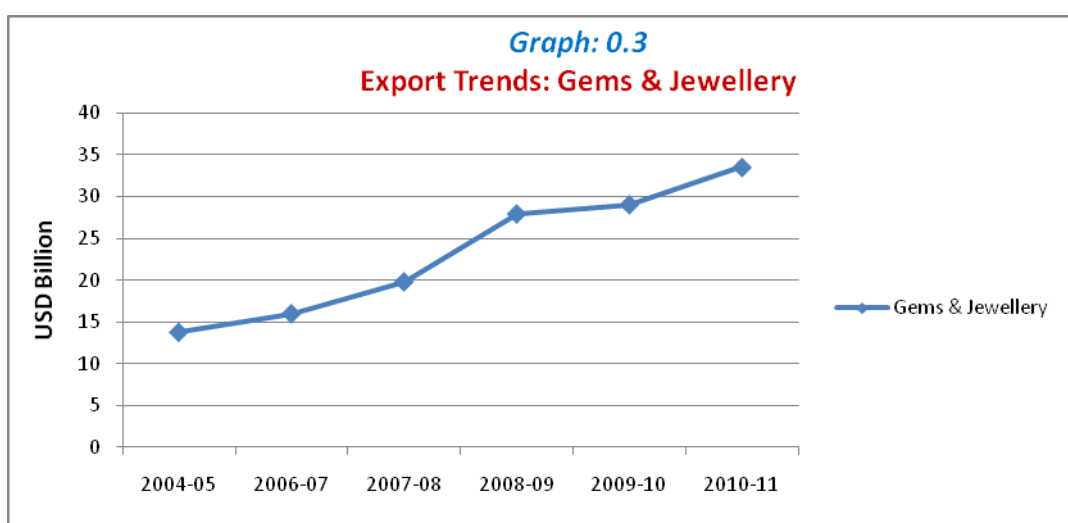
In the plastic sector, stepping up manufacturing base of processing by facilitating fresh investments for plastic processing parks and cluster development are the major production related strategies. Export related strategies include focus on high-value-added and high technology items, setting up of common facility centres for design and prototyping of plastic items and mould & dye design centres and tool rooms, widening of product base in existing markets/exploring new markets and market research/intelligence.

## II.3 Pharmaceuticals

The suggested strategy for further building on our strength for boosting pharmaceuticals exports includes, financial support, funding through SPVs, aggressive diffusion of knowledge, cluster development, brand building ,shared services in foreign countries, herbal industrial parks and setting up of pharma zones.

## III. Employment Intensive Sectors

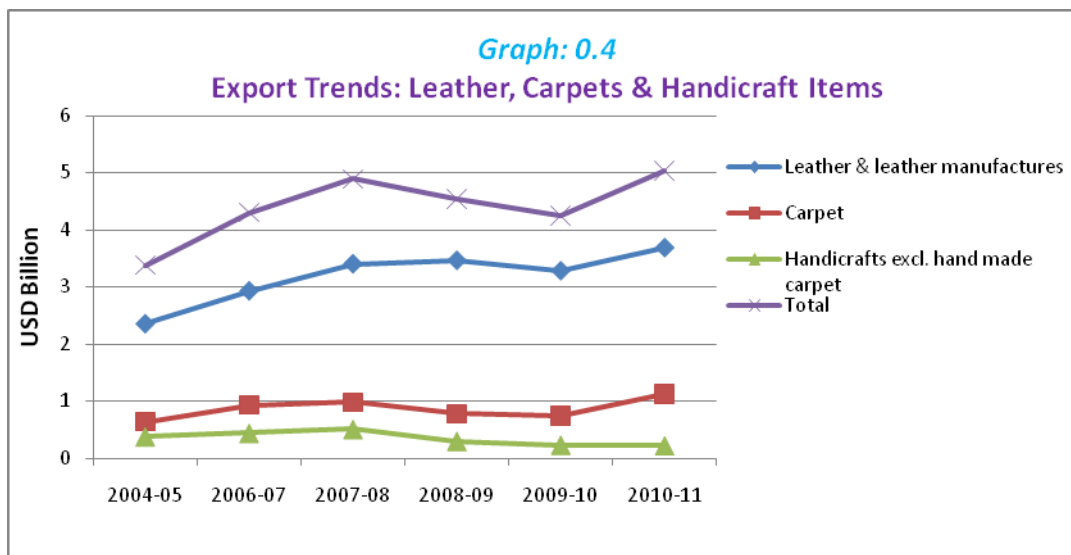
Gems and jewellery, leather, jute, carpets and handicrafts have been identified as traditional areas of India's export basket. Boosting exports of these sectors has the added advantage of increasing employment as these are labour intensive, employing large number of workers mostly in the unorganised sector.



The gems and jewellery sector is the most predominant sector in this category and has performed consistently well during the XI Plan period (Graph:0.3). The sector, comprising a

large number of SME units, employs approximately 3.4 million workers, both skilled and semi-skilled. Leather industry provides jobs to about 2.5 million people predominantly women and belonging to the weaker sections of society. Jute industry supports nearly 4 million farm families, provides direct employment to about 0.26 million industrial workers and livelihood to another 0.14 million persons in the tertiary sector in allied activities The carpet industry provides employment to over 2.5 million workers, mainly in the rural areas of North India and artisans in the handicraft sector have been identified as the second largest rural employment category.

The specific problems and challenges in each of these sectors have been identified. These include securing availability of raw material and alternative markets for gems and jewellery, corporatization and compliance to environmental standards for leather, upgradation of technology to improve productivity and balancing the domestic and export requirements for jute and ways and means to handle the variations in international demand for carpets and handicrafts. Export and employment targets for each of the five sectors for the 12<sup>th</sup> Plan have been stipulated keeping in view the past trends. The export target at the end of the XII Plan for gems and jewellery is US \$ 109.38 billion and for leather it is US\$ 14.06 billion.



After analyzing the challenges and problems of these sectors the following strategy for meeting the targets is suggested: (a) ensuring adequate availability of raw material, (b) skill development, (c) manufacturing parks/clusters, (d) tapping potential markets, (e) brand promotion, (f) financial/fiscal incentives, (g) production, design and productivity, (h) capacity building for export, (i) continuation of existing schemes, (j) changes in the foreign trade policy etc. Other important areas covered as part of the strategy are as follows:

- Development of a world class Convention Centre in Mumbai for Gems and Jewellery,
- Access to Capital through Corporatization of the leather Industry,
- Up-gradation of Common Effluent Treatment Plants (CETPs) with Zero Liquid Discharge (ZLD) technology for leather industry,
- Simplification of Regulation for import of hides, skins and leathers,
- Leveraging eco-friendliness of Raw Jute,

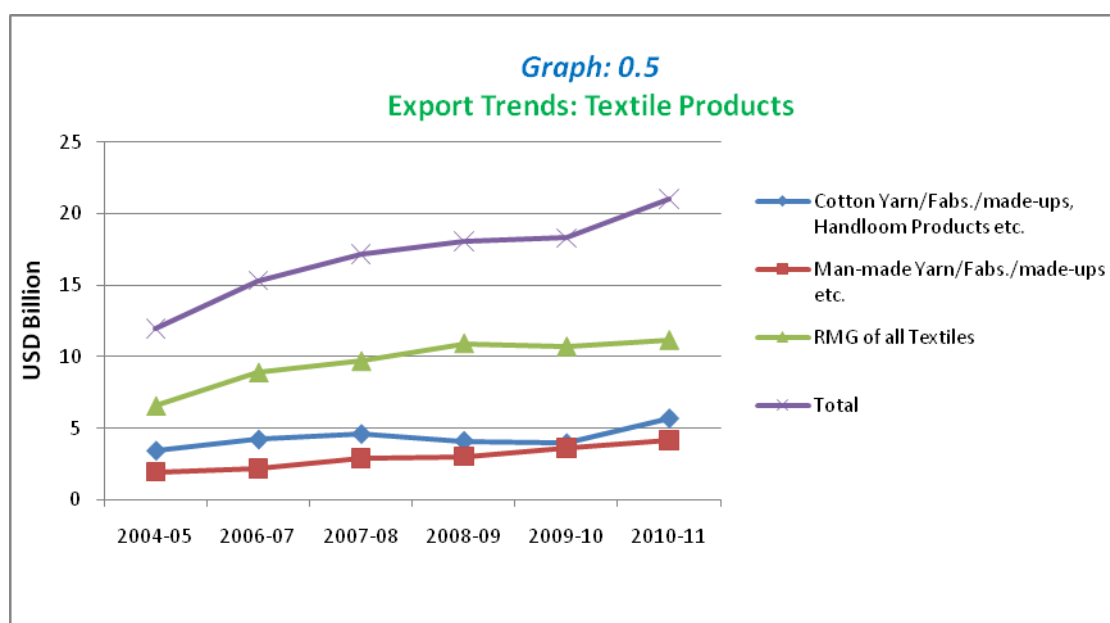
- Improving Social & Environmental Compliance in Jute Sector,
- Establishment of 6 Sector specific Special Economic Zones for handicrafts namely at Firozabad, Saharanpur, Agra, Jaipur, Narsapur and Chennai.
- Setting up of Design Centers at Clusters with 100% grant for first three years.
- Setting up of 40 products specific Common Facility Centres (CFCs).
- Five Testing Labs in major craft clusters every year
- Setting up of Packaging unit.

#### IV. Textile and Clothing Sector

India's textiles and clothing exports are around 4 per cent of world exports, a market dominated by China. Structural changes in the Chinese economy offer tremendous opportunities for India's textile exports. In India, labor intensive, small and medium enterprises with low productivity, technology and inadequate skilled manpower form the bulk of the textiles and apparels sector. Though export performance of the sector was not extraordinary during the initial years of XI Plan, it has shown a clear upward trend in 2010-11 (Graph: 0.5).

Exports of textile and clothing are likely to reach around US \$ 32.35 billion by the end of the XI Plan, as against the target of US \$ 55 billion envisaged in the Report of the Working Group on Textiles for the XI Plan. Based on historic growth rate of 10 per cent (CAGR), a business as usual approach, will result in exports of US\$ 52 billion by the end of the XI Plan. However, the projected export target of US\$ 65 billion and creation of 25 million additional jobs has been proposed with a CAGR of 15 per cent during the XII Plan.

To achieve the targets, a multipronged strategy has been suggested which includes focus on value added products, up-gradation of technology, investment in modernization and vertical integration, product design and development, quality enhancement, strengthening of trade related infrastructure, R&D, Brand building, Integrated Skill Development Scheme (ISDS) etc





## **V. Micro Small and Medium Enterprises (MSMEs)**

MSME`s have made substantial contribution to the Indian economy and export promotion from this sector has been accorded high priority in India`s export promotion strategy. The sector faces a number of problems such as low level of technology and innovation, inadequate access to concessional credit, poor marketing, branding, packaging and complicated procedures. Addressing these problems is expected to improve their production capability and exports. Emphasis of the strategy is on skill development and training, standardization and quality, access to affordable credit, impetus for innovation, and brand building. The following five schemes with an outlay of Rs 2500 crores have been proposed :

- (i) Interest subsidy scheme for exporting MSMEs
- (ii) Market Development and Brand Building for MSME exporters
- (iii) Skill Development and Training for MSME exporters
- (iv) Building Institutional structure for MSME exports
- (v) Establishment of Export promotion Fund

## **VI. Cross-cutting Issues**

The ToR of the Working Group included issues of a cross cutting nature which are noticed to play major role in aiding or deterring the manufacturing export efforts of India. These include Branding, Non Tariff Measures (NTMs), Transaction costs and Regional trade engagements of India.

### **VI.1 Brand India**

The Working Group recognised that manufacturing exports require strong brand promotion. Sectors like Gems and Jewellery, Leather, Textiles, Engineering etc. are striving to carve an exclusive `Brand India` niche for themselves in the world markets. The industry needs to lead the initiatives for brand promotion by dovetailing with on-going Government initiatives like India Brand Equity Foundation (IBEF) and Ministry of Tourism led "Incredible India" campaign . The Leather industry has proposed that Government of India may consider formulating a specific package for brand promotion by creating a separate fund, so as to provide direct financial assistance to individual companies in leather sector. The financial assistance requested is to the extent of about 10% of export turnover of the company for a period of 5 years to enable them to gain a foothold.

India Brand Equity Fund (IBEF) has suggested a multipronged brand strategy to build and promote a brand identity for the manufacturing sector. The proposed strategy should coalesce in itself the brand values of this sector viz. quality, skilled manpower, innovation, technology sophistication, value for money, resilience and market adaptability. As a first step, the strategy may combine the essential elements that may assist in positioning the Indian manufacturing sector viz. audits and assessments, product and market perception, a logo and standardise a business brand kit.

## **VI.2 Non Tariff Measures**

India's exports encounter access difficulties in developed country markets because of restrictive standards, burdensome regulations, and expensive compliance costs. The Department of Commerce in consultation with other Departments identifies the NTMs faced by exporters so that they may be taken up at the appropriate level in the SPS/TBT Committee Meetings at the WTO or bilaterally with the concerned countries in the FTA negotiations. An Inter-Ministerial Committee has been constituted for effective coordination, strengthening domestic regulatory regime by upgrading existing regulations or creating new technical regulations, standards and ensuring conformity of Indian imports to assessment procedures .

## **VI.3 Technology Intensity in manufacturing Exports**

The Working Group recognized that it has been clearly brought out in empirical literature that technology intensity is a major determinant of manufacturing export growth, working through higher ends of the value chain and by creating higher demand in export destinations. There is need for India to shift fast from natural resources based and low technology intensity exports to medium and high tech exports, keeping in view her latent strengths. India figures very low when it comes to technology intensity in manufacturing exports when compared even with countries like Malaysia, Singapore etc. in East Asia. Recently China has overtaken the US to be the biggest high tech exporter of the world.

India needs to create and regularly update a database on dynamic products, which are generally technology intensive in nature. Investment in R&D by India is abysmally low. Government sector spending in R&D dominates in India overwhelmingly unlike in other countries where investment by industry is dominant. Industry-Research Institution linkage is an important gap in India and Indian industry depends on foreign firms for technology through licensing and technology transfer. There is need for incentivizing investment in R&D by Indian industry through fiscal incentives, in particular, and through preferential access to credit for the purpose. FDI - inward as well as outward - plays an important role in enhancing technology content in manufacturing output as well as exports. IP regulations and import regime in place also influence technology intensity in output and exports.

Case studies on sectors like automotives, chemicals, pharma, non-electrical machinery, electronics and machine tools have been looked at. With appropriate supporting measures and awareness building among industry all these sectors can help enhance India's share in high tech manufacturing exports. There is need for efforts to bring together and maintain a network of researchers in this area and representatives of industry.

## **Schemes**

Various export incentives and schemes provided for different sectors under the Foreign Trade Policy should be continued in the 12<sup>th</sup> Plan. In addition, some new schemes for engineering goods, leather sector, MSME's and technology intensity for manufacturing exports etc. are recommended for consideration. These include , Technology Upgradation

Fund Scheme for the Engineering Sector, particularly, the MSME Sector; Technology Upgradation & Development Scheme (TUDS) for auto components and casting industry; for the Leather sector a scheme for Up-gradation of Common Effluent Treatment Plants (CETPs) with Zero Liquid Discharge (ZLD) technology and a scheme on Corporatization of the industry to facilitate access to capital; separate schemes for the MSME exporters on interest subsidy, market development and brand building, skill development and training, building institutional structure and establishment of export promotion fund and a scheme on improving the country's technology intensity in manufacturing exports by establishing an institutional mechanism which brings together a network of researchers and representatives of industry to update the lists of globally dynamic products.

### **Manufacturing exports during XII Plan: Projections**

The sub groups have gone into assessing export prospects during the XII Plan, subject to certain identified issues in the respective sectors being adequately addressed. In major sectors like engineering, electronics, chemicals etc. the effort was to build on the projections in the Strategy Paper for doubling exports prepared by the Department of Commerce. The projections are given in Annex. 0.2.

It has been estimated that manufacturing exports would go up from the current level of US \$151.15 billion (2010-11) to US\$ 534 billion by 2016-17. This would work out to a CAGR overall of 28.7 per cent. In value terms the maximum contribution would come from the engineering sector (US\$ 222 billion) followed by the Gems and Jewellery (US\$ 109 billion). Given that the share of manufacturing in merchandise trade of India is 61.5 per cent currently and assuming that this pattern would continue in the coming years, the total merchandise trade of India is likely to be in the vicinity of US\$ 900 billion during the final year of 12th Plan (2016-17). Since non manufacturing segments of the merchandise exports tend to follow a lower growth trajectory, the final figure may be slightly lower than US\$ 900 billions.

Annex 0.1							
Export of Manufacturing Sectors for the period from 2007-08 to 2010-11							
<i>(Amount in US\$ Millions)</i>							
Sl.No	Sector/ Group	2007-08	Growth in 2007-08 over previous year (%)	Share in total mfg exports (2007-08)	2010-11	Growth over previous year	Share in total mfg exports (2007-08)
1	Gems & Jewellery	19807.0		20.5	33542.1		
		<b>19807.0</b>	<b>24.0</b>	<b>20.5</b>	<b>33542.1</b>	<b>15.3</b>	<b>22.2</b>
2	Drug, Pharmaceuticals & Fine Chemicals	7410.0	<b>24.7</b>	7.7	10324.6	15.1	6.8
3	Other Basic Chemicals	6320.5	<b>26.0</b>	6.6	8617.8	25.9	5.7
4	Plastic & Linoleum	3285.4	<b>1.0</b>	3.4	4591.9	36.4	3.0
	<b>1+2+3</b>	<b>17016.0</b>	<b>19.7</b>	<b>17.6</b>	<b>23534.3</b>	<b>22.7</b>	<b>15.6</b>
5	Engineering Goods	33715.5	<b>27.3</b>	35.0	60148.0	84.8	39.8
6	Electronic Goods	3355.2	<b>17.5</b>	3.5	7377.4	35.5	4.9
	<b>5+6</b>	<b>37070.6</b>	<b>26.5</b>	<b>38.6</b>	<b>67535.4</b>	<b>77.0</b>	<b>44.7</b>
7	Cotton Yarn/Fabs./made-ups, Handloom Products etc.	4603.5	<b>9.1</b>	4.8	5667.4	42.9	3.7
8	Man-made Yarn/Fabs./made-ups etc.	2897.0	<b>31.4</b>	3.0	4191.0	16.2	2.8
9	RMG of all Textiles	9686.5	<b>8.9</b>	10.0	11163.1	4.2	7.4
	<b>7+8+9</b>	<b>17187.0</b>	<b>12.2</b>	<b>17.8</b>	<b>21021.4</b>	<b>15.0</b>	<b>13.9</b>
10	Jute Mfg. including Floor Covering	329.0	<b>26.3</b>	0.3	445.6	104.7	0.3
11	Carpet	975.8	<b>5.2</b>	1.0	1130.5	53.5	0.7
12	Handicrafts excl. hand made carpet	508.2	<b>16.0</b>	0.5	220.4	-2.3	0.1
13	Leather & leather manufactures	3396.3	<b>15.7</b>	3.5	3677.0	12.0	2.4
	<b>10+11+12+13</b>	<b>5209.4</b>	<b>14.2</b>	<b>5.4</b>	<b>5473.4</b>	<b>22.6</b>	<b>3.6</b>
	<b>Total Manufacturing (1-13)</b>	<b>96437.2</b>	<b>21.3</b>	<b>100.0</b>	<b>151143.0</b>	<b>38.4</b>	<b>100.0</b>
	<b>Total Merchandise Exports</b>	<b>162904.3</b>	<b>28.9</b>		<b>245868.3</b>	<b>37.5</b>	
	<b>Share of mfr sectors in total merchandise exports</b>	<b>59.2</b>			<b>61.5</b>		

Note: The US\$ figures are worked out using the average exchange rate for the respective period. The figures for 2010-11 are provisional and subject to change

<b>Annex: 0.2</b>		
<b>Export projections for Terminal Year for XII Plan (2016-17)</b>		
<b>Sectoral targets</b>		
<b>Sector</b>	<b>Compound Annual Growth Rate (CAGR) (%)</b>	<b>Target for 2016-17 (in US\$ billion)</b>
1. Engineering	34.39% (from 2010-11 to 2013-14) 20% (remainder of 12 <sup>th</sup> Five Year Plan)	222.0
2. Electronics	25% (during 12 <sup>th</sup> Plan period)	29.3
3. Chemicals	33.42% (from 2010-11 to 2013-14) 15% (remainder of 12 <sup>th</sup> Plan)	28.9
4. Plastic & Linoleum	35.50% (from 2010-11 to 2013-14) 15% (remainder of 12 <sup>th</sup> Plan)	15.0
5. Pharma	34.3% (from 2010-11 to 2013-14) 18.9% (remainder of 12 <sup>th</sup> Plan)	42.0
6. Textiles & Clothing	10% (Business as usual) 15.17% (Best case scenario)	52.0 65.0
7. Handicrafts	18% (during 12 <sup>th</sup> Plan period)	6.2
8. Gems & Jewellery	16.26% (from 2011-12 to 2016-17)	109.3
9. Carpets	18.61% (during 12 <sup>th</sup> Plan period)	1.9
10. Jute	17.5% (from 2011-12 to 2016-17)	0.6
11. Leather	24% (during 12 <sup>th</sup> Plan period)	14.0
	Total	

## Chapter 1

### Introduction

The pattern of development has been understood to be a sequential shift from agriculture to manufacturing to services<sup>1</sup>. India, however, has grown rapidly in the last 20 years without substantial contribution from its manufacturing sector. The contribution of India's manufacturing sector to its GDP has stagnated and even marginally declined from above 16 per cent in 1996-97 to just over 15 per cent in 2010-11. Although the services sector has been growing at a healthy annual rate of around 10 per cent, to address the problem of unemployment of largely unskilled and semi skilled manpower that India has, growth of the manufacturing sector has to be stepped up to a much higher rate than has been achieved in the past. India's target is to increase the share of manufacturing sector to at least 25 per cent of GDP by 2025<sup>2</sup>. India's share in global merchandise exports, in general, and manufacturing exports, in particular, though rising, has been not reflective of her economic strength and potential. This has the consequence of widening trade and current account deficit, having implications for sustainable balance of payment position of the country. The Planning Commission Working Group on 'Boosting India's Manufacturing Exports' in the context of the formulation of the 12<sup>th</sup> Five Year Plan was constituted keeping this in view, and to complement the work of other Working Groups that look at boosting output in the manufacturing sector

#### Low manufacturing output in India

Output is the most important determinant of exports. The concept of 'enclaves' for production for exports has been losing currency with the strengthening of multilateral trade rules with the conclusion of the Uruguay Round and the coming into being of the World Trade Organization (WTO). Dichotomized production separately for exports and for domestic consumption with different qualities, different factor intensities and different standards, as also different fiscal regimes governing them is gradually becoming impracticable, with tariffs falling and with multilateral rules entering the domain of domestic regulations and with national treatment stipulations being rigorously implemented. India's experiment with EPZs and the

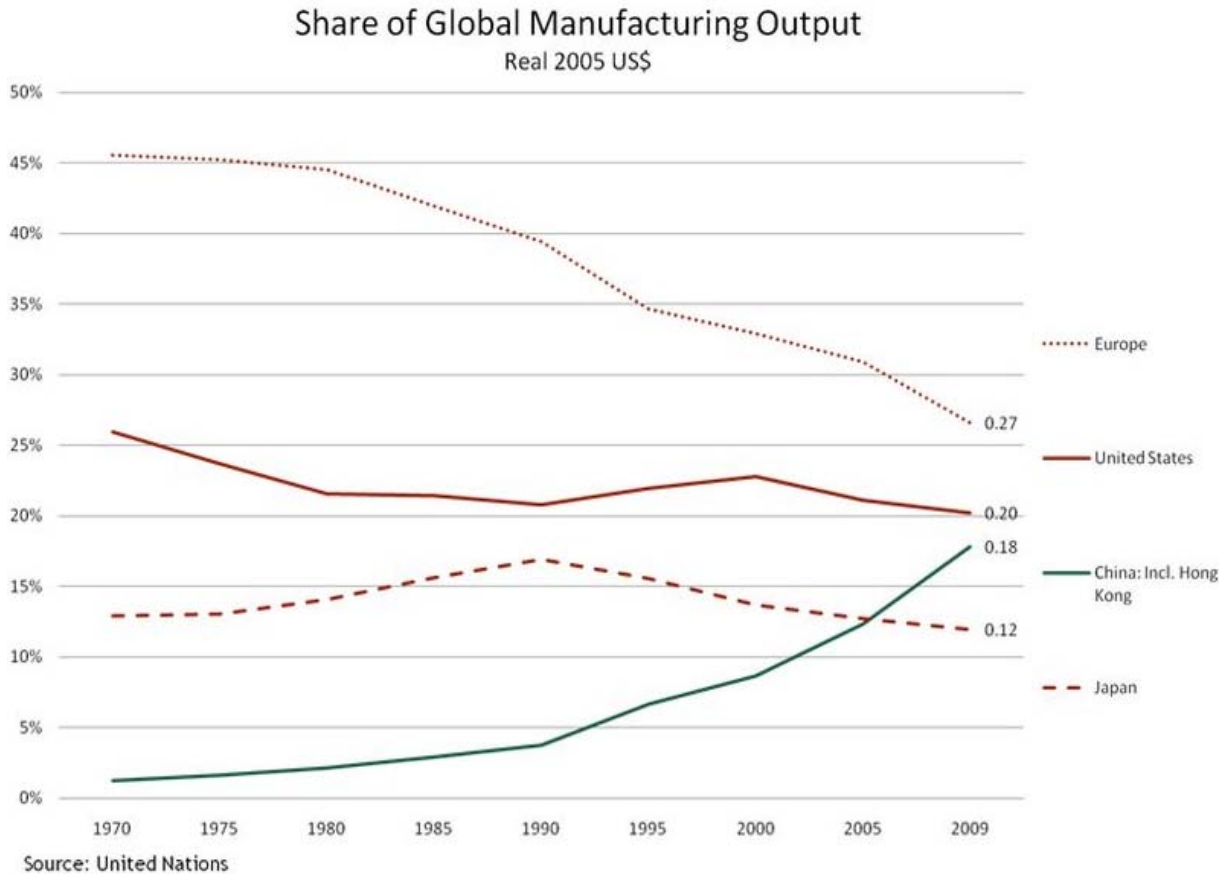
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<sup>1</sup> This follows the pioneering work of Nobel Laureate US Economist Simon Kuznets

<sup>2</sup> The draft National Manufacturing Policy is in final stages of government approval. The Policy has, as its objectives, the increase in the sectoral share of manufacturing in GDP from the present around 16% to at least 25% by 2025 and increase in the rate of job creation in manufacturing to create 100 million additional jobs by 2025.

current success story of SEZs notwithstanding, they cannot be the sole pillar for long term export growth strategy.

**Graph: 1.1**



Source: United Nations, as quoted by the Atlanta Federal Reserve

<http://southpoint.frbatlanta.org/southpoint/2011/04/surveying-manufacturing-role-in-the-us-economy.html>

Therefore, the quantum, quality and competitiveness of domestic manufacturing output is the most important determinant of export performance of the manufacturing sector. Unfortunately, manufacturing as share of GDP remained low at around 1/6 in India. In contrast, most of the developing countries that started in the 1960s at the same stage of development as India, enhanced their manufacturing capability substantially over the decades and have manufacturing sector currently contributing between 1/5 to 2/5 (East Asian Countries and PR China, for example) of GDP. China, in particular weaved her successful growth strategy around rapid expansion in manufacturing output and manufacturing exports. China ate into the global manufacturing output share of the European countries and the United States steadily over the last decades, and currently (2009) accounts for over 18 per cent of global manufacturing output, which is a rise from about 3 per cent in 1970. On the other hand, the share of Europe as a whole came down steeply from above 45 per cent in 1970 to 27 per cent in 2009 (Graph: 1.1). The

share of the United States of America fell, though less steeply, from 26 per cent to 20 per cent. India's share has remained almost same at around 2-3 per cent.

### **Trends in India's Exports and Imports**

Consequently, India's share in merchandise exports fell from nearly 2.4 per cent in 1947 to 0.5 per cent as we approached 1990. With the advent of liberalized economic policies the share of India in global exports started climbing, and is currently (2009) 1.3 per cent. India's merchandise exports registered growth much faster than that the world average in recent years (While world exports grew by 5.9 per cent (CAGR), India's exports grew faster at 15.42 per cent during 2006-10, for example). However imports have grown faster. Manufacturing exports have been the driving force behind growth in exports of fast growing countries like the Peoples Republic of China (PR China) and South East Asian countries. Manufacturing exports constitute 93 per cent of PR China's total merchandise exports, against India's 61.5 per cent. Technology content in India's manufacturing exports also remains relatively much lower (varying between 5% and 8 % against China's 31%), resulting in lower value addition.

Merchandise exports, imports and balance of trade during the Tenth Plan (2002-03 to 2006-07) and during the first four years of the Eleventh Plan (2007-08 to 2010-11) are in Table 1.1 and Graph 1.2. During the 10<sup>th</sup> Plan, Merchandise exports increased at a CAGR of 24.45% while imports grew at a faster pace of 31.86 %. This was a period when growth in world trade and output was on an upswing. The 11<sup>th</sup> Plan period was, however, largely under the shadow of global financial crises and partial recovery. The year 2009, one of the years of the 11<sup>th</sup> Plan, was characterized by a rare occurrence, negative growth in world output (-0.5%) and trade (-10.8%). In the first four years of 11<sup>th</sup> Plan merchandise exports increased at CAGR of 18.1% and imports by 17.2%. Exports and imports declined in 2009-10 vis-à-vis the preceding year but recovered in 2010-11.

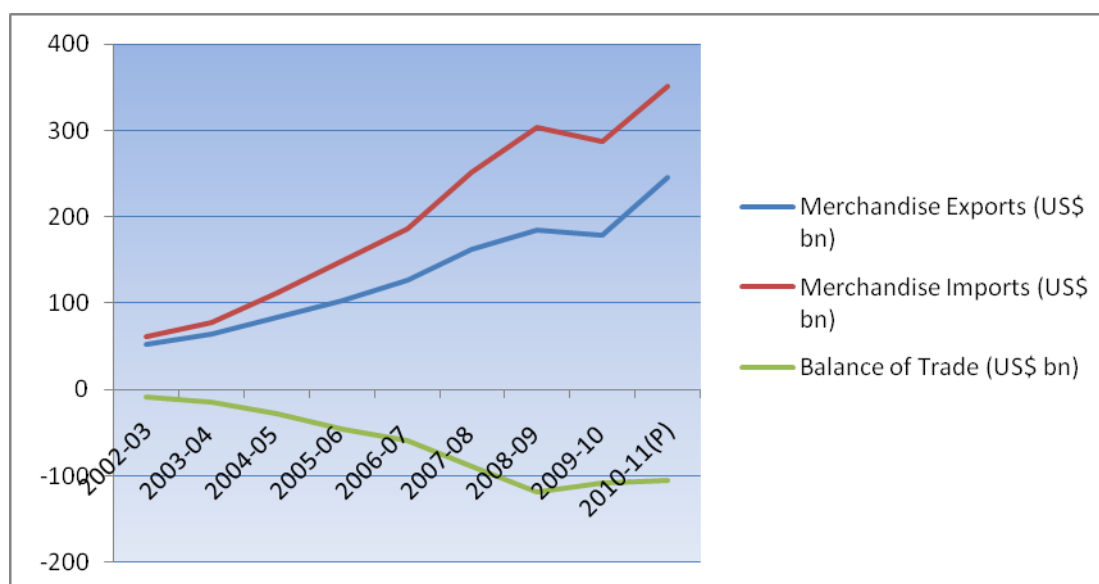
**Table 1.1**  
**Exports, Imports & Balance of Trade**  
(US\$ billions)

<b>Year</b>	<b>Merchandise Exports</b>	<b>Growth Rate (%)</b>	<b>Merchandise Imports</b>	<b>Growth Rate (%)</b>	<b>Balance of Trade</b>
2002-03	52.7	16.9	61.4	16.3	-8.7
2003-04	63.8	21.1	78.1	27.2	-14.3
2004-05	83.5	30.9	111.5	42.8	-28.0
2005-06	103.1	23.5	149.2	33.8	-46.1



2006-07	126.4	22.6	185.7	24.5	-59.3
2007-08	163.1	29.0	251.6	35.5	-88.5
2008-09	185.3	13.6	303.6	20.7	-118.3
2009-10	178.6	-3.6	286.8	-5.5	-108.2
2010-11(P)	245.9	37.5	350.7	21.6	-104.8
2011-12 April-July(P)	108.4	54.0	151.0	40.0	-42.7
(P) :Provisional			Source: DGCI&S		

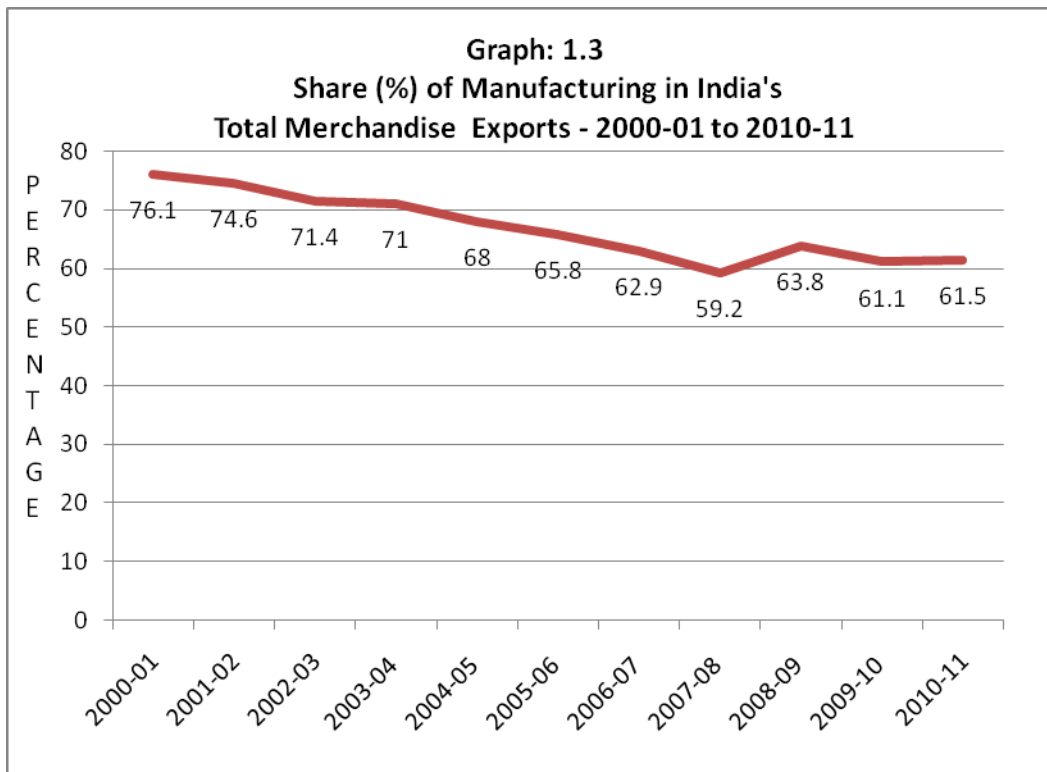
**Graph 1.2**  
**India's Merchandise trade:**  
**Import, Export and Trade balance**



Source: DGCI&S

### Share of manufacturing in total merchandise exports

The share of manufacturing goods in India's total merchandise exports during 2000-01 to 2010-11 is depicted in Graph 1.3. Manufacturing exports as a percentage of total exports declined substantially over the period 2000-01 to 2007-08 from above 76 per cent to 59 per cent. The share went up marginally thereafter, and is about 61.5 per cent in 2010-11. The decline is largely attributable to the emergence of petroleum products (not covered under manufacturing) as one of the major items of merchandise exports for India in recent years. In contrast, in the case of PR China the share of manufacturing in total merchandise exports is 93 per cent.



Source; DGCI&S

### **The consequences for the Economy are serious**

In spite of India's reasonably good performance on the export front in the recent years, the consistent relatively better performance of India's competitors in manufacturing output and manufacturing exports has resulted in the balance of trade turning to the deficit zone in 2004-05 and remaining there ever since. This could be justified due to higher levels of imports necessitated by the needs of a growing economy. However, the persistence of such deficit cannot be overlooked without important adverse consequences for the economy. As is evident from the Summary Statement of Balance of Payments of India over the period 2002-03 to 2010-11 (Table 1.2), the current account has turned into deficit since 2004-05, and the deficit has been widening ever since. Even when invisible earnings have risen, current account deficit (CAD) has continued to widen (Graph 1.4). The widening BoT deficit on merchandise account would invariably result in significant expansion of the CAD, in turn, leading to a reliance on foreign capital inflows to finance the deficit. Foreign portfolio investment is still a major part of capital inflows and past experience suggests that such flows are indeed volatile. Hence, a large widening of the trade deficit can potentially result in payments difficulties. And, such a situation is simply unacceptable because it may jeopardize the entire growth process. It is, therefore, of paramount importance that the BoT deficit is kept within manageable bounds. High imports are necessitated

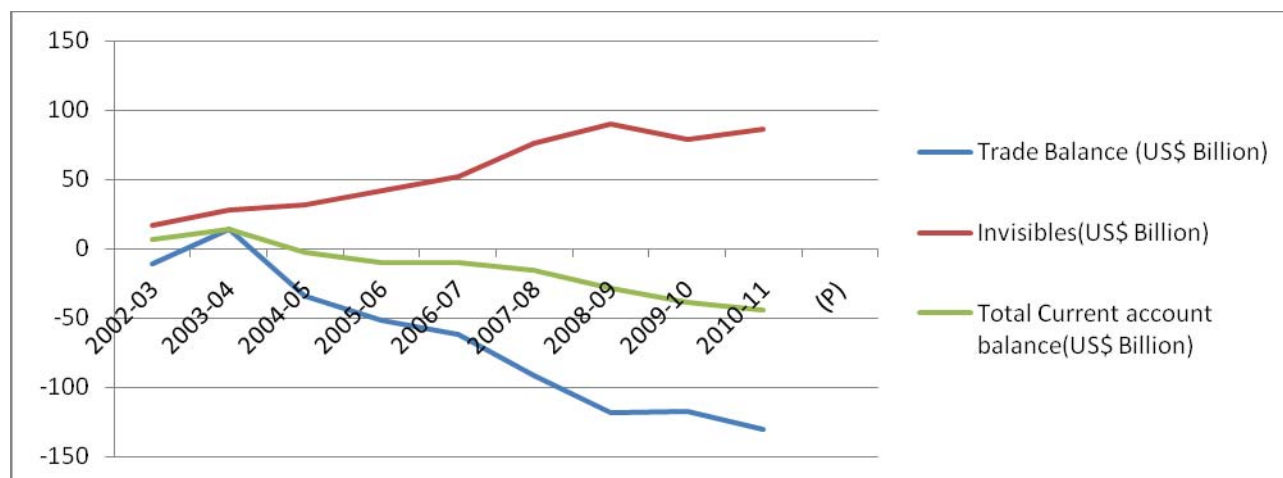
by a growing economy and there are limits to harnessing them. Thus rapidly increasing exports are needed to manage the balance of trade and balance of payments.

**Table 1.2**  
**Summary Balance of Payments**  
*Value (in US\$ billions)*

Year	Trade Balance	Invisibles	Total Current account balance	Foreign Investment (Net)	Of which FDI (net)	Other capital flows*	Total Capital account balance	Errors and Omissions	BOP
2002-03	-10.70	17.00	6.30	41.60	3.20	5.80	10.80	-0.20	17.00
2003-04	13.70	27.80	14.10	137.40	2.40	1.70	16.70	-6.00	31.40
2004-05	-33.70	31.20	-2.50	13.00	3.70	0.70	28.00	-6.00	26.20
2005-06	-51.90	42.00	-9.90	15.50	3.00	1.20	25.50	-0.50	15.10
2006-07	-61.80	52.20	-9.60	14.80	7.70	4.20	45.20	-9.00	36.60
2007-08	-91.50	75.70	-15.70	43.30	15.90	10.90	106.60	1.30	92.20
2008-09	-118.70	89.90	-28.70	3.50	17.50	-1.50	7.10	1.40	-20.20
2009-10	-117.30	78.90	-38.40	52.10	19.70	-12.70	53.60	-1.70	13.40
2010-11 (P)	-130.47	86.19	-44.28	37.43	7.14	0.15	59.75	-2.42	13.05

\* Loans, Banking capital, Rupee Debt Service, Other capital flows  
(P) :Provisional Source: RBI

**Graph: 1.4**  
**Trade Balance and Current Account Deficit**



Source: DGCI&S

## Composition of Manufacturing exports

The composition of manufactured exports at the beginning and end of 10<sup>th</sup> Plan (i.e. 2002-03 and 2006-07) and the commencement and fourth year of the 11th Plan (i.e 2007-08 and 2010-11) is given in Table 1.3. During this period the share of chemical products as a group remained unchanged and engineering products in total manufactured exports almost doubled from 20.44 percent to 39.80 per cent. The share of leather and leather manufactures declined from 4.8 % in 2002-03 to 2.43 % in 2010-11. This decline in trend was also noticeable in Gems and Jewellery which registered a decline from 24.01% in 2002-03 to 22.19% in 2010-11. The share of cotton yarn, fabs, made-ups etc, and readymade garments also declined from 27.69% in 2002-03 to 13.91% in 2010-11. There was an appreciable decline in share of handicrafts and marginal increase in share of electronic goods.

Item Group	2002-03	2006-07	2007-08	2010-11
Leather & leather manufactures	4.80	3.69	3.52	2.43
Gems & Jewellery	24.01	20.10	20.54	22.19
Drug, Pharmaceuticals & Fine Chemicals	7.05	7.48	7.68	6.83
Other Basic Chemicals	5.34	6.31	6.55	5.70
Engineering Goods	20.44	33.33	34.96	39.80
Electronic Goods	3.33	3.59	3.48	4.88
Computer Software	0.11	0.11	0.15	0.03
Cotton Yarn/Fabs./made-ups, Handloom Products etc.	8.91	5.31	4.77	3.75
Man-made Yarn/Fabs./made-ups etc.	3.65	2.77	3.00	2.77
RMG of all Textiles	15.13	11.19	10.04	7.39
Jute Mfg. including Floor Covering	0.50	0.33	0.34	0.29
Carpet	1.42	1.17	1.01	0.75
Handicrafts excl. handmade carpet	2.09	0.55	0.53	0.15
Plastic & Linoleum	3.25	4.09	3.41	3.04
<b>Source: DGCI&amp;S</b>				

## Manufacturing exports across countries

WTO International Trade Statistic (2010) presents exports of Manufactures as a proportion of total Merchandise exports in 2000 and 2009 in selected emerging and developing economies such as Brazil, China, Argentina, Indonesia, Korea Republic, Malaysia and India. Only in the case of China the share of manufactured exports in total merchandise exports has increased over the period 2000 to 2009. While in the case of Korea and Argentina, the share of

manufactured exports has remained unchanged, in the other comparable countries the share has declined. India's share of manufactured exports in total merchandise exports showed substantial decline. There is, therefore, a strong case for India to focus on boosting its manufactured exports.

### **Strategy for Manufacturing Exports: Some Realities**

While formulating any strategy for boosting manufacturing exports certain facts of life in international trade and certain aspects of domestic policy environment need to be kept in mind. Some of these are discussed briefly in the following paragraphs.

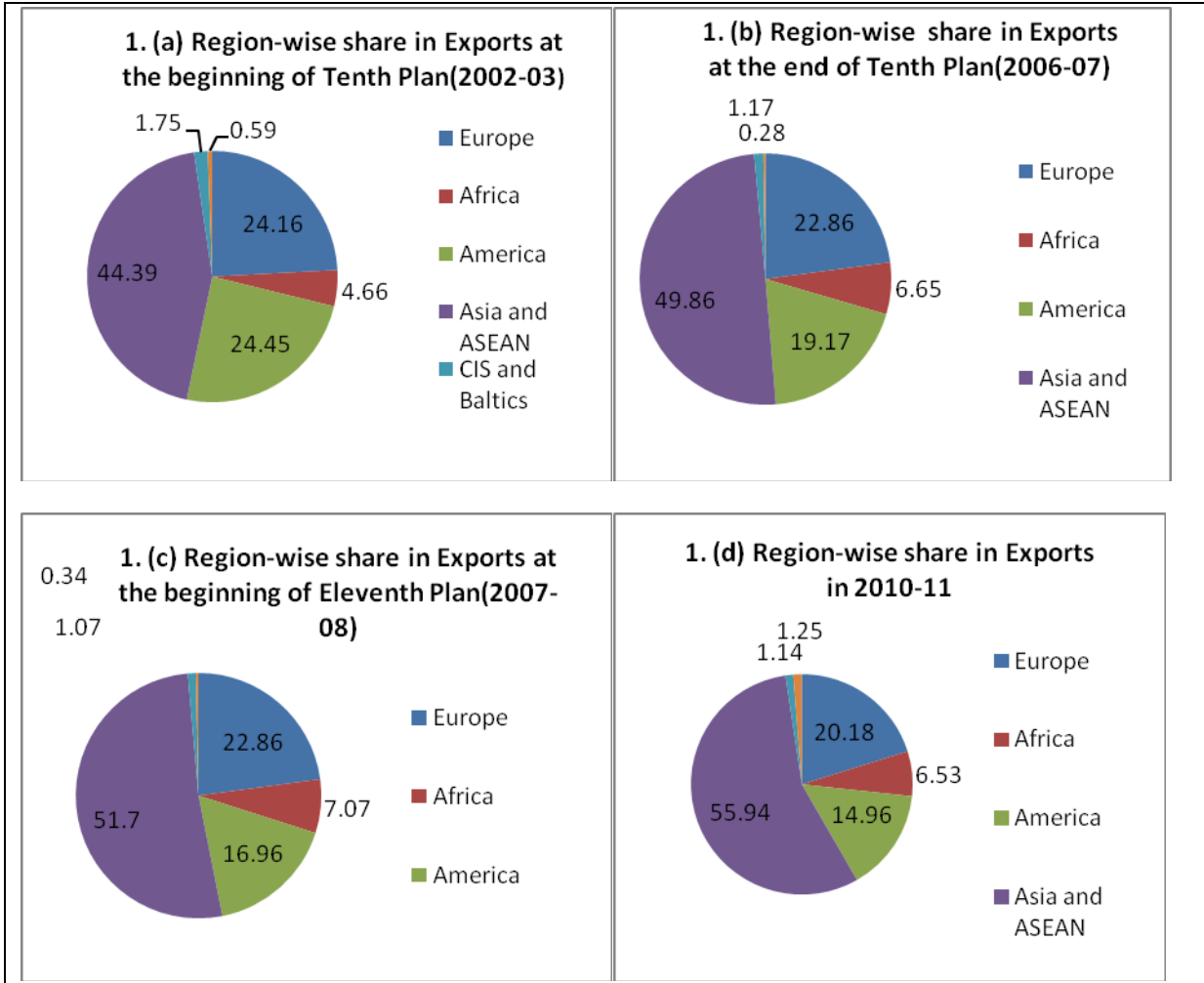
#### **(a) Ongoing Transformation in the Direction of India's Exports**

The region wise share of exports in the first and terminal year of the 10<sup>th</sup> Plan and at the beginning and penultimate year of the 11<sup>th</sup> Plan is in Table 1.4 and Diagrams 1 (a) to (d). The following trends are noticeable:

- (a) Share of Europe in India's exports has declined from 24% in 2002-03 to 20% in 2010-11.
- (b) Share of South/North America declined from 24.5% in 2002-03 to 19% in 2006-07 and further to 15% in 2010-11.
- (c) Asia & ASEAN (including WANA) have recorded substantial increase in their share from 44% in 2002-03 to 56% in 2010-11.
- (d) Share of Africa has increased marginally from 4.7% in 2002-03 to 6.5% in 2010-11.
- (e) Share of CIS & Baltics has moderated from 1.7% in 2002-03 to 1.1% in 2010-11.

The emerging trends in India's export markets will have to be factored while drawing up the policies and incentives for boosting exports.

**Diagram 1. (a) to (d):  
Region wise share in exports at the beginning and end of the  
Tenth and Eleventh Five Year Plan**



Source: DGCI&S

### Asian Exports and Evolving Networks in Asia

IMF in its Regional Economic Outlook on Asia (April 2011) has analysed the growth of exports in Asia and the key role of China. It has been pointed out that Asian exports have benefited from investment in machinery and equipment by advanced economies and by greater final demand from emerging economies within and outside the region. Asia is the world's leading source of exports, but the most striking trend is the rapid growth in intra-regional trade.

While global trade and Asia's trade with economies outside the region have doubled since 2000, intra-Asian trade has tripled, and regional trade involving emerging Asia, in particular, has increased even faster. As a result, Asian economies accounted for 35 percent of world exports in 2009, compared with 25 percent 10 years earlier, with the share of intraregional exports rising to 55 percent from 45 percent over the same period.

Asian economies increasingly have formed a supply network, with China taking the role of an assembly hub for final goods exports, notably consumer goods. As a result, competition in intermediate goods markets has become more important for Asian economies' overall exports than competition at the final goods level.

**Table 1.4 Region-wise share of exports from India**

	(in percentage)																
	EU (27)	Other WE	East Europe	Southern Africa	West Africa	Central Africa	East Africa	North America	Latin America	East Asia	ASEAN	WA NA	NE Asia	South Asia	CARs	Other CIS	Unspecified Regions
2001-02	23.17	1.57	0.04	1.06	2.39	0.21	1.27	20.76	2.19	1.16	7.89	13.18	13.3	4.68	0.16	2.06	4.93
2002-03	22.55	1.58	0.04	1.21	2.02	0.22	1.2	21.99	2.46	1.15	8.76	14.28	14.9	5.28	0.16	1.59	0.59
2003-04	22.74	1.73	0.07	1.24	1.99	0.24	1.35	19.19	1.78	1.1	9.12	15.95	14.7	6.73	0.24	1.39	0.44
2004-05	21.85	1.65	0.05	1.51	1.98	0.19	1.37	17.52	2.59	1.03	10.09	17.04	15.8	5.51	0.21	1.1	0.49
2005-06	22.53	1.58	0.05	1.88	1.84	0.16	1.39	17.82	2.9	0.97	10.1	16.19	15.7	5.38	0.16	1.05	0.24
2006-07	21.23	1.58	0.06	2.23	1.94	0.16	2.33	15.8	3.37	1.17	9.97	18.23	15.4	5.12	0.15	1.02	0.28
2007-08	21.17	1.62	0.07	2.21	2.12	0.16	2.58	13.48	3.48	0.87	10.06	18.62	16.3	5.91	0.14	0.92	0.34
2008-09	21.24	1.4	0.07	1.69	1.81	0.21	2.43	12.15	3.33	0.95	10.33	22.5	13.7	4.62	0.14	0.9	2.49
2009-10	20.16	1.33	0.07	1.85	1.75	0.2	1.96	11.56	3.47	0.95	10.13	22.02	16.2	4.69	0.15	0.79	2.75
2010-11	18.63	1.49	0.06	2.33	1.81	0.19	2.21	10.71	4.25	0.78	11.04	22.41	16.6	5.09	0.11	1.03	1.25

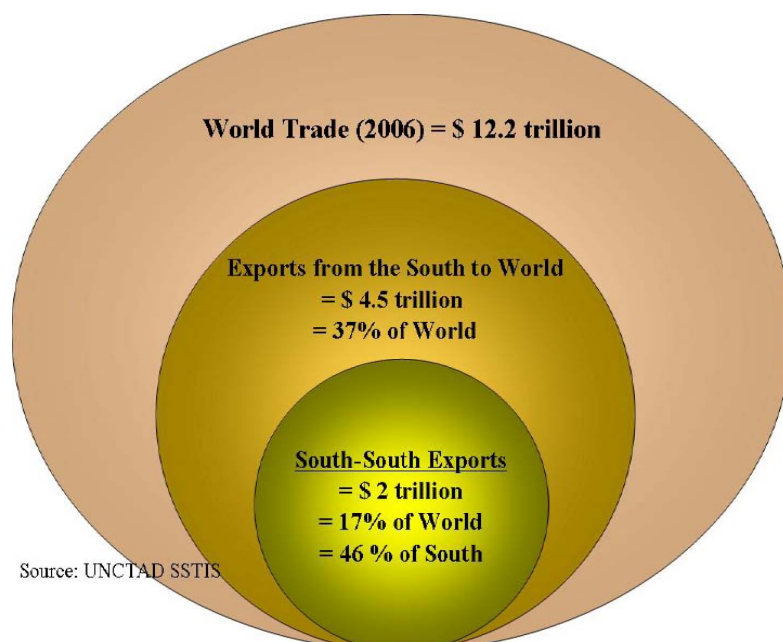
Source: DGCIS

### **(b) Emergence of the South from the periphery to closer to the centre of global economic stage**

The economic muscle of the South has been growing stronger in recent years. South's share in global GDP went up from 27.8 per cent in 1990-91 to over 41 in 2009 (Table 1.5). The share of developing Asia registered faster growth during this period going up from 13.1 per cent to 25.7 per cent. While China's share nearly quadrupled from 3.7 per cent to 12.6 per cent, India's share less than doubled from 3.0 per cent to 5.2 per cent during the period. GDP being one of the major determinants of imports of countries, any export strategy by India should have as its focus the developing country (Southern) markets which are fast expanding. This is the basis of the focus market strategy in the Foreign Trade Policy (2009-14).

The trend towards the South occupying more and more global economic space is expected to continue in the coming years. During 2011 to 2016, growth in the advanced economies is projected to average at about 3.7 percent while developing and emerging economies are projected to grow at 8.9 percent IMF<sup>3</sup>. In global GDP the share of advanced economies is projected to decrease from about 65 percent to 59 percent during this period while the share of emerging and developing economies is expected to increase from over 35 percent to over 41 percent over the period 2011-16. Within emerging economies, the relative share in world GDP of Developing Asia, Sub Saharan Africa, West Asia and North Africa and Latin America and Caribbean is expected to increase. India's export strategy will have to take note of such projected trends as this would determine the markets for her products.

**Diagram: 2**



This growing economic strength of the South is reflected in trade as well. Diagram 2 depicts the share of the South in global exports (37 per cent in 2006). South-South exports were 17 per cent of global exports and 46 per cent of South's export to the world. The share of the South in world trade has gone up by 145 per cent during the last 20 years (1990 to 2009), while its export share went up by 133 per cent. India's share in South-South trade remains low even though it has doubled during the last 20 years to 5.4. India's current share of 5.4% does not compare well with China's 40 per cent.

<sup>3</sup> IMF's World Economic Outlook database (April 2011)



**Table 1.5**  
**The rise of South-South trade (%)**

<b>GDP indicators<sup>a</sup></b>	<b>1990-91</b>	<b>2000-01</b>	<b>2006-07</b>	<b>2008</b>	<b>2009</b>
<b>Share of world GDP held by:</b>					
The South	27.8	33.6	38.4	39.7	41.3
Developing Asia	13.1	18.3	22.8	24.0	25.7
China, People's Rep. of	3.7	7.3	10.4	11.5	12.6
India	3.0	3.8	4.7	4.8	5.2
<b>Trade indicators<sup>b</sup></b>	<b>1990-91</b>	<b>2000-01</b>	<b>2006-07</b>	<b>2008</b>	<b>2009</b>
<b>South-South trade as share of world trade</b>					
Exports	7.6	10.2	15.0	16.3	17.7
Imports	6.2	9.6	14.1	15.4	16.1
Trade	6.9	9.9	14.5	15.9	16.9
<b>Developing Asia's share of South-South trade</b>					
Exports	88.2	79.8	79.8	78.9	80.3
Imports	86.8	71.6	69.3	66.0	68.5
Trade	87.5	75.7	74.6	72.5	74.4
<b>People's Republic of China's share of South-South trade</b>					
Exports	35.5	35.1	40.8	41.2	41.6
Imports	43.9	36.9	37.8	34.4	38.4
Trade	39.7	36.0	39.3	37.8	40.0
<b>India's share of South-South trade</b>					
Exports	2.1	3.1	3.7	3.9	4.9
Imports	2.3	1.6	2.4	4.7	5.8
Trade	2.2	2.4	3.0	4.3	5.4
<b>Other South's share of South-South</b>					
Exports	11.8	20.2	20.2	21.1	19.7
Imports	13.2	28.4	30.7	34.0	31.5
Trade	12.5	24.3	25.4	27.5	25.6
Developing Asia's share of South-South trade (growth, %) <sup>c</sup>		12.0			22.8
Other South's share of South-South trade (growth, %) <sup>c</sup>		47.2			25.7

<sup>a</sup> GDP, purchasing power parity (current international \$). <sup>b</sup> Nonfuel merchandise trade. <sup>c</sup> Average annual growth rate in 10 years (1990/91-2000/01); in 9 years (2000/01-2009).

Source: Athukorala Prema Chandra (forthcoming); ADB calculations using World Bank, World Development Indicators online database (accessed 21 March 2011).

There is substantial unexploited potential in India's exports, especially manufacturing exports, to the South. The share of manufacturing in India's exports to the South was only 57.8 per cent (2006-07) (Table: 1.6), while that of developing Asia was 83.3 per cent and that of China 94.7 per cent.

**Table: 1.6****Commodity Composition of Developing Country Nonfuel Exports, 2006-07**

	South-South (Share in %)				South-North (Share in %)			
	Fuel	Non-fuel Primary	Manufa- -ctures	Total (\$billion)	Fuel	Non-fuel Primary	Manufac- -tures	Total (\$ billion)
Developing Asia	8.6	8	83.3	1414.8	7.3	7	85.7	1340.9
China, People's Rep. of	1.9	3.4	94.7	675.5	0.8	3.8	95.4	728.3
Southeast Asia	15.9	14.1	70.0	438.8	11.4	14.8	73.8	335.9
Sothern Asia	19.4	22.8	57.8	92.8	16.7	9	74.3	94.8
India	21.2	21.3	57.6	76.1	7.0	10.9	82.0	55.8
Total South	14.7	12.1	73.2	1896	19.9	11.1	68.9	2272.3

Source: South-South Economic Links: Asian Development outlook, 2011(Compiled from UN Comtrade database)

**(c) Trade and Employment**

Trade is not an end in itself. It is pursued universally due to its welfare enhancing properties. But for this beneficial property countries would have preferred to remain autarchies. Trade makes available to consumers the best products at the most competitive prices from anywhere in the world. The employment objective of trade is, however, incidental rather than intended. While exports as such may not guarantee increased employment per unit of output, rapid growth in exports would generate more employment opportunities since any likely decrease in labour content per unit of output could be more than offset by the increase in the quantity/number/value of output for the export market.

Trade is also known to enhance the quality of employment since the technology content in exported products, in general, tend to be higher than that in production for domestic consumption. The remuneration for employees engaged in production for export has also been noticed to be relatively higher which will have spillover effects in the entire economy. Labour welfare is enhanced due also to the tendency of export production units to adopt labour standards more aligned to international best practices. Trade policy, however, does not serve the employment objective directly. For that complementary policies in the form of industrial and investment policies will have to be put in place.

All the same, there are manufacturing sub sectors that are labour intensive by their very nature. Gems and Jewellery, Leather, Carpets, Handicrafts and Jute are highly labour intensive sectors, employing large workforce primarily drawn from the unorganized sector. Trade Policy formulation takes special care about these sectors.

#### **(d) Inclusive growth**

'Inclusion' has emerged explicitly as the most prominent pillar of India's economic growth strategy. Growth that does not benefit the 'common man' would not be sustainable. Economic policies being formulated are, therefore, required to invariably build in the inclusive growth objective. However, the inclusive agenda may not fit in the same degree in each and every economic policy measure. Foreign trade policy, as it deals largely with foreign markets, is at a disadvantage in building inclusive goals into it directly. The contribution of foreign trade policy is primarily to growth, and its contribution to 'inclusion' is indirect. Research has shown that a one percent rise in GDP amongst low income countries translates on average, globally, into a reduction in poverty of 0.73 percent. In India the figure is 0.65 percent. In Kerala, Punjab and West Bengal the ratio is above unity, while in Rajasthan it is 0.43, in Maharashtra 0.4, and Bihar a meagre 0.34. Complementary policies - industrial and investment policies, in particular, would therefore have to be put in place to fully address the objectives of the inclusive agenda.

India has been calibrating and coordinating trade and other economic liberalizations as well as putting in place various social safety nets keeping this reality in mind. India's stand in multilateral trade negotiations and her articulation in multilateral and international fora reflect this policy priority.

#### **(e) Global Economic Outlook**

Emerging economies are the growth centres of the world now and in the coming years. During 2011 to 2016, growth in the advanced economies is projected to average at about 3.7 percent while developing and emerging economies are projected to grow at 8.9 percent<sup>5</sup>. As a proportion of the global GDP, the share of GDP of advanced economies is projected to decrease from less than 65 percent to 59 percent while the share of emerging and developing economies is expected to increase from 35 percent to 41 percent over the period 2011-16. Within emerging economies, the relative share in world GDP of Developing Asia, Sub Saharan Africa, West Asia and North Africa and Latin America and Caribbean is expected to increase. India's exports strategy will have to take note of such projected trends as this would determine the markets for

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<sup>4</sup> <https://www.imf.org/external/np/apd/seminars/2003/newdelhi/besley.pdf> ( Quoted in 'Fostering Inclusive Growth Through ICT & Trade Garnet V Capacity Building Workshop, Hotel Golden Tulip, Jaipur, India, 0103, December 2009. Summary Report, Compiled by Fabrice Lehmann'

<sup>5</sup> IMF's World Economic Outlook database (April 2011)

our goods. Our policies have to be geared to take advantage of the growth potential in emerging and developing economies.

During 2004 to 2007 the world economy exhibited robust growth and India's exports grew rapidly taking advantage of the situation. However, India's exports are expected to moderate in the near future as the global economy faces numerous challenges in its path of recovery. In a number of emerging and developing economies, inflation pressures especially in food and fuel have become broad based. Overheating pressures in some key emerging economies have intensified as observed in elevated inflation pressures, and high asset prices.

Global financial conditions continue to be volatile. FDI has not yet recovered fully and the worsening global economic outlook, especially in major home countries to FDI may derail the FDI recovery<sup>6</sup>.

### **Boosting Manufacturing Exports: The Answer**

In an increasingly globalising economy, it is expected that a competitive and efficient manufacturing sector alone would create the necessary base for making inroads into the world markets and transform India into a major exporter of manufacturing products.

### **Department of Commerce Strategy Paper (May, 2011)**

Foreseeing the emerging scenario on the balance of trade and current account front the Department of Commerce, based on wide consultations released a Strategy Paper on Doubling of India's Exports in the next three years (2011-12 to 2013-14), in May 2011 ([www.commerce.gov.in](http://www.commerce.gov.in)), which emphasized the crucial need of high growth in manufacturing exports in achieving the target of US \$ 500 billion for merchandise exports in 2013-14. The Paper recognizes that rapid increase in exports is the only option available to maintain the trade and current account deficit at manageable levels.

The paper was finalized in the backdrop of cautious recovery in the world economy and the pickup in exports by India since the second half of 2010-11. Overall merchandise exports increased by 37.5 per cent in dollar terms in 2010-11 and by 45.7 per cent in the first quarter of 2011-12. However, the reported slowdown in growth and the downgrading of the credit rating of US, sovereign indebtedness in Europe and less than adequate measures to meet these challenges, political developments in the Middle East and in North Africa, problems caused by natural/nuclear disaster and the consequent current state of economy in Japan have raised questions about sustaining such high rates of growth of India's exports. India's economy is now

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<sup>6</sup> UNCTAD World Investment Report, 2011

much more globally integrated with merchandise trade as share of GDP climbing above 37 per cent in 2010-11 from only 21 per cent in 2000-01. Export growth prospects cannot be viewed in isolation from developments in the world economy.

### **Working Group on ‘Boosting India’s Manufacturing Exports’**

In the context of formulation of the 12<sup>th</sup> Plan, a Working Group on ‘Boosting India’s Manufacturing Exports’ was constituted, chaired by Dr. Rahul Khullar, Commerce Secretary (vide its O.M. dated 9<sup>th</sup> May, 2011 of the Planning Commission) under the umbrella of the Steering Committee on Industry, to build on the Strategy paper prepared by the Department of Commerce, concentrating on the manufacturing sector. The composition and Terms of Reference of the Working Group is at **Annex I**. This Working Group has explored the steps required to improve the export potential in prominent sectors *viz.* engineering, chemicals, plastics, textiles, pharma, electronics etc., as well as in sectors like gems and jewellery, leather, handicrafts, carpets and jute. The Micro, Small and Medium Enterprises (MSME`s) sector which have substantial employment and export potential were also looked at closely. The Working Group has also considered certain cross cutting themes which have vital bearing on manufacturing export performance. These are Brand India, Non Tariff Measures, Free Trade Agreements and Technology Intensity. Accordingly six Sub-Groups *viz.* on (i) Engineering and Electronic Goods, (ii) Chemicals, Pharma and Plastic, (iii) Textiles, (iv) Employment intensive sectors (Leather, Gems & Jewellery, Jute, Carpets and Handicrafts), (v) Micro Small and Medium Enterprises (MSME) and (vi) Technology Intensity in India’s Manufacturing Exports were constituted.

For the purpose of the work of the Working Group manufactured exports have been defined in an inclusive manner covering sectors like Engineering and Electronics; Drugs, Pharma, Fine Chemicals, Other Basic Chemicals; Plastic & Linoleum; Textiles- Cotton Yarn/Man-made Yarn/Fabrics/Made-ups, RMG of all Textiles; and Leather, Gems & Jewellery, Jute, Carpets and Handicrafts.

The Working Group held four meetings on 26<sup>th</sup> May, 28<sup>th</sup> June, 20<sup>th</sup> July and 25<sup>th</sup> August, 2011. In the first meeting the Group defined its programme of work and decided to constitute Sub Groups. In the second and third meetings the progress made by the Sub-Groups in the preparation of their reports was reviewed and in the final meeting the Report of the Working Group was finalized.

The composition and Terms of Reference of the six Sub-Groups are at **Annex II to VII**.

## Chapter 2

### Engineering and Electronics Exports

#### 1. Engineering Exports: Performance and Trends

The engineering sector is the largest segment of the overall Indian industrial sector accounting for 3 per cent of India's GDP. India's exports of engineering goods grew at 25.2% (CAGR) during 2000-01 to 2007-08. In 2008-09, the growth moderated to 18.7% and in 2009-10 it declined by 19.6% because of global recession, with its share in total exports falling to 18.2%. Engineering exports bounced to touch US\$ 59.78 billion in 2010-11 recording growth of 84% over 2009-10, but it was only 48% above 2008-09 exports. Table 2.1 looks at the turnaround in the engineering exports in 2010-11 across various engineering sectors.

**Table 2.1: Export Performance of Different Engineering Goods**

Description	Values in Million USD		Growth (%)
	2009-10	2010-11	
<b>1. Iron and Steel and Products Made of Iron and Steel</b>			
A. Iron and Steel	4516.13	9494.36	110.23
B. Products of Iron and Steel	4055.11	7677.02	89.32
<b>2. Non-Ferrous Metals and Products made of Non Ferrous Metals</b>			
A. Copper and products made of copper	1853.02	8221.74	343.69
B. Aluminium and products made of Aluminium	1057.54	1630.20	54.15
C. Zinc and products made of zinc	407.12	845.31	107.63
D. Nickel and products made of Nickel	23.44	33.79	44.12
E. Lead and products made of Led	117.53	109.14	-7.14
F. Tin and products made of Tin	9.53	4.44	-53.41
G. Other Non-Ferrous Metals and their products	248.50	308.60	24.19
<b>3. Industrial Machinery</b>			
A. Nuclear Reactors, Industrial Boilers and Parts	377.19	502.60	33.25
B. IC Engines and Parts	919.44	1123.87	22.23
C. Pumps of all types	341.53	447.45	31.01

Description	Values in Million USD		Growth (%)
	2009-10	2010-11	
D: Air condition and Refrigeration Machinery and Parts, Industrial Furnaces, Water heaters and Centrifuges and Compressor	688.12	767.81	11.58
E. Industrial Machinery for dairy, agriculture, food processing, textiles, paper, chemicals, etc	2153.88	3148.65	46.19
F. Machine Tools	276.50	297.59	7.63
G. Machinery for ATMs, Injecting Moulding machinery, valves, etc	626.69	771.48	23.10
<b>4. Electric Machinery and Equipment</b>	<b>2709.05</b>	<b>3104.64</b>	<b>14.60</b>
<b>5: Auto and Auto Components</b>			
A. Motor Vehicle/cars	3565.36	7174.07	101.22
B. Two and Three-Wheelers	589.06	828.69	40.68
C. Auto Components/Parts	1517.23	2533.68	66.99
<b>6: Aircrafts, Spacecrafts and Parts</b>	<b>1030.01</b>	<b>1614.70</b>	<b>56.77</b>
<b>7: Ships, Boats and Floating Structures</b>	<b>2554.31</b>	<b>5267.51</b>	<b>106.22</b>
<b>8: Miscellaneous</b>			
A: Medical and Scientific Instruments	551.68	820.34	48.70
B: Railway Transport and Parts	37.26	99.27	166.43
C: Hand Tools, Cutting Tools and Implements made of Metals	377.56	533.63	41.33
D. Electrodes, Accumulators and Batteries	158.86	234.53	89.36
E. Bicycle & Parts	148.75	210.53	41.53
F. Cranes, Lifts & Winches	137.86	171.77	24.60
G. Office Equipments	56.50	48.96	-13.34
H. Other Construction Machinery	678.41	649.53	-4.26
I. Prime Mica & Mica Products	12.08	13.49	11.67
J. OTHER MISC. ITEMS	759.07	1095.54	72.27
<b>Total Engineering Exports</b>	<b>32554.30</b>	<b>59784.93</b>	<b>83.65</b>

Source: DGCI&S

## 2. Reasons for growth in Engineering Exports

### Thrust given to the engineering industry

The key growth drivers have been:

- i) The growth of the key end user sectors in India. For example, the domestic sales of automobiles have grown at a CAGR of around 18 per cent over the past four years.
- ii) Government's emphasis on power and construction sector has led to increase in demand for capital goods.
- iii) India is being preferred by global manufacturing companies as an outsourcing destination due to its lower labour cost and better designing capabilities.
- iv) The initiatives of the government towards FDI serve as a catalyst to further raise the demand for engineering goods and machinery. Around 36 per cent of the total FDI is directed towards engineering industry through an automatic route, but subject to a limit of US\$ 2 million of lump sum payments. Royalty payment is restricted to 5 per cent and 8 per cent on domestic and exports respectively. Depreciation on general plant and machinery is proposed to be around 15 per cent.
- v) Some specific initiatives by the government, which positively impacted the engineering sector are:
  - o Removal of tariff protection on capital goods.
  - o Delicensing of heavy electrical industry and allowance of 100 per cent FDI.
  - o Various initiatives focused on infrastructure development and construction.
  - o Initiatives to increase power generation and improve quality of power supply.
  - o The reduction of custom duties on various equipments.

### **Raw materials Availability**

Key raw materials required by the engineering sector - ferrous and non-ferrous metals such as mild steel and aluminium – are available in India. Ready availability of these materials provide a major cost advantage, as materials account for nearly 50 per cent of the industry's operating costs.

### **Skill set**

Engineering industry has significant support from India's well-established IT sector, as well as institutions of higher education. India has a well-developed technical and tertiary education infrastructure of over 250 universities, 1500 research institutions and over 10,000 higher education centres, which support the engineering sector not only by supplying a steady stream of qualified manpower, but also in areas of research and development.

### **Vendor base**

India has a well-developed vendor base for supporting engineering industries such as machine tools, textile machinery, auto components, etc. Some of these sectors have developed global capabilities and help the engineering sector achieve global competitiveness.



## **Export Promotion Policies**

Policy support has provided the big push that has augmented the exporters to supply competitive products globally. The main features of the Export Promotion Policies have been the following:

- Providing Duty Neutralization to ensure India's exports is zero rated. Thus, schemes like the DEPB Scheme, the Drawback Scheme have helped Indian exporters to become price competitive vis-à-vis their competitors like the Chinese manufacturers;
- Incentivizing Exports volume growth through schemes like Advance Authorization, DFIA, etc;
- Promotion of technology upgradation and linking these to exports through schemes like EPCG Scheme, SHIS, etc
- Diversifying Indian goods into hitherto low or untapped foreign markets or products through schemes like FMS, FPS and MLFPS.
- Lowering Cost of Credit through the system of both general and special interest subvention.
- Promotion of exports through SEZs: the Special Economic Zones has contributed immensely in giving a considerable push to not only engineering exports but of Indian exports in general.
- Promotion of Indian Goods abroad through specific export promotion schemes like MDA and the MAI Schemes.

### **3. Problems and Challenges**

India accounts for a mere 0.8% share of world engineering exports (in 2008) and ranks 30<sup>th</sup> below countries like China, Brazil, South Africa, Mexico, Poland, Czech Republic, Hungary, Slovakia, South Korea. The main reasons for this position are :

- i) Low output-to-export ratio (24% for India vis-à-vis 30% for other India-like countries);
- ii) Low technology intensity of engineering exports (share of high and medium technology engineering exports-62% for India vis-à-vis 71% for India's competitors)

The problems and challenges of Indian engineering exports are as follows:

- a. Stiff competition:** Indian Engineering Exports have been facing stiff competition from other countries. China, Mexico, Hungary, Czechoslovakia, Brazil and Korea have emerged as the fastest growing Engineering export countries.
- b. Technology Related Problems resulting in low valued engineering goods:** Technological competitiveness of Indian Engineering goods sector is low. Some of the Indian exporters are still at disadvantage in international market vis-a-vis their counterparts in terms of product design, finish specific features, performance and raw

- material substitutes. Although Indian firms are capable of achieving high levels of precision, they are unable to provide high quality products due to lack of supporting process, technologies such as precision measuring, material engineering and process control. Environment technologies and energy saving technologies are another area where Indian engineering companies in the MSME sector are lagging behind.
- c. **High Cost of Credit:** The credit cost is rather high in India. At present, export credit is available at about 12-14%, which is factored in the price.
  - d. **Credit Availability:** Non availability of long term finance for 3-5 years to compete with foreign (Chinese) manufacturers as in the case of the auto sector.
  - e. **High cost of industrial inputs:** The Engineering industry mainly uses raw materials of domestic origin. The raw materials price index has risen faster than the machinery price index. It is difficult for engineering manufacturers to pass on the rise in prices to the consumers there by impacting their profitability. Sometimes, the quality of raw materials is also not up to the international standards and it in turn affects the quality of final products. Indian engineering exporters belonging to the MSME sector are of the view that steel in China is much cheaper for the domestic Chinese industry than steel for the Indian industry. The difference is over 10 to 15%. In such a scenario, MSMEs cannot compete with Chinese engineering industry where bulk orders are concerned. Our uncompetitiveness prevents building large scale manufacturing base which further creates a chain reaction. And all this results in the fact that Indian factories are 1/10th the size of Chinese factories. The key issue, however, it seems is that till steel is provided at an internationally competitive price to the downstream light engineering industries, Indian MSME manufacturers may not be able to actually face the Chinese in international markets.
  - f. **Trade Barriers:** A large number of trade barriers are being imposed on Indian engineering products e.g. Anti Dumping and Anti Subsidy measures, problems with regard to technical certification in various countries, particularly, the Latin American countries, certain policies by the countries like the USA, which has withheld the extension of GSP for the current year so far and has also put sanctions on banks and financial institutions for doing trade with Iran, which is a growing market for Indian engineering goods, among others. India's competitors like China have FTAs with a number of emerging countries while India either does not have or at best has a Preferential Trading Arrangement, which is insufficient for Indian engineering goods to be competitive vis-à-vis say Chinese engineering goods. A good example is in the case of Chile where India's auto exports are negatively affected as India has a PTA where it still has to pay a basic customs duty of 6% while all major auto exporting countries have FTAs with Chile. Major engineering sectors such as the Auto sector has also reported the problem of Non-Tariff Barriers faced by them.

- g. Infrastructural bottlenecks:** Infrastructural bottlenecks are the major problem hindering both domestic and export production. The scarcity and quality of infrastructure (land, transport, power, ports and roads) is poor, thus affecting competitive delivery schedule and increasing operating costs. The delivery time of locally made Engineering goods in many cases is 1.5 to 2 times longer than in industrialized countries. Companies tend to lose orders on delivery schedule. The inland transport is slow although the rail road density is the highest in the world. The cost of electric power is comparable to that in other nations, but reliability is poor. This apart, compared to the Chinese, the Indian overseas freight rates are exorbitant and arbitrary, with the exporters being virtually at the mercy of a cartel of shipping lines. Overall infrastructure inadequacies are estimated to translate into 7% cost disadvantage for Indian Engineering manufacturers vis-à-vis foreign manufactures.
- h. High transaction cost:** The export transaction cost for Indian Engineering goods industry are among the highest in the world. Heavy transaction costs not only increase the prices of the final export products, but also result in inordinate delay in export fulfillments, thus affecting export competitiveness. According to estimates by export promotion bodies, total cost of transaction of engineering goods in India works out to be around 10% of total export earnings.
- i. Non-zero rating of Exports and embedded taxes:** While in principle, exports are zero rated, this is not so in actual practice. Indirect taxes that are imposed on exports are generally refunded back to exporters. The refund system very often does not refund the full element of the taxation on the goods produced, the procedures are complicated and in certain cases like the VAT refund system, either not refunded back or are delayed to such an extent that it negates the very principle of such refunds. Thus, the cascading impact of the indirect taxation both at the State and Centre levels still continues to affect exports. In the case of auto sector, in particular, the supply chain of a vehicle manufacturer comprises of multiple tiers of vendors (many of them at lower tiers being smaller units) and in the course of transactions between the vendors till the supply of component to manufacturer, some element of taxes do remain unabated for various reasons creating a disadvantage position for Indian exports.
- j. High Fuel Cost:** All fuel oil is becoming expensive and is increasing the cost of production of engineering sector as nearly 10% to 15% of the total cost is of fuel. All input taxes on all fuels should be perfectly Cenvatable or Vatable. Currently the Central and the State laws provide for barriers in achieving this goal. For example the Central Excise Act provides no input credit on LDO, the State VAT Acts do not allow full input credit on furnace oil and LPG etc. With such high costs of fuel in the country, Engineering exports cannot grow.

**k. Manpower Challenges:** Ensuring availability of trained manpower is of critical importance. Adequate infrastructure is needed to ensure availability of trained manpower.

### Reasons affecting vocational training in India

<b>Inadequate course content</b>	<ul style="list-style-type: none"> <li>• Most courses have outdated content</li> <li>• Content is not aligned with industry requirements</li> <li>• Course content is not revised regularly</li> </ul>
<b>Absence of qualified teachers</b>	<ul style="list-style-type: none"> <li>• Poorly-trained</li> <li>• Low salary</li> <li>• Inadequate industry exposure</li> <li>• Unmotivated and uninspiring</li> </ul>
<b>Inadequate infrastructure</b>	<ul style="list-style-type: none"> <li>• Outdated and inadequately maintained equipment and machines</li> <li>• Few equipment, leading to insufficient practical training for students</li> <li>• Low practical content in course structure</li> </ul>
<b>Low industry participation</b>	<ul style="list-style-type: none"> <li>• Industry requirement not captured in course design or teaching</li> <li>• Few industry tie-ups for providing practical exposure</li> <li>• Inadequate on the job training</li> </ul>
<b>Absence of quality assurance</b>	<ul style="list-style-type: none"> <li>• No scientific framework for quality assurance of content design and delivery, trainers and infrastructure</li> <li>• Absence of standardisation of skills and certification</li> </ul>

Source: SIAM

**l. World Demand for Engineering Exports:** World Engineering Exports have grown at a relatively lower CAGR of 12.7% during the period 2004-08 as opposed to World Exports which grew by about 14.5% during the same period. It is felt that engineering exports during the 12<sup>th</sup> Five year Plan period may be slightly lower growing at a CAGR between 9%-11%. Thus, lower world demand for engineering goods could increase competitive pressures on engineering exports worldwide.

#### 4. Engineering Export Target for the 12th Five Year Plan

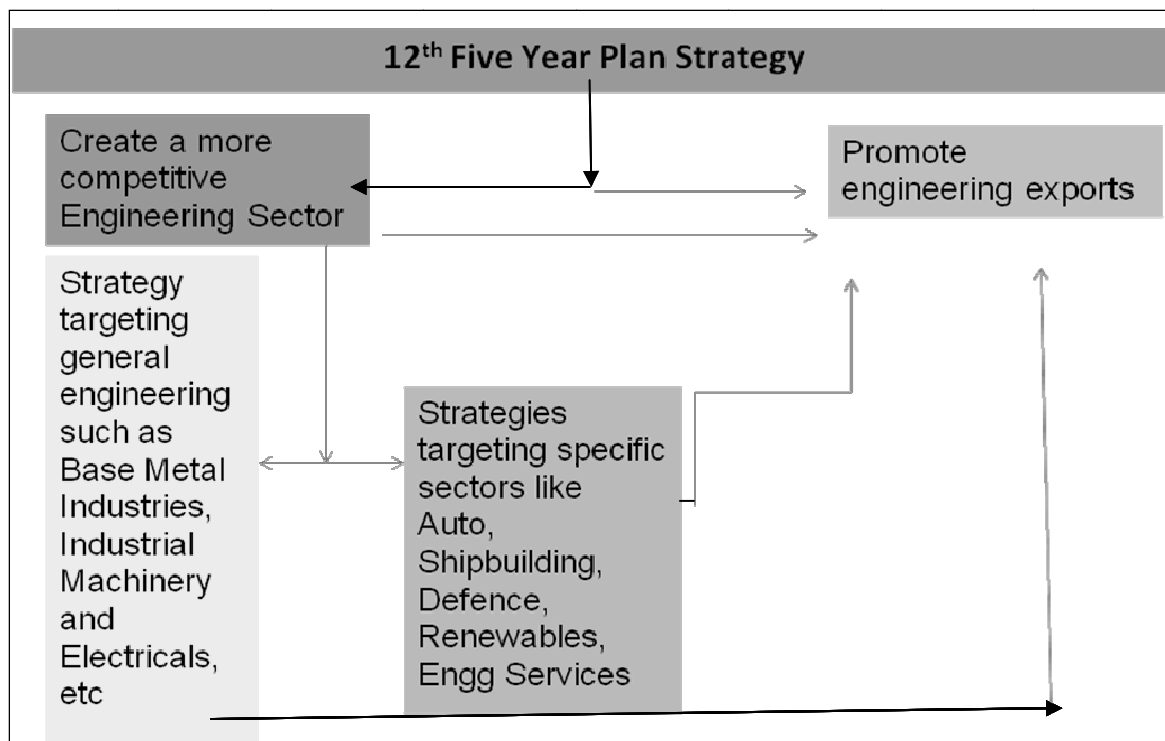
In the Strategy Paper for Doubling of Exports, prepared by the Department of Commerce, the target for engineering exports in 2013-14 is US\$ 125 billion. Thereafter, for the remaining three years of the 12th Five Year Plan, based on a CAGR of 20% for the major sectors of engineering exports except Industrial Machinery, Electrical Machinery and Shipbuilding, the overall export target for engineering exports at the end of the 12th Five Year Plan is US\$ 222 billion. The year wise targets are indicated in Table 2.2.

**Table 2.2: Engineering exports targets for 12<sup>th</sup> Plan**

<b>S. No.</b>	<b>Engineering Products</b>	<b>Doubling Strategy Target for 2013-14</b>	<b>Target for 2014-15</b>	<b>Target for 2015-16</b>	<b>Target for 2016-17</b>
1	Iron and Steel and Products Made of Iron and Steel	26.99	32.39	38.87	46.64
2	Non-Ferrous Metals and Products made of Non Ferrous Metals	11.96	14.35	17.22	20.67
3	Industrial Machinery	19.44	24.32	30.1	36.59
4	Electric Machinery and Equipment	12.86	17.43	21.36	27.42
5	Auto and Auto Components	19.49	23.39	28.07	33.68
6	Aircrafts, Spacecrafts and Parts	4.24	5.09	6.11	7.33
7	Ships, Boats and Floating Structures	10.63	12.76	14.38	16.32
8	Miscellaneous	19.4	23.28	27.94	33.52
9	<b>Total Engineering Exports</b>	<b>125</b>	<b>153.01</b>	<b>184.05</b>	<b>222.17</b>

**5. Strategies for meeting targets on Engineering exports in the 12<sup>th</sup> Plan**

In the 12<sup>th</sup> Five year plan, the emphasis will be on strategies to (i) create a more competitive domestic engineering sector and (ii) promote engineering exports through strengthening or modifying the existing set of policy instruments. The chart below provides a bird's eye view of what could be a possible roadmap for the 12<sup>th</sup> Plan.



### A. Strategy on General Engineering

Basic Metals, Machinery and Equipment, Electrical Equipment and Fabricated Metal products account for 78% of factories; 75% of the total invested capital; 70% of the total persons engaged in the engineering sector and 78% of the total net value added or output in the engineering sector. Clearly, the focus of the 12<sup>th</sup> Plan should be to concentrate on strengthening this base of the general engineering segment of India's engineering industry.

There are essentially two main issues with regard to the ferrous and non-metals sector that need to be addressed. First, there is an urgent need to expand production of ferrous and non-ferrous metals, if India wishes to develop a strong and vibrant engineering sector. Second, India exports these products either as raw materials or with low value addition. The emphasis, therefore, should be to move up the value chain. The growth of sectors like electrical machinery, construction, power, telecommunications and automobiles will further create demand of ferrous and non-ferrous metals. The steel sector, for instance, is the mother of all user engineering industries. The National Steel Policy had envisaged steel production to reach 110 million tonne by 2019-20. Thereafter, based on the assessment of the then ongoing projects, both in green field and brown field, in 2007, it was believed that the steel capacity in the country was likely to be 124 million tonnes by 2011-12. In 2010-11, India's crude steel production was only around 67 million tonnes, indicating the need to expand steel production in the country. In case of non-ferrous metals, aluminium, copper, lead and zinc are the main metals. India exports a large

quantity of aluminium given its large bauxite reserves, while in case of copper, India has now become a net exporter after being a net importer in the last decade. However, as the country lacks quality copper concentrate reserves, it imports raw copper and exports refined copper products like copper cathodes which have low value addition. In case of zinc, the main consumer is the domestic steel industry, which uses zinc for galvanizing. India's refined zinc production was 646,000 MT in 2009, an increase of around 8%-9% from the previous year. Consumption of refined zinc in India reached 512,000 MT in 2009, an increase of 20.8% from 2008. India's per capita zinc consumption is at a meager 0.4 kg, among the lowest in the world. As far as lead goes, the country has been importing major portion of its total consumption. This deficit has led to domination of secondary or recycling market in lead. The main challenge, therefore, for the Indian Ferrous and Non-ferrous metals industry is not only to expand capacity but also move up the value chain. The following steps are necessary:-

**a) Increase the inflow of FDI in manufacturing sector**

- i) India's market access in engineering related products could be linked to definitive and time bound FDI flows into India;
- ii) Preferential incentives may be considered for FDI coming into High-Potential products (where the domestic market is almost nonexistent). This will ensure a robust export growth as well as lead to the desired technology transfer.

**b) Improve Implementation Ratio to encourage Value Addition**

The Investment Implementation ratio (i.e. Investment under implementation as a percent of Total Investment Intentions during the year) for sectors of the engineering goods industry is much lower than that of all industries. This is evident from Table 2.3.

**Table2.3: Implementation Ratio (%)\* during 2004-05 to 2010-11**

Sectors	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
All Industries	55.2	45.8	39.7	39.4	40.3	47.2	48.8
Manufacturing	46.7	37.7	37.2	38.8	39.3	42.6	38.3
Metal and Metal Products	35.8	21.4	30.9	34.1	40.1	37.6	35.9
Ferrous Metals	33.7	18.7	25.4	30.9	37.8	34.6	33.3
Non-Ferrous Metals	46	49.9	92	64.1	56.8	67.7	64.1

Transport Equipment	37.1	27.7	32.6	40.2	57.6	72.6	64.6
Automobile	35	29.5	31.7	41.7	57.3	72.4	67.4
Automobile Ancillaries	46.6	20.3	39.2	34.3	59.1	73.5	53.9
Electricity	53.1	40.9	33.8	31	30	36.5	39.3

Source: Economic and Political Weekly, June 4, 2011

The implementation ratio is reasonably good with respect to Non-Ferrous Metals and Transport Equipment (which includes Automobiles and Ancillaries). However, it is rather low in critical segments of the engineering industry, particularly, Electricity.

The Draft National Manufacturing Policy has made a series of recommendations with the centre piece being the concept of National Manufacturing and Investment Zones (NMIZs) to boost to manufacturing, augmentation of exports and generation of employment. Hopefully, if this is implemented, there could be a remedy to the problem of low implementation ratio in certain engineering segments and the manufacturing sector.

**c) Formulate a Technology Upgradation Fund Scheme for the Engineering Sector, particularly, the MSME Sector:**

Collaborate with the Ministry of MSME on the proposal mooted by the Prime Minister's Task Force on Micro Small and Medium Scale Enterprises regarding constitution of a Rs 2500 crore Technology Upgradation Fund Scheme for the Engineering Sector. This will help in MSME exporters move up the value chain;

Till a Technology Upgradation Fund Scheme for the MSME Sector is put in place, the Credit Linked Capital Goods Scheme (CLCGS) should be extended. The CLCGS is available till 2012. The CLCGS, at present, provides capital subsidy of 15% for loans up to Rs 1 crore. The CLCGS was launched in the year 2000, revised in 2005 and has been extended from the 10th Plan to the 12th Plan. Under the scheme, approximately 7396 units, largely in the engineering and textile sectors, have availed subsidy of Rs. 315.21 crores up to August, 2009. It is further suggested that not only should the CLCGS be extended till the TUFs for the MSME sector is formulated, but in view of the inflationary situation, both internally and externally, the Capital Subsidy should be increased from 15% to 25% and the loans should be provided up to Rs 5 crore, given the high cost of modern and green technology.



#### **d) Ramp up the focus on R&D and Innovation:**

Research and development is a critical driver for higher productivity and economic growth. The country's research orientation in engineering sector is largely demand-driven. A major factor against research and development has been inadequate funding which hampers the completion of research activities. As a result the intended output is not realized and transferred to ultimate users. Inadequate funding has become an issue due to two reasons – (i) lack of comprehensive picture of the R&D happening across the engineering sector, not all deserving projects with high commercial potential receive the required amount of funding; (ii) Most of the R&D institutes are not geared to commercialize their innovations, as a result they are not able to sustain them and are forced to be dependent on the Government for grants.

In order to address this imbalance the Government could initiate activities under four key areas:

- ▶ **Discovery:** A R&D mapping exercise for the engineering sector covering the entire spectrum of R&D institutes as well as individual firms (wherever applicable) should be initiated. Further prioritization of these activities based on several vital parameters like impact on the quality, degree of cost optimization, reduction in emissions; commercialization potential etc should be done so as to channelize the grants towards supporting innovation in the Indian engineering industry.
- ▶ **Institutionalisation:** In order to achieve the above, there is a need to create central coordinating machinery which can initiate the 'discovery' process to encourage and facilitate effective creation, development and marketing of intellectual property/innovative technology in the engineering sector. A few Engineering industry bodies could be endorsed to be the nodal agencies for coordination between the various research entities and the Government to manage the disbursement of grants and also assist the entities with patenting procedures.
- ▶ **Link:** Industry bodies should be encouraged to develop strong partnerships among Industry and academic/research institutions and end users.
- ▶ **Facilitate:** Industry bodies should be urged to lead and act as facilitator to actively commercialize and market the innovations developed in the R&D institutes as well as the R&D arms of engineering companies. This can lead to generation of the much needed capital which can be re-circulated in the R&D systems thereby reducing their dependence on grants from the Government.

Additionally, enhancing the incentives given to investments in R&D to spur the level of R&D activity may be considered as it can provide the necessary momentum for moving up the value chain.

**e) Provide Credit at Low Cost for investment in Capital Goods/Equipment and Capacity Addition.**

i) Relax the provision of the RBI's External Commercial Borrowings (ECBs) to allow all categories of Engineering Exporters to raise ECBs for import of capital goods and equipments. For technology upgradation, given the huge Foreign Exchange Reserves of over USD 300 billion, it is suggested that RBI may relax the provisions of the ECB Guidelines to allow import of capital goods under the Foreign Trade Policy by all members of Export Promotion Councils. This means the following:

- Partnership firms who are exporters and having an average export turnover of Rs 5 crore in the last three years should also be allowed to raise ECBs only for import of capital goods under the Foreign Trade Policy. At present only Corporates and units in SEZs are allowed to raise ECBs.
- If need be, for these category of exporters (i.e. non-corporate exporters), the cap for raising ECBs could be lowered to USD 100 million from USD 500 million that applies in case of Corporates.
- The "All-in-cost ceilings" which includes rate of interest, other fees and expenses in foreign currency except commitment fee, pre-payment fee, and fees payable in Indian Rupees should be lowered to 1.5% from the present 3% for average maturity period of 3 to 5 years and to 3% from 5% for average maturity period of over 5 years for these non-corporate exporter members. This means that for non-corporate exporter borrowers the interest rate should be Libor (London Inter-Bank interest rate) plus 1.5% for loan maturity of 3years to 5 years and Libor plus 3% for maturity of loan for over 5 years.

**f) To expand capacities with the objective to enable MSMEs reap economies of scale, the cost of credit for term loans may be lowered.**

In the MSME sector, the manufacturing capacities are just too small compared to China and need to be ramped up rapidly. However, the cost of credit for this is a big deterrent. For instance, on a term loan of Rs 10 Crore, MSME units have to pay an annual interest of Rs 1.30 crores and a repayment of Principal of Rs 1.20 crores ( calculated at a total repayment period of 7 years ) which adds up to a total of Rs 2.50 crores of repayment. This is just not possible to generate per year. For this, we have to reduce the rate of interest on term loans and also increase the repayment period to 12 or 14 years. Currently, banks are hesitant to lend for periods above 7 years to the Manufacturing sector – whereas they are quite happy giving home loans for 15

years. So, a system has to be put into place where the banks do not discourage repayments of 12 to 14 years.

#### **g) Improve Power availability**

India has a chronic shortage of electricity and ranks below all other similar countries on quality of power. Shortage and poor quality of electricity supply has led to reliance on more expensive forms of power generation. This not only reduces the competitiveness of many engineering product categories vis-à-vis other low-cost countries but also can push many small-scale enterprises toward closure. As the power scenario has a direct bearing on the competitiveness of the engineering export and other manufacturing sectors, it is necessary to take important steps to address the situation. Some of the steps that may be considered are:

- Increase investment in power generation and transmission capacities beyond the current five-year plan by encouraging merchant and captive power plants to bridge the huge gap between demand and supply.
- Continue privatization of distribution to tackle losses and improve operational efficiency through increased investment in the necessary infrastructure.

#### **h) Policies for Competitive Raw Materials for Engineering Industries**

Suitable policies to provide engineering raw materials like steel, pig iron and other non ferrous metals at international prices, particularly to the MSME and the light engineering sectors, may be formulated. This is required because the MSME units do not import raw materials as they find it uneconomical to import.

#### **i) Initiate labour reforms**

The existing labour laws are archaic and not in line with the current recessionary market realities. Some of the amendments that may be considered are:

- Removal of ambiguity from the Contract Labour (Regulation and Abolition) Act, 1970. The 1970 Act may be retained but Section 10 tightened up so that ambiguity about continuance of contract labour and absorption following abolition is removed.
- Amend Section V-B of the Industrial Disputes Act for easier exit option for firms without adversely affecting the interests of labour.

#### **j) Enhance Skill Development**

The Engineering sector accounts for about 3.5 million persons engaged in Organized industry while about 4.48 million workers are engaged in the unorganized industry in 2008-09. With the advent of new technology in the engineering sector, there is a crying need for skill upgradation. According to various estimates of different industry bodies, the engineering sector

faces a skill shortage of nearly 30% in certain high skilled segments and anything between 10-15% in the low to medium scale segment. Industry expects that this shortage is likely to widen in the next couple of years. The role of National Skill Development Corporation (NSDC) is critical. The Engineering Industry Bodies and leading companies should draw up action plans for the development of skills for the general engineering industries, which are tailor made for these industries and make the trainees employable.

Another initiative is with respect to Tooling which is an essential component of the engineering industry. India has many Tool Rooms in different parts of the country. While these Tool Rooms have provided yeomen service to Indian engineering industry, some of the Tool Rooms are underutilized. It is felt that the infrastructure developed in the Tool Rooms needs to be utilized better and possible linkages with the private sector may be considered as a matter of policy. The NSDC and other Industry bodies dealing in general engineering could also be roped in, particularly, for the growth of the training skills as per the needs of the international market.

#### **k) Introduce a Full GST which implements the notion of one Common Market**

The GST should be introduced at the earliest. Further the GST should be a full GST so that all taxes, be it at the Centre or State level, are included in the GST scheme. Also one GST should be introduced across all States and the rates should be same under the GST system. This will reduce the cascading effects of indirect taxation both at the Centre and State Level.

### **B. Strategy to promote specific Engineering Industries**

#### **Automobile Industry**

The Indian auto industry has recently started penetrating international market and is working towards increasing its presence in various countries across the world. The vehicle manufacturers are looking for encouragement for exports to countries like Bangladesh, Sri Lanka, Peru, Chile, Indonesia, Malaysia, Saudi Arabia, Iran, Israel, Netherlands, South Africa, Kenya, Algeria and UK. Some important steps that have been suggested by Auto industry bodies for meeting the export target under the 12<sup>th</sup> Five Year Plan are as follows:

##### **i) Port Infrastructure**

- Creation of two dedicated berths for handling automobile export cargo, one on the East coast preferably in Chennai and the other on the West coast, each equipped to handle output of 5 lakh vehicles annually by 2015.
- Earmark space for parking, vehicle repair at these ports to accommodate at least 20,000 vehicles at a time - like the proposed multi-level facility at Chennai port.

- ii) **Minimum Alternate Tax (MAT)** to be waived for export earnings- which is available in many other ‘Export Focus’ developing countries.
- iii) **Quota System** – negotiate with competing countries (including FTAs) for automobile market access through Quota System (if it is not possible to negotiate on reduction in the import duty).
- iv) **Credit availability** - The Government needs to consider having a set up either through EXIM Bank or other leading Government owned bank to provide long term finance for vehicle exports to support Institutional bulk deals as well as Retail Financing.
- v) **Focus on Hybrid and Electric Vehicles:** The setting up of National Mission for Hybrid & Electric Hybrid Vehicles was announced by the Hon’ble Finance Minister in the Union Budget 2011-12. The Ministry of Heavy Industries & Public Enterprises has been entrusted with the task of developing a technology roadmap for such vehicles, exploring the likely market for these vehicles in India and promoting manufacturing of such vehicles in India. To focus on Hybrid and Electric Vehicles, a study is being undertaken in order to develop a mission plan and roadmap for promoting the adoption of an optimal range of electric mobility solutions for India, which can mitigate national fuel import dependency, provide affordable and environmentally friendly transportation and allow the Indian automotive industry to achieve global technology leadership. The study is expected to come out with the policy interventions and technology roadmap for such vehicles in India by September 2011. This would become a critical area in future.

## **Auto Components**

### Technology Upgradation & Development Scheme (TUDS) for Auto Components

The long-term competitiveness of the auto component industry in India is a major concern, as is the ability of the industry to invest in technology upgradation, especially in case of the SMEs. According to industry estimates, the auto component industry needs to invest Rs. 15,000 crores over the next five years towards technology and R & D to maintain and enhance its competitiveness. The investment is required not only for auto components but also for the casting industry on which the industry is dependent. The industry has requested for an interest subvention scheme for a five-year period wherein the industry would invest a matching amount equivalent to government’s contribution.

The following domains have been identified for R& D and technological intervention:

**Light Weighting:** Considering the fact that reserves for fossil fuels are exhaustive, there is a considerable focus the world-over on ensuring that the vehicles are fuel-efficient. This is leading to the usage of low-density metals, high strength light alloy (HSLA) steel structures, plastics and composites in component manufacturing.

**Engine and powertrain:** India is emerging as major engine manufacturing location. This huge growth opportunity necessitates and offers opportunities to develop more efficient powertrain technologies. On the one hand new technological developments in this domain will be driven by fuel-efficiency, on the other; the focus on electric vehicles and its variants is also posing a new challenge the world-over. While at the moment, the latter seems to be somewhat distant in the context of India, however, it could be potentially disruptive and India needs to prepare itself for such an eventuality.

**Manufacturing technologies:** Process improvements by investing in appropriate technologies that allow for efficient production, testing and validation will also lead to cost competitiveness.

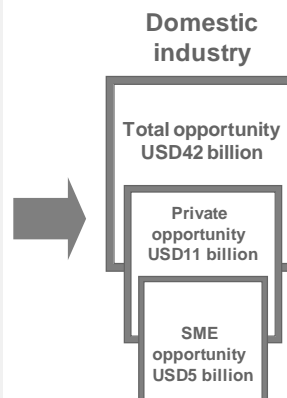
A Technology Upgradation and Development Scheme for Auto component industry would help the industry to undertake these technology related investments. Countries like Korea, Japan, Canada, Thailand and France have taken a large number of steps to help their respective auto components industry undertake such investments.

## **Defence Sector**

India's defence sector budget is expected to grow at a rate of 8% till 2014, with an anticipated capital budget share of 45%, which includes procurement of aircrafts and aerospace equipments such as, heavy and medium armament systems, vehicles, platforms and naval vessels among others. The balance is accounted by revenue expenditure, which caters to the operating expenditure of the three Services (Air Force, Army and Navy) and other Departments for spares, stores, fuel, etc. It is estimated that 17% of the revenue expenditure (9% of total defence budget) will go towards spare parts manufacturing. Thus, the total manufacturing opportunity in defence is 54% arising from capital budget (45%) and revenue budget (9%) translating into a market of approximately US\$ 91 billion for the period 2010–2014 with individual year spread as given in the Table below.

**Exhibit 8.17 Indian defence market size (USD billion)**

Years	FY10	FY11	FY12	FY13	FY14	Total
Total budget (Growing at 8%)	28.5	30.8	33.3	35.9	38.8	167
Capital budget (45% of total)	12.8	13.9	15.0	16.1	17.5	75
Revenue equipment portion (9% of total)	2.6	2.9	3.2	3.5	3.8	16
<b>Total (45%+9%)</b>	<b>15.4</b>	<b>16.8</b>	<b>18.1</b>	<b>19.6</b>	<b>21.3</b>	<b>91</b>
Share of domestic suppliers (46%)	7.1	7.7	8.3	9.0	9.8	42
Total private share @ 27%	1.9	2.1	2.2	2.4	2.6	11
SME share @ 40%	0.8	0.8	0.9	1.0	1.1	~5



Source: EY Analysis

To realize this potential, the following steps are suggested:

- i) The issue of FDI in defence has many dimensions. It has been observed, from the examples of other countries, that by allowing foreign firms to take a substantial stake, they are more likely to transfer technology and outsource production to the domestic industry, which in turn leads to greater production and exports. This empirical observation has to be balanced with the security needs of the country. Thus, FDI should be considered as an important element in expanding the manufacturing capabilities in the defence sector in the country and liberalization of FDI rules in this sector could take place in phased manner.
- ii) The Ministry of Defence (MoD) should come out with a short term procurement plan on a regular basis as it will help the domestic private firms in adequately preparing themselves by means of - Finalizing domestic/foreign collaborators; Raising sufficient amount of funds. This will help the domestic private sector realize its anticipated potential.
- iii) Currently, the offsets policy is applicable to any procurement that is above Rs 300 crore in value. This threshold value for offsets is comparatively high and as a result only a handful of domestic players will be able to utilize it. The threshold for offset should be reduced to Rs 75 crore in line with what is practised in other countries to ensure participation from a larger breadth of the domestic industry.
- iv) The tenure for Banked offsets clause, which has been recently introduced, should be increased to around 5 years.

## C. Strategy to promote Engineering Exports

### i) Ensure Policy Stability during the 12<sup>th</sup> Five Year

Promotion of exports through a compressive policy should be stable with reference to incentive structure, thrust focus, market penetration efforts and procedural issues. Efforts must be made to lower paper work for exporters so that they can concentrate on marketing their goods abroad.

### ii) Lower rate of Export Credit for Engineering Sector

- **Interest Subvention Scheme on Rupee Export Credit be restarted till Interest Rates slacken:** The RBI through the banks used to provide a subsidy of 2% which is called the Interest Subvention Scheme. This scheme lapsed on March 31, 2011. However, the interest rates have zoomed northward as RBI has tightened liquidity to curb inflationary pressures. Thus, the Department of Commerce should recommend that the Interest Subvention be extended till the Base rate is lowered by banks to 7%.
- Another option to lower export credit is to move to the earlier system of RBI refinancing of Export Credit at the Repo Rate to banks and provide export credit to exporters at Repo rate plus 0.25%. Thus, if the Repo rate is 8%, as at present, Rupee Export Credit Interest Rate to be paid by exporters would be 8.25% as opposed to 11.5% which they are being charged at present. The earlier RBI refinancing system was followed till 2006-07.
- **Provide Export Credit in Foreign Currency (PCFC) as per RBI's guidelines:** The RBI provides the PCFC for a maximum period of 360 days at Libor plus 300 basis points. Extension of the credit is also allowed subject to certain conditions. Exporters have complained that banks are not providing PCFC on the grounds that they lack Foreign Currency for such credit. It is suggested that the Department may write to Finance Ministry and the RBI to resolve this complaint of the exporters.

### iii) National Shipping Regulator

There have been persistent complaints from the exporting community, particularly, engineering exporters regarding the arbitrary fixation of freight rates by shipping liners from time to time.

Shipping liners are in the habit of imposing various charges which has a disruptive effect on pricing of goods by exporters. For instance, while there are



mandatory charges like Base Ocean Freight, there is also spate of auxiliary shipping charges such as Container Clearing Charges, Bunker Adjustment Charges, Peak Season Surcharge, Congestion Surcharge, Emergency Revenue Charge etc.

The exporting community has suggested that a National Shipping Regulator be formed so that the freight rates that are charged by shipping liners reflect genuine competitive conditions between the buyer and seller of shipping service and are arrived at based on certain laid down guidelines rather than being determined by a quasi-monopoly situation that seems to be the case at present.

In this context, the draft Shipping Trade Practices Bill 2010 is a step towards creating a legislative mechanism that deals with arbitrary shipping trade practices. However, the provision of the Bill does still leave the possibility of cartelization. As such, it may, therefore, be better to amend the draft Shipping Trade Practices Bill by incorporating a provision to set up a National Shipping Regulator like the regulatory mechanisms that are being followed in the Telecom, Insurance and Electricity sectors with the purpose of fixation of freight rates based on certain objective criteria that takes into account the views of all stake-holders.

#### **iv) Upgrading Export Infrastructure**

High turnaround time, few containers handled per hour, and high charges impose 30% higher working capital requirement in India. At present, the capacity of 43 million tonnes at all Indian ports is being fully utilized, and this requirement will increase up to 130-170 million tonnes by 2017. For engineering exports, freight rates contribute anything between 25%-30% of the total costs of exporting and therefore, port inefficiencies directly impinge on the export competitiveness of engineering exports from the country. Thus, deepening of draughts at berths, Anytime Working in Ports, deployment of shore mobile cranes for engineering cargo, etc are need of the hour.

Also, LPG and CNG through pipes should be made available in every town. For all steel making like forging, casting, heating, etc some kind of fuel is needed and Gas is the cleanest and best fuel.

#### **v) Promotion and Strengthening of Brand Image of Indian Engineering Goods**

- **Line of Credit for Developing Countries:** A large number of countries around the world are facing credit problems in wake of the global crisis. However, some of these countries have also pushed through stimulus packages targeting the infrastructure sector. If India could provide lines of credit to these

countries, it may be possible for Indian engineering companies and exporters to supply such infrastructure related goods to these countries. Prime Minister of India has already started this process for African Countries. This may be extended to some Latin American Countries.

- **Make India a Vendor Development Hub:** We suggest that under the MAI Scheme, we invite leading foreign manufacturers to conduct Vendor Development Programmes in India. This will attract foreign companies to see the engineering skills of our companies and choose the best vendors from India. In areas like Auto Sector, the Vendor Development Programme will be a great attraction for foreign car manufacturers as well as the various auto ancillaries in India.
- **INDIA SHOWS in Latin American Countries:** To promote engineering goods of the MSME sector, India needs to go to diversified markets and more emphasis should also be given to the Latin American Countries. For this purpose, there should be, at least, three INDIA SHOWS specialized for engineering goods and services whereby Export Promotion Councils and Industry Bodies can take at least 150 Indian companies to diversified markets.
- **Enhancement of Promotional Budgets:** The support under the MDA and MAI schemes may be enhanced to boost promotional efforts in emerging and potentially growing markets of engineering goods.

#### vi) **Expanding FMS, FPS and MLFPS Benefits and Identification of Thrust Markets and Thrust Products**

The revival of engineering exports in 2010-11 in the aftermath of a negative 19% growth in 2009-10 and the dispersal of engineering exports to hitherto untapped countries during 2010-11 indicate the contribution of schemes like Focus Market Scheme (FMS), Focus Product Scheme (FPS) and the Market Linked Focus Product Scheme (MLFPS) in promoting engineering exports from the country. Since there is a likelihood of world demand slackening in the next couple of years and the revival may happen with a lag, it is felt that these export promotion schemes should be expanded and strengthened to bolster competitiveness of our engineering goods. The FPS and MLFPS schemes may be utilized for the benefit of those tariff lines which can be identified as Thrust Products directed towards Thrust Markets. This could be an annual exercise based on which these benefits could be provided during the 12<sup>th</sup> Five year Plan period. Similarly, an enhanced FMS benefit could be used to increase India's engineering exports to countries with potential export growth possibilities.

**vii) Create a Fund to develop Service and Distribution Outlets in Difficult Markets**

An innovative idea is to create a fund to develop Service and Distribution Outlets in Difficult Markets. Detailed proposals may be sought from EPCs and other Industry organizations for this purpose.

## **Electronics Exports**

### **1. Overview**

India is currently a relatively small player in the world Electronics market but in the next few years its market share is expected to increase. The global market is estimated to be US\$ 1.8 trillion and India's share in it was 1.44% in 2010-11. Electronics is the largest and fastest growing manufacturing industry in the world, and is expected to reach USD 2.4 Trillion by 2020. India's export of Electronics Hardware in 2010-11 is estimated to be Rs. 7.6 billion which is merely 0.42% of the world market. As per report published by Frost & Sullivan, the Indian Electronics Industry will cross US\$ 350 billion by the year 2020. The main segment expected to be contributing to this growth are Wireless, Consumer Electronics, Aerospace and Defence, Medical Devices, Identification and Security Solutions.

While India has become a global power house in software and software services sector, it lags behind in Electronics Systems Design and Manufacturing (ESDM) capabilities. Manufacturing base of electronic products in the country is grossly inadequate in comparison to demand of such goods. Even in cases where products are manufactured in India, the extent of domestic value addition is low. Import of Electronics is a close second to the country's oil import. Unless the situation is corrected, it may be that by 2020, the electronics import may exceed oil imports. This fact goes unnoticed because electronics, as a "meta resource" forms a significant part of all machines and equipment imported, which are classified in their final sectoral forms, for example, automobiles, aviation, health equipment, media and broadcasting, defence armaments, etc.

### **2. Problems faced by Electronics Manufacturers**

The main problems faced by Electronics manufacturers are –

- i) Hardware industry not avidly promoted as its software counterpart
- ii) Trading more attractive than manufacturing
- iii) Inadequate physical infrastructure
- iv) Stiff competition with low cost products manufactured by China

### **3. Strategy for Domestic Electronics Manufacturing**

The growth of the electronics manufacturing has sorely lagged behind consumption. High volume manufacturing opportunities are yet to be tapped in certain product segments. Despite efforts facilitated through policy changes and incentives there has been a failure to create an ecosystem for nurturing electronics manufacturing within the country. The strengths in the form

of a healthy electronic components industry and strong design expertise have to be positioned to attract manufacturing investments. Within electronics manufacturing, the growing segments of telecom infrastructure, consumer electronics and medical equipments should receive increased focus.

Important features of the strategy for bolstering growth in electronics manufacturing in the country are given below.

- a) Change in strategy from ‘Design led Manufacturing’ to ‘Demand led Manufacturing: India itself is a huge market for electronics. Therefore the industry should be encouraged to manufacture electronic goods which are in huge demand considering the success stories of several MNCs such as LG, Samsung, Sony, Nokia etc. The feeder industries and adequate infrastructure for such manufacturing needs to be created and supported.
- b) Promotion of Export incentives to create an environment for electronics exports: The Government should increase export promotional funds under the MDA / MAI and similar schemes.
- c) Development of clusters for Electronics – ‘design to marketing’ clusters. : Promote Cluster manufacturing by setting up Industrial Parks. This can assist in mass production to derive results in a very efficient and effective manner, thus, partially mitigating the impact of disability, especially power, manpower productivity, logistics, warehousing, test facility and finance.
- d) Promotion of tax holidays and incentives for Electronic Manufacturing Services (EMS) companies investing in the country: This will attract and encourage global manufacturing companies to invest in India. Thus building India to be a global electronics manufacturing hub.
- e) Policy to attract investment in setting up of ecosystem companies: India’s electronics industry currently suffers from the lacuna of a well defined ecosystem. Absence of feeder industries is the biggest hurdle for electronics manufacturers to set their operations. Steps are needed to start developing an ecosystem, which will, in turn, attract manufacturing investments. Some of the pertinent action items include:
  - i) Policies to encourage investments in the feeding industries
  - ii) Extended period tax breaks for emerging companies in the feeding industries
  - iii) Initiatives to promote technology transfers through joint ventures with overseas companies in the feeding industries

#### 4. Export Targets for Electronics Hardware Sector in the 12<sup>th</sup> Five Year Plan

In conformity with the Strategy Paper for Doubling of Exports by 2013-14, the target for Electronics Hardware exports by the end of the 12<sup>th</sup> Five year Plan is given in Table 2.4. Exports are projected to increase at CAGR of 25% over the plan period.

**Table 2.4: Electronics Goods Export projections (USD million)**

Year	Electronics Hardware Exports (USD million)
2010-11	7680
2011-12	9500
2012-13	12000
2013-14	15000
2014-15	18750
2015-16	23450
2016-17	29300

Table 2.5 sets out the export projections of the various sub sectors of the Electronics industry exports.

**Table 2.5 : Electronics Goods Export projections (USD million)**

Sub-Sector	2009-10	2010-11*	2011-12**	2012-13	2013-14	2014-15	2015-16	2016-17
Consumer Electronics	632	800	950	1150	1350	1600	1890	2240
Telecom Equipments	1644	2710	3500	4550	5800	7550	9820	12710
Electronics Instruments	738	900	1050	1300	1600	1900	2255	2670
Electronics Components	2045	2670	3300	4100	5050	6200	7610	9340
Computer Hardware	401	600	700	900	1200	1500	1875	2340
Total	5460	7680	9500	12000	15000	18750	23450	29300

\*Provisional \*\* Estimated

2012-13 to 2016-17 : Projected

## 5. Strategy for achieving the Electronics Export Targets

### A. Domestic Electronic Software Delivery and Management (ESDM) Sector

- i) Set up two Semiconductor Wafer Fabs.
- ii) Preferential access to “Manufactured-in-India” Electronics Products and “Indian Electronics Products” for all government procurements and procurement by Government Licensees.
- iii) Set up a dedicated Electronic Development Fund.
- iii) Providing Capital grant and creation of electronic manufacturing clusters to encourage manufacture of specific high priority electronic product line in India.
- iv) Skill Development
- v) Intelligent Manufacturing

### B. Export Promotion

- a) The entire ESDM Sector may be extended the benefits of Focus Products Scheme (FPS) including EMS.
- b) The benefit of Market Linked Focus Product Scheme (MLFPS) may also be extended to the entire ESDM Sector including Electronic Manufacturing Services (EMS).
- c) The Duty Drawback Scheme benefit should be provided for the entire ESDM Sector. Today some items are included in the scheme but in order to promote export of entire ESDM Sector, the entire sector may be extended this benefit. As IT goods are at Zero duty, a new window has to be carved out.
- d) ITA goods may be treated as physical exports and extended all the benefit of export schemes.
- e) Relocation : There are large number of companies in US/ Europe who have closed down or are at the verge of closing down. They would like to migrate their manufacturing to India but retain brand/ marketing in US/ Europe as the case may be. Such companies should be consciously wooed. Specific incentives should be created for them. In addition road shows should be conducted in these countries. Industry associations can be engaged with the effort of identifying such companies abroad.
- f) Identification of new opportunities: Considerable opportunities exist in Repair, Reconditioning and Refurbishing of Electronics Hardware Goods. China has been servicing this market and Vietnam, Philippines, Thailand are the emerging to make inroads in it. The estimated size of this market in North America is US\$ 10 billion.

Currently India`s exports of refurbished electronics hardware are Rs 20-25 crores but in the next 5 years, these could grow to US \$ 2 billion providing employment opportunity to 1 million skilled labour. To encourage scalability of this business, various provisions of the SEZ Act may be streamlined to encourage investment and manufacturing capacity in the electronics hardware sector.



## Chapter 3 Chemicals, Plastics and Pharmaceutical

### 1. Chemical Exports: Performance and Trends

Total size of the chemical industry which includes base chemicals, speciality chemicals, knowledge chemicals petrochemicals and fertilizers is US \$ 108 Billion. Total size of traditional chemical industry (including petrochemicals) (excluding fertilizers, oil and gas) is - US\$ 43 Billion. (equivalent to 3% of India's GDP). Indian Chemical sector including petrochemicals ranks 6th by volume in the world production of chemicals and 3<sup>rd</sup> largest in Asia. Chemical sector including petrochemicals accounts for about 14% in the general index of industrial production, 17.6% in the manufacturing sector and 13-14% of total exports of the country. Chemical export performance and trend for the last five years (2005-06 to 2009-10) is shown in Figure 3.1.

**Figure 3.1: Chemical Export Performance and Trend (Last 5-years)**

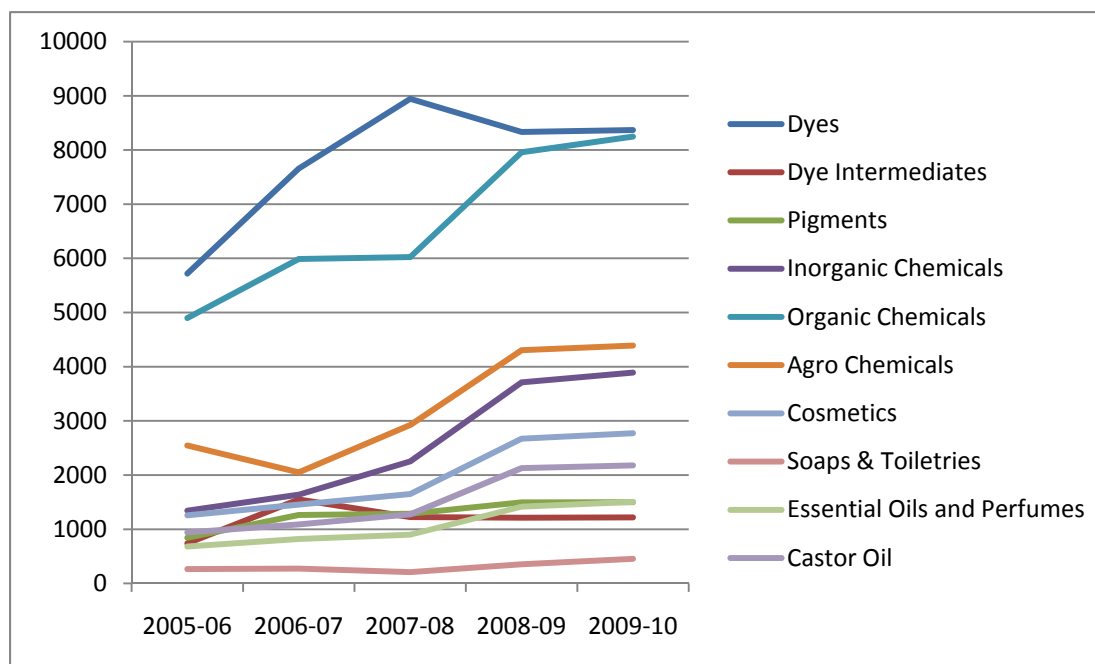


Table 3.1 highlights the turnaround in exports of major segments of the Chemical sector in 2010-11. Chemical exports registered a growth rate of 22% in 2010-11 over 2009-10.

**Table 3.1: Chemical Export – Major Segments**

US\$ in Millions

<b>Sr. No.</b>	<b>Description</b>	<b>2009-2010</b>	<b>2010-2011</b>
1	Organic Chemicals	2708.03	4024.21
2	Agrochemicals	1112.82	1123.5
3	Dyes	1046.26	1172.79
4	Cosmetics and toiletries	782.5	934.63
5	Inorganic Chemicals	672.12	894.67
6	Dyes intermediates	164.76	173.19
7	Essential Oils	49.73	45.73
8	Misc.	306.11	348.03
<b>Total</b>		<b>6842.33</b>	<b>8716.75</b>

10 % of countries in the world control nearly 90% of world exports in chemicals. Within European Union (EU) 27, eight countries account for more than 80% of chemicals exports.

## **2. Problems and Challenges**

### **India's position vis-a-vis its competitor (China)**

China had put up manufacturing capacities to cater to international market whereas India's focus was on domestic market. The main factors for China's competitive chemical industry are (a) bulk capacities (b) availability of utilities at bare minimum costs (c) availability of low cost finance and (d) less stringent environmental laws. Further, in agrochemicals, China has advantage of having the feed stock such as rock phosphate.

India is depending on China for lot of low cost and high volume intermediates such as J-Acid, Beta Napthol, K-Acid, Topias acid which are used for dyes and dyestuff and low cost

technical intermediates for agrochemicals. To reduce the dependence on China, Indian manufacturing units need to work at backward integration and diversification.

Problems and challenges faced by chemical industry in India are (a) production related and (b) export related..

### **Production Related**

- i) Poor Feed Stock availability and High Input Material Cost: In case of chemical industry, the feed stocks (Raw materials) are two fold
  - a) Naphtha based (For dyes and specialty chemicals) which are by products of Refineries
  - b) Green herbal feed stock such as molasses (Alcohol based chemicals) and Palm oil (oleo chemicals) .

The industry faces shortage of feed stocks like naphtha due to the fluctuations in the international market and inability of the medium/ small players to do the forward booking or import them in small quantities. In case of molasses, the same is being diverted to industrial ethanol's rather than chemical industry due to the better realization of value and paucity of liquid natural gas at affordable price. Because of these factors, the chemicals produced by Indian chemical sector are uncompetitive in international market compared to OPEC countries or countries with green feedstock availability. Therefore, even with existing capacities, having skilled labour and export orders in hand, many a times, manufacturers are forced to say no to the overseas buyers.

- ii) Fragmented Chemical Industry especially SMEs:-
  - Indian Chemical Industry having majority of SME units in various parts of the country have smaller installed capacities as compared to global scales; which puts them in disadvantageous position while tapping export opportunities with large volume.
  - Most of the SMEs cannot avail common facilities such as cluster development. Wide dispersion of industries leads to high logistic cost.
- iii) Inadequate Manufacturing Capacities:-
  - Inadequate manufacturing capacities as per international standards
  - The chemical plants in India with the exception of few do not have large capacities and thereby cost of production becomes high. Many chemical units have old equipments and obsolete technologies.

- iv) Stringent Environmental Norms: -
- Stringent pollution norms – difficult to adhere and unachievable by SMEs as the resources are limited.
  - For putting up any new chemical unit, there is need to get environmental clearance before even starting the unit.
  - Ban on increasing manufacturing capacities in existing industrial areas such as Ankleshwar due to pollution issues
- v) Poor infrastructure
- Industrial production suffers due to absence of world class infrastructure such as roads, ports and power supply.
- vi) Inconsistency in state levied tax Structure:-
- No uniformity in fiscal benefits for manufacturing.
  - No continuity in fiscal benefits for manufacturing (e.g. Excise benefits rolled out to attract manufacturing units are withdrawn suddenly rendering all the efforts put in to relocate manufacturing in these areas futile [Baddhi in H.P.]
- vii) Low level of R&D
- Traditionally, Indian Chemical manufacturers were subcontractors to the MNCs, manufacturing their raw materials. Therefore, new molecules which are more effective and environment friendly are being developed continuously by leading multi-national companies abroad. The Indian companies spend abysmally low on R&D establishments, ranging 1-2% of their turnover.
- viii) Paucity of skilled manpower
- There is lack of skilled manpower and also trainers.

### **Export Related**

- i) Compliance with International regulatory framework: - Exports are increasingly being subjected to compliance norms as per international standards such as REACH, GHS, SAICAM. Due to high compliance cost for discharging obligations under REACH, the exports from SMEs are becoming uncompetitive. This needs financial handholding.

Also, India does not have her own chemical management programme similar to international regulatory framework like REACH, GHS, and SAICAM.

- ii) Capital intensive chemical and petrochemical industry faces high cost of finance, high cost of energy and transaction cost which reduce the export competitiveness vis-à-vis competing countries.
- iii) Port constraints: Ship turnaround time is more. Delivery time to the buyer is much higher (No quick deliveries)

### 3. Chemical Export Target for the 12th Five Year Plan

In the Strategy Paper for Doubling of Exports, prepared by the Department of Commerce, the target for chemical exports in 2013-14 is US\$ 19.01 billion. Thereafter, for the remaining three years of the 12th Five Year Plan, based on a CAGR of 15% for the major sectors of chemical exports, the overall export target for chemical exports at the end of the 12th Five Year Plan is US\$ 28.88 billion. The year wise targets are indicated in Table 3.2.

**Table 3.2: Chemical export targets for 12<sup>th</sup> Plan**

S. No.	Chemical products	Doubling Strategy Target for 2013-14	Target for 2014-2015	Target for 2015-16	Target for 2016-17
1.	Dyes, Intermediates, Pigments	5.89	6.77	7.78	8.95
2.	Inorganic Chemicals	2.03	2.33	2.68	3.08
3.	Organic Chemicals	4.50	5.17	5.95	6.84
4.	Agrochemicals	2.52	2.89	3.33	3.83
5.	Cosmetics, Toiletries	2.14	2.46	2.83	3.25
6.	Essential Oils, Perfumes and Caster Oil	1.93	2.21	2.55	2.93
	<b>Grand Total</b>	<b>19.01</b>	<b>21.83</b>	<b>25.12</b>	<b>28.88</b>

#### **4. Strategies for meeting targets on Chemical exports in the 12<sup>th</sup> Plan**

##### **Production related**

##### **Feed Stock availability**

- Concessions on the feedstock by way of Duty/ Tax reductions with a rider of actual user condition.
- Reduce / eliminate duty concession for export of raw material / intermediate inputs used in various chemicals so as to encourage / promote domestic value addition in India.
- Government to have strategic alliance with feedstock rich countries such as Middle East and Russia. Utilization of rupee debt could be explored.
- Incentivizing refineries to produce feedstock meant for exports instead of only fuels
- Encourage cultivation of bio crops giving bio fuels/feedstock such as palm, castor, algae, etc.
- Encourage Cluster approach for common purchase of feedstock.
- In order to reduce extreme dependence of feedstock on China, Indian Manufacturing Units need to work at backward integration and diversification.

##### **Consolidation**

Since the Indian Chemical industry is fragmented, consolidation is required and possibly needs to be incentivized.

##### **Infrastructure**

- Creating common infrastructure facilities in the clusters such as roads, Common Effluent Treatment Plants, power etc. for the units to have plug in and plug out approach
- Encouraging policies such as Petroleum, Chemicals and Petrochemical Investment Regions (PCPIRs) for encouraging additional investments in these regions. Ancillary units using the feedstock produced as a by product of mother plant should be encouraged to relocate to such PCPIR's However experience so far is not very encouraging and needs corrective actions.
- A mapping of the common facility gaps need to be undertaken and specific proposals for bridging the gaps need to be given.

##### **R&D**

- Put up centers of excellences in each of chemical clusters housing common R&D facilities.
- Initiating policy fiscal incentives for encouraging investment in R&D.
- While formulating the schemes, facilities available in the CSIR Labs and other National Labs should be extensively utilized for sponsored R&D by the industry.

- The chemical industries have to gear up to face the challenges of product patent regime and increase their R&D expenditure to international level.

### **Technology Up-gradation**

- Technologies tie ups with the global companies who could give buyback for the resultant products.
- To encourage and subsidize pilot plants for technology up-gradation which would yield world class state of the art products.

### **Skilled Manpower**

- The full fledged industry oriented skill development programme under the expert guidance of NSDC needs to be initiated/implemented
- Govt. should facilitate first tailor made mobile business skill development programmes (pilot project), Trainers training to be held in all the chemical clusters. These would be conducted by Export promotion councils in collaboration with local manufacturing associations & NSDC which would mainly aim at doubling the exports of manufactured goods in that area.

### **Exports related**

#### **Development of Scientific Regulatory Frame Work.**

India needs to have its own inventory of chemicals to monitor production, import and export of chemicals in all its totality. Also a chemical management programme would not only ensure that the safe green chemicals are being manufactured, imported and exported into India, but the databank of their Safety Datasheets is maintained (Similar to China, US, Canada, EU and developed countries). A domestic Chemical Management Programme will facilitate compliance of Reach/GHS/SAICAM. The burden of Regulatory compliance will fall. GOI will be the owner of all the Chemical Safety Data, and this will facilitate movement towards Clean Green India using Environmental friendly chemicals. These programmes could be implemented with financial help under MAI or any other scheme of Government of India.

**Export finance/packing credit for exports** should be made available with minimum threshold of value addition in India.

#### **Reduction in export turnaround time**

Promotion of Infrastructure investments in reducing the turnaround time Improvement in logistic management (export consignment clearance) is need of the day.

## Plastics

### 1. Plastic Exports: Performance and Trends

The Indian plastic industry made a modest beginning in the 1950s by commencing production of Polystyrene (PS). Gradually over the years, Polypropylene (PP); Polyethylene (PE); Polyvinyl Chloride (PVC) and Polyethylene Terephthalate (PET) found a place in the Indian manufacturing segment and lot of capacities were added and are likely to be added in the near future. From a meagre export turnover of 16.5 million US Dollars 1955-56, the exports from the Indian plastic industry has crossed the 4 billion US Dollars in 2010-2011. There are about 15 polymer manufacturers in India. The details of polymer consumption; production and capacities; imports and exports are as given in Table 3.3. While we have capacities in India, availability of plastic raw materials for plastic processors may not really be an issue given that in addition to availability locally easy access is available through imports.

**Table 3.3: Growth of Polymer Industry**

Unit: Kilo Tonnes

<b>Products</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>CARG % 2005- 06 to 2009-10</b>
Commodity Polymers ( Polyethylene, poly Propylene, Poly Vinyl Chloride and Polystyrene)						
Capacity	4710	5187	5777	5720	6170	7.0
Production	4770	5183	5304	5060	4791	0.1
Imports	780	750	1152	1275	2086	
Exports	698	881	632	357	1001	
Consumption	4852	5052	5824	5977	5876	4.9
Synthetic Rubbers (Poly Butadiene Rubber (PBR), Styrene Butadiene Rubber (SBR), Nitril Butadiene Rubber (NBR), Butyl Rubber (BR), Ethyle Vinyl Acetate (EVA), Ethylene Propylene Dimer (EPDM))						
Capacity	148	148	186	186	186	5.9
Production	110	101	106	96	106	(-) 1.0
Imports	240	286	342	290	331	
Exports	22	16	14	16	17	



Consumption	328	372	433	371	420	6.4
Performance	Polymers (Acrylonitrile Butadiene Styrene (ABS) Resin, Styrene Butadiene (SAN) Resin, Nylon, Poly Methyl metha Acrylate (PMMA))					
Capacity	137	163	202	202	202	10.2
Production	127	138	157	141	172	7.9
Imports	37	45	57	67	168	
Exports	5	6	10	9	18	
Consumption	159	172	204	200	322	19.3

(Source : Department of Chemicals & Petrochemicals)

The post-liberalisation scenario witnessed large capacities of polymer production and easy access to both capital and raw material inputs. Besides servicing the potential domestic markets, plastic processors, particularly those having surplus capacities, started looking up at export opportunities in the overseas.

As per estimates, there are about 25000 plastic processors. Most of these processors are in the SME sector. It is understood that just about 6% of the plastic processors have a plastic processing capacity of over 1000 MT per annum. Based on the machineries used for; injection moulding and blow moulding, it is estimated that plastic processing capacities through these may be in the range of about 22 million MT per annum.

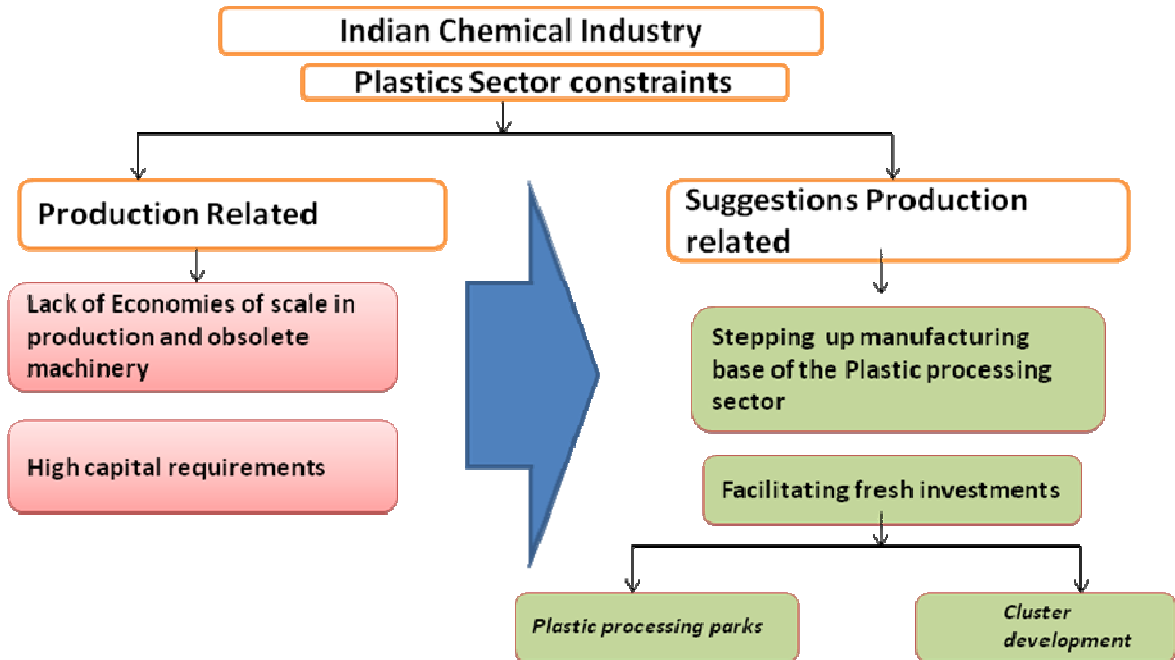
## **2. Problems and Challenges**

India's export share in World imports is only about 0.6%. Export of value added plastic items in case of China is 77.42% of their total plastic exports in volume terms while in our case it is only 38.41% . Even some of the Asian countries like Malaysia, and Thailand are exporting far greater quantities of value added plastic items than us.

Problems and challenges faced by plastic industry in India are analyzed from two angles (a) production related and (b) export related. Figure 3.2 shows the production related and Figure 3.3 presents the export related problems in the industry.

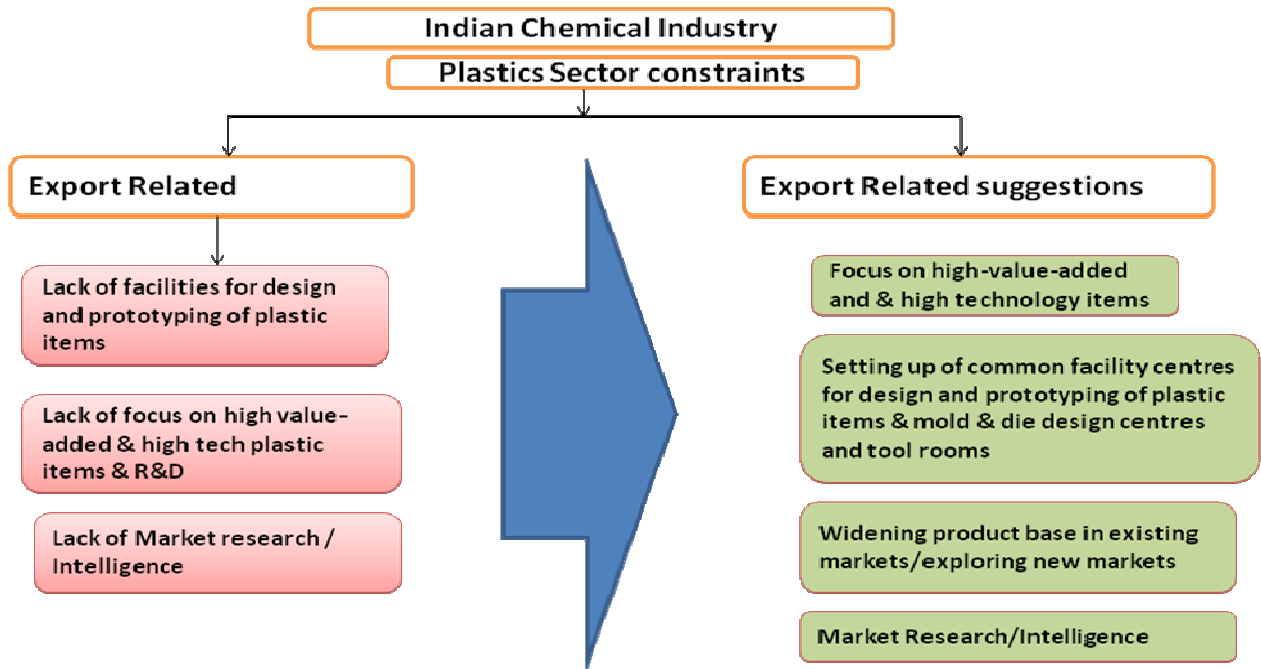
**Figure: 3.2**

# Plastic sector-KEY CONSTRAINTS



**Figure: 3.3**

## **Plastic sector-KEY CONSTRAINTS**



## **Production related**

- (i) Lack of Economies of scale in production and obsolete machinery

Though rough estimates may indicate that the plastic processing industry may not be operating at full capacities, operating at full capacities may not yield competitive products. This is primarily because a lot of machinery in use may have become obsolete.

As mentioned earlier, the plastic processing industry is highly dominated by the SME sector (over 90%) and some initiatives to motivate them into technological upgradation and increasing capacities is required. It is understood that just about 6% of the plastic processors have a plastic processing capacity of over 1000 MT per annum. The negative aspect of the plastic processing industry is that it lacks the economies of scales in production and is a factor that goes against withstanding competition particularly from the Asian Tigers.

- (ii) High capital requirements

The plastic processing industry is highly capital intensive. Besides huge investments in machinery, there is a regular requirement of investing in moulds and dyes that are costly.

## **Export related**

- (i) Lack of facilities for design and prototyping of plastic items

Supply of plastic components to Original Equipment Manufacturers (OEMs) commands a high export potential for the Indian plastic industry. The potential as per our rough estimates is well over 2.5 billion US Dollars per annum. One of the main drawbacks of the Indian plastic industry to tap this potential (given that over 90% of plastic processors constitute the MSME sector) is that they really do not have facilities in place to design and develop prototypes as per the requirements of the OEMs at a fast pace to subsequently put them into production. This is mainly because the investments required are such that the plastic processors may not individually be able to afford to put in place such facilities.

- (ii) Lack of focus on high value-added & high tech plastic items & R&D

For encouraging processing of high value-added (like plastic components) and high technology (like composites) plastic items, there is a lack of adequate R &D facilities so very necessary for development of specialty plastics depending on the application. Further, to promote high-value added items like plastic components, design and rapid prototyping facilities are also lacking.

(iii) Lack of Market research / Intelligence

As mentioned earlier, the plastic processing sector is mainly dominated by the SME sector and lacks the financial strength/inclination to undertake market research/intelligence for tapping potential export markets.

### 3. Plastic Export Target for the 12th Five Year Plan

In the Strategy Paper for Doubling of Exports, prepared by the Department of Commerce, the target for plastic and linoleum exports in 2013-14 is US\$ 10 billion. Thereafter, for the remaining three years of the 12th Five Year Plan, based on a CAGR of 15% for the major sectors of plastic and linoleum exports, the overall export target for plastic and linoleum exports at the end of the 12th Five Year Plan is US\$ 15.19 billion. The year wise targets are indicated in Table 4.4.

**Table 3.4: Target for remainder 12<sup>th</sup> Five Year Plan @ CAGR-15%**

<b>Product</b>	<b>Target 2014-2015</b>	<b>Target 2015-2016</b>	<b>Target 2016-2017</b>
Plastic Raw Materials	3.88	4.47	5.14
Moulded & Extruded goods	2.2	2.53	2.92
Plastic sheets, films, plates etc (incl PET Film)	1.98	2.28	2.63
Packaging materials	1.12	1.29	1.49
Other plastic items (Leather Cloth, Floor coverings, electrical items, photo films etc)	0.74	0.85	0.98
Human Hair & Products thereof	0.54	0.62	0.71
All types of optical items (incl optical frames, lenses, sunglasses etc)	0.42	0.48	0.56
Stationery/Office & School Supplies (incl writing instruments)	0.57	0.66	0.76
<b>TOTAL</b>	<b>11.45</b>	<b>13.18</b>	<b>15.19</b>

#### 4. Strategies for meeting targets on Plastic exports in the 12<sup>th</sup> Plan

##### Production related

It is essential that we focus on enhancing the manufacturing base of the plastic processing industry to ensure that value is added to the raw materials available both from within and outside India and value added plastic items dominate our export basket. This may be undertaken through technological upgradation and by attracting fresh investments both from within and outside India for plastic processing.

- **Plastic processing parks**

The concept of plastic processing parks is already in vogue in countries like Malaysia. The main idea is to provide a “specialised scheme of incentives” to investors setting up shop in this area close to a petrochemical complex so that raw material is within easy reach. It is suggested that such plastic processing parks be set up in PCPIRs (Petroleum, Chemicals and Petrochemical Investment Regions). Further, it is also suggested that an incentive package also be designed for investors in these areas.

- **Cluster development**

As a corollary to the above concepts, it is also suggested that clusters to manufacture highly labour oriented items like plastic stationery and items of artificial leather also be set up. Similar initiatives like a packaged scheme of incentives to develop new clusters for products that command a huge global demand. Items made of artificial leather (like leather goods) command a huge potential. Cluster development can also be an effective tool to increase plastic manufacturing base.

##### Export related

- i) Focus on high-value-added and & high technology items

The main areas which have been identified in the plastic industry are plastic components for the automobile sector, various equipments and the composite sector. These sectors cater to the requirements of even the high technology sectors like aviation and spaceships. The export potential for the aviation and spaceships sector may be well over 5 billion US Dollars and the Indian share may be practically zero.

- ii) Setting up of common facility centers for design and prototyping of plastic items & mould & dye design centers and tool rooms.

The plastic processors in the SME sector do not have the facilities to design and develop prototypes as per the requirements of the OEMs. Such facilities may be provided by Plexconcil under adequate funding from the Government. Facilitation in terms of investments for setting up of more tool rooms is also necessary to supplement the production of plastic components.

The proposed common facility centers for design and prototyping of plastic items and mould and dye design centers and tool rooms are to be located at places which are required based on detailed analysis of various clusters. These may be set up in PPP mode for higher involvement of the industry and demand driven approach.

- iii) Widening product base in existing markets/exploring new markets.

While our major markets comprise of the developed world comprising of the European Union and the USA (and, of course, many more), an analysis of our export basket vis-à-vis the imports of these regions/countries needs to be done which would enable us to tap new exports products/markets in different parts of the world for which adequate assistance under MAI or other Schemes be provided.

### **Market Research/Intelligence**

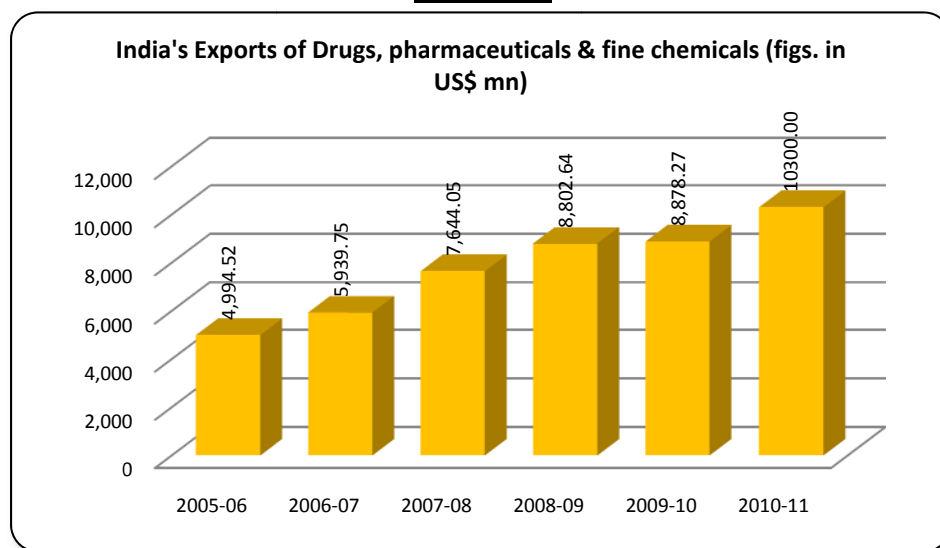
It is essential that Export Promotion Councils conduct regular market research and also develop mechanisms to maintain market intelligence for the benefit of their members. This idea needs to be worked out and implemented to really supplement the marketing efforts of the exporting community (given that the SME sector is ill-equipped to do this on its own).

## Pharmaceuticals

### 1. Pharmaceutical Exports: Performance and Trends

Indian pharmaceutical industry is 4<sup>th</sup> in the world in terms of production volumes, 13<sup>th</sup> in domestic consumption value and 17<sup>th</sup> in terms of export value of bulk actives and dosage forms. The country accounts for 8% of global production and 2% of world pharmaceuticals markets. The domestic pharmaceutical market size of India (at retail value excluding public procurement and exports), stood at approx. Rs. 53,350 Crore during FY 2010-11, with a growth rate of 16.3% (Inclusive of Hospital Sales). According to Department of Pharmaceuticals (DoP), the total production of drugs in the country is about US\$ 20 bn and about 40% of this production is from SME sector. The exports of Drugs, pharmaceuticals & fine chemicals stood at US\$10.3 bn during the year 2010-11 with a YOY growth of 15.1% (refer figure 3.4). The exports grew at a compounded annual growth rate (CAGR) of 14.75% during the five year period from 2005-06 to 2009-10.

**Figure 3.4**



Broadly, Asia is the largest importing region with a share of 30% of India's pharmaceutical exports followed by North America (24%) and Europe (21%), Africa (16%) and LAC (7%). During 2009-10 United States of America is the top export destination valued at US\$1.92bn with a share of approx. 21.67% in India's pharmaceutical exports followed by UK (US\$0.35bn with a share of 3.89%), Germany (US\$0.32bn, 3.57%), Russia (US\$0.27bn, 3.09%) and South Africa (US\$0.25bn, 2.77%).

The details of category-wise exports of pharma products during the last three years and targeted exports for 2013-14 are indicated in Table 3.5.



**Table 3.5: Category wise exports of pharma products**

Category	2007-08	2008-09	2009-10	CAGR	% Share
Bulk Drugs	12,647.51	16,360.71	17,307.02	16.98%	40.77%
Formulations	16,706.39	23,460.03	24,570.98	21.27%	57.88%
Herbals	470.12	594.87	570.76	10.19%	1.34%
Total Sector	29,824.02	40,415.60	42,448.76	19.30%	100.00%

Exports during 2009 and 2010 have been more or less same as in 2008-09. In the global recession, the impact of global slowdown has not been noticed in the bulk drugs and formulations. However, in herbals or life style drugs sector, there has been a fall vis-à-vis 2008-09. In the overall exports from the country, formulations segment comprise 58% while bulk drug are 41%. Herbals at present are only 1.34%. Keeping in view the interest in the herbal sector and with the anticipated improvement in the world market, this sector is expected to grow substantially.

## **2. India's Strengths in Pharma Manufacturing**

As per PricewaterhouseCoopers report, finished generics supplied from India account for 20% of the global generics market. It is estimated that 70% of the patients belonging to 87 developing countries received medicine procured from India by the United Nations Children's Fund (UNICEF), International Dispensary Association (IDA), the Global Fund and the Clinton Foundation.

The country has approx. 1,000 WHO Current Good Manufacturing Practices (WHO CGMP) approved pharmaceutical plants. It has 153 European Directorate of Quality Medicine (EDQM) approved manufacturing facilities among which 32 sites have Certificate of suitability of Monographs of the European Pharmacopoeia (CEP) approvals (Sep. 2008).

Country	Name of Regulatory Agency	Nos.
<b>USA</b>	DMFs filed with U.S. FDA (companies)	209
	DMFs filed with U.S. FDA (facilities)	169
	Number of molecules filed for which DMFs have been filed	632
	Formulation plants approved by U.S. FDA	23
<b>EDQM</b>	EDQM (European Directorate of Quality Medicine) (Bulk drug facilities)	153

	Number of CEPs received	539
	Number of Molecules for which CEPs have been filed with EDQM	195
<b>UK</b>	MHRA (Medicines Healthcare Regulatory Agency), UK (companies)	15
<b>Ethiopia</b>	DACA (Drug Administration and Control Authority), Ethiopia (companies)	50
<b>Tanzania</b>	(TFDA) Tanzania Food and Drugs Authority (companies)	75
<b>India</b>	WHO GMP Certified Plants (as per Drug Controller General of India)	1,000
Source: FDA websites of respective countries, Pharmexcil Research		

India has 2333 Type-II active DMF filings with US FDA of all as on Dec 2010.

As per WHO data and Pharmaceutical Export Promotion Council (Pharmexcil) research more than 90% of Active Pharmaceutical Ingredients (API) approvals for Antiretroviral (ARVs), Anti-tubercular & Anti-malarials (WHO Prequalified) are granted to India. Of the total of 4,942 prequalified approvals granted by WHO as on Jan, 2009 to 12 countries, India has 3rd highest number of approvals (621) for 6 companies. It also has the highest number of approvals from US President's Emergency Plan for AIDS Relief (PEPFAR).

### 3. Linkage of Pharma exports and production

The pharma sector is unique in that exports constitute about 50% of the total turnover of the industry. A substantial portion of this export is to regulated markets which have high quality standards. Therefore exports of pharma products have a very large contribution to make to the revenues and jobs created in the sector. Further, to cater to the export markets, pharma industry has had to imbibe global best practices and combine them with the cost competitiveness of domestic industry. Thus the export of pharmaceuticals has been the major driver of growth and success of this industry.

While the pharma industry and its mother sector, chemicals, has a number of large manufacturers, it is dominated by small industry. To ensure that the industry flourishes it is important to preserve and enhance the competitiveness of the small & medium enterprises. This can be done by policies and incentives which promote consolidation and help emergence of large players while at the same time providing common facilities and infrastructural support for clusters to make small units thrive.

#### **4. Problems and Challenges**

Some of the major challenges include:

- Lack of world class R&D infrastructure and absence of Government support for drugs related to R&D.
- Poor funding for drug discovery with emphasis on reverse engineering rather than innovation.
- Weak chemicals base with over-dependence on import of large proportion of bulk drugs from unreliable sources like China. High cost of finance for long term capital requirements and working capital.
- Absence of quality infrastructure with assured power supply and common facilities like effluent treatment and hazardous waste disposal.
- Storage and infrastructure bottlenecks at ports, airports, etc.
- Lack of resources for promotion of products and brands due to large number of brands being owned by medium and small enterprises.
- Heavy dependence on China for imports of bulk drugs is a major challenge which Indian pharmaceutical industry faces. 40% of our API requirements are imported from China. Certain sectors like fermentation which require cheap and abundant power have almost completely migrated to China.
- The non-tariff regime in the domestic chemicals and pharma sector is very weak and needs to be built up.
- Industry does not enjoy a reputation of high quality.

#### **5. Pharmaceutical Export Target for the 12th Five Year Plan**

In the Strategy Paper for Doubling of Exports, prepared by the Department of Commerce, the target for Pharmaceutical exports in 2013-14 is US\$ 25 billion .At CAGR of 19.3% achieved during 2007-08 to 2009-10, exports are projected to attain only US\$15.8 billion in 2013-14 .Thus a gap of US\$ 9 billion exists between projected and targeted exports. From exports of US\$10.3 billion in 2010-11, they have to grow at over 34% CAGR during the 12<sup>th</sup> Plan period to attain US\$ 42 billion in 2016-17.

#### **6. Strategies for meeting targets on Pharmaceutical exports in the 12<sup>th</sup> Plan**

**Cluster Development:** There is an urgent need for providing common facilities in the major pharma clusters such as cogent power, Transmission & Distribution lines, effluent treatment facilities, and allied common infrastructure. The Common Facility Centers proposed to be set up

in clusters should have all necessary equipments for testing quality and standards. This infrastructure should urgently come up in at least 5 emerging clusters. The user fees can be charged to cover the expenses of running the common facilities. It is felt that competitive advantage the industry will build up consequent to such infrastructure will bring back intermediates and fermentation industry to India. However, the initiatives for investment in various clusters should be based on detailed studies and assessment for its potential growth and benefit facilitating higher exports and full realization of final product values.

**Financial support to pharma industry:** Pharma sector has a long gestation period as the benefits by way of margins accrue to the companies after lot of investments. Regulatory approvals as also R&D and emerging technologies require lot of investments which the predominant SME sector at present is not able to arrange. Banks/financial institutions should be sensitized for funding both tangible and intangible assets especially in around 200 complex API/Intermediates and formulation technologies that are untapped by Indian industry.

Around Rs. 6000 crores for capex of 200 API facilities, 2000 crores for 200 technologies, Rs. 1500 crores for 1000 patents, 100 crores per year funding for shared services in 20 identified foreign markets will be required for building up the capacities and giving a competitive advantage to Indian pharma companies for achieving the set targets. Besides, development of common infrastructure in 5 clusters may require another Rs. 2500 crores. Along with this, Rs. 50 crores per annum for two years will be required for capacity building for pharma companies. Banks/financial institutions must provide special packages to pharma industries.

**Funding through SPVs** is necessary for the future growth of the domestic Indian pharma industry. Out of over 250 sustained release technologies; India has not progressed beyond ten to fifteen products. However, each ANDA costs a couple of million dollars. Hence, the need for SPVs. These SPVs floated by key banks can own the IP and contract the research work to the applicants through an agreement. Through an escrow mechanism the sale proceeds can come back to SPVs. Once the SPV obtains an agreed IRR, the IP can be transferred to the companies.

**Aggressive Diffusion of Knowledge:** Understanding of global markets, IP issues, GMP & Compliance, legal contract capabilities etc are limited to top companies. There is an urgent need for starting training programmes in centres like NIPER with additional focus of providing industrial support like advanced testing services, facilitating education needs, promoting incubation centers to foster new ideas.

**Shared services in foreign countries:** There is a need to promote shared services in foreign countries such as setting up of warehouses and office space for initial launch period; purchase of RLD drugs, information on market, regulatory guidelines and other procedures, facilitating initial entry work into the country like submission of regulatory documents on behalf of SMEs, etc.,

Such a move will result in significant cost savings to domestic companies enhancing their competitiveness.

**Herbal Industrial Parks:** Herbal industrial parks in line with model concept of JNPC should be developed wherein the national priority 25 herbals are processed into GMP facilities and infrastructure for necessary conversion into end use formulations is provided.

**Setting up of Pharma Zones** - Ensuring creation of Pharma zones to provide temperature control storage facilities at ports and airports with large pharma trade to preserve quality and efficacy of drugs.

**SEZs:** SEZs are essential for the growth of Industry. The gestation period to commence and obtain regulatory approvals takes at least 4 to 5 years. Hence the direct tax code related limits for setting up of new units and new SEZs should not apply to this strategic sector. Allow the use of SEZ unit for domestic purpose until the regulatory approvals take place i.e, in first five years. (of course without tax advantage). Consider the first year of profit to begin the calculation of tax holiday. Also the industry urges ministry to influence banking sector to recognize the long gestation of the projects and develop such term loans structure for tangible and intangible assets. SME export credit hurdles at banks should be resolved consistent with Govt. policy on expanding ties with African countries etc.

**Standards:** Establishing mandatory standards in this sector will on the one hand prevent dumping of sub-standard products by foreign enterprises while on the other hand it will help the domestic industry to raise its manufacturing capability to provide better quality drugs to local consumers in the short run. It will also make industry better equipped to meet international norms in the long run without having to invest in parallel 'export only' facilities.

**Brand:** There is a need to develop, promote and implement a large campaign in important markets to build a strong brand image for Indian pharmaceuticals and position them as safe, effective, affordable products of high quality.

**Industry – Research institution Linkage:** Pharmaceutical sector is highly dependent on skilled human resource and international successes have been propelled by availability of good quality human resources around pharma manufacturing centres. To further build on small initiatives like NIPER undertaken by Indian pharma, there is a need to develop partnership or leverage the research capacities of large research institutions, universities and centres of excellence.

**Define high tech value addition:** Frontier areas in the pharma industry are those which are based on development of new chemical entities. These are followed by efforts to develop non-infringing processes for existing drugs. The lowest end involves formulations from imported

APIs with little local value addition. It is imperative to define high-tech/high value add products and develop schemes to support their production and export.

**Strengthening of DCGI:** Ease of compliance with global regulatory requirements ensures quality in both domestic markets and imports, enhances competition among domestic and foreign generic cos., enables capturing business of regulated markets and establishes much required confidence in Indian capabilities among foreign buyers. Strict implementation of cGMP to include mandatory bio-equivalence tests.

**Bioequivalence Centres:** Mechanisms to have access to bioequivalence centres to conduct studies at concessional price for Indian pharma exporters. Reimbursement of 50% of bioequivalence expenses incurred, upon proof of adequate sales.

## Chapter 4 Textiles and Clothing Sector

### 1. Structure of the Indian Textile and Clothing Industry

The Indian Textiles and Clothing sector is an important constituent of the manufacturing sector and second largest employment provider after Agriculture. It contributes about 4% of GDP, 14% of industrial production, 12% of total exports and 20% of the workforce in the organized manufacturing sector. Labor intensive, small and medium enterprises dominate the landscape of Textiles sector as compared to other sectors.

The structure of the Indian textile industry is quite unique. It comprises mainly of small-scale, stand alone spinning, weaving, finishing and apparel making enterprises. Such a structure arose mainly on account of policies on tax, labour and other regulations that favoured small scale, labour intensive enterprises. The Readymade garments and Hosiery sectors were reserved for the SSI sector until 2004. Table 4.1 gives details of the structure at present.

<b>Table 4.1 – Structure of the Indian Textile and clothing industry</b>			
<b>Sector</b>	<b>No. of Units</b>	<b>Cloth production ( Million sq.mtrs)</b>	<b>Employment (Million)</b>
<b>Organized Textile Mills (including exclusive weaving units)</b>	368 (Nos)	2208	0.26
<b>Powerlooms</b>	5.15(lakh)	37517	5.7
<b>Handlooms</b>	23.77 (lakh)*	6902	4.33*

Source: o/o Textile Commissioner

\*As per 2010 Handloom Census Report of DC (Handloom)

Indian textiles and clothing industry is self reliant and complete in value chain, i.e. from raw material to the highest value added products (garments/made-ups). It is extremely complex and varied with labour intensive hand-made sector and the capital intensive sophisticated mill sector, with decentralized power loom and knitting sectors coming in between.

India is one of the few countries that have a presence of manufacturing units across the entire value chain starting from fibre production to spinning, weaving/knitting, processing and garment manufacturing. This industry uses a wide range of fibres from natural fibres like cotton, jute, silk and wool to synthetic/man-made fibres like Polyester, viscose, nylon, acrylic and the multiple blends of such fibres and filament yarns. Table 4.2 below gives details of production of Fibres and Yarn.

Items	UNITS	2005-06	2006-07	2007-08	2008-09	2009-10	% Growth
<b>Production of Fibres</b>							
<b>Raw Cotton</b>	Lakh Bales	241	280	315	290	295	1.72%
<b>MMF</b>	Mn Kgs	968	1139	1244	1066	1268	18.95%
<b>Raw Wool</b>	Mn Kgs	44.9	45.2	45.2	45	45	0.00%
<b>Raw Silk</b>	Mn Kgs	17.31	18.48	18.31	18.37	19.69	7.19%
<b>Production of Yarn</b>							
<b>Cotton</b>	Lakh Bales	2521	2823	2948	2896	3079	6.32%
<b>Other Spun</b>	Mn Kgs	937	990	1055	1014	1114	9.86%
<b>MMF Filament</b>	Mn Kgs	1179	1370	1509	1418	1523	7.40%

Source: Textile Commissioner, Mumbai

Indian textiles industry is predominantly cotton based. The share of cotton cloth in India's cloth production was as high as 60% in 1995-1996, which has declined over the years to 48.5% in 2009-2010. Table 4.3 gives details of fibre wise production of cloth.

Period	Cotton cloth		Blended Cloth		100% Non-cotton Cloth		Total Qty
	Qty	% share	Qty	% share	Qty	% share	
2005-06	23873	48.91	6298	12.90	18637	38.18	48808
2006-07	26238	49.82	6882	13.07	19545	37.11	52665
2007-08	27196	49.22	6888	12.47	21173	38.32	55257
2008-09	26898	49.63	6766	12.48	20534	37.89	54198
2009-10	28914	48.58	7767	13.05	22840	38.37	59521
2010-11P	31266	51.21	8171	13.38	21620	35.41	61057
CAGR	5.54%		5.35%		3.01%		4.58%

## 2. Global Scenario

World trade in textiles and clothing, which amounted to around US \$ 612 billion in 2008 and declined to US \$570 billion during 2009 due to global recession. However, 2010 showed signs of recovery in global trade of textiles and clothing. Developing countries are the major exporters and account for 2/3<sup>rd</sup> of these exports.



China dominates the world trade in textile and clothing with exports of US \$ 200 billion representing 35% of the market share. After China, the EU is the world's second largest exporter of textile products with 31% share (including intra-EU trade).

Exports from India account for 4% of world trade and are currently valued at US \$ 25 billion. India is also one of the leading suppliers of garments to USA. In the EU India is a leading supplier after China and Turkey. However, Bangladesh has a higher level of exports of garments than India in the EU market mainly on account of a duty free access.

In the global textile market the major importing countries are USA, European Union and Canada. Asia has been the principal sourcing region for imports of textiles and clothing by USA and European Union. Apart from Asia, the USA depends on the Latin American Region having built a sourcing base casting a web of preferential arrangements. The European Union (EU), on the other hand has been relying on intra-EU trade supported by an enlargement process covering central and east European countries and the Mediterranean Region.

Recent trends in global economies like China show that in areas of labour intensive and mass production items such as textiles and clothing, wage increases, structural adjustments rising cost of credit are compelling investors to look towards alternate locations. In this scenario India stands to gain if coordinated efforts are made to attract these investments into India.

India is not a low cost producer of textiles and apparels. India's shipping costs, power costs, road transportation costs tax burden are the highest amongst its competitors. Labor costs and hours worked remain less than its closest competitors. Bangladesh has the lowest costs amongst the major apparel producers. Table 4.4 gives details of input cost of selected countries.

**Table 4.4: Comparison of production/ input cost in 5 countries**

<b>Cost</b>	<b>Unit</b>	<b>India</b>	<b>China</b>	<b>Pakistan</b>	<b>Bangladesh</b>	<b>Cambodia</b>
<b>Labor cost</b>	US\$/ hour	0.83	1.44	0.55	0.32	0.53
<b>Hours worked</b>	Hours/ year	2280	2328	2324	2336	1960
<b>Electricity cost</b>	US\$/ kwh	0.086	0.065	0.071	0.053	0.14
<b>Transport Ocean</b>	US\$/ 20''	2100	1800	2000	1900	1900
<b>Land</b>	container	400	470	300	250	600
<b>Building cost</b>	\$/ sq mt	140	97	150	120	130
<b>Taxation Corporate Tax on</b>	% of	33.60	25.00	35.00	35.00	20.00

<b>profits VAT</b>	profit % of value add	12.50	17.00	15.00	15.00	10.00
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Source: Benchmarking International Competitiveness of the Indian Textiles and Apparel Industry by Dr. Meenu Tiwari and Manjeeta Singh ICRIER January 16, 2011

### 3. Review of Export performance

The Working Group report for the Eleventh Five Year Plan had projected the following growth rates:

- The textiles industry was targeted to grow at the rate of 16 percent in value terms to reach the level of US\$ 115 billion (Exports US\$ 55 billion; domestic market US \$ 60 billion) by the terminal year of the Eleventh Five Year Plan.
- Cloth Production was expected to grow at the rate of 12 percent in volume terms.
- Clothing and Apparel were expected to grow at the rate of 16 percent in volume terms and 21 percent in value terms.
- Exports were expected to grow at the rate of 22 percent in value terms

Based on the above growth rates, the targets for textiles were projected at US \$ 55 billion. The review of the actual performance of Exports shows that targets for the different items were not achieved during the first four years of the Eleventh Five Year Plan. The reason for non-achievement could be attributed to high projections and global recession in the early part of the plan period prolonging to 2009-10. Therefore, against projected export target of US\$ 55 billion on the terminal year of the 11<sup>th</sup> plan, the T&C exports is estimated to have crossed export figure of US \$ 25 billion in 2010-11 and is projected to reach the level of US \$32.35 billion in the terminal year of the 11<sup>th</sup> Plan. Table 4.5 shows the actual performance of the sector during the 11<sup>th</sup> plan period and the growth rate achieved.

**Table 4.5: Export Performance in Eleventh Five Year Plan**

(in Million US \$)						
Items	2007-08	2008-09	2009-10	2010-11 (P)	2011-12 (P)	CAGR 2007-08 / 2011-12
Cotton Textiles	5553	5083	5644	6840	7500	7.80%
Manmade Textiles	3177	3281	3959	4325	5500	14.71%
Silk Textiles	657	676	597	543	800	5.05%

Woollen Textiles	443	478	476	441	700	12.12%
Clothing	9070	10242	10125	11354	14000	11.46%
TOTAL	18900	19760	20801	23503	28500	10.81%
Jute, Coir & Handicrafts	3247	1179	1586	1775	3850	4.35%
Grand Total	22147	20939	22387	25278	32350	9.94%

#### 4. Twelfth Five Year Plan Targets

The trends during the Eleventh Five Year Plan show that against an expected target of achieving US \$ 55 billion by the end of the 11<sup>th</sup> Plan, exports of textile and clothing are likely to reach around US \$ 32.35 billion.

Table 4.6 shows the projections of the T&C exports from India during the 12<sup>th</sup> plan period based on the historical growth rate of 10% CAGR registered during the previous Plan periods.

**Table 4.6: Projections for Twelfth Five Year Plan**

(in Million US \$)

Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% share
Cotton Textiles	7500	8250	9075	9983	10981	12079	23.18%
MMF Textiles	5500	6050	6655	7321	8053	8858	17.00%
Silk Textiles	800	880	968	1065	1171	1288	2.47%
Wool Textiles	700	770	847	932	1025	1127	2.16%
RMG	14000	15400	16940	18634	20497	22547	43.28%
Others	3850	4235	4659	5124	5637	6200	11.91%
<b>Total</b>	<b>32350</b>	<b>35585</b>	<b>39144</b>	<b>43058</b>	<b>47364</b>	<b>52100</b>	<b>CAGR 10.00%</b>

However considering the grave Balance of Trade position and likely current account deficit arising out of high growth in the Indian Economy, there is a need to accelerate the pace of exports in the highly labor intensive textile and clothing sector.

With the recently announced national policy on manufacturing likely to create 100 million additional jobs and boost the manufacturing sector's GDP share to 25% by 2025, the textile and clothing industry must aim at creating additional 25 million jobs during this period.

### **Garment Sector**

The labor intensive garment sector contributes about 50% of India's T&C exports and needs to be the engine of growth for the entire sector. In order to achieve this, the sector must grow at a very fast rate as compared to the other segments of the textile economy. Accordingly, exports of garments sector is projected to grow at a CAGR of 18% during the 12<sup>th</sup> Plan period.

### **Man Made Fibre Textile Sector**

The man made textile sector has enormous potential and India has not been able to harness its full potential for various reasons which has in a way been a limiting factor in India attaining a dominant position that it deserves in the International textile and clothing sector. While efforts are being made separately through the National Fibre Policy to enhance the production of Man Made Fibre Yarns and Fabrics, there is a need to encourage exports of Man-made fibre textiles in all their value added forms. Given the changing demand profile in favour of manmade fibre based textiles it is envisaged that these items may grow at a CAGR of 16% during the 12<sup>th</sup> Five Year Plan period.

### **Cotton Textiles**

Indian textile and clothing exports are predominantly cotton based with the fibre accounting for 57% of exports during 2010 followed by Man-Made Fibre based textiles (14%) and other textiles (13%), silk textiles (9%) and Wool textiles (7%).

India is also the second largest producer of cotton and the largest exporter of cotton yarn. While India is expected to be a cotton surplus Nation in the next decade, supply side management issues are likely to be of vital importance in the sector. Policy relating to exports of cotton and cotton yarn are likely to form part of a larger question of Raw material security as India caters to growing demand in the domestic and export sector for value added products.

However with India having the strength of home grown cotton and a vibrant spinning industry, export of cotton textiles in their value added form as Yarns, Fabrics and Home Textiles will find customers around the world.

Taking into account various factors, it is felt that export of cotton textiles are expected to grow at a rate of 12% during the entire 12<sup>th</sup> Plan period.

### **Other Textiles**

With India having a presence in almost all other fibres like Silk, Wool, Jute, Coir and in Handicrafts the sub group estimates growth in exports of these sectors @a CAGR of 10%.

Taking in to account the various projections, a target of US \$ 65 billion by the end of the 12<sup>th</sup> Five year Plan period is expected.

Table 4.7 gives the projections for the entire textile and clothing sector.

**Table 4.7: Export Target for Textile & Clothing in XIIth Five Year Plan**

(in US \$ Million)

Items	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	CAGR 2012-13 / 2016-17
<b>Cotton Textiles</b>	7500	8400	9408	10537	11801	13218	12.00%
<b>Man Made Textiles</b>	5500	6380	7401	8585	9959	11552	16.00%
<b>Silk Textiles</b>	800	880	968	1065	1171	1288	10.00%
<b>Woollen Textiles</b>	700	770	847	932	1025	1127	10.00%
<b>Clothing</b>	14000	16520	19494	23002	27143	32029	18.00%
<b>TOTAL</b>	28500	32950	38117	44121	51099	59214	10.00%
<b>Jute, Coir &amp; Handicrafts</b>	3850	4235	4659	5124	5637	6200	10.00%
<b>Grand Total *</b>	32350	37185	42776	49245	56736	65414	15.17%
<b>% Growth</b>		14.91%	15.03%	15.12%	15.21%	15.29%	

##### 5. Strategy to achieve the projected export targets

The main points of the Strategy identified for achieving the export targets in the 12<sup>th</sup> Plan, including expanding domestic production base, improving quality and market linkages, sound export promotion policies are given below.

- Product and market strategy with a focus on shifting to value added niche product segment;
- Up-gradation of technology, investment in modernization and vertical integration;
- Creation of additional capacities and, scaling up of operations in the value chain;
- Scaling up of investment and credit flow to the sector, including facilitating foreign direct investment;
- Product design and development, quality enhancement;
- Programme for productivity enhancement across the value chain;
- Compliance to social, environmental and safety standards;

- Creating Competitiveness through stable policy instruments including fiscal incentives;
  - Institutional changes and strengthening, including revamping of Export Promotion Councils;
  - Procedural rationalization and reduction in transaction costs;
  - Obtaining enhanced market access across the world, and diversification of export markets.
- Addressing infrastructural bottlenecks related to exports, providing full refund of all indirect taxes and levies,

The above strategies have been further elaborated as follows:

**Product Strategy and Promotion of Exports of Value Added Products**

A major portion of India’s textile and apparel exports is in textile form (fiber, yarn or fabric) where the value addition is quite low.

Table 4.8 below shows the share of different product segments in India’s export basket which indicates that specialized products like nonwovens, coated fabrics, etc. with medium to high value addition constitute a miniscule share in total textile and apparel exports of India.

**Table 4.8**

<b>S.No.</b>	<b>Description</b>	<b>Value Addition level</b>	<b>Share in India’s exports</b>
1	Silk textiles	Medium	1%
2	Wool textiles	Low to Medium	1%
3	Cotton textiles	Low	15%
4	Other veg. fiber based textiles	Low	1%
5	MMF based textiles	Low	8%
6	Manmade staple fiber based textiles	Low	6%
7	Waddings, nonwovens, etc.	Medium	1%
8	Carpets	Medium to high	4%
9	Special woven / tufted fabric	High	1%
10	Coated / laminated fabric	High	0%
11	Knitted fabric	Low	0%
12	Knitted apparel	Medium to High	24%

13	Woven apparel	Medium to High	28%
14	Made ups	Medium to High	11%

An analysis of 10 largest Textile & Apparel commodities exported out of India **given in Table 4.9** reveals that the average unit price for Indian products is about 20 - 30% lower compared to competitors like Turkey.

**Table 4.9: Textile & Apparel commodities during 2009**

Sl. No.	Commodity	2009 exports (US\$ Mn.)	Unit price	Remark
1	Women's trousers, skirts, etc. woven	1,967	\$ 7 / pc	Unit price for Turkey: \$ 12 / pc
2	Knitted T-shirts	1,945	\$ 3 / pc	Unit price for Turkey: \$ 4 / pc
3	Woven synthetic fabrics	1,407	\$ 12 / kg	Fabric level exports, low value addition
4	Women's tops etc., woven	1,361	\$ 5 / pc	Unit price for Turkey: \$ 7 / pc
5	Cotton yarn, >85% cotton	1,231	\$ 3 / kg	Yarn level exports, low value addition
6	Misc. furnishing articles	1,022	\$ 13 / kg	Unit price for Turkey: \$ 15 / kg
7	Raw cotton	1,007	\$ 1 / kg	Fiber level exports, no value addition
8	Men's trousers, shorts, etc, woven	776	\$ 8 / pc	Unit price for Turkey: \$ 14 / pc
9	Men's shirts	754	\$ 7 / pc	Unit price for Turkey: \$ 10 / pc
10	Shawls, scarves, etc.	669	\$ 3 / pc	Unit price for Turkey: \$ 5 / pc
	Total	12,138	(← Cumulative 56% share in India's total T&A exports)	

Lower price realization is due to the fact that India mainly exports basic products. Countries like Germany, Italy, USA, Japan, etc. where the cost of manufacturing is high and most of the textile and apparel manufacturing industry has shifted elsewhere, still feature among the largest exporters of textile and apparel, because of their focus on value added items like: lingerie, suits, sportswear, specialty fibers, technical textiles, etc. These countries have carved a niche for themselves in the market by focusing on these products which have a high value realization. India's share in such commodities is quite low. Table 4.10 shows the share of leading suppliers of value added products and that of India in the world trade.

**Table 4.10: Leading suppliers of value added products and India's share in the world trade**

<b>Commodity</b>	<b>Global trade value (2009, in US\$ Mn.)</b>	<b>Leading supplier</b>	<b>India's share</b>
Woven fabric of combed wool or fine animal hair	2352	Italy (35%)	1%
Artificial filament tow	2232	USA (40%)	0.004%
Synthetic staple fiber	4344	S. Korea (17%)	4%
Nonwovens textiles except felt	9602	Germany (17%)	0.2%
Fabric impregnated, coated or covered with plastic	8720	China (32%)	0.4%
Special textile products for technical purposes	3687	Germany (17%)	0.2%
Knitted Panty hose, tights, hosiery, etc.	10278	China (37%)	0.4%
Track suits, ski suits and swimwear	7870	China (34%)	2%
Men's suits, woolen	2375	China (26%)	1%

The manufacturing and marketing of value added products provides better margins and being a niche category is quite resistant to downward changes in demand and price. In order to take Indian exports to a new level it is suggested that special support may be given to manufacturer-exporters of value added products.

**Special Support to Manufacturing-Exporters of Value Added Products**

- Capital subsidy on specialized plant and equipment items required for manufacturing value added items;
- Accelerated depreciation of such plant and machinery, so as to write-off the entire cost in 3 years;
- Subsidy on interest on working capital loans;
- Duty exemption on inputs viz. excise, sales tax and *octroi*;



- Establishment of a dedicated fund for promotion of these products in major export markets;
- Special rates of duty drawback for such items;
- Market focus product scheme for major markets;
- Interest subvention on pre and post shipment rupee export credit;
- Establishment of sampling and product development fund to support businesses for doing contract research and tax subsidy for investment in same;
- Higher deduction of the expenses incurred on in-house R&D facility and contract research work;
- Providing financial support to companies to conduct location analysis for establishing such manufacturing units.

Aggressively promoting export growth of high value products that have a strong domestic manufacturing base be the cornerstone of our overall export growth strategy. Consolidation in the textiles and garment segments may be given importance because of its employment potential and our historical strength in our export markets.

#### **Continuation of present level of incentives**

In order to retain the competitiveness and compensate for the disadvantages suffered due to various infrastructural bottlenecks it is essential to continue with the existing incentive schemes such as Duty Drawback, Tax benefits, and Interest Subvention schemes. The thrust should be to make these schemes more user- friendly while addressing the issue of their compatibility with the multilateral trading system.

#### **Full reimbursement of all Taxes and Levies**

A lot of our competitors are seen to be increasingly incentivizing their textile sectors through various hidden subsidies, and full refund of all taxes, schemes are required to be formulated to enable the exporters get full refund or rebate of all Taxes and Levies in a stipulated time frame to enable the industry to retain its competitiveness.

#### **Reduction in Transaction Costs**

Trade related transaction cost is one of the major determinants of export competitiveness of an economy. Trade-related transaction costs refer to a large number of regulatory requirements; compliance measures; procedures and infrastructure related costs, including, communication costs with clients; domestic transport costs to bring goods from the production site to the border; time and money spent in ports on border procedures or to make products ready for shipment; international transport costs and inspection and certification costs. Simplifying the processing of documentation, trade facilitation, reducing human interface with exporters, working out web based solutions are needed initiatives.

### **Strengthening of Trade Related Infrastructure**

A commitment to a substantial step up in the overall Plan support for the Trade Related Infrastructure beyond historical trends will be needed. Schemes for market development and access need to be expanded substantially to reduce critical gaps pertaining to export related infrastructure in the States and Central agencies. Due to inadequate availability of resources under the scheme, it has so far not been possible to take up large projects which by themselves could make a substantial improvement in the overall infrastructure available for promoting exports. Enhancing funding for the scheme in the last year of the Eleventh Plan and in the Twelfth Plan, as well as improving the quality of output and effective monitoring of the scheme would be a major cornerstone of the strategy.

### **Availability of Export Finance on easy terms**

Reforms in the Banking Sector and availability of finance at competitive terms provide for ease of doing business in the exporting segment. Export finance should be available at a reasonable rate of interest to neutralize the interest cost differential compared to competing economies.

### **Negotiating preferential access to prospective markets**

Seeking deeper market access as opposed to the limited coverage Agreements have become an important tool globally for achieving economic objectives and increased market access. The policy of working out preferential access to new markets and putting in place conducive trading arrangements with trading partners through Preferential Trade Arrangements (PTAs), Free Trade Agreements (FTAs) and Comprehensive Economic Cooperation / Partnership Agreements (CECAs/CEPAs) needs to be continued and expanded.

### **Market Strategy**

A market diversification strategy based on the changing dynamics of growth in the world economy is necessary to ensure sustained growth. The demand in the traditional markets of the developed western world, North America and Europe, is projected to be relatively sluggish at 2 percent due to slowing output expansion in these economies. Against this, emerging economies are expected to grow at about 6.5 percent. The core of the marketing strategy must therefore be:

- Maintain share in “tried and tested” markets;
- Capture higher value in the products exported to traditional markets; and
- Explore new opportunities in emerging and secondary markets.

Towards this end a shift in focus should be made from US and EU markets to South East Asia, Latin America and Africa. At the same time, efforts should be made to strengthen engagement with traditional markets, by increasing volumes and value add.

### **Technologies and R&D**

A renewed thrust needs to be given to Technology Upgradation with special emphasis on Eco-friendly products and Green Technology. R&D efforts should be redoubled and adequate tax breaks should be given to enhance adoption of new technologies. Towards this end the Textile Research Associations should be upgraded and encouraged to seek collaboration with overseas testing laboratories and other likeminded institutions.

### **Brand Image building**

Sustained supply of quality products inculcates a Brand Image, not only for the product but the Country as well. As the products get upgraded in value terms they carve a niche for themselves which should be nurtured to become a Brand. As creation, promotion and sustenance of Brands is highly capital intensive, requiring vast amount of funds, the present allocation for such activities should be substantially increased and '**Brand Promotion Fund**' should be created.

### **Sectoral Strategies**

To achieve the export target of US \$ 65 billion for Twelfth Plan Period differentiated strategies for different product groups need to be pursued. These differentiated strategic initiatives have been formulated on the basis of the critical assessment of strengths, weaknesses, opportunities and challenges facing the Indian economy and the export sector.

#### **RMG Sector**

Readymade Garments are the most significant item in the basket of goods exported in the textile sector by India. India contributes 3.6% share in the total world export of apparel and it is one of the top ten export items of India. While Readymade Garments is the single largest contributor to exports in the textile sector, it also is the sector which offers the scope for maximum growth. Towards this end, the following steps are required to be taken:

- A substantial increase in production capacities and investment is required in the 12<sup>th</sup> Plan period not only in garmenting but also in downstream activities. This infusion of investment is critically required if we are to compete with our major competitors like China, Bangladesh and Vietnam. Higher depreciation on such capital expenditure on Textile Machinery should be allowed for income tax purposes so as to encourage fresh investment.
- Rising input costs are a major factor affecting exports of garments worldwide. Since India has the advantage of having its own source of raw material, this advantage needs to be leveraged so as to gain a competitive edge over other countries.

- A huge potential exists for increasing exports by undertaking capacity building in this sector. The following specific initiatives are recommended for capacity building:-
- Improving compliance level in the factories by introduction of Common Compliance Code for Apparel Industry. An estimated sum of **Rs.36 Crores** will be required to design and implement a world class compliance code for the entire textiles and garment industry during the 12<sup>th</sup> Plan
- An Integrated Apparel Development Scheme will be developed with an allocation of Rs. 1000 crores comprising of the following elements: (a) Establishment of Integrated Apparel Parks and (b) Domestic Market Development Scheme
- Integrated Skill Development Scheme predominantly aimed at Apparel and Garment Sector with an allocation of Rs. 3500 crores and a per trainee cost of Rs. 9500;
- Integrated Processing Development Scheme with investments in technology and provisions for setting up CETPs/ IETPs and construction of marine outfalls with an allocation of Rs. 1000 crores. The scheme would be used for revival of Tiruppur Textiles industry which has been shut down after environmental concerns;
- Extension of Knit Wear Technology Mission for apparel industry to more knitwear centres/clusters in the country like Ludhiana and Kolkata in PPP mode with an outlay of Rs50 crores;
- Initiation of a Productivity Improvement Programme for the Apparel industry with financial assistance from the Government. An outlay of Rs 50 crores is required for designing and implementing the programme in various apparel clusters across the country;
- Setting up of centres of excellence for garment and apparel sector, design studios and product innovation centres for encouraging Indigenous Design Development, product improvement, fashion adoption and absorption. An allocation of Rs25 crores will be required for this;
- A new Wovenwear Technology Mission needs to be launched to give a boost to the wovenwear segment of the garment sector at a plan outlay of Rs30/-crores;
- Indian garment and apparel sector lacks standard size specifications to fit Indian body size and shapes and follows the western sizing standards. A programme to launch an anthropometric study and design standard sizes for Indian garments and apparels under “Size India” scheme is proposed to be implemented in the 12<sup>th</sup> Plan with an outlay of Rs9/- crores.
- In addition to the above specific programmes of the RMG sector, the Skill development Programme for the T&C sector needs to be continued in the 12<sup>th</sup> Plan to improve the skill set of garment workers.

## **MAN MADE FIBRE**

Manmade yarn fabrics and made ups constitute the 12th largest commodity in India's export basket. Indian manmade fibre textile industry has a large production base. India offers the entire range of polyester, viscose, nylon, acrylic and blended textile items with vertically integrated complete production chain starting with production of raw material to exquisite fabrics and made ups. The high custom tariffs in the importing countries are an important limiting factor in expanding our exports. The tariff ranges from 18 to 35 % in many of the important regions of the world like Latin American MERCOSUR countries, Egypt and Morocco in WANA region, Russia and Uzbekistan in CIS countries. More preferential trade agreements with these major trading partners will help in boosting our exports to these countries.

In addition to high tariff barriers there are non-tariff barriers in some of the major importing countries such as Turkey, Brazil and Peru etc in the form of antidumping, anti-subsidy or safeguard measures which hamper export growth. Child Labour related issues raised by the US Department of Labour and Foreign Manufacturers Legal Accountability Act (FMLAA) introduced by the United States' Senate on February 24, 2010 have also affected this sector and needs to be resolved with the US Govt. REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) brought into effect by the European Union will make it difficult to export to that country without registration with the European Chemical Agency (ECHA).

Apart from these general issues the following rational policy approach for the MMF fibre segment is required for the growth of this sector:

- A fibre neutral excise policy; i.e. all textiles and fibres should attract the same excise duty i.e. 4% optional
- Excise duty and customs duty exemption for specialised MMF which are not produced indigenously.
- Removal of 4% Special Additional Duty (SAD) on man-made fibres to make the same available to domestic consumers at competitive prices.
- Customs duty exemption on certain raw materials and additives that are primarily imported
- Customs duty on rayon grade wood pulp to be exempted (from current 5%)
- Customs duty on titanium di-oxide (Anatase grade) with HS code 283230030 to be reduced to nil from current 11%.
- Customs duty on Spin-finish oil to be reduced to nil from current 8%. Specific HS codes for Spin finish oil have already been proposed by the industry (HS code 34031200) and endorsed by the Department of Chemicals and Petrochemicals for this purpose.
- Export oriented incentives should be provided to manufacturers of MMF textiles and garments for a limited period to neutralize the impact of cost-disadvantage vis-à-vis exporters in competing countries. This could include higher drawback rates and inclusion of fabrics and garments made of man-made fibres under the Focus Product Schemes.

- A graduation scheme for three years can be introduced under the Focus product scheme with benefits of 10% in first year, 7% in second year and 3% in third year.
- This scheme may cover man-made textiles and garments. In case financial implications do not permit coverage of textiles and garments then at least garments sector should be incentivised as exports of these are currently very low in value terms.
- Synthetic fibres should be covered under TUFS with fund support from their administrative Ministry i.e. Department of Chemicals and Petrochemicals.
- The machinery for manufacture of synthetic fibres post polymerisation may be covered under TUFS. Since the processes upto polymerisation are primarily chemical in nature polymerisation machineries may not be covered.
- The post polymerisation machinery may be benchmarked by TAMC in consultation with proposed advisory council on MMF.
- To encourage setting up of small size units, particularly from chips the restriction on term loan and also on capital cost may be fixed by IMSC in consultation with TAMC and proposed advisory council.
- A MMF advisory council with all the stakeholders may be set up to monitor that the excise duty and other concessions have been passed on by the MMF manufacturers and also to take on integrated approach to solving the problems of MMF producers and users of MMF and to accelerate their growth
- MMF manufacturing and processing units should be given a priority under the gas allocation policy, at par with the power sector.

## **COTTON**

The export competitiveness of this sector is very significantly affected by the cost & reliability of power supply, logistics and transaction costs. In order to boost the export performance, the following steps need to be taken:-

- Having a long term export policy on cotton and yarn so as to ensure stability and predictability for the producers and enhanced competitiveness of cotton fibre, as well as ensure most judicious and efficient utilisation of the country's strength for sustainable development of all the sub sectors of the cotton economy through backward and forward integration. Institutional mechanism must be created that will monitor, coordinate and also create a unified platform of all other interests in the lines of the National Cotton Council of the US.
  - Being a power intensive sector, major steps for improving power supply.
  - Treating Home Textiles at par with Readymade Garments for all incentives under the EXIM Policy.
  - Add select Made-ups (covered under Chapter 63) in Table 4 (Focus Products Scheme) of Appendix 37D and make them eligible for the benefit of Duty Credit Scrip at 2% under "Focus Product Scheme" on the lines of Toilet Linen and Kitchen Linen.

- Expand the list in New Focus Market Scheme so as to include some more potential markets like Brazil, Mexico, South Africa, Kenya, Australia, Middle East and South America, Vietnam, Egypt, Morocco.

## **JUTE**

The recommendations on Jute sector are the strategies that can be considered to cater to the objectives of the policy. The strategy for the next five years is as follows: -

- Encourage production and bring about improvement in quality of raw jute by a) subsidizing distribution of certified seeds, b) dissemination of improved agronomical practices and c) bridging the gap between the jute growers and users.
- To improve efficiency of jute industry by a) providing sufficient incentive to jute industry for large scale adoption of available new technology machines, b) streamlining the existing Jute Technology Mission Schemes to improve its delivery system and c) making schemes of JTM more attractive to textile machinery manufacturers for development of modern machines. To gradually decrease the protection given through the JPM Act.
- Highlighting the eco-friendly and renewable characteristics of jute as well as taking steps for removal of all trade barriers.
- To adopt suitable marketing strategies for value added jute products.
- To provide incentives to the entrepreneurs to take up development and manufacture of value added jute diversified products.
- To facilitate a Disposal Protocol accepted at the global level and ensure eco-labeling for better standardization of jute products.

## **SILK**

The 12<sup>th</sup> Plan target may be at bridging the gap between demand (for both quantity and quality) and domestic supply, and at reducing the country's dependence on imports for its raw silk requirements. Sericulture and silk manufacturing sector needs certain structural adjustment in terms of the way seri-farming and reeling and weaving sector is organized in the country to graduate itself from subsistence level to commercial production level to remain viable and to continue to provide employment and livelihood to a large rural population. Some of the major recommendations for the sector are as follows:

- Rationalization of duty structure in the silk value chain and reduction of duty on raw silk needs to be carried forward. To provide adequate protection to the twisting and weaving sector there is need to revise the basic customs duty on twisted yarn and silk fabrics from the present level of 10% to 15% and 20% respectively.
- In order to encourage farmers to adopt sericulture practices and to protect them from large price fluctuation in cocoon and silk prices, a price support scheme should be implemented, along with rationalization of the duty structure. A quality-based pricing

mechanism for cocoons for appropriate and better price realization by the cocoon growers is also needed to incentivize better quality production.

- There is a need to increase thrust on developing silkworm races that are not only resistant to drought/change in climatic conditions, but are also disease-resistant, and high-yielding.
- Vanya Silk which has shown significant growth potential needs to be positioned in the export market as ‘green silk’ or ‘Ahimsa Silk’ with more product innovation.

## **WOOL**

The Indian Woollen sector may be made more competitive on addressing the following major concerns of the industry:

- Duty structure rationalization: Given the gap between demand and domestic production, and the fact that the domestic industry will not be able to produce adequate quantity of raw wool, there is a need to rationalise import duty on raw wool and on woollen yarn & fabrics. There is also a need to rationalise import duty on waste of wool and bring it at par with raw wool since we are dependent on imports. It has been proposed that the duty on raw wool imports should be exempted (from current 5%) and on woollen yarn & fabrics and waste wool should be reduced to 5% (from current 10%).
- Improve the quality and quantity of wool:
  - There should be increased thrust on cross-breeding programmes with aim to bring down the micron structure of the carpet grade wool, and also to improve the quality of Deccani wool
  - Efforts should be made for selective breeding and for cross breeding of imported sheep breeds with inferior and widespread local breeds
  - Efforts should be focused on implementing programmes for producing highland wool in the hilly tracts of India
  - Provision of adequate extension support for marketing of specialty fibres.
- Check mortality rate: Government policy should focus on extending proper nutritional support facility, and adequate healthcare and veterinary facilities, and government should organise healthcare programmes for better management of sheep at farmers’ level.
- Collaborative research projects: The industry should undertake collaborative research projects with the major wool producing countries, with necessary support from the government. The research should focus on breed improvement and overcoming the diseases in sheep breeds and producing disease-resistant stud rams.
- Database building: Building of national level database on production, exports and imports, to ensure availability of reliable and timely data to the industry.



- Common facility centres: Provision of one-time support to private players to encourage setting up modern processing facilities, including financial assistance to import machinery.
- Grading system and marketing support: Introduction of scientific grading system to incentivise the sheep breeders by way of better wool prices. Establishment of an agency on PPP model to ensure providing wool growers with the right price for their produce and to ensure procuring wool in substantial quality.
- Strengthening the Central Wool Development Board: Review and redefining the role of the CWDB to make it more effective and to enable it to perform the tasks assigned to it appropriately; to be done in close collaboration with wool producers and the user industry. Increased allocation of funds to the Board to enable it to achieve its laid objectives in an effective manner.

### **SPECIALITY FIBRE (TECHNICAL TEXTILES)**

The indigenous development of speciality fibres is highly dependent upon the demand for these fibres in the domestic market from the downstream industry, i.e. the technical textile manufacturers. Thus, besides the recommendations for speciality fibres, the group has also proposed specific fiscal and non-fiscal recommendations for technical textile products with a view to increase their consumption and production in India. The fiscal and non-fiscal demands of this sector for speciality fibres and technical textiles are:

- Import duty and CVD on additives used in Flame retardant speciality fibres and other speciality fibres should be removed and Capital equipment used in the manufacture of identified speciality fibres should be exempted from Custom duty;
- Excise duty on focus speciality fibres should be reduced to 4% (from the current level of 8%)
- The government should consider introduction of a Special Incentive Package for enabling Indian or foreign companies to set up manufacturing facilities for speciality fibres, thereby strengthening the raw material base for Indian technical textile industry;
- The customs duty exemption may be allowed even to an independent manufacturer of aramid fabric, which will be used for production of bullet-proof jackets for defence and police personnel
- VAT rates should be uniform for technical textiles products irrespective of the base fibre used and irrespective of the source of origin of the product, whether from domestic market or from imports
- An R&D centre with a funding of at least Rs 50 crores is recommended at either NCL Pune, one of the IITs or UICT Mumbai and incubation centres should be set-up for transfer of technology and acceptance of innovative technologies by the industry;
- Well-equipped laboratories should be set-up in the four Centres of Excellence to extend support of the industry in fields of testing and development, as per the requirements

- Standard quality Technical Textiles are needed for maximum benefits and their installation should be carried out as per standard guidelines and procedures. Specific segments of Technical Textiles where standardization is required on a priority basis include Geotech, Buildtech, Protech, Meditech, and Agrotech
- Mandatory usage of fire retardant fabrics in exhibition centres, cinema halls and other public places and mandatory usage of fire retardant apparel for fire-fighting personnel
- Increased usage of geo-synthetics in infrastructure development projects and Increased usage of nonwoven disposable Meditech products in medical institutions and hospitals
- In order to boost domestic consumption of Technical Textile, awareness programs about usage and benefits of these products and creation of specific programs for end use application to educate users may be initiated.
- Incorporation of new generation medical textiles manufactured from MMFs and their blends in Indian Pharmacopoeia and change in Schedule F-2 of Indian Drugs & Cosmetics Act
- Infrastructure projects could be modified to DBOT from BOT to emphasize more on initial design so as to enhance usage of latest material and technology relating to geotextiles. Various Ministries could make amendments in certain existing Policies/Acts/Guidelines to directly/indirectly boost the growth of Technical Textiles in India
- Under the Scheme for Integrated Textile Parks (SITP), at least 10% of textile parks should be dedicated technical textile parks
- In order to meet the stringent and critical performance related requirements of Technical Textile products in the international markets, it is recommended that world class testing facilities should be set-up in India. These facilities will assist in accurately evaluating the products to meet international requirements
- Technical textiles need to be included in the syllabus and curriculum of educational institutions at B.Tech/B.E. and higher levels in all related branches of engineering and technology, architecture and medicine to ensure availability of skilled manpower over the long-term.

### **Human Resources in the Textiles Sector Vision 2010**

The expected manpower requirement vis-à-vis investment (sector-wise) for the period from 2006-07 to 2010-11, as per the estimation by the office of the Textiles Commissioner, which was done in consultation with industry, TRAs and CRISIL Report is given in Table 4.11.

**Table 4.11: Expected Man Power Requirement vis-a-investmnet (Sector-wise)**

<b>S.No</b>	<b>Sector</b>	<b>Investment (In Crores)</b>	<b>Direct Man Power Requirement</b>
.			

			(All Categories)(In Lakhs)
1	Spinning	45,200	5.75
2	Weaving	30,000	1.57
3	Knitting	10,000	0.92
4	Processing	30,000	1.76
5	Clothing	25,000	40.00
	<b>Total</b>	<b>1,40,000</b>	<b>50.00</b>

Source: Report of the Committee to assess the requirement of Human Resources in the Textiles Sector Vision 2010, Ministry of Textiles, Govt. of India, 2006

While analyzing the human resource requirement, the overall T&C sector can be categorized as: i) The Mainstream T&C sector – comprising of Spinning, Fabric Manufacturing, Fabric Processing, and Garmenting, ii) Other related industries such as: a) Handloom, b) Woolen, c) Sericulture, d) Handicrafts, e) Jute. NSDC report anticipated that the human resource requirement in the Mainstream T&C sector to be closely related to market driven T&C industry growth, the human resource requirement in areas such as handloom and handicrafts would have to be supplemented by initiatives from the Government and Industry. The addition of human resource into these other sectors would be at a much lower rate as compared to the Mainstream sectors due to need for significant support for earnings, scope for enhanced technology intervention and automation as compared to current levels, the need to add value, and attractiveness of the sector among the human resource supply.

It is expected that the overall employment in the sector would increase from about 33 to 35 million currently to about 60 to 62 million by 2022. This would translate to an incremental human resource requirement of about 25 million persons. Of this the Mainstream T&C sector has the potential to employ about 17 million persons incrementally till 2022. It implies that by the end of the 12<sup>th</sup> Plan (2016-17), which is close to 2018, the textile sector's incremental human resource requirement would be about 17.8 millions, of which roughly 11 million human resources would be required in the Mainstream T&C sector.

**Table 4.12: Projected human resource requirement in the T&C sector (in million)**

	2008	2012	2018	2022	Incremental
Main-Stream Textile & Clothing					
Spinning	1.2	1.5	2.0	2.4	1.3
Fabric Manufacturing	5.1	6.5	9.0	11.0	5.8

Fabric Processing	0.3	0.4	0.5	0.6	0.3
Garmenting	6.5	8.6	12.6	15.8	9.3
<b>Sub Total</b>	<b>13.1</b>	<b>16.9</b>	<b>24.1</b>	<b>29.9</b>	<b>16.8</b>
Other Related Sectors					
Handloom Sector	6.7	7.0	7.2	7.4	0.7
Woolen Sector	1.9	3.2	4.3	5.2	3.3
Sericulture	6.3	7.0	7.9	8.5	2.3
Handicraft Sector	7.0	8.0	9.0	9.8	2.7
Jute Industry	0.4	0.6	0.8	0.9	0.5
<b>Sub-Total</b>	<b>22.3</b>	<b>25.8</b>	<b>29.1</b>	<b>31.8</b>	<b>9.4</b>
<b>Total</b>	<b>35.4</b>	<b>42.6</b>	<b>53.2</b>	<b>61.6</b>	<b>26.2</b>

Source: IMaCS analysis/NSDC

### Profile of projected human resource requirement in the Mainstream T&C sector

Based on the distribution of human resource employed, the projected profile of human resource requirement across various education levels is presented in Table 4.13 and functional levels at Table 4.14.

**Table 4.13- Projected human resource requirement across various educational levels**

(in million)

Work force distribution by education	Engineers etc.	Diploma or equivalent certification by other agencies	ITI and other vocationally trained	Other graduates	CA/ MBA/ etc	12 <sup>th</sup> / 10 <sup>th</sup> standard and below /dropouts	Total
Spinning	0.03	0.11	0.14	0.04	0.01	0.94	1.27
Fabric Manufacturing	0.06	0.12	0.47	0.06	0.06	5.09	5.85
Fabric Processing	0.00	0.01	0.03	0.00	0.00	0.28	0.33
Garmenting	0.09	0.19	0.75	0.09	0.09	8.13	9.34
Total	0.18	0.42	1.38	0.19	0.17	14.44	16.79

Source: IMaCS analysis

**Table 4.14: Projected human resource requirement across various functional levels**

(in million)

Work force distribution by function	Procurement	Production	Sales	Quality	Engineering and Maintenance	Support	Total
Spinning	0.02	0.98	0.03	0.06	0.05	0.13	1.27
Fabric	0.09	4.68	0.06	0.06	0.29	0.67	5.85

Manufacturing							
Fabric Processing	0.00	0.26	0.00	0.00	0.02	0.04	0.33
Garmenting	0.09	7.48	0.37	0.37	0.28	0.75	9.34
Total	0.21	13.39	0.46	0.50	0.64	1.59	16.79

Source: IMaCS analysis/NSDC

### **Integrated Skill Development Scheme (ISDS)**

To address the training needs of the textiles and related segments, Integrated Skill Development Scheme (ISDS) has been launched in 2010. In addition to the training programme planned under ISDS, the training programmes are being conducted by various segment of the Ministry of Textiles such as the office of the Development Commissioner for Handlooms and Handicrafts. The details are as follows:

- This Scheme seeks to make intervention to assist the textiles economy to meet the gap in manpower requirement. It planned to provide training to 26.75 lakh persons at the estimated cost of Rs. 1952.83 crores (Rs. 2359.70 crores including non-govt) over a period of 5 years. During the remaining two years of the XI Plan (2010-11 & 2011-12), the schemes has been approved as a Pilot Project with the approved outlay of Rs 228.99 crores with a physical target of 2.70 lakh persons. The details are as follows:

#### **Objective of the Scheme (ISDS)**

- To address the trained manpower needs of textiles and related segments including Handicrafts, Handlooms, Sericulture, Jute, Technical Textiles etc. by developing a cohesive and integrated framework of training based on the industry needs. Addressing this need is critical for enhancing the competitiveness of the industry in the globalized economy.
- To increase the employability of residents of the targets areas through imparting of skills in the above segments.
- To create a trainers' pool by conducting the advance training programmes at a cluster level.
- To ensure training in design development programmes, which is critical for handloom weavers' handicraft artisans / jute artisans, to help them produce diversified products with innovative uses and improved quality to meet changing market trends.

### **Strategy**

- The scheme is proposed to leverage on the existing strong institutions and training experience on one hand and ensure private sector participation through a PPP Model

on the other. The expansion of training centers would be demand driven, based upon the requirements of the Industry.

- It is approved to Operate Pilot Projects within the XI Plan Outlay of 239.70 crore during the first two years (2010-11 & 2011-12) with a physical target of 2.70 lakh persons in the said two years.
- The Scheme also envisages concurrent evaluation. Based upon the performance & after making necessary modifications / adjustments, the Scheme would be scaled up in the next three years to meet the targets.

#### **Salient Features of the Scheme**

- The Scheme would work on the basic principles of leveraging on the existing resources and infrastructure and target to train approximately 26.75 lakh persons over a period of 5 years.
- It would cover all segments viz. i) Textiles and Apparel, ii) Handicrafts, iii) Handlooms, iv) Jute, v) Sericulture, vi) Technical Textiles
- All facets of the Skill Development will be covered which includes Basic Training, Skill Upgradation, Advanced training in emerging technologies, training of trainers, orientation towards modern technology, retraining, skill upgradation, managerial skill, entrepreneurship etc..
- The training programme will be designed based on industry demand in different segments. The emphasis will be on measurable outcomes, wherein it will be ensured that all successful trainees are certified through an accredited agency.
- Private sector participation will be ensured, and outcomes will be strengthened by incentivizing training where the trainees get employed/self-employed after training is imparted
- The average cost per trainee (for the Government) to be borne through the Scheme would be approximately Rs.7300/-.
- The Govt. will meet 75% of the total cost of the project, and balance 25% would be met from Fee / Industry Contribution. However, in courses / programmes (of Component –I) where it is not feasible to organise the beneficiary contribution, the Empowered Committee shall be authorized to approve a higher level of Government assistance.
- A budget line of Rs. 229 crore for a new HRD Scheme under new initiatives of the Ministry of Textiles already exists, which will be operated for this scheme.
- A Mid-term evaluation would be carried at the end of the first 2 years to make mid-course modifications in the Scheme as required.

**Component;** The scheme would have two broad components:-

**Component-1** Skill development by augmenting and strengthening the capacity of institutions and schemes under Ministry of Textiles. Through this component, the target

would be to train an estimated additional 11.25 lakh persons in various skill sets covering all segments under the ambit of the Ministry of Textiels over a period of 5 years.

**Component-2** Skill development in partnership with the private sector. The target would be to train an estimated 15.50 lakh persons in all segments through a PPP model over a period of 5 years.

## Chapter 5

### Employment Generating Sectors

Gems and jewellery, leather, jute, carpets and handicrafts belong to the Manufacturing sector identified as traditional areas of India's export basket. Boosting exports of these sectors has the added advantage of increasing employment as these are highly labour intensive, employing large number of workers mostly in the unorganized sector. This chapter examines the export performance of the aforesaid sectors, projects targets for exports and employment and suggests specific strategies for achieving the targets.

#### I. Gems and Jewellery

##### 1. Overview and Exports Performance

The Gems and Jewellery sector is one of the leading sectors in India in terms of value of exports and employment generation. The sector consists of three segments – cut and polished diamonds, gold jewellery and coloured gemstones and other items. In 2009-10, the shares of these three segments in the total gems and jewellery exports were 60.5%, 24.1% and 15.4%, respectively. India is the largest cutting and polishing centre in the world. Of the global polished diamond market, India's share is estimated to be 70% in terms of value, 85% by volume and 92% in terms of pieces. Diamond processing units in the country are mainly located in Surat, Ahmedabad – Palampur belt and Bhavnagar-Rajkot belt of Gujarat.

From a humble beginning of US\$ 62 million in 1968-69, India exported gems and jewellery goods worth over US\$ 29 billion in 2009-10 accounting for 16.23% of her total merchandise exports. This is likely to reach US\$ 51 billion by the end of the 11<sup>th</sup> Five Year Plan. Export performance during the 11<sup>th</sup> Five Year Plan is given in Table-5.1.

**Table 5.1: Exports of Gems & Jewellery (US \$ m): XI Five Year Plan**

Year	Total export of Gems & Jewellery (US\$ in million)	Percentage growth over previous year (%)
2007-2008	19691.58	23.20
2008-2009	28411.38	44.28
2009-2010	29081.11	2.36
2010-2011 (Provisional)	43139.00	48.34
2011-2012 (Estimated)	51490.00	19.38

CAGR: 27.16% (2007-08 to 2011-12)



The sector, comprising a large number of SME units, employs approximately 3.4 million workers, both skilled and semi-skilled, mostly in the unorganised sector.

## 2. Reasons for growth in Gems and Jewellery Exports

The growth in this sector has been possible due to:

- (a) Dynamic entrepreneurship
- (b) Support under the Foreign Trade Policy and other initiatives: A number of incentives were provided to the gems and jewellery sector in the Foreign Trade Policy 2004-09, which have been continued in the current Foreign Trade Policy (2009-2014). Similarly, a number of deregulatory measures have been effected and many incentives have been given to the sector in successive Union budgets. These measures include abolition of Licensing regime for rough diamonds and abolition of import duty on rough as well as cut and polished diamonds, reduction of customs duties on coral; polished cubic zirconia, benign assessment scheme; reduction in transaction costs, drawback duty on gold and silver jewellery; import of gold through nominated agencies and Star Trading Houses etc. In addition, liberal financial assistance were made available to the sector under the Market Assess Initiative (MAI), Market Development Assistance (MDA) scheme of the Department of Commerce to participate in international exhibitions; organise B2B meetings and export related activities. **It is recommended that all these incentives/concession/schemes which have helped in the growth of the sector should be continued.**
- (c) Market size: According to a KPMG study<sup>1</sup> on the global Gems & Jewellery scenario, the size of global gems and jewellery industry was estimated at USD 185 billion in the year 2010, which is expected to reach USD 230 billion by the year 2015 taking into consideration an annual growth of 4.6% in the field of global jewellery sales. By 2015 China and India, together, will emerge as equivalent market to U.S.A. It has also predicted that India's share in diamond processing is likely to decline; value addition is likely to increase; and there would be growing demand for jewellery as a category.

## 3. Problems and Challenges

- India's Gems and Jewellery industry is an import sensitive industry with about 90% of the raw material imported from overseas.
- For manufacturing and exports the industry is in constant need of raw material throughout the year. At present, the availability of raw material is not from direct source which adds to costs.

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<sup>1</sup> "The Global Gems & Jewellery Vision 2015 : Transforming for Growth", KPMG – GJEPC, 2006

- A highly skill based sector wherein specific skills and training are required for manufacture of finished products. Special skills are required in particular by the sector for cutting and polishing small diamonds, setting them and coloured gemstones into finished precious, plain and studded jewellery. With steady growth in the sector, the human resource situation is getting stretched.
- There are very few training centres in India and total capacity of these centres is limited and inadequate. The Indian Diamond Institute, Surat is well known throughout the world. Gems and Jewellery Export Promotion Council (GJEPC) runs training institutes in Mumbai, New Delhi, Jaipur and Kolkata, which conduct specialised courses. Some international organisations like GIA (America), IGI (UK) are conducting training courses in India.
- For a manufacturing export sector like gems and jewellery, minimum infrastructure like Convention Centre, Common Facility Centres, Technological Development / Design Studio etc. are essential. These facilities are not currently available to the sector in adequate measure.

#### **4. Export and Employment Target for the 12th Five Year Plan**

##### **Export target**

The sector has high potential for sustained export performance during the 12th Plan. The targeted CAGR during the 12th Plan for gems and jewellery exports as shown in Table 5.2 below is proposed to be 16.26%, with an export value target of US\$ 109 billion by the end of 12th Five Year Plan. This has been determined to be feasible, keeping in mind likely global demand growth, past performance and continued strengths and opportunities available to the industry.

**Table-5.2 :Projected Exports in XII Plan**

(in US\$ million)

<b>Items</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>
<b>Cut &amp; Pol. Diamonds</b>	33910	39510	44650	49610	54400	58760
<b>Gold Jewellery</b>	15210	18150	22050	27560	34990	44800
<b>Col. Gem Stones</b>	340	370	410	450	490	520
<b>Others</b>	2030	2430	2920	3620	4380	5300
<b>Total Gems &amp; Jewellery</b>	51490	60460	70030	81240	94260	109380

CAGR: 16.26% (2011-12 to 2016-17)

## Employment Generation

~~There is no authenticated data on the employment generated by this see~~ According to the IMRB survey commissioned by the GJEPC and ICRA Management Consulting Services Limited (IMaCS) survey commissioned by NSDC ~~However, according to the Gems and Jewellery Export Promotion Council (GJEPC),~~ it is estimated that the sector employs about 3.4 million workers currently, which includes both skilled and semi-skilled. It is estimated that, with increasing manufacturing and export activities, employment opportunities will increase in the sector, which is likely to absorb approximately 6.6 million workers in various activities by 2018, as shown in the Table 5.3 .

**Table 5.3: Employment Trends: Gems & Jewellery Industry**

(in thousands)

Segments/Year	2008	2012	2018
<b>Jewellery Fabrication</b>	1,167	1,626	2,339
<b>Cut &amp; Polished Diamonds</b>	767	1,032	1,563
<b>Gemstones and Other Categories</b>	267	432	858
<b>Jewellery Retail</b>	1,134	1,517	1,905
<b>Total</b>	3,335	4,608	6,665

### 5. Strategy for meeting export targets in the 12<sup>th</sup> Plan

To sustain and build upon the current momentum of growth in Gems and Jewellery sector, it is felt that if existing policies are continued and further strengthened, and new initiatives are put in place to address identified issues, a significant jump in the export as well as manufacturing activities possible. The thrust areas of the strategy are set out below.

(a) Securing **availability of raw material** is of utmost importance in generating enhanced exports.

- The major diamond producing countries, which need to be targeted through bilateral engagement to secure reliable and adequate long term supply are Russia, Canada, Botswana, Angola, Namibia, South Africa, Australia, Democratic Republic of Congo (DRC) and Zimbabwe as per Kimberley Process Certification Scheme (KPCS) guidelines. The major rough diamond producing companies operating in these countries are DTC, ALROSA, SODIAM, BHP, Rio Tinto and Harry Winston. The major coloured gemstones producing countries, which need to be engaged with to ensure supplies are Tanzania, Zambia, Myanmar, Thailand, Srilanka, Namibia, Colombia and Brazil.

- To ensure continuous supply of raw material to the sector, the following measures are recommended:
  - (i) Enter into FTAs/PTAs with countries possessing raw materials to directly source from the country.
  - (ii) Mining exploration/investment in major African countries on the lines of China with strong support from Government of India by way of guarantees to investors etc.
  - (iii) Investment in overseas diamond mines by the consortia promoted by trade.
  - (iv) Facilitation for opening of offices of overseas diamond mining companies in Bharat Diamond Bourse and other designated areas.
  - (v) Free import of gold completely and de-canalise for manufacturing sector to eliminate 4.5% processing cost.
  - (vi) Bring gold import in any form and purity, under OGL (Open General Licence).
- Import of precious metals should be permitted through selected nominated agencies authorised by Government of India and 20 banks authorised by RBI. These agencies sell duty free gold to exporters and duty paid precious metals in the local/domestic market

**(b) Skill Development:** The following steps are recommended for improving skill levels of workers and adequate availability of skilled manpower in the gems and jewellery sector:

- (i) As the training requirement of the sector is very specific, the industry itself should take the lead in designing and implementing need based training programmes. GJEPC could consult on the issue with all the stakeholders and seek support through windows like the National Skill Development Mission / Corporation.
- (ii) Gems and jewellery industry may assess existing and likely future work force training requirement and suggest an industry led PPP scheme to set up specialised training institutes linked to industry needs.
- (iii) Government may consider providing incentives to big corporate in the sector for on the job training programmes, in the form of tax relief, preferential and enhanced availability of raw materials, duty concessions etc.

iv) Formation of Gem & Jewellery Sector Skill Council by GJEPC with the help of National Skill Development Corporation India (NSDC) and other stakeholders in the industry.

**(c) Infrastructure Development :** The following proposals are recommended for provision of minimum infrastructure to the sector:

- (i) **Development of a world class Convention Centre in Mumbai:** GJEPC organises the India International Jewellery Fashion Week (IIJFW) / Show (IJS) every

year, where more than one thousand domestic and international exhibitors participates. This show provides a platform to Indian exporters to showcase their products and attract buyers from across the world. This show is the fifth largest show in the world in the gems and jewellery sector and the second largest in Asia after Hong Kong. It is organised in a rented place and requires approx 4,50,000 square feet of covered space. There is no convention centre in Mumbai which meets this space requirement. Thus, there is a need for a general purpose, world class Convention Centre in Mumbai, which is the commercial capital of the country. It is learnt that the gems and jewellery industry is already in touch with Government of Maharashtra for provision of land for this purpose. In this context, it is recommended that:

- (a) Efforts for acquiring land for setting up a convention centre in Mumbai may be expedited.
- (b) The Convention Centre should be a general purpose centre with world class facilities, which could be used by other sectors also.
- (c) The Centre could be developed under an industry led PPP initiative, with the State Govt. facilitating the provisioning of and the Central Government assisting the participating organisations/Councils through provision of a competitively determined viability gap funding under ASIDE, a separate Plan scheme or the existing Viability Gap Scheme run by the Ministry of Finance.

**(ii) Setting up of Gems and Jewellery Manufacturing Parks/clusters:** To promote manufacturing activities in the gems and jewellery sector, there is a need to set up manufacturing parks /clusters across the country on the lines of software sector. The existing SEZ scheme can also be used for this purpose. These parks may contain Common Facility Centres with advanced machinery and technology, design studios and other infrastructure facilities. At present, the gems and jewellery sector has no scheme to address this need. Therefore, it is recommended that the Gems and Jewellery industry may commission a study for setting up manufacturing parks/clusters across the country under a PPP model, while working out the facilities required in the nature of Common Facility Centres with advanced machinery and technology, design centres etc. and submit it to the Government for consideration.

**(d) Tapping Potential Markets:** The major existing markets for gems and jewellery export are USA, Hong Kong, UAE, Belgium and Israel. There are a large number of potential markets by way of new countries which can be tapped for increasing exports. In the field of cut and polished diamonds, potential markets are available in EU, Singapore, Malaysia, Turkey, Lebanon and Russia. For precious metal jewellery, EU, Australia, Latin America and Russia can be explored. In coloured gemstones, EU, China and Switzerland have potential for increasing exports. During the 12<sup>th</sup> Plan period, the gems and jewellery industry, with the support of the Government, should target untapped markets to increase exports. The following measures are recommended for this purpose:

- (i) The Government should encourage gems and jewellery industry participation in B2B interactions in untapped markets with a focus under MAI and MDA schemes.
  - (ii) GJEPC may consider organising events like IJF in countries like China, Australia, Brazil, Turkey and Russia and these countries should be invited in the IJS Exhibition also.
  - (iii) The Government should initiate steps to create facilitating trading regimes / agreements with countries with high import potential that may be earnestly impeded by high tariffs on import from India.
- (e) Brand Promotion:** Gems and Jewellery are high value commodities and need constant efforts to ensure sustained attention and loyalty of consumers towards them. Recently, a survey conducted by GJEPC during the India Show 2011 in Basel showed that in light of very positive customer perceptions, the India G&J brand is well placed to occupy the No.1 spot in the world in the gems and jewellery sector and this is an opportune time to pro-actively promote the “Made in India” brand through a deliberate campaign. An enhanced brand perception would also help our exports move up the value chain. It is estimated that about US\$ 20 million may be required over four to five years for this purpose. Keeping in view the turnover of the sector, the industry could lead such an initiative, and dovetail on-going Government initiatives like IBEF and Ministry of Tourism led “Incredible India” campaign with it. The following measures for brand promotions are recommended:
- (i) Gems and Jewellery industry may consider setting up a Brand Fund from contributions from its members for brand promotion of the “Made in India brand as no. 1 in the world, with strict internal quality control and standards adherence for participating brands.
  - (ii) The Council may collaborate with India Brand Equity Foundation (IBEF) for positioning of gems and jewellery in an international brand promotion campaign.
- (f) Financial/Fiscal Incentives:** A number of suggestions have been received from Industry for providing incentives under the Foreign Trade Policy and concession in taxes/duties on export and import. Some of these suggestions are:
- (i) Inclusion of Gems & Jewellery under Market Linked Focus Product Scheme
  - (ii) Allowing consignment import of rough diamonds
    - a) for assortment & re-export of the same
    - b) for purchase or return
  - (iii) Allow sale of rough diamonds, rough coloured gemstones, cut & polished diamonds and coloured gemstones by a foreign miner without IEC number.
  - (iv) Remove requirement of minimum 2 years business in Gems & Jewellery and average turnover of Rs. 3 Crore for opening of Diamond Dollar Account (DDA).

- (v) Allow import of jewellery/ jewellery samples by courier mode under courier regulations.
- (vi) Remove ban on import export of mother-of-pearl.
- (vii) Declaration of Gems & Jewellery Sector as a priority under Special Focus Initiatives.
- (viii) Application of Zero Duty EPCG Scheme as per FTP Para 5.1 to Gems& Jewellery products.
- (ix) Introduction of Turnover Presumptive Tax regime with tax rates as followed by other competing countries.
- (x) Make dollar credit available at international interest rates.
- (xi) Re-introduce interest rate subvention scheme for Gems& Jewellery Sector
- (xii) Allow External Commercial Borrowings for working capital.
- (xiii) Allow personal carriage of import/export parcels including by overseas bound passengers and remove quantity restrictions on import of bullion through personal carriage for exports.
- (xiv) Allow replenishment of Silver/Gold by foreign buyers after receipt of jewellery consignments and payment of making charges in convertible foreign currency.
- (xv) Amend value addition principles for plain and studded jewellery in cases of export based on input supply by foreign buyer.
- (xvi) Introduction of trade friendly regulatory framework by RBI in place of current stringent fiscal controls.
- (xvii) Creation of dollar fund to refinance banks to finance industry at competitive international rates.

It is recommended that these suggestions may be taken up by the industry council with the concerned Ministries / Departments for suitable decisions.

## **II. Leather sector**

### **1. Overview and Exports Performance**

The Leather Industry holds a prominent place in the Indian economy. The sector is known for its consistency in generating high export earnings and is among the top ten foreign exchange earners for the country. The export of leather and leather products has increased manifold over the past decades and touched US\$ 3.40 billion in 2009-10, recording a CAGR of about 5.43% over the last five years. Though India is the second largest producer of footwear and leather garments in the world, India accounted for a share of only about 2.5% in the global leather import trade of US\$ 147 billion in 2009.

About 82% of exports from the leather sector are value added leather products and footwear. Exports have grown from a value of USD 2752 million in 2005-06 to USD 3401

million in 2009-10. Though exports declined in 2009-10 on account of the global economic slowdown, they have shown more than 11% growth during 2010-11. The export performance during the 11<sup>th</sup> Plan is in Table 5.4.

**Table 5.4 Exports of Leather in XI Five Year Plan**

(in US \$ million)

Product	2007-08	2008-09	2009-10	2010-11*	2011-12**
<b>Finished Leather</b>	807.19	673.37	<del>625.54</del> <u>627.95</u>	<del>800.25</del> <u>810.92</u>	<del>1158</del> <u>950</u>
<b>Footwear</b>	1489.35	1534.32	<del>1507.51</del> <u>1507.59</u>	<del>1752.55</del> <u>1732.04</u>	<del>2912</del> <u>2200</u>
<b>Leather Garments</b>	345.34	426.17	<del>428.52</del> <u>428.62</u>	<del>404.31</del> <u>400.83</u>	<del>1075</del> <u>500</u>
<b>Leather Goods</b>	800.46	873.44	<del>756.02</del> <u>757.02</u>	<del>798.92</del> <u>814.91</u>	<del>1572</del> <u>2950</u>
<b>Saddlery &amp; Harness</b>	106.18	92.15	83.39	<del>85.06</del> <u>86.15</u>	<del>190</del> <u>125</u>
<b>Total</b>	3548.51	3599.46	<del>3400.97</del> <u>3404.57</u>	<del>3841.09</del> <u>3844.85</u>	<del>6907</del> <u>5500</u> <del>4725</del>
<b>% Growth</b>	15.99%	1.44%	-5.41%	<del>12.46</del> <u>12.93</u> %	<del>79.82</del> <u>43.19</u> <del>22.89</del> %

\*Projecte \*\*Estimated

CAGR: ~~18.12~~ 17.42% (2007-08 to 2011-12)

The leather industry is an employment intensive sector, providing jobs to about 2.5 million people, mostly from the weaker sections of society. Women's employment is predominant in the leather sector with a 30% share.

The major production centers for leather and leather products in India are located in Tamil Nadu - Chennai, Ambur, Ranipet, Vaniyambadi, Trichy, Dindigul; West Bengal – Kolkata; Uttar Pradesh – Kanpur, Agra & Noida ; Maharashtra – Mumbai; Punjab – Jalandhar; Karnataka – Bangalore ; Andhra Pradesh - Hyderabad ; Haryana - Ambala, Gurgaon, Panchkula and Karnal; Delhi.

## 2. Problems and Challenges

- (a) Absence of corporatization of the sector: Availability of capital/institutional finance for leather units / projects either through public issue or bank loans is constrained, given the largely non-corporatized nature of the Industry.



- (b) Environmental concerns that could threaten acceptance of goods in foreign markets.
- (c) While India produces about 2 billion sq. ft. of leather an additional 2 billion sq.ft. is required in the next 4-5 years. Considering the limitations of domestic supply and strict environmental regulations involved in setting-up of tanning facilities, there is a need to look for reliable suppliers of hides/skins/leathers, particularly in other regions.
- (d) Some of the regulations imposed by the Department of Animal Husbandry, Dairying and Fishery (DAHD&F) have created procedural bottlenecks in the import of raw material. According to the industry, the new regulations imposed by DAHD & F in March 2008 on import of hides / skins / leathers into India, citing health hazards, has created difficulties in import of hides, skins and leathers.
- (e) Infrastructure and skill development.

### 3. Export and Employment Target for the 12th Five Year Plan

**Export target:** Global import of leather and leather products (HS codes 41, 42, 64) was US \$ 147 billion in 2009<sup>2</sup> and India's exports had a share of about 2.5% of this market. There are tremendous prospects for further increasing Indian leather exports. During the XII Plan period, Indian leather exports need to target the goal of achieving 3.5% of global market share, keeping in view past performance and available opportunities and capacity. Although leather exporters favour a much more conservative scenario, the goal is achievable provided no economic major disruptions occur in the main markets, and the proposed strategies are implemented.

**Table 5.5: Projected Exports of Leather in XII Plan**

( in US \$ million)

Product	2012-13	2013-14	2014-15	2015-16	2016-17
Finished leather	1100	1250	1400	1500	1650
Footwear	2800	3500	4200	5200	7100
Leather Garments	600	900	1300	1800	2200
Leather Goods	1150	1400	1700	2000	2500
Saddlery & Harness	200	275	350	420	550
Total	5850	7325	8950	10920	14000
% Growth	23.81%	25.21%	22.18%	22.01%	28.21%

CAGR: 24.03% (2012-13 to 2016-17)

**Employment target:** The leather industry currently employs a workforce of 2.5 million both directly and indirectly. A look at the work force structure of the leather industry reveals that shop-floor operators and workers constitute 80% of the work force, followed by supervisors and

<sup>2</sup> COMMTRADE data

executives (9%), support office staff (5%), middle level managers (4%) and top level managers (2%). In order to achieve the target of about USD 14 billion by 2016-17, the leather industry may require an additional work force of 1 million in the next 4-5 years, bulk of whom (approx about 0.8 million) would be at the shop-floor level.

#### 4. **Strategy for meeting export targets in the 12<sup>th</sup> Plan**

- (a) **Access to Capital: Corporatization of the Industry:** Creation of a Venture Capital Fund under Exim Bank / ECGC / any Nationalized Bank with equity participation for capital requirements by various financial institutions could support creation of new corporatized entities and corporatization and growth of existing leather sector entities. Such equity can be paid back by the unit in periodical manner within a span of 5 years to create a rotating pool of funds. This [is critical to addressing financial constraints facing the sector and](#) would be useful for capacity enhancement and modernization of existing leather units and also in establishment of new units in a corporatized mode. It is recommended that given the importance of the Sector in terms of employment targeting of lower income groups and value added potential, a new Plan scheme to facilitate corporatization –is essential to achieve XII Plan goals. Government can work out the scheme in consultation with RBI, SEBI, Exim Bank, ECGC etc, as also industry stake holders. [A scheme to implement this suggestion effectively should be taken up in the 12<sup>th</sup> Plan on priority.](#)
- (b) **Up-gradation of Common Effluent Treatment Plants (CETPs) with Zero Liquid Discharge (ZLD) technology:** Zero Liquid Discharge (ZLD) is an eco-friendly technology wherein not even a drop of tannery waste is discharged into the environment. Establishment of a CETP with the ZLD technology with a 1000 m<sup>3</sup> capacity involves a huge investment of about Rs. 20 Crore, of which the cost of the ZLD technology component alone is about Rs.12 Crore. It is estimated that the Operations and Maintenance (O&M) cost of a Common Effluent Treatment Plant with ZLD with a 1000 m<sup>3</sup> capacity is about Rs.4 Crore per annum. This is a very huge financial requirement, which will be difficult to sustain by tanneries, most of them being in the SME segment. In view of the increasing of critical role of environmental standards worldwide, we need to urgently address this issue providing financial support to the tanning sector for implementing ZLD technology and for meeting the recurring O&M cost. Department of Industrial Policy and Promotion has a scheme for setting up of CETPs. It is recommended that these ZLD projects ideally be made a part of that scheme. If that is not possible, it would be in the interest of expanding leather exports to even consider a full fledged stand alone scheme to fast track the environmental standards upgradation measures necessary.
- (c) **Securing Availability of Raw Material:** Some of the countries where raw material for Leather is available in abundance are Algeria, Angola, Burkina Faso, Cameroon, Chad, Cote d'Ivoire, Ethiopia, Guinea, Kenya, Madagascar, New Zealand, Egypt,

CIS countries, Morocco, Niger, Nigeria, Senegal, Somalia, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe, Mongolia, Argentina, Australia and Brazil. It is recommended that:

- i) The Council for Leather Exports (CLE) may utilize the existing schemes such as MAI which provides financial assistance for organizing visits to countries rich in raw leather supplies.
  - ii) Government may discuss the issue of raw material supplies with the countries mentioned above under bilateral trade interactions.
- (d) **Simplification of Regulation for import of hides, skins and leathers:** It has been suggested that import of pickled hides and skins be allowed on the basis of Veterinary Certificate of the supplying country in their own format as against the present practice of allowing their import on the basis of Veterinary Certificate prescribed by DAHD&F. The second suggestion is to allow import of finished leather without any Animal Quarantine Clearance since finished leather itself is a finished product, which is ready to use in manufacture of value added leather products and footwear. It is recommended that these suggestions be duly considered by the appropriate authorities.
- (e) **Production, Design and Productivity:** The present MAIS guidelines (para 7.5.2) state that appropriate resources would be assigned to the priority sectors like cottage and handicrafts, leather etc., Further, under para 7.2.5 65% grant is provided for hiring consultants/designers subject to the condition that the exporter can apply for a maximum of two reimbursements a year and the total ceiling for each exporter would be Rs.5 lakh per annum. The sector has requested (a) provision of enhanced grant of 75% or more instead of 65% (b) inclusion of technicians/resource persons/experts also in the grant component (c) removal of the restriction that the exporter can avail grant only 2 times, as the services of such persons are required on continuous basis (d) creation of a fund of Rs.10 Crore for this purpose. Timely knowledge of international trends and designs are very essential for growth of the leather sector, as is the case in exporting sectors like gems and jewellery, textiles etc. It is recommended that the existing portions under MAI Scheme of the Department of Commerce for hiring designers/consultants be fully availed of the purpose. Additional funds could be requested from the Planning Commission, if so required.
- (f) **Infrastructure & Skill development:**
- i) **Development of Mega Leather Clusters:** The Government has announced setting up of seven mega leather clusters in different parts of the country. The Department of Industrial Policy and Promotion, Ministry of Commerce and Industry has already held preliminary discussions on the guidelines of the scheme. According

to the Council for Leather Exports, the scheme should cover the cost of land, ready-to-use factory sheds, common infrastructure (like training facilities, trade centre, design studios etc.). The Council has suggested a grant of Rs.125 Crore (80% of the estimated expenditure of Rs.156.25 Crore) per cluster. It is recommended that the **work of setting up the leather clusters should be expedited. Preparatory work should be finalized by 2011-12 so that implementation can begin at the commencement of the 12<sup>th</sup> Plan.** It is further recommended that **projects like Trade & Exhibition Centres, Warehouses, Design Studios, Testing Labs, Social Infrastructure and basic infrastructure like roads and islanding of power supply should be included in the mega leather cluster scheme**, which could be adequately stepped up based on the initial experience.

**ii) Infrastructure Development under ASIDE scheme:** As most of the companies in the leather sector are concentrated in the SME segment, they need support for infrastructure development and creation of common facilities. To meet these requirements, the industry has suggested grant funding under central ASIDE component for creation of Common Facilities like Trade & Exhibition Centres, warehouse, design studios, testing labs, social and basic infrastructure like roads and islanding of power supply in export clusters, on priority. In addition the Central Govt. may encourage State Governments to provide land on long term lease at competitive prices to SPVs formed for infrastructure development. If specific individual projects are required to be implemented in areas not included in the mega cluster project to serve existing leather clusters, CLE may prepare projects for the same and seek assistance under the ASIDE scheme.

**iii) Skill Development:** Skill development is a key requirement for meeting growing HR needs and enhancing productivity. As explained earlier ,80% of work force in the sector comprises shop-floor operators and workers. With the ambitious export targets and related employment generation goals, a significantly larger skilled work force will be required in the coming years particularly at the shop floor level. Hence suitable training modules to ensure capacity building and skill up-gradation are needed to ensure adequate supply of man power for the sector.

Footwear Design and Development Institute can play a useful role in imparting training .At present, it has established four new branches in Chennai, Kolkata, Rohtak and Chindwara. As a result, their training capacity has increased from 190 in 2004-05 to 2700 in 2010-11. It has excellent placement record. A new branch of FDDI is being set up at Jodhpur.

Training requirements of the leather sector are very specific. The industry should itself take the lead in designing need based training programmes to improve the skills of its workers. Council for Leather Exports and FDDI may discuss the issue with all stakeholders and work out an action plan to take it forward. **Therefore as was**

**considered appropriate for the Gems and Jewellery sector, it is recommended that the following measures be taken to meet the training requirements of the sector:**

- **Work out the long term requirement for additional FDDI branches in consultation with stakeholders and make provision for their establishment on the 12<sup>th</sup> Plan.**
- **The industry should take the lead in designing and up-grading ongoing training curricula in a need based manner to improve the skills of the workers.**
- **Provide incentives by way of income tax relief, duty concessions etc. incentivizing in-house training.**
- **National Skill Development Corporation may be approached for support to meet the training requirements of the sector. CLE is on the Board of NSDC also.**

**iv) Tapping New markets:** Major export destinations for Indian leather products are Germany (14.45%), UK (13.41%), Italy (11.72%), Hong Kong (7.53 %), France (7.53%), Spain (6.43), Netherlands (4.03%), Belgium (1.92%), UAE (1.03%) and Australia (1.58%). These 11 countries together account for nearly 75% of India's leather exports. The US market has not been fully tapped. It is the largest importer of leather and leather products in the world and its annual imports are around US\$ 26 billion. India's exports to USA have not increased significantly from the US\$ 290.40 million in 2004-05 and are US\$ 296.22 million in 2009-10 Our market share in the US market is 1.4%.

The Council for Leather Exports has requested a special package for USA comprising the following:

- Inclusion of USA under Focus market Scheme
- Provision of 5% duty credit scrip under Focus Market Scheme
- Increased assistance @ 50% on the investment made in plant and machinery subject to ceiling of Rs.2 Crore under Integrated Development of Leather Sector (IDLS) (as against the current limit of 30% for SSI and 20% for non-SSI and 20% for all units for assistance above Rs.50 lakh) and
- 100% grant for inviting US designers and technicians to India.

In addition to the US, India's share in markets like Japan, Russia, Australia, New Zealand, Canada, Brazil, Saudi Arabia, Jordan, Bangladesh and Sri Lanka is also very

low. The industry has requested 100% MAI grant for activities like participation in fairs, inviting designers / technician to India, establishing show rooms / warehouses, organizing leather shows and undertaking market studies to penetrate these markets.

To meet the ambitious export targets of the 12<sup>th</sup> Plan, it is necessary to strengthen performance in existing markets and penetrate new markets. For this a quantum jump by way of special packages is necessary, in addition to continuation and enhancement of existing programmes. **It is recommended that these suggestions may be considered by the Department of Industrial Policy and Promotion and the Department of Commerce.**

**v) Brand Promotion:** Brand promotion aimed at creating a brand identity and an associated brand loyalty is necessary for the growth of leather sector in the international market. The industry has proposed that Government of India may consider formulating a specific package for brand promotion by creating a separate fund, so as to provide direct financial assistance to individual companies in leather sector. The financial assistance requested is to the extent of about 10% of export turnover of the company for a period of 5 years to enable them to gain a foothold. Eligibility criteria may be drawn for selecting the companies. Activities like advertisements in magazines / news papers / public places, taking floor space in departmental stores / airports etc. could be considered for coverage. A component supporting industry level efforts at creating a 'Made in India' brand could also be included. This fund would to that extent also cover brand promotion activities like organizing buyer get-togethers, fashion shows, etc. The industry itself should take ownership and assume the lead in initiating and funding brand promotion activities. The dependence on Government should not be the key driver, if the efforts are to be on the scale and the flexible basis required for effectiveness in a dynamic and varied world. Major companies should come forward to create such a fund. It is recommended that:

- The leather sector may consider setting up a fund through industry contributions for brand promotion, particularly to establish the "Made in India' brand and ensure quality control.
- Leather sector may also work with the IBEF for sector-specific branding.

**vi) Continuance of existing schemes:** Increase in export of leather goods was made possible by timely, well-conceived interventions by the Government through provision of incentives in the form of grants under various schemes, measures under the Foreign Trade Policy, financial concessions by way of reduction in duties etc. Some these measures include (a) Grant of "Special Focus Sector" status to Leather under Foreign Trade Policy and Special Focus Initiatives notified under Chapter 1 B of the FTP (b) Schemes like Focus Product Scheme (with 4% duty credit scrip) and

Focus Product Scheme for finished leather(with 2% Duty credit scrip (c) Focus Market Scheme (d) Zero Duty EPCG Scheme e) Status Holders Incentive Scrip Scheme(f) Duty Free Import Scheme (DFIS) implemented through the Council for Leather Exports (g) Marketing Development Assistance (MDA), ASIDE and Market Access Initiative (MAIS) Schemes etc. The sector desires that these schemes/ concessions be continued in the 12<sup>th</sup> Plan. Continuation of all the export promotion schemes which are currently operating in the 12<sup>th</sup> Plan period is recommended.

**vii) Financial/ fiscal concessions:** The industry has requested the following concessions / incentives for promotion of the leather industry:

- Enhancement of duty limit under Duty Free Import Scheme from 3% to 5%
- 3% Duty Free Import Scheme for finished leather
- Restoration of the 2% interest subvention scheme on rupee export credit (packing credit) available for the Leather Sector from Dec. 2008 to March 2011, as the revenue implications of the scheme are only to the tune of about Rs.40 Crore per annum. It may be reintroduced for a 5 year period from 2011-12 to 2015-16.
- Reduction in transactions costs by opening of Animal Quarantine Certification Stations at Kanpur & Jalandhar and by making Wild Life Clearance officers available on all week days.
- Notification of Ranipet, Gurgaon and Unnao as towns of export excellence (TEE) under the Foreign Trade Policy as these towns are producing goods exceeding of Rs. 750 Crore in value. Notification as TEE will facilitate up-gradation of common and specific infrastructure in these clusters.

Issues relating to reduction in transaction costs have already been included in the Report of the Task Force which was set up under the chairmanship of Minister of State for Commerce and Industry and are already in the process of implementation. **Other issues relating to various Ministries/ Departments such as Ministry of Finance may be taken up with them.**

### **III. Jute sector**

#### **1. Overview, Exports Performance and Employment**

The Jute Industry is one of the oldest industries in India and one of the mainstays of the economy in the eastern region, particularly in West Bengal. The production process in the jute

industry comprises a wide range of activities from cultivation of raw jute, processing of jute fibres, spinning, weaving, bleaching, dyeing, finishing and marketing of jute products.

Jute industry supports nearly 40 lakh farm families, provides direct employment to about 2.6 lakh industrial workers and livelihood to another 1.4 lakh persons in the tertiary sector in allied activities. The industry is labour intensive, involving a large number of people in the value chain.

In 2010-11 the jute industry produced goods worth Rs. 7500 crore and had export earnings of nearly Rs.1350 crore.

Jute exports have been stagnant in value terms. Nevertheless, Indian jute exports still constitute a sizable share of 27% of the world market for jute trade. Jute exports during the 11<sup>th</sup> Plan period is in Table 5.6.

**Table 5.6: Jute Exports in XI Plan**

(in US \$ m)

<b>Year</b>	<b>Exports</b>
2007-08	293
2008-09	238
2009-10	189
2010-11	299*
2011-12	300**
* Projected	
**Estimated	
CAGR (2007-08 to 2010-11) : 0.68%	

## **2. Market for Jute Exports**

Jute being a strong, versatile and highly spinnable fibre, the potential for the sector in the world market is very good. The likely global market size for jute trade by the end of 11<sup>th</sup> Plan (2011-12) will be 780,000 MT out of which projected export from India is likely to be 210,000 MT constituting 27% of global trade. By the end of 12<sup>th</sup> Plan (2016-17) the global market for jute products is likely to be about 1.2 million MT.



### 3. Problems and challenges

Though, India is the second highest producer (in terms of tonnage) of the jute fibre in the world the sector faces number of serious challenges for achieving its export potential. Some of the challenges are as follows:

- The present productivity of raw jute (approx. 2200 kg. per hectare) is far below the potential and productivity achieved in other countries such as China (6000-7000 kg. per hectare).
- High dependency on sacking and Government purchase.
- Rise in domestic demand for sacking – leading to short supply (and price rise) of raw material for the export sector.
- Rising prices of jute goods forcing buyers to switch to other materials.
- Lack of modernisation leading to low efficiency & productivity in the Industry.
- Lack of diversification in production from traditional products.
- Lack of modern technology in farm sector – leading to low quality of raw jute.
- Lack of eco-labelling & disposal protocols for jute products.

### 4. Export and Employment Target for the 12th Plan

A strategy is being proposed to ramp up jute exports. Even so, given the track record so far, a determined effort has to be made to realize the growth potential of the jute industry in the Twelfth Plan. We may then aim for significantly increasing global market share with projected exports from India targeted at 5lakh MT, which would imply capturing 42% of the global trade as shown in Table 5.7.

**Table 5.7: Share of Jute Exports in Global Trade : XII Plan**

Items	By the end of XIth Plan (2011-12)	In US\$ million	By the end of XIIth Plan (2016-17)	In US\$ million
Likely Global market Size of Jute trade	7.80 Lakh MT	900	12 lakh MT	1400
Projected Export from India	2.10 lakh MT	300	5 lakh MT	667
% of Global Trade	27%		42%	

The targeted export growth for the sector in the 12th Plan has been proposed as shown in Table 5.8, keeping in mind the potential:

**Table 5.8: Jute Export Projections in XII Plan**

<b>April-March</b>	<b>Exports (in US\$ million)</b>
2012-13	350
2013-14	392
2014-15	484
2015-16	575
2016-17	667

CAGR (2010-11 to 2016-17): 17.49%

With increase in domestic demand and higher exports, employment opportunities in the sector are likely to increase during the 12<sup>th</sup> Plan with 61 lakh persons projected to be employed in the jute sector by the end of of the Plan.

**5. Strategy for meeting export targets in the 12<sup>th</sup> Plan**

(i) **Increased productivity:** Active steps need to be taken to increase productivity of raw jute to at least 3500 kg. per hectare by the end of the 12th Plan by using initiatives like new varieties of HYV seeds, promoting modern farm practices and extension services. Appropriate intervention for improving the quality of jute by modernizing jute de-cortication, ribboning and rattng techniques and propagation of such modern techniques also needs to be taken up during the 12th Plan Period. **This is a critical intervention, and it is expected that the Jute Technology Mission will prioritize this in the XII Plan.**

(ii) **Capacity Building for Export:** Over the last few years, the share of domestic consumption has been increasing in total production, as seen in the Table 5.9.

**Table 5.9: Share of Jute Production: Domestic vs. Exports**

<b>Year</b>	<b>Domestic %</b>	<b>Export %</b>
2006-07	83%	17%
2007-08	88%	12%
2008-09	88%	12%

2009-10	92%	8%
2010-11*	87%	13%

\* Estimated

The dominance of domestic consumption has arisen due to increase in demand for sacking products for reserved items (food-grains & sugar) under the Jute Packaging Materials (Compulsory use in Packing Commodities) Act 1987, which provides an assured market to the jute industry. At present around 80% of the total production of sacking and 50% of the overall production of the jute industry is being protected by this Act. The increase in demand for reserved products correspondingly reduces the supply available for meeting other demand (including export demand). Thus for increasing exports, jute supply needs to be gradually freed from the constraint of being a reserved product.

Appropriate changes in government policy related to determining the levels of reservations under the JPM Act need to be considered. Over the 12th Plan, Government could consider adoption of a policy to bring down the demand created by reservation (as a percentage of total production) back to around 40% by the end of the 12th plan. This will free the raw jute availability and capacities for exports, as lower price pressure on jute goods meant for export, and enable us to increase our share of the global jute market.

**(iii) Leveraging Eco-friendliness of Raw Jute:** In the international market, the bio-degradable and eco-friendly character of jute and jute products could be a major driver of consumption, if this empirical feature is established in accordance with relevant international parameters and publicized after accreditation by a credible authority. The need for credibility in this regard can be achieved through an independent third-party labelling regime. In many instances, such labelling has taken the form of eco-labels awarded to products approved by an eco-labelling program operated at a national or regional (i.e. multi-country) level. "Eco-labelling" is one of the voluntary methods of environmental performance certification and labelling that is practised around the world.

Eco-labelled Indian Jute products will give the Jute goods manufacturers an additional tool to market and push their products against competing suppliers and products. In addition, it should enable greater value added to exports. With eco-labelling and disposal protocols in place, it will be easier to reach out to and educate the consumer, both individual and institutional, about the eco-friendly and bio-degradable nature of such products and create a demand for such products. The fact that eco-labelling and disposal protocols are mandatory in certain major markets across the globe reinforces the crucial need to take this endeavour forward.

In this context, the establishment of eco-labelling and established disposal protocols for Jute products are pre-requisites for market growth, especially in the export sector. It is recommended that special emphasis should be given for eco-labelling of Jute Products & its disposal protocol in the 12<sup>th</sup> Plan and Industry could be encouraged to take the initiative.

**Improving Social & Environmental Compliance in Jute Sector:** Exports in the future are likely to require compliance with a number of environmental & social sector requirements. Thus, in order to prepare the industry for this future scenario, Government should promote and incentivise environmental and social compliances in the Jute sector. Jute mills should be incentivised to take steps in respect of Quality Management Practices, Environmental Management Systems and Safety Management System in their factories. To improve such compliances the following certifications need to be achieved by the units concerned:

- Quality Management System Certification under IS/ISO 9001:2008 by BIS.
- Environmental Management System Certification under ISO 14001:2004
- Occupational Health & Safety Management System Certification under BS OHSAS 18001:2007.

It is recommended that issues related to attainment of these standards by Jute Mills / producing units and the time frames for their achievement should be examined and appropriate policies / mechanisms based on incentives and disincentives put in place.

(iv) **Continuation of Existing Schemes**

**Jute Technology Mission:** The only Scheme implemented under the 11<sup>th</sup> Plan was the Jute Technology Mission. The Jute Technology Mission was divided into four Mini Missions and the implementing agencies of each Mission are given below:-

<b>Mission</b>	<b>Implementing Agencies</b>	<b>Fund Allotted (Rs. Crores)</b>
Mini Mission-I	Ministry of Agriculture(ICAR)	7.06
Mini Mission-II	Ministry of Agriculture (DARE)	49.90
Mini Mission-III	Ministry of Textiles (JCI)	64.58
Mini Mission-IV	Ministry of Textiles (JMDC)	234.02
<b>Total :</b>		<b>355.56</b>

Ministry of Textiles funded the MM III & MM IV part only:

This scheme will have to be the driver of key elements of the strategy e.g. improved productivity, and it is proposed to be continued in the 12<sup>th</sup> Plan with increased allocation and more innovative elements.

(v) **Changes in the Foreign Trade Policy**

The jute sector has the potential to increase its manufacturing activities and export volumes, provided issues relating to productivity, capacity building, compliance with equitable standards are addressed. Certain incentives have been provided to this sector under the Foreign Trade Policy. The Jute exporters have sought the following changes in the Foreign Trade Policy to promote exports during the 12<sup>th</sup> Plan:

- Include hessian cloth and bags, sacking cloth and jute yarn under VKGUY and focus product scheme.
- Extend deemed export benefits on sales to foreign buyers visiting India
- Include Argentina, China, South Africa, Egypt, Kenya, Ghana and Turkey in Focus Market Scheme.
- Include jute bags, blended jute carpets, JGT and jute technical composites in duty drawbacks scheme.
- Increase cap under DEPB scheme on specified items.
- HS codes for export promotion of JGT to precisely monitor its production.

It is recommended that the above incentives be considered for inclusion in the next Foreign Trade Policy.

**IV. Carpets sector**

**1. Overview and Exports Performance**

The Indian handmade carpets industry, is an age old industry that has made significant strides in the recent past. It is highly dispersed and is spread across States like Uttar Pradesh, J&K, Rajasthan, Haryana, Punjab, H.P. etc. Immense potential exists for significant growth in production and exports. The industry provides secondary, alternate occupation to rural farming communities in their dwellings. The industry is highly labour intensive and provides employment to over 2.5 Million workers, mainly in the rural areas.

Major highlights of this sector are:

- It is essentially a rural based cottage industry.
- It requires minimal capital investment.
- It is highly labour intensive.
- It is highly export oriented.
- It involves very high value addition.
- India ranks No. 1 as a producer and exporter of handmade carpets in terms of volume.
- India has a market share of around 29% of total world import of floor coverings.

Exports of carpets in 2009-10 were US\$ 525 million, which grew to US\$ 653 million in 2010-11. The Handmade carpets industry is a major foreign exchange earner for the country. Major export destinations are USA and Germany which account for approx. 65 % of the exports. The exports during the 11th Plan is shown in Table 5.10.

**Table 5.10: Carpet exports in XI Plan**

(in US \$ million)

<b>Year</b>	<b>Export</b>
2007-08	875
2008-09	600
2009-10	525
2010-11	653*
2011-12	800**

\*Projected, \*\* Estimated

Although carpet exports have declined from the high achieved in 2007-08, there are signs of a strong revival. In 2010-11 the export growth in handmade carpets and other floor covering was (+) 24.34%.

## **2. Exports and Employment target for the 12th Plan**

At present the total global import of handcrafted carpets and other floor covering is US\$ 2254.69 million and India's share is 29%. Assuming that the rebound in growth continues, India should aim at a CAGR of about 15% to hold, and slightly increase its market share to around 31%.

The projected targets for the 12th Plan are proposed as in Table 5.11, based on the growth potential that exists.

**Table 5.11: Carpet Exports target in XII Plan**

(in US \$ million)

Year	Proposed targets
2012-13	960
2013-14	1150
2014-15	1350
2015-16	1600
2016-17	1900

Targeted CAGR (2012-13 to 2016-17): 18.61%

At the end of the 11th Plan the Carpets sector is expected to employ approximately one million families with a CAGR of 0.55% over the plan period. However, upon achievement of the targeted exports during the 12th Plan, the sector is likely to generate employment for approx. 2.27 million families by 2016-17 with a targeted CAGR of 19.04% over the Plan period.

### **3. Strategy for meeting exports targets in the 12<sup>th</sup> Plan**

#### **(i) Expanding Capacity: Infrastructure & Skill Development**

The following projects are under implementation / consideration for the sector in the 11<sup>th</sup> Plan period:

- Setting up of Expo Marts in Varanasi, Jaipur and Srinagar (Kashmir).
- Strengthening of the carpet cluster in Bhadohi-Mirzapur carpet belt in U.P. and in Srinagar.
- Opening of New Carpet Weaving Training Centres in U.P. and other craft concentration areas.
- Development of domestic markets by organizing shows and exhibitions at Varanasi, Jaipur, Panipat, Kashmir and Delhi Haat etc.
- In addition, financial assistance under MAI and MDA scheme is also available to the sector. Sector has requested increased grant under Focus Development Scheme under MAI and increased grant under MDA for participation in international exhibitions/fairs.

The ongoing projects / schemes have been reviewed and it is recommended that projects which are under implementation / consideration in the 11<sup>th</sup> Plan may be continued in the 12<sup>th</sup> Plan. Efforts may be made to strengthen linkages between entrepreneurship and marketing and design development, linkage of clusters with markets and setting up of exclusive Common Facilities Centres in large and established clusters to promote its manufacturing activities.

It is also recommended that existing MDA, MAI, ASIDE and similar schemes operated by other Ministries / Departments may be continued for the sector in the 12<sup>th</sup> Plan. Proposals for increased assistance under these schemes may be considered by the Department of Commerce for appropriate action.

There is also need for opening of Carpet Weaving Training Centres for survival of the traditional art of carpet weaving. Opening of more carpet weaving training centres is recommended. The possibility of linking these with MNREGA or any other existing scheme to ensure assured stipend with weavers may be explored.

**(ii) Exploring new markets**

India ranks No. 1 as a producer and exporter of handmade carpets in terms of volume. It is having market share of around 29% of total world import of floor coverings. However, carpet exports are demand-sensitive, and significantly affected by slowdown in the economies of its major markets. Hence, the relatively weak performance during the global economic crisis. The major export destinations are limited to USA (46%), Germany (22%) and the rest of the world accounts for just 32%. Thus, if we are to move to a higher growth trajectory, there is a need to explore new markets to increase export of Indian carpets and floor coverings. The overseas markets with good potential which may be targeted through various market access and promotional instruments are Gulf countries, Russia, South East Asia such as Indonesia, Malaysia, Singapore, Thailand, Hong Kong, China, Latin American Countries, South African and Other African Countries. In recent years, even major carpet manufacturing countries like Turkey and China have become increasingly important destinations for Indian carpet exports. The following strategies have been proposed to tap these markets:

- Market Studies / surveys.
- Generic promotion of Indian Handmade Carpets and other floor coverings by organizing Made in India Shows in various markets in association with local big importers/chain stores as well as by participating in established international fairs/exhibitions.
- Support to entrepreneurs to develop their products in line with specific consumers preferences and tastes in these markets.
- Invitation to buying missions to India
- Holding large BSMs in India and abroad.
- Encouraging industry to opening warehouses for direct marketing & distribution of stocks to retailers.
- Ensuring presence in most product specific events by entrepreneurs, even if by way of thematic participation with products for brand promotion.



It has been noted that schemes are already in place to provide financial assistance to undertake these activities. MAI and MDA schemes of the Department of Commerce are two such schemes. It is recommended that the carpets sector should take advantage of MAI, MDA and other relevant schemes run by other Ministries / Departments to promote exports to untapped markets.

**(iii) Financial incentives/concessions**

The Carpets exporters have sought the following financial incentives for the promotion of exports:

- Export Credit Guarantee Corporation Ltd. (ECGC) coverage to Carpet Exporters- Claims of carpet exporters who have been provided insurance cover under ECGC may be settled on priority once coverage is provided. The premium charged for policy cover from carpet exporters may be reduced by 50%. Pre-shipment should also be covered under ECGC cover.
- Exemption from payments of service tax: Waiving of service tax in relation to business exhibitions [RBSMs] organized within India and waiving of service tax on membership fees of the Council.
- Continuation of GSP benefits to carpets and other floor coverings: Withdrawal of increase in processing fees for certificate of origin for Indian exports under generalized system preferences (GSP) scheme
- Increase in duty Drawback Rates: As per the new all Industry Rate of Duty Drawback for 2010-11 announced on the 17.09.2010, the Drawback Rates have been decreased across all carpet categories. Drawback Rates may be increased keeping in view the increase in prices of raw-materials.
- Extension of interest subvention of 2% beyond 31.03.2011
- Non-recovery of drawback paid in case of non realization of proceeds – Conditions like ECGC cover, RBI consent and Foreign office certification may be relaxed and fulfilment of any two conditions by exporters may be mandated. Recovery of drawback paid should not be done in case sale proceeds are not realized.
- Re-introduction of 80HHC specially for carpet and cottage sector.
- Removal of 1% Excise duty on handmade carpets imposed in the Finance Bill, 2011.
- Liberalization of labour laws for cottage based carpet industry on par with Agricultural Industry.

These issues relate to a number of Ministries/ Departments, such as Ministry of Finance, Ministry of Labour and Employment, DGFT etc. It is recommended that these may be taken up with the concerned Ministries/ Departments.

## V. Handicrafts sector

### 1. Overview and Exports Performance

The Handicrafts industry has over the years contributed significantly to employment and foreign exchange earnings of the country. However, despite the large production base, the market at the international level is still largely unexplored. The industry has made tremendous progress during the last decade. New lines of products, designs, colours, and raw material bases have been introduced.

Major items covered under handicraft sector are as under:

<b>Category</b>	<b>Items covered</b>
Textile based handicrafts including needle crafts	Chickkan Embroidery, Crewel Embroidery, Hand Printed Textiles/Applique work, Home Textiles / Home Furnishings, Patch/Applique work etc.
Light and Lighting Products	Christmas lighting , Floor lamps, Light for decoration etc.
Festive decoration	Marble stone carving, Christmas decoration, Palm leaf craft/ dry flowers, Handicrafted decoration. Christmas gifts etc.
Natural Fibre and Eco-friendly Products	Rambans, Sisal craft, banana fiber, natural fiber, vegetable dyed products
Furniture and accessories	Furniture & accessories, cane and bamboo furniture etc.
Houseware and Decorative Products	Metalwares, Ceramics decorative, Tableware, Candles, incense etc.
Fashion Jewellery	Cane and bamboo jewellery, Jute/terracotta jewellery Bridri craft, Silver fillgri, Fashion accessories, Fashion jewellery etc
Gifts for all occasions including Corporate gifts	Marble carving, Thanjavur glass painting, Nirmal painting, Rosewood inlay etc.
Pottery, Ceramic & Glass	Glass decorative items, Ceramics, Pottery, Blue pottery etc.

Although handicrafts exports registered impressive growth during the post reform period (post 1991), India's share in world handicraft exports is still around 1%. Exports of handicrafts during 2007-08 were to the tune of US\$ 3481 million. They have shown sensitivity to economic conditions in major markets and recorded drastic dip during the global economic slowdown, reducing by around 50% during the year 2008-09. They have rebounded since, and are expected to rise to US\$ 2700 million in the final year of the 11th Plan as shown in Table 5.12.

**Table 5.12: Exports of Handicrafts in XI Plan**

(in US \$ million)

Year	Exports
2007-08	3481.14
2008-09	1797.88
2009-10	1830.23
2010-11	2302 *
2011-12	2700 **

\*Projected

\*\*Estimated

Growth rate: (2010-11 to 2011-12) :17.29%

NB: Handicrafts exports data is being compiled on the basis of 207 HS Codes at 8 digit HS level.

## **2. Market for Handicrafts Exports**

The world market for handicrafts in the year 2003 was to the tune of USD 235 billion (as per Frost & Sullivan study<sup>3</sup>). Average annual growth rate was around 5% between 1999 and 2003. Estimated world market in the year 2010-11 is to the tune of USD 251 billion. Indian handicraft exports have a share of a little over 1% of this market. India can do much better, and the aim must be to double its share of the world market in the next five years. The world market for handicrafts is estimated to be USD 345 billion by the end of the 12th Plan i.e. 2016-17.

## **3. Problems and Challenges**

- (a) The industry is highly dispersed in India with each state contributing towards it through one or more crafts.
- (b) Handicrafts production is predominantly carried out in the unorganized household sector. Handicrafts artisans / manufacturers are mostly household members working jointly at their residences. They employ other artisans on need basis.

<sup>3</sup> Market Feasibility Study & Business Development Plan for the Handicraft Sector, Frost & Sullivan – EPCH, 2005

- (c) Handicraft exports are demand sensitive to economic conditions in major markets and recorded drastic dip during the global economic slowdown, reducing by around 50% during the year 2008-09.

#### 4. **Export and Employment Target for the 12th Five Year Plan**

Exports of handicrafts are expected to reach US\$ 6177 million assuming an average annual growth rate of 18% per annum over the 12th Plan period as shown in Table 5.13 consistent with the likely growth of 17.29% in 2011-12. This growth rate has the potential to be realized.

**Table 5.13:Exports of Handicrafts) in XII Plan**

(in US \$ million)

<b>Year</b>	<b>Targeted Value ( US \$ million)</b>
2012-13	3186
2013-14	3760
2014-15	4436
2015-16	5235
2016-17	6177

Current employment in the handicrafts sector is around 6.7 million (2010-11). Given the projected growth in exports, this is expected to increase to 10.63 million by the end of 12th Plan period.

#### 5. **Strategy for meeting targets in the 12<sup>th</sup> Plan**

##### (i) **Infrastructure Development: Design & Production Capacity**

**Development of Clusters:** Feasibility reports for 25 theme based handicraft clusters have been completed, and needs of the clusters in terms of designs, product development, market and infrastructure have been identified. These clusters will be spread across the country. The strategy for developing these clusters during the XII Plan period is proposed as follows:

- Set up 2 mega clusters every year over the plan period
- Set up five testing labs in major craft clusters every year
- Set up five Common Facilities Centres in major craft clusters every year
- Other amenities such as Effluent Treatment Plants to be set up in clusters
- Strengthen supply chain management

Keeping in view, the projected increase in manufacturing / export activities and employment generation in the coming years, it is recommended that Ministry of Textiles and Ministry of

MSME may examine the feasibility reports for cluster development and formulate appropriate proposals to ensure availability of Plan funds for developing these clusters. [This suggestion assumes importance as a cluster location is critical to achieving economies of scale on both the input procurement and marketing facilitation side. This initiative must factor in the fact that handicrafts activity is spread across all States, and not confine itself to certain high profile existing activity centres.](#)

### **Additional Infrastructure**

The handicrafts exporters have proposed the following additional infrastructure proposals for the 12<sup>th</sup> Plan for funding under the ASIDE / SEZ scheme:

- Establishment of 6 Sector specific Special Economic Zones for handicrafts namely Firozabad, Saharanpur, Agra, Jaipur, Narsapur and Chennai.
- Setting up of Design Centers at Clusters with 100% grant for first three years.
- Setting up of 40 products specific Common Facility Centres (CFCs).
- Five Testing Labs in major craft clusters every year
- Setting up of Packaging unit

Setting up of Design Centres, Common Facilities Centres, testing laboratories etc. from ASIDE scheme may not be feasible on the scale requested given the limited budget available under it. Therefore it is recommended that these programs should be included as part of the Cluster Development Program. On the development of Sector Specific SEZs, the scheme for establishment of SEZs is already in operation, and should be suitably accessed with appropriate proposals from promoters.

### **(ii) Tapping New Markets**

Two thirds of handicrafts exports are to the traditional markets of USA, Canada, France, Germany, Italy, Japan, Netherlands, UAE, Switzerland and UK. However, the following high potential market segments have not been fully tapped due to focus on traditional markets by the exporters:

- LAC (Latin American Countries including South America & MERCOSUR Region)
- Middle East (Gulf)
- Far-East (Including China)
- CIS (Including erstwhile USSR & East Europe)
- African Region

The industry has identified following activities to tap these markets:

- Market Studies / surveys
- Market specific development of products
- Generic promotion of Indian handicrafts by holding Craft Festivals of India
- Support to entrepreneurs to develop products in line with specific preferences and tastes in various markets
- Invitation to buying missions to India
- Holding large BSMs clubbed with seminars
- Opening of warehouses by institutions includes direct marketing & distribution of products to retailers
- Appointment of Marketing Agents by institutions
- Presence in events including thematic participation.

Schemes are already in place to provide financial assistance to undertake these activities. MAI and MDA schemes of the Department of Commerce are such schemes. It is recommended that the Handicraft sector should take advantage of MAI, MDA, MSS and similar schemes run by ministry of Textiles/other Ministries to promote exports in untapped markets.

**(iii) Brand Promotion**

Brand promotion is a key initiative to expand the export market. It is necessary that the presence of Indian products should be known in targeted markets and an attachment created in a systematic manner through promotion and publicity. There is a need to project the Indian handicraft brand “Hand made in India”. Generic promotion is a slow process and needs constant focus on the consumer. A “Brand Fund” is proposed for this purpose. Efforts for brand promotion should come from the exporters themselves with their ownership to be fully effective. It is recommended that the creation of a Brand Fund with contribution from major manufacturing and exporting stakeholders in the handicrafts sector. The Export Promotion Council can also work with the IBEF in the Department of Commerce develop their international campaigns.

**(iv) Continuation of Existing Schemes**

The sector utilizes all existing schemes such as Market Access Initiative (MAI), Market Development Assistance (MDA), ASIDE etc. for participation in international exhibitions and development of infrastructure. Some proposals for increased grants in some of the areas, such as reimbursement of airfare, space rentals, 100% grant for warehouses, publication of catalogues, publicity etc have been received. It is recommended that existing MDA, MAI, ASIDE and similar schemes operated by other Ministries/ Departments may be continued in the 12th Plan. Proposals for increased assistance under schemes may be considered by the Department Commerce for appropriate action comprehensively across sectors.

(v) **Financial / Fiscal incentives**

Following proposals were received to provide financial / fiscal incentive to the sectors:

- Restoration of deemed export benefits on sale of handicrafts to foreign tourists in foreign exchange
- Extension of interest subvention of 2% beyond 31.03.2011
- Reduction of customs duty from 30% to zero per cent for sea shells.
- Export Credit Guarantee Corporation Ltd (ECGC) coverage to Handicrafts Exporters [under MDA scheme or a special scheme]
- Exemption from payment of service tax
- Waiving of service tax on business exhibitions organized within India
- Waiving of service tax on membership fee of the council
- Continuation of US GSP benefits to handicrafts items beyond 31.12.10
- Withdrawal of increase in processing fees of Certificate Of Origin for India's exports under Generalized System Of Preferences (GSP) scheme
- Exemption from income tax under section 10BA of I.T. act, 1961 for all handicrafts items
- Increase in duty drawback rates.
- Duty Credit Scrip of 3% over and above existing (5% + 2%) for units located in NER, J&K, HP and Uttaranchal and export to LAC.

In addition, a request has been made to liberalize labour laws for the sector at par with Agriculture. These issues relate to a number of Miniseries / Departments such as Ministry of Finance, Ministry of Labour and Employment, DGFT etc. and the Handicraft Export Council may take up these issues with the concerned Ministries / Departments.

## Chapter 6

### Micro, Small and Medium Enterprises (MSME)

#### 1. Exports of MSMEs

MSMEs play a pivotal role in India's economy. They contribute 8 per cent of GDP, 45 per cent of manufactured output and 40 per cent of the country's exports. MSMEs provide employment to about 60 million persons through 26 million enterprises.

The share of MSMEs in total exports is spread across different product segments. In case of items like Textiles, Leather Goods, Processed Food, Engineering Goods and Gems & Jewellery, export performance has been commendable over the years. Sectors like Sports Goods are almost 100% export oriented. In view of this, export promotion from MSME sector has been accorded high priority in India's export promotion strategy which includes simplification of procedures, incentives for higher production of exports, preferential treatment to MSMEs in market development fund, simplification of duty drawback rules etc.

#### 2. Problems and challenges

Despite a reasonable growth story and substantial share in overall exports, MSMEs face several problems and constraints as given below.

- i) Low value addition- especially in sectors like Gems & Jewellery, value addition is negligible. Engineering Goods and Leather Goods also lag behind in value addition.
- ii) Lack of access to timely and affordable credit.
- iii) Lack of access to equity capital and innovative sources of financing like Angel funds / Venture Capital
- iv) Low level of Technology Adoption
- v) Lack of Innovation
- vi) Poor Branding and Packaging
- vii) Lack of awareness on IPR issues and International Trade Agreements
- viii) Lack of quality database on Exports
- ix) High Transaction Costs
- x) Complicated procedures for Exports

To address the above problems Development Commissioner MSME is administering a number of schemes and training programmes. These include the National Manufacturing Competitiveness Programme (NMCP), a flagship programme, which



addresses many of the issues facing MSMEs such as marketing support / assistance to MSMEs (Barcode), building awareness on IPRs, Design Clinic Scheme for Design Expertise, Enabling MSMEs to be competitive through Quality Management Standards (QMS) and Quality Technology Tools (QTT), Promotion of ICT in MSMEs etc. National Award for Quality Products to MSME entrepreneurs, WTO Sensitization Workshops/ seminars all over the country and Technical & Managerial Consultancy Services to MSME manufacturers/exporters through a network of field offices.

### **3. Strategy for boosting MSME exports**

The strategy to improve the manufacturing ability of the MSME sector is expected to improve the competitiveness of their products and enhance exports. Higher value addition, skill development and training, thrust on standardization and quality, access to affordable credit, impetus for innovation, etc. would be essential elements of the strategy. Key areas of the strategy include Skill Development and Training, Infrastructure Development, Access to affordable Credit, Impetus for Technology Upgradation and Innovation, Providing Marketing Support and Brand Building with adequate Institutional Structure and special support for MSMEs.

### **4. Recommendations:-**

#### **4.1 Skill development and Training**

- Organising Training programmes / Seminars to create awareness among exporters on importance of value addition and competitiveness.
- Training on Export procedures and Export incentives. Involving MSME Associations and EPCs in Skill Development and Export capacity building activities for MSMEs. Introduction of Export Related Business, Skill Development Programmes with support of trained export consultants for providing a complete range of export related strategic services.
- Scheme to set up Leather Design & Training Institutes in different leather export hubs to provide for skill development needs of exporting units. This needs to be replicated in other focus sectors.

#### **4.2 Infrastructure development**

- Development of Inland Container Depots (ICDs) near MSME Clusters (information on MSME clusters available on website of DC, MSMSE) since most of them is not located near ICDs and has to rely on private warehouses.
- Reduction in Container handling & Freight charges and concession for MSMEs.

### Credit and Institutional Finance

- Availability of timely, adequate and affordable export finance at liberal terms. Credit availability for exporting MSMEs should be 40% of total credit to export sector.
- Introduction of a new Interest Subsidy Scheme for exporting MSMEs. - Additional interest outgo over and above inflation plus a particular percentage (say 2%) should be given as Subsidy to exporting MSMEs in proportion to their export e.g. if Inflation is 8% and rate of interest is 14%, then 4% should be given as interest subsidy.
- Creation of a Venture Capital Fund to target innovative export oriented units.

Relaxation of Provisions of RBI's External Commercial Borrowings (ECBs). External Commercial Borrowings should be made accessible to Small Units and Micro Clusters with the help of a separate window in SIDBI or other Financial Institutions.

- Continuation of Zero-Duty EPCG Scheme beyond 31<sup>st</sup> March, 2012 for MSME Sector and inclusion of import of capital goods for CFCs under MSE-Cluster Development Programme.
- Allocation of 50% of Foreign Currency available with commercial banks for meeting requirements of MSME exporters on priority basis.

### 4.3 Technology and Innovation

- Cheaper credit for acquiring Capital Goods, Equipments, Clean Technology etc.
- Allow duty free import of laboratory equipments and instruments for MSMEs.
- Technology support schemes for MSMEs in areas of quality management and standardization / certifications to be made more Enterprise friendly.
- Support for procuring IT hardware and encouraging Internet diffusion to MSMEs, promotion of Product and Process Innovation and Inter-Cluster exchange of innovation & emerging technologies.

### 4.4 Marketing and Procurement

- Promotion of Brand Building.
- Organization of Trade Fairs and Buyer-Seller meetings in emerging markets and non-traditional products.
- Partial refund of marketing expenditure to MSMEs to give a fillip to entrepreneurs to aggressively market their products in global markets.
- Support / fund MSMEs in establishing / acquiring foreign companies, show rooms etc and for promotion of Indian Franchising, Licensing in selected sectors.

- Assistance to MSME Associations / Cluster Associations for setting up office in a focused market place abroad.
- Creation of a Challenge Fund for undertaking Product specific studies, Country specific studies, Short term specific interventions and innovative collective initiatives for market access.
- Subsidizing setting up of more design studios.
- Creating awareness on labeling, packaging, bar-coding, standardization etc.
- Providing enhanced focus on benefits of IPR.
- Financial assistance to exporters under MDA Scheme to be made more attractive and comprehensive.
- Setting up of a permanent Market Development Assistance Fund with adequate outlay.
- Focus on value addition and diversification of products.
- Creation of awareness on new markets and products.
- Encouragement of Consortia Approach.
- Support for sourcing raw materials at a cheaper rate and duty free import of inputs for exports.
- Strengthening of international marketing intelligence with support of relevant agencies of repute.
- A structured export support programme on the lines of Centre for the Promotion of Imports from Developing Countries (CBI), Netherlands.
- Identification of MSMEs which are export worthy, but not exporting, in targeted sectors.

#### **4.5 Institutional Structure**

- Ten dedicated MSME- Export Promotion Institutes in major exporting States/ Zones to be set up. These Institutes would co-ordinate/implement various export promotion schemes of the Central Government- Market development assistance programmes and Skill development assistance programmes as mentioned above.
- Strengthening of Database on Exports from MSMEs with provision of financial assistance to Export Promotion Councils/ IIFT.
- A professionally managed apex Public Institution (like EXIM Bank, with capabilities to provide strategic guidance and oversee assisted Cos) to support Private & PPP initiatives.

#### **4.6 Special support for MSMEs**

- MSME exporters should be given at least 1% additional incentive over and above other exporters.

## **5. Proposed schemes**

### **5.1 Interest subsidy scheme for exporting MSMEs**

An interest subsidy scheme should be introduced for MSME exporters.

Budgetary provision Rs 300 crores

### **5.2 Market Development and Brand Building for MSME exporters**

An overarching scheme with components can be launched for undertaking various export promotion activities for MSMEs viz. Brand Building, organizing Trade Fairs and Buyer-Seller Meets , Partial refund of overseas marketing expenditure (say 50%) to aggressively market their products in global markets in initial years, Support for establishing/ acquiring foreign companies, show rooms etc, Assistance to MSME Associations / Cluster Associations for setting up office in a focused market place abroad, ( 25% cost to be borne by MSMEs, 75% by Govt. for 3 yrs, max. Rs 1 crore), Undertaking product specific studies and Country specific studies, Creating awareness on labelling, packaging, bar-coding, standardization , new markets and new products, Strengthening of international marketing intelligence, Structured export support programme on the lines of Centre for the Promotion of Imports from Developing Countries (CBI), Netherlands , Identification of export worthy MSMEs ,etc . In addition to above following schemes are also proposed to be introduced: -

- (i) Assistance for establishing Export Development Companies (EDCs) floated collectively by at least 10 MSMEs or cluster units (of same/ similar products/customer segment/country specific). (25% cost to be borne by MSMEs, 75% by Govt. for 3 yrs, max. Rs 2.5 crore). Target 100 EDC,s in 12<sup>th</sup> FYP .-Rs 250 crores.
- (ii) Trading Houses (Private or PPP) for export of MSME products, especially labour intensive sectors with competencies of market development and international trade. [Export incentive @ 5% on purchases from MSMEs worth Rs. 5000 Cr] - Rs 250 crores

Budgetary provision Rs.1000 crores

### **5.3 Skill Development and Training for MSME exporters**

Under the scheme various kind of Training programmes / Seminars to create awareness amongst exporters regarding value added products and on improving competitiveness, Export procedures/documentation and incentives will be organised. In addition, MSME Associations and EPCs will be involved in Skill Development and Export capacity building activities for MSMEs. Export Related Business Skill Development Programmes with support of trained export consultants for providing a complete range of export related strategic services like gathering market intelligence, organizing professional and planned participation in trade fairs, undertaking

matchmaking services with potential international buyers, risk management, etc. will be introduced .

Budgetary provision Rs 200 crores

#### **5.4 Building Institutional structure for MSME exports**

5.4.1 Setting up of MSME- Export Promotion Institutes in major exporting States. Ten Institutes to be set up in the 12<sup>th</sup> Plan, which would co-ordinate/implement various export promotion schemes of the Central Government- Market development assistance programmes and Skill development assistance programmes as mentioned above.

Budgetary provision - Rs 25crores. The capital and manpower related expenditure would be in the range of Rs 20-25 crore per Institute excluding land acquisition. Land would be provided by the State concerned. Priority would be given to such States which would provide land.

5.4.2 Strengthening of Database on Exports from MSMEs with provision of financial assistance to EPCs/ IIFT to maintain up-to-date data. Assuming 20 EPCs /Institutions to be supported for capacity building. IIFT to co-ordinate creation and regular updation of database. A system of regular online transmission of export data from the exporting units may be established. The EPCs should have the task of updating the list of exporting MSMEs relating to their sector on a continuing basis. Further they have to pursue with the units for on-line transmission of export data on a regular basis. The overall compilation and analysis of the export data may be done at IIFT with input from the concerned EPC.

Budgetary provision –Rs.100 crores which would also include the infrastructure/manpower related expenditure including putting in place a system of on-line transmission of data and follow-up of non-responding units)

5.4.3 Setting up of a professionally managed apex Public Institution (like EXIM Bank, with capabilities to provide strategic guidance and oversee assisted Companies) to support Private & PPP initiatives of different types.

5.4.4. Establishment of Export promotion fund for taking care of various other export promotion activities like Special support for MSMEs exporters.

#### **6. Plan Budgetary Provisions**

An overarching Plan Budget of Rs 2500 crore is proposed to finance various activities for MSME export promotion (Concessional finance to exporting MSMEs, Market promotion, Skill Development and , Creation of a credible export data-base as discussed in the Chapter). The proposed plan Budget would also be for institution building (Export Promotion Institutes, Export Development Companies, Trading Houses,

Strengthening of IIFTs and Export Promotion Councils) to implement the proposed promotional and developmental activities to boost export from the MSME sector.

**Budgetary provisions - Rs.2500 crores**

<b>S.No.</b>	<b>Name of the scheme/programme</b>	<b>Budget (Rs. Crores)</b>
1.	Interest subsidy scheme for exporting MSMEs	300.00
2.	Market Development and Brand Building for MSME exporters	1000.00
3.	Skill Development and Training for MSME exporters	200.00
4.	Building Institutional structure for MSME exports	500.00
5.	Establishment of Export Promotion Fund	500.00
	<b>Total</b>	2500.00

Remarks:

1. Capital expenditure wherever figures in the proposed schemes will be under PPP mode with 25% on Govt. account and 75 % on private account.
2. Budgetary provisions do not include expenditure to be borne by other administrative ministries / departments, under different proposed schemes.

## Chapter 7

### ‘Technology Intensity in India’s Manufacturing Exports’

#### 7.1 Importance of technology content in manufacturing output and exports

Exports have been key to economic growth in most countries. With India’s potential technology strengths and with the focus shifting to newer products and newer markets in the Foreign Trade Policy (2009-14) announced by the Government of India, there is an excellent opportunity for India to evolve competitive advantage in technology led exports.

The average technology value addition in products currently manufactured by Indian industry is around 8%, very low compared even to other emerging developing nations. Indian manufacturing is rather “shallow”, with more focus on assembling and sales rather than design and development. Despite having one of world’s largest and fastest growing markets, the country captures only a very limited part of the product value chain, thus transferring the fruits of its progress to the economies which export their products/assemblies/sub-assemblies to India.

Industry’s investment in R&D is the main indicator to measure industrial innovation. In all the developed economies in the world, the share of industry’s investment in R&D is around 3/4<sup>th</sup> of the Gross Expenditure in R&D (GERD) whereas in India the picture is diametrically opposite. India’s GERD is already low (compared to innovation driven economies) at around 1% of GDP and the situation becomes alarming when we note that Industry’s share in R&D investment is around 1/4<sup>th</sup> and balance 3/4<sup>th</sup> is invested by the Government sector.

Traditionally, high technology exports was more or less concentrated in the industrialized countries. Recently, however, countries in East Asia have emerged as major high-tech exporters. China has emerged as the top country in the world in high technology exports. China’s share in the high technology manufactured exports increased from 27% in 2003 to 31% in 2009. During the same period, Germany’s share remained between 15 and 18 and that for USA, fell to 23% in 2009 from 31% in 2003. Brazil’s share remained in the range of 12% and 14% and Mexico’s was between 17% and 21%. India, on the other hand, has performed poorly in the high-technology exports market with its share remaining more or less stagnant between 5% to 8% during 2003-09, with a spurt of 8.8% in 2009, an abnormal year for international trade (Table 7.1).

**Table 7.1: HIGH TECHNOLOGY EXPORTS BY MAJOR COUNTRIES**  
**According to Percentage Share of Manufactured Exports (2003 to 2009)**

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



Country	2003(US\$)		2004(US\$)		2005(US\$)		2008(US\$)		2007(US\$)		2008(US\$)		2009 (US\$)	
	(%)		(%)		(%)		(%)		(%)		(%)		(%)	
China	107,543	27	181,803	30	214,248	31	271,170	30	338,988	30	381,345	29	348,294	31
Germany	1 02,889	18	131,838	17	137,547	17	154,757	17	155,922	14	182,421	14	142,449	15
USA	180,212	31	218,018	32	233,079	32	219,179	30	228,855	28	231,128	27	141,518	23
Korea Rep.	57,181	32	75,742	33	83,527	32	92,945	32	110,833	33	110,833	33	103,400	32
Japan	105,454	24	124,045	24	122,880	22	128,818	22	121,425	19	123,733	18	99,209	19
Singapore	71,421	59	87,742	59	105,078	57	124,138	58	105,549	48	120,345	51	97,207	49
France	58,338	19	84,871	19	89,873	20	80,525	21	80,485	19	93,209	20	83,828	23
Netherlands	49,548	31	55,211	29	85,758	30	89,210	28	74,389	28	87,058	22	58,449	24
UK	84,511	28	84,295	24	82,841	28	115,484	34	83,088	19	81,787	19	57,177	22
Malaysia	47,042	58	52,888	55	57,378	55	83,411	54	84,584	52	42,784	40	51,559	47
Switzerland	20,472	22	24,121	22	25,544	22	29,281	22	33,855	22	41,111	23	38,558	25
Mexico	28,734	21	31,832	21	32,282	20	35,732	19	33,314	17	41,201	19	37,353	21
Thailand	18,203	30	18,203	30	22,480	27	28,953	27	30,925	27	32,370	25	28,854	28
Ireland	27,578	34	30,239	34	-	-	31,840	34	28,720	28	28,808	28	24,738	25
Philippines	23,942	74	-	-	28,077	71	27,828	88	13,792	54	28,875	88	21,530	85
Hungary	9,831	28	14,158	29	13,045	25	14,915	24	19,349	25	20,990	24	17,443	28
Denmark	8,402	20	9,888	20	11,733	22	11,455	20	11,247	17	11,850	18	10,742	18
Israel	5,322	18	8,881	19	4,937	14	5,585	14	3,088	8	9,239	18	10,287	23
India	2,292	5	2,840	5	2,840	5	3,511	5	4,944	5	8,497	8	10,143	8.8
Finland	10,485	24	10,825	21	13,835	25	13,990	22	15,585	21	18,884	21	8,599	18
Brazil	4,505	12	5,929	12	8,007	13	8,428	12	9,295	12	10,572	12	8,315	14
Hongkong, China	1,845	13	80,109	32	94,808	34	1,788	11	2,370	19	2,184	22	1,849	31

Source: World Bank, *World Development Indicators 2010* (and various issues), Washington, DC (USA)

## 7.2 Export Intensity of Technology Intensive Manufacturing Industries in India: Insights from Firm and Product Level Analysis.

The role played by technology in determining the export competitiveness of Indian industries has been well researched [Narayanan and Bhat (1998)]. Most of them report a strong positive role for technological efforts in the decision to export as well as in boosting export intensity.

### 7.2.1 Firm Level Analysis

The export intensity of technology intensive manufacturing industries in India was first analyzed using the data collected from the Center for Monitoring Indian Economy (CMIE) Prowess 4.0 firm-level data of Indian manufacturing industries for the time period 1994-2009. The analysis was carried out by Dr. K. Narayanan, Professor, IIT, Bombay and Santosh Kumar Sahu. Narayanan and Sahu have created two samples, one: the full sample covering firms in manufacturing industries and sub-sample: covering only exporting firms. They have classified the industries based on the OECD technology classification into four groups. Further, they have classified the firms based on MNE affiliation. The study finds that the export intensity in Indian manufacturing industries follows an increasing trend. R&D intensity, disembodied technology intensity, embodied technology intensity are also following increasing, but fluctuating, trend from 1994-2009. The medium hi-tech and the low-tech industries are exporting higher compared to other industries groups. However over time the inter-group differences in export intensity of four OECD classifications of industries have decreased. The firms with multinational affiliation export more when compared to the wholly domestic owned ones.

First the authors look at the full sample [both exporting as well as non-exporting firms]. Further, following OECD technology classification of industries they have compared export and technology intensity among the OECD classifications. The classification of industry sectors in terms of low technology, medium-low technology, medium-high technology and high technology, by OECD is given in Table 7.2.

**Table 7.2: Technological Classification of Manufacturing Industry  
[OECD Classification]**

SL No.	OECD Classification	NIC-2008 Code	Activities
1	Hi-Tech	21	Pharmaceuticals, medicinal chemical and botanical products
		28	Computer, electronic and optical products
2	Medium Hi-Tech	20	Chemicals and chemical products

		27	Electrical equipment
		28	Machinery and equipment
		29	Motor vehicles, trailers and semi-trailers
		30	Other transport equipment
3	Medium Low-Tech	32	Other manufacturing (Jewellery, Bijouterie and Related articles)
		19	Coke and refined petroleum products
		22	Rubber and plastics products
		23	Other non-metallic mineral products
		24	Basic metals
4	Low-Tech	10	Food products
		11	Beverages
		12	Tobacco products
		13	Textiles
		14	Wearing apparel
		15	Leather and related products
		18	Wood and products of wood and cork, except furniture
		17	Paper and paper products
		18	Printing and reproduction of recorded media
		58	Publishing activities

### ***Technology Intensive Exports: Broad Trends***

Trends in exports, R&D and technology intensity of India's manufacturing exports based on firm level data are given in Table 7.4. Definition of terms is in Table 7.3.

**Table 7.3: Definition of variables**

Variable	Symbol Used	Definition
Export Intensity	EI	Ratio of export to sales
Research & development Intensity	RDI	Ratio of R&D expenses to sales
Disembodied Technology Intensity	DTI	Royalty, and technical fees payments in foreign currency / Sales turnover of the firm
Embodied Technology Intensity	ETI	Expenditure on import of capital goods / Sales turnover of the firm
Number of Observations (Full Sample)	24804	
Number of Observations (Sub Sample)	18410	

**Table 7.4: Trend in Export, R&D, Embodied and Disembodied Technology Intensity of Indian Manufacturing Industries from 1994-2009 (in %)**

Year	EI <sup>[1]</sup>	EI <sup>[2]</sup>	RDI <sup>[1]</sup>	RDI <sup>[2]</sup>	DTI <sup>[1]</sup>	DTI <sup>[2]</sup>	ETI <sup>[1]</sup>	ETI <sup>[2]</sup>
1994	12.84	17.35	0.25	0.31	0.58	0.38	98.89	28.73
1995	13.90	19.50	0.38	0.38	0.74	0.41	84.24	12.14
1998	17.32	23.08	0.38	0.43	0.52	0.28	123.19	44.42
1997	15.33	20.33	0.44	0.52	0.58	0.32	23.85	11.02
1998	18.23	21.33	0.45	0.53	0.73	0.47	231.98	259.25
1999	15.80	21.18	0.85	0.95	0.80	0.42	23.88	3.07
2000	18.23	22.30	0.28	0.33	0.88	0.58	13.82	3.41
2001	18.57	25.09	0.34	0.42	1.09	0.42	2.02	1.98
2002	17.27	22.90	0.38	0.48	0.74	0.48	1.48	1.58
2003	17.85	24.72	0.38	0.44	0.77	0.45	2.01	1.88
2004	18.29	24.39	0.81	0.52	0.80	0.49	8.25	8.10
2005	20.75	25.02	1.14	0.59	0.07	0.08	5.70	2.94
2008	18.58	25.02	0.75	0.54	0.58	0.42	32.30	4.13
2007	20.17	28.78	0.74	0.49	0.58	0.38	12.07	13.74
2008	19.38	25.83	0.59	0.53	1.29	0.40	732.83	4.01
2009	19.92	28.31	0.85	0.58	1.48	0.44	45.02	4.89
Total	17.83	23.58	0.55	0.51	0.79	0.40	99.08	23.13

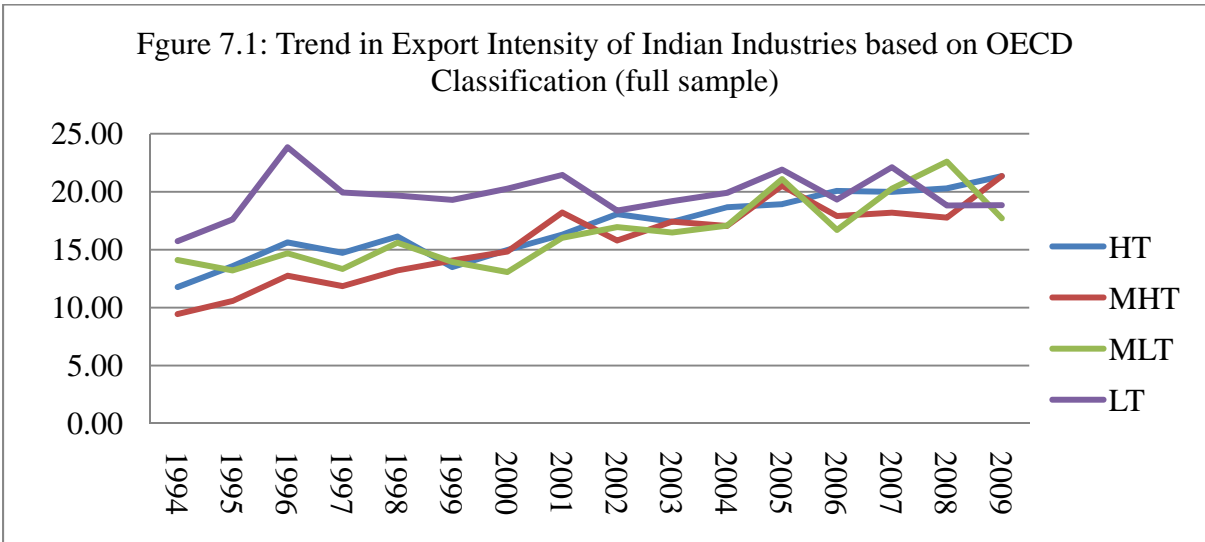
Note: Author's own calculation based on CMIE data, [1] refers to result based on full sample and [2] refers to result based on the sub-sample for firms those export.

The export intensity of Indian manufacturing sectors has shown an increasing trend during 1994-2009. However, year 2005 experienced the highest export intensity for Indian manufacturing industries. The mean export intensity of the full sample is calculated to be 17.83%. For the exporting firms the year 2005 experienced the highest export intensity and 1994 experienced the least export intensity.

**Table 7.5: Trend in Export Intensity of Indian industries based on OECD Classification full sample [%]**

Year	Hi-Tech [HT]	Medium Hi-Tech [MHT]	Medium Low-Tech [MLT]	Low-Tech [LT]
1994	11.77	9.44	14.11	15.74
1995	13.59	10.57	13.21	17.81
1998	15.83	12.78	14.89	23.83
1997	14.73	11.88	13.33	19.93

1998	18.13	13.21	15.80	19.87
1999	13.50	14.08	13.95	19.29
2000	14.98	14.84	13.07	20.28
2001	18.30	18.21	18.03	21.45
2002	18.07	15.80	18.95	18.38
2003	17.40	17.42	18.48	19.18
2004	18.88	17.05	17.07	19.90
2005	18.92	20.51	21.09	21.90
2008	20.07	17.91	18.70	19.33
2007	19.99	18.20	20.28	22.12
2008	20.30	17.77	22.59	18.81
2009	21.34	21.38	17.71	18.83
Total	17.28	18.10	18.85	19.85



Note: The horizontal Axis is year and vertical Axis is the Export Intensity in Percentage

From table 7.5 and figure 7.1 it can be seen that the export intensity is higher for the high-tech industries from 1994. However, gradually all the four major technology classification industries have improved exports and the inter-group difference have narrowed. The rise in export intensity is higher for the medium hi-tech industries. The mean export intensity for the hi-tech industries is calculated at 17.28%. For the medium hi-tech it is 18.10%, for the medium low-tech it is 18.85% and for the low-tech it is calculated to be 19.85%.

## 7.2.2 Product Level Analysis

Dr. Mohanty, Senior Fellow, RIS and Member of the Sub-Group analyzed the technology intensity of India's manufacturing exports at broad sector/product level. Manufacturing sector is defined in various ways in different international institutions such as WTO, UN (National Accounts Statistics), etc. For this Report, Dr. Mohanty has defined manufacturing sector as a derived sector which is defined as all economic activities in the economy other than agriculture and mining sectors. Under the harmonised system, irrespective of nomenclature, manufacturing sector covers HS Chapters starting from 28 and onwards.

In international trade, embodiment of technology in a product is important as a tradable commodity. Technology content in a product and its scope for absorption determines its price and terms of trade. Several product classifications are available in the literature to identify tradable products on the basis of its technology intensity. Using some of the important classifications existing in the literature, tradable products are classified into five categories based on their technology intensities<sup>1</sup>. They are primary, resource-based, low, medium and high technology intensive products.

It is discussed in the literature that technology intensive products enjoy better terms of trade because income elasticities for these products are very high. Experiences from global trade indicate that globally dynamic tradable products are mostly dominated by the technology intensive products, but some of these technology intensive products are globally dynamic but not all of them. Several globally dynamic products are also falling under the category of primary, resource intensive along with technology intensive products<sup>2</sup>.

Relevance of globally dynamic products in trade policy is important because of their sustained and voluminous demand in the global market over a long period of time. When similar products in domestic economy appear as dynamic, the export performance of the country is likely to be better off.

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<sup>1</sup> Trade items are classified into different product groups by Pavitt (1984) and OECD (1994) based on technology content. Lall (2000) brought certain improvements in the product classification using SITC Revision 2. Despite these changes in product classifications, the entire range of tradable products was not fully covered in various technology intensities. This gap is fully addressed in another study (Mohanty, 2003). In this report, all tradable products at 8-digit HS are classified into various groups of technology intensity.

<sup>2</sup> Engagement of emerging economies in global trade is becoming more intense in recent decades. Persistently rising demand for certain types of primary, resource-based and low technology products, by these economies have enable these products to remain as globally dynamic products despite lacking much technology content in them. Relevance of globally dynamic products in the context of Indian exports is elaborately discussed in the literature (GoI, 2009).

For an empirical analysis, a product can be identified as a globally dynamic, when its export growth rate is above that of overall export growth rate of the global economy/country over a period of time, and also it has a significant product share in the total exports of the global/country. The same definition is used for identifying dynamic products in India and the world economy.

Dynamic products are identified at 4-digit HS and technology intensity of products is not affected due to aggregation of products<sup>3</sup>. Taking into account data reported by *comtrade* using various nomenclature for different periods, data reported for the period 2003-2009 is used for identifying dynamic product<sup>4</sup>. Due to insufficient number of years and volatility of global exports on account of intermittent reoccurrence of exogenous shocks, growth and share analysis for identifying dynamic product at 4-digit HS are undertaken using export data at two points of time, i.e., 2003 and 2008.

### **Technology Intensity of India's Exports**

**Recent surge in India's exports has been on account of technology intensive exports, particularly by the medium technology intensive exports.** It may be noted that exports items are classified into five groups on the basis of technology contents in these products, and items falling under the category of medium and high technology are considered as technology intensive products. Since the mid-90s, technology intensive products maintained high growth in the export sector surpassing other sectors such as primary, resource-based and low technology intensive sectors.

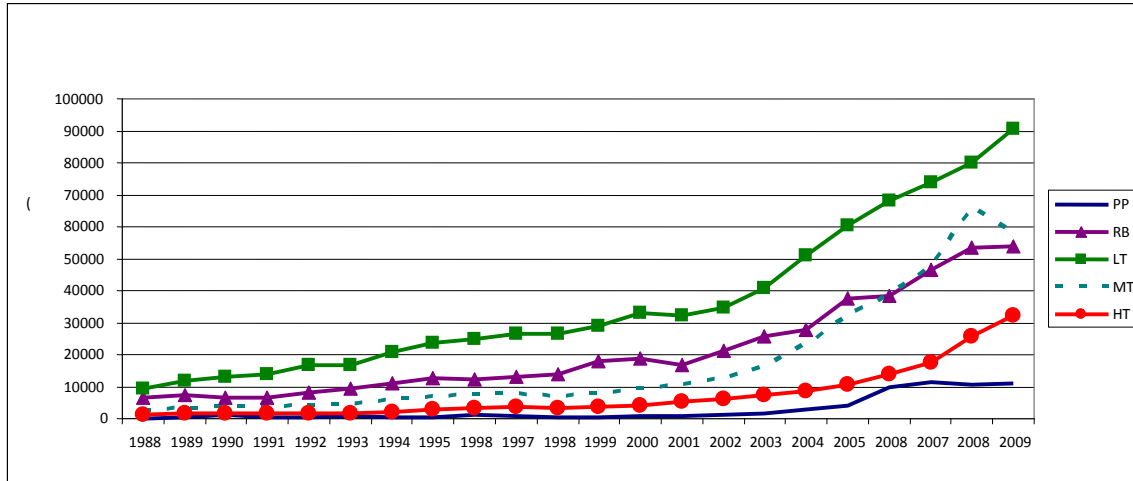
Export performance in various categories of technology intensity is shown in Figure 7.2. The profile of the Indian export sector indicates that export sector received major impetus since 2000, may be on account of complete recovery of the world economy from the 'Asian Economic Crisis'. Export performances of technology products have shown significant progress during the period 2000-08 (Figure 7.2).

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<sup>3</sup> It may be mentioned that exportable products at 8-digit HS are classified into various levels of technology intensities. For identifying dynamic export products for India, aggregation of product at the level of 'HS heading' is conducted but it has not affected technology classification of tradable products.

<sup>4</sup> This data series is in HS 2002 nomenclature.

**Figure 7.2: Technology Intensity of Indian Exports, US \$ Million**



**Source:** Comtrade Online, World Bank, Washington D.C.

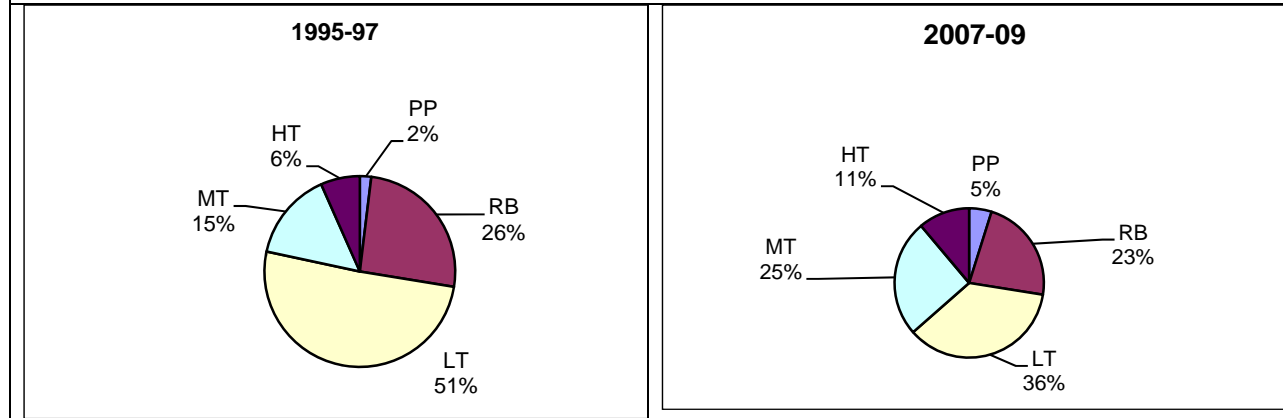
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uring the ‘global financial crisis’, slump in the world exports had an adverse impact on technology intensive exports, but such impacts differ significantly across different product segments of technology intensive exports. While the export performance in medium technology intensive exports registered a sharp decline, exports of high technology products were not affected much in 2009. Resource-based exports also suffered significantly due to global recession.

In the manufacturing exports, since the mid-90s, technology intensive exports are growing faster than other product groups such as primary, resource-based and low technology intensive. Technology intensive exports not only registered high growth performances as compared to other export sub-sectors, but also improved its export share in the manufacturing sector during the last one and half decades.



**Figure 7.3: Export Performance of Technology Intensive Sectors**



**Source:** Comtrade Online, World Bank, Washington D.C.

For example, export share of technology intensive sector (sum of medium and high technology intensive sector) has increased from 21% during sub-period I to 38.4% during sub-period III in a more persistent manner as shown in Figure 8.2. During the period 1995/97-2001/03, export growth rate of both medium and high technology intensive sectors were much higher than primary, resource based and low technology export sectors and similar performances were repeated during the period 2001/03-2007/09.

It is evident from Table 8.8 that low technology intensive exports have been the largest export earning sector in the manufacturing sector, but it is gradually replaced by technology intensive sector. If low technology sector continues to maintain low export growth in future, technology intensive sector is likely to dominate the manufacturing export sector.

**Table 8.8: Structure of India's Technology Intensive Exports**

Sl.	Technology Intensity Sectors	Exports (Mil \$)		Share (%)			CAGR (%)	
		1995-97	2007-09	1995-97	2001-03	2007-09	1995-97/2001-03	2001-03/2007-09
1	Primary Products	478	5492	1.9	1.8	4.9	5.0	43.1
2	Resource Based	8323	25842	25.8	27.1	22.7	8.9	15.9
3	Low Technology Intensive	12531	40780	50.8	48.2	38.0	8.2	14.8
4	Medium Technology Intensive	3700	28880	15.0	18.9	25.3	10.1	27.8
5	High Technology Intensive	1838	12808	8.8	8.1	11.1	11.8	25.9
	Total	24888	113180	100.0	100.0	100.0	7.9	19.4

**Source:** Comtrade Online, World Bank, Washington D.C.

In the technology intensive sector, exports of medium technology products are growing faster than the high technology products.

### Sectoral Performances of Technology Intensive Export

Empirical evidences suggest that any manufacturing trade sector may not be identified with a specific technology intensive sector because trade sector generates export from different technology intensive groups as shown in Table 8.7. For example, chemical sector exports products of primary, resource-based, low to high technology products to rest of the world. Depending upon structure of each sector and its technology intensity exports, trade strategy needs to be evolved.

Total export of technology intensive exports was over US\$45 billion in 2009. Exports of medium intensive technology constituted US\$ 29 billion, sharing nearly 84.2% of total technology intensive exports. It may be noted that coverage of medium technology intensive exports are more widely spread across various product groups than high technology intensive sectors. High technology exports mostly originated from four sectors viz. chemicals, machinery & appliances, automobile & transport and optical & cinematography, but sizable exports are confined to the first two sectors. Export growth rates in these two sectors have been robust during the period 2003-09.

**Table 7.7: India's Technology Intensive Exports by Sector in 2009**

Sec	Description	Exports (Mill US\$, 2009)					CAGR% (2003-2009)				
		PP	RB	LT	MT	HT	PP	RB	LT	MT	HT
6	Products of Chemicals	1	<b>8842</b>	85	<b>3488</b>	<b>5922</b>	18.8	17.7	31.9	20.0	20.1
7	Plastics & Articles thereof	27	1145	823	1584		-7.8	12.5	18.8	11.3	
8	Hides & Skins, Leather, etc.	18		1981			39.3		8.5		
9	Wood & Articles of Wood	7	141	4			19.8	19.8	10.8		
10	Pulp of wood or Fibres		295	481				13.5	18.2		
11	Textile & Textile Articles	<b>1031</b>	134	<b>18539</b>	2209		57.9	41.4	8.4	14.8	
12	Footwear, Headgear,			1893			0.0	0.0	14.1	0.0	

	etc.										
13	Articles of Stone & Cement		1152	198	32		0.0	12.7	8.3	12.5	
14	Gems & jewellery	<b>1853</b>	<b>17072</b>	<b>13874</b>			139.4	11.5	40.4		
15	Base Metals & Articles	<b>2480</b>	33	8112	<b>3788</b>		23.7	14.4	10.8	22.8	
16	Machinery & Appliances		51	818	<b>7935</b>	<b>8181</b>		47.8	9.9	23.3	34.7
17	Automobile & transport, etc.			3	<b>9520</b>	1089			21.9	34.0	58.0
18	Optical & Cinematography			42	340	929			25.3	11.4	19.5
19	Arms and Ammunition			2	15				8.5	37.2	
20	Misc. Manufactures		12	817	82			80.8	15.7	44.7	
21	Works of art, etc			205					-9.4		
	Total Manufactures	5418	28875	45238	28971	18121					

**Source:** Comtrade Online, World Bank, Washington D.C.

**Note:** PP refers to primary products, RB to resource-based, LT to low technology intensive, MT to medium technology intensive and HT to high technology intensive products respectively.

Though several sectors export similar type of technology intensive products, performances differ across sectors, both in terms of volume and growth performance. India's exports of medium-intensive technology products are distributed across ten HS Sections as presented in Table 8.7, but bulk of such products are sourced from chemicals, base metals, machinery and automobile sectors. In most of these sectors, growth rates of medium technology-intensive exports are much higher than overall export growth rate of manufacturing sector during the period 2003-09. The sectors performing better in terms of export growth and share are chemicals, base metals, machinery & mechanical appliances and automobiles.

Contribution of low technology intensive exports in the total exports has been the largest one among various technology intensive export sectors in India. Low technology intensive exports are sourced from all 18 manufacturing HS Sections (Table 7.7), and bulk of its exports is originating from two sectors namely textile and gem & jewellery. These two sectors share 71.2% of total low technology intensive exports of India. Relatively poor performance of the low technology intensive export segment is because of low growth in the textile sector during buoyancy in the global economy. Impressive growth performance of the gems and jewellery

sector in low technology intensive segment has improved overall performance of the low technology intensive export sector.

### ***Direction of Technology Intensive Exports***

India's export destinations are diversified so far as its technology intensity of exports are concerned. Among the top ten countries in each of the five technology intensity of exports, India's exports are targeted towards both developed and developed countries.

Therefore, India has large export market in developing countries for both high technology intensive and primary products, whereas developed countries are largely for India's low technology intensive products.

### **7.3 Industry Case Studies in India**

The Sub-Group explored the export competitiveness of select high technology sectors (auto, chemicals, pharma, non-electrical machinery industry, electronics, mechanic tool industry) in India's manufacturing sector. It draws heavily from a DSIR sponsored study of RIS (Research and Information System) which was later published in a book titled *International Competitiveness and Knowledge based Industries in India* edited by Nagesh Kumar and K J Joseph (Member of the Sub-Group) and published by Oxford University Press in 2007. The Sub-Group also reports the results of a preliminary analysis of the export behavior in terms of technology intensity of SMEs using data obtained from the census of small scale industries.

#### ***Auto Industry***<sup>5</sup>

The study finds that despite being highly dynamic, the export potential of India's auto industry is far above the observed export performance. The Indian auto industry needs to capitalize on the high design, engineering and IT capabilities which are available at competitive rates and needs to concentrate on building the 'made in India' brand.

The government needs to further encourage the in-house, collaborative and sponsored R&D in the auto sector and the setting up of independent auto designing & styling firms.

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<sup>5</sup> Draws from Singh Neelam (2007) Kumar Nagesh and K J Joseph (eds) *International Competitiveness and Knowledge based Industries in India*, Oxford University Press.

Technology tie-ups help indeed; however, even for exploring foreign technology and unbundling capability, the in-house R&D is a must. Greater government-industry consultation and coordination is recommended for the technology-related matters. Technical advancement of the related fields like machine tools and die-making is crucial too. The SIAM/ MOHI&PE Proposal for Upgradation of Testing Facilities should be implemented at the earliest. Steps should be taken to move quickly towards mutual recognition of standards and eventually for uniform standards across countries.

There should be special incentives for component exports to OEMs, as these exports involve stringent quality norms while improving the firm's brand equity, thereby enhancing exports in future. The study recommend setting up of show casing centres for auto component export items especially from S.S.I. units, as in China, where the potential importer can have a good idea of the range/ price/ source of product. Such centres may be located close to the major auto component clusters in India, and ACMA can do the required networking. Since there are a large number of components, for exports we ought to select niche items for greater emphasis and encouragement; also geographically we need to be focused.

FTAs need to be concluded with more prosperous regions to enhance vehicle exports. The auto component producers must have a level-playing field in terms of taxes and duties on raw materials; also the rules of origin should be in place. At the same time ACMA has to ensure some restructuring, like technological upgradation by firms to be prepared for FTAs/ PTAs.

In view of the 'proximity (to OEMs) need' for bulky and critical components, the shift to modularisation and tierisation, and the rules of origin/ implicit local content requirements in many countries, it is imperative that prominent Indian component players now move their focus to overseas operations through production establishments and sales/ distribution offices abroad. Given these three factors, at this stage, overseas local production is not likely to happen at the expense of exports from India. In case of vehicles the rules of origin, the buyer country's usual preference for local assembly (over imports) and the bulkiness of vehicles (specially CVs) are important considerations. Thus compared to the direct export of vehicles, having overseas production centres may be a better mode of tapping certain foreign markets vigorously.

A handful of firms both in the vehicle and component sectors have created/ acquired overseas production facilities, mostly in the last few years; some have distribution/ sales centres too. The instances are still rare. The government policy thus needs to be re-oriented to support and encourage setting up of overseas production and/ or distribution operations centres (and even R&D centres), largely 'infant activities' in India at this stage. One such step can be a special investment tax credit scheme for business fixed investment abroad in plant & equipment and buildings (also in case of acquisitions). For promoting outward FDI some specific geographical area can be chosen for 2-3 years for concerted focus (as under the MDA schemes); subsequently

some other area(s) can be selected as the focus area. The government should also facilitate the development of synergies between component and vehicle manufacturers for overseas production. These two sets of manufacturers need to make overseas geographical moves in cohesion. SIAM and ACMA should also work together to coordinate this.

### ***Chemical Industry***<sup>6</sup>

In order to be internationally competitive, chemical manufacturers need to be either innovator or be cost competitive. To follow either of the strategy in the chemical industry, one needs to have technological capabilities. For innovation, the focus needs to be not only on developing new product or process, but also to develop technologies.

As regards chemical research, India spends as little as 1% of the USA's budget. Technology leadership can not be achieved, even in strategic areas with such low level of expenditure on R & D. Government, Industry and Institutions have to wake up and move boldly.

Any investments by a corporate in Research & Development should be covered under priority sector lending and therefore allow the Corporate to have access to low cost funds. This shall promote further research in the Chemical/pharmaceutical industry and shall help in increasing the research and development activity in the Country.

It is suggested that any R & D capital equipment imports should be financed at LIBOR linked rates for tenor ranging from 7 to 10 years. Any local procurement of R & D capital equipments should be financed at Bank rate for tenor for the tenor of 7 to 10 years. Government should also identify or assign the special status to some designated banks for lending for such R & D activities. This would facilitate the early disbursements at right time and at right cost.

Funding modernization should be given priority sector status for lending institutions. If import duties are to be brought down, the cost of funds should also not be higher as compared to international players. This would mean that the transactional cost must be brought down to 1% so that the cost of borrowing equal to international LIBOR + Cost of inflation / rupee depreciation + transactional cost of 1%.

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<sup>6</sup> Draws Kaul Vijay Kumar (2007) in Kumar Nagesh and K J Joseph (eds) *International Competitiveness and Knowledge based Industries in India*, Oxford University Press.

## ***Pharmaceutical Industry***<sup>7</sup>

Analysis of the export competitiveness of firms in pharmaceutical industry highlighted the role of firm specific advantages as well as that of government fiscal incentives. Among the firm specific factors, own R&D efforts emerged as one of the prime factors influencing export competitiveness. Furthermore, it was found that R&D efforts involved in the modification in process technology were more relevant than the introduction of new products, reflecting the importance of the pursuit of improvement in processes in the industry's technological trajectory. It was observed that the export behaviour differed across different size-groups. While large firms were competing on the basis of their own R&D efforts, medium firms followed a different strategy. Due to lack in the depth of their R&D they imported newer technologies and absorbed them using their R&D efforts to acquire competitiveness. Small firms were competing on the basis of lower costs. Brand promotion and marketing expenditures were not found to be related with the export performance of firms but that could be because these expenditures might not capture the effects of these factors.

The government should focus on export promotion in the TRIPs driven environment. If multinationals aggressively market patented drugs in India, Indian companies can enjoy strong sales in the opposite direction by exporting generics. For this, research and development is an important area that needs attention. ***R&D spending among most Indian drug firms still averages less than 2% of the total turnover, compared to 17% in the US. Many believe that strengthened patent protection is expected to encourage foreign firms to locate their R&D in India due to sizeable pool of low cost and technically skilled labour.*** This will set in motion a range of other dynamics such as licensing, co-marketing and joint ventures, generating multiplier effects that benefit local drug manufacturers.

Indian embassies across the world may collect information on issues such as guidelines for licensing of pharmaceutical companies; registration procedures for medicines; local production level; demographic data; and healthcare systems, health indicators and prevalent disease patterns. This information should be made readily accessible through internet. Many firms (92% firms) believed that Indian embassies abroad can play a very important role in information dissemination.

## **Non-electrical machinery industry**<sup>8</sup>

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<sup>7</sup> Draws from Agarwal Aradhna (2007) in Kumar Nagesh and K J Joseph (eds) International Competitiveness and Knowledge based Industries in India, Oxford University Press.

Analysis of the non-electrical machinery industry showed an outward export orientation by and large found lacking among firms in the sector.

The study called for a number of initiatives at the firm level to take advantage of the extremely challenging as well as rapidly changing global environment and increase their prospects for growth as well as exports which include focus on technology upgradation. In India, in the non-electrical machinery industry, firm level innovation is low and most firms source technology from abroad. To be internationally competitive, firms need to adopt the latest product and design technologies. Larger firms in the industry need to allocate more resources for in-house R&D in product/design development.

Research and training institutes promoted by industry level associations (e.g IMTMA Design Institute) are important since many small and medium firms lack the resources for in-house R&D and training facilities. Such institutes can therefore provide strong support to industry in meeting their requirements.

## **Electronics<sup>9</sup>**

India's current competitiveness in the international IT market may be undermined by the emergence of new players like China which has solid hardware base and increasing software base. Hence, not only for sustaining the competitiveness of the software sector, but also for creating additional sources of employment and income generating opportunities in the country, India can ill afford to bear with a stagnant IT hardware (electronics) sector. At the same time, being a signatory to Information Technology Agreement of WTO, it is important that the industry equip itself to meet the import competition and enhance its export competitiveness.

The central finding of the analysis is the prominent role that technology behaviour of firms in the form of in-house R&D and embodied technology import (import of capital goods) along with foreign participation play in influencing the inter-group variation in the observed

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<sup>8</sup> Draws from Suresh Padma (2007) in Kumar Nagesh and K J Joseph (eds) *International Competitiveness and Knowledge based Industries in India*, Oxford University Press.

<sup>9</sup> Draws from K J Joseph (2007) in Kumar Nagesh and K J Joseph (eds) *International Competitiveness and Knowledge based Industries in India*, Oxford University Press.



performance. It was also found that access to imported components and spares also has crucial bearing on the performance. However, if the firms resort to a strategy wherein it doesn't adopt the "technology-FDI package" in its totality, the outcome is likely to be less than optimum (defined as both high export and production). Thus the second group of firms behaved in similar manner to the first group of firms with respect to dis-embodied technology import and foreign participation and they could achieve higher export growth but not high production growth. Hence the strategic approach towards increasing the performance of firms belonging to this group might entail inducing them to invest more in R&D, enable them to import needed capital goods, components and spares. This in turn calls for policy measures that facilitate import of capital goods. Given the fact that many of the world leaders are phasing out their electronics production there is an opportunity for Indian firms to buy up such production plants leading to substantial reduction in fixed cost. The policy needs to facilitate such imports as they can enhance the cost competitiveness.

When it comes to the third category of firms, while they behaved the same way as the first group with respect to disembodied technology import, they behaved differently in terms of foreign participation and embodied technology imports. The result has been that while they fared well in the production front they lagged in exports making them domestic market oriented. If the estimates of the model is any indication, the strategic approach towards enhancing the performance of such firms *inter alia* include inducing them to invest more in embodied technology imports, to help modernization, and joining hands with the foreign firms to get access to the export market. Also there appears to be the need for intensifying the in-house R&D efforts.

### ***Machine Tool Industry***

India is presently ranked 8<sup>th</sup> in the world as regards consumption of machine tools and 19<sup>th</sup> in the world in terms of production. The low level of exports from India is due to the large domestic market which absorbs almost the entire production. The lack of volume production on global scales makes Indian machines non-competitive against countries like Taiwan, Korea, and lately China in standard products. Technology gaps have played a role in making Indian machines unattractive to foreign buyers although in some cases prices have been competitive.

## **7.4 Enabling Mechanism for MSMEs**

Making use of the data from the Census of Small Scale Industries (Registered and Un-registered) for the year 2000-01, Prof. K.J. Joseph, CDS, mapped the distribution of export, output and employment across industries according to the technology level. As per the OECD classification industries are divided into four categories - high technology, medium high technology, medium low technology and low technology.

The following observations were made from the census data (see Table 7.8):

- While, the low technology industries accounted for a little over 50% of the total output in the small scale sector their share in export by the small scale sector is as high as 78% and employment over 83%.
- When it comes to medium low technology and medium high technology and high technology the export share is found lower than the output share with substantial difference in case of medium high and medium low technology.
- Bulk of India's export and employment is from the medium technology and low technology
- For the small scale industry as a whole, the export intensity was found to be six per cent and it is found to be varying within and between industries of varying technological levels.
- While the export intensity is found to be the highest (9%) in case of low technology industries, followed by high technology industries (4.7%)
- Export intensity is at a much low level in case of medium high (2.5%) and medium low technologies (2.9%).

**Table 7.8: Distribution of output, export and employment across different industries in the SSI Sector**

NIC		Output share (%)	Export share (%)	Employment share (%)	Export intensity(%)
2423	Pharmaceutical	2.08	1.88	0.85	5.34
300	Office, accounting & Computer machinery	0.25	0.02	0.07	0.38
321	Electronic valves & tubes	0.48	0.29	0.18	3.80
322	TV & radio transmitters	0.27	0.10	0.05	2.25
323	TV & radio receivers	0.19	0.09	0.04	2.75
331	Medical appliances	0.34	0.45	0.15	7.80
332	Optical Instrument	0.08	0.02	0.08	2.25
333	Watches & clocks	0.08	0.04	0.03	4.37
353	Aircraft & Spacecrafts	0.02	0.09	0.01	27.70
<b>Total high tech</b>		<b>3.75</b>	<b>2.95</b>	<b>1.28</b>	<b>4.71</b>
241	Basic chemical	2.19	1.27	0.74	3.49
242*	Other chemical products	3.88	2.17	2.89	3.55
243	Man-made fibres	0.11	0.10	0.03	5.58
291	General purpose mach.	1.87	0.82	0.92	2.84
292	Special purpose mach.	3.83	0.53	1.43	0.83

293	Domestic appliances	0.50	0.10	0.22	1.23
311	Electronic motors etc	0.78	0.44	0.31	3.49
312	Electricity distribution & control appliances	0.50	0.18	0.23	2.12
313	Insulated wires & cables	0.49	0.23	0.14	2.75
314	Accumulators, cells etc.	0.10	0.01	0.18	0.34
315	Electronic lamps etc.	0.18	0.17	0.11	5.53
319	Other electrical equip.	0.52	0.24	0.22	2.70
341	Motor vehicles	0.05	0.00	0.02	0.43
342	Bodies for motor vehicle	0.22	0.00	0.19	0.04
343	Parts for vehicles	1.32	0.83	0.45	2.88
352	Railways & tramways etc,	0.07	0.00	0.03	0.39
359	Transport equip. n.e.c.	1.04	0.43	0.38	2.47
<b>Total Medium high technology</b>		<b>17.42</b>	<b>7.33</b>	<b>8.47</b>	<b>2.52</b>
231	Coke-oven products	0.41	0.05	0.25	0.78
232	Refined petroleum prod.	0.32	0.02	0.07	0.28
233	Refined petroleum prod.	0.00	0.00	0.00	0.00
251	Rubber products	1.80	0.80	0.79	2.99
252	Plastic products	4.01	1.08	1.77	1.82
281	Glass & glass products	0.35	0.21	0.47	3.54
289	non-metallic mineral	4.87	1.71	11.48	2.19
271	Basic iron ore & steel	5.09	0.88	1.05	0.78
272	Basic & non-ferrous metal	1.49	1.37	0.78	5.54
273	casting of metals	1.33	0.43	0.51	1.93
281	Structural metal	3.01	0.27	4.38	0.55
289	Fabricated metal etc	5.93	7.20	5.38	7.29
351	Building & repair of ships	0.02	0.00	0.02	0.23
<b>Total Medium low technology</b>		<b>28.21</b>	<b>13.80</b>	<b>28.89</b>	<b>2.93</b>
151	Prod. & process of metal	5.74	9.44	2.28	9.87
152	Dairy products	0.98	0.04	0.78	0.22
153	Grain mill products	13.85	3.31	12.89	1.48
154	Other food products	3.88	3.92	8.47	8.08
155	Beverages	0.87	0.20	0.88	1.78
180	Tobacco products	1.32	0.94	2.98	4.29
171	Spin, weaving of textiles	3.12	1.97	3.81	3.79
172	Other textiles	2.10	4.83	4.73	13.82
173	Knitted & crochet fabrics	3.23	21.32	1.13	39.53
181	Wearing apparel, not fur	3.22	14.27	3.87	28.55
182	Dressing & Dying of fur	0.15	0.00	0.19	0.19

191	Leather	1.29	5.58	0.89	25.89
192	Footwear	1.20	3.85	1.85	19.31
201	Saw milling of wood	0.89	0.04	1.07	0.32
202	Wood, cork & straw	1.81	0.51	7.14	1.91
210	Paper & paper products	1.55	0.32	0.88	1.23
221	Publishing	0.21	0.00	0.11	0.07
222	Printing	1.93	0.13	2.43	0.42
223	Reprod. Recorded media	0.01	0.00	0.02	0.00
381	Furnishing	2.40	0.48	7.25	1.14
389	Manufacturing n.e.c.jewellery	1.88	4.79	2.84	17.10
<b>Total Low technology</b>		<b>50.81</b>	<b>75.93</b>	<b>83.38</b>	<b>9.00</b>

**Source:** Census of Small Scale Industries (Registered and Unregistered: 2000-01), calculated by Prof. K.J. Joseph, Centre for Development Studies (CDS)

### **Incidence of Exports**

- For the small scale sector as a whole only 0.58 per cent of the firms are found to be engaged in export. Hence the low export intensity of SSI might be on account of the low incidence of exports among firms.
- In this regard the firms in high technology industries perform better since the proportion of firms engaged in export is much higher (2%). The corresponding shares for medium high (0.81%) medium low (0.78%) and low technology (0.52%) are much lower. (Table 8.9)
- Notwithstanding the low export intensity for the SSI as a whole, in case of exporting firms export intensity is fairly high.
- Export intensity of exporting firms is found increasing as the level of technology declines such that the highest export intensity was observed in case of low technology industry (87.3%) where as that of high technology is (25%) and the average being 54%.
- It is observed that, in all the four technology categories firms that import technology are found having higher export intensity indicating the catalytic role that technology import plays in promoting it imports.
- Firms that collaborate with domestic R&D institutions are found to be having higher export intensity especially in high technology industry and medium low technology industries.

**Table 7.9: Export and technology transfer behavior**

	High tech	Medium High tech	Medium Low tech	Low tech	Total
No. of exporting firms/ Total No. of firms	1.98	0.81	0.78	0.52	0.58
Export intensity	24.98	30.80	37.28	87.31	53.89

Export intensity with technology import	25.32	37.58	59.90	57.52	51.90
Export intensity with domestic collaboration (firms)	14.80	29.91	23.42	57.40	43.83
Export intensity if collaborate with domestic R&D institution	20.15	15.18	29.55	54.89	34.91
Export intensity if None	30.21	34.52	41.48	71.73	59.79
Export intensity if 1 & 2*	18.82	31.52	30.15	57.43	45.58
Export intensity 1&3*	21.82	21.45	37.44	58.04	41.12
Export intensity 2&3*	17.98	23.98	25.78	58.82	40.81
Export intensity 1,2&3*	19.35	25.73	29.97	58.78	42.5

\*Note: Source of Technical Know-how: 1=Abroad, 2=Domestic Collaborating company/unit, 3=Domestic R&D institution/specialized agency/organization and 4=None

**Source:** Census of Small Scale Industries (Registered and Unregistered: 2000-01), calculated by Prof. K.J. Joseph, Centre for Development Studies (CDS)

## 7.5 Major Drivers of Technology Intensity in Indian Exports

Some of the policy instruments which will lead to higher technology content in Indian exports include, FDI, technology transfer, fiscal incentives, outward FDI (OFDI), imports and IPR Regime.

### (i) *Foreign Direct Investment (FDI) and Technology Transfer*

The results of R&D undertaken in developed countries are transferred globally through many channels, perhaps the most important of which is foreign direct investment (FDI)—investment projects whose ownership and control lie in the hands of overseas investors.

A basic tenet of the theory of the multinational firm is that such firms rely heavily on their technology-based assets and well-established brand names to offset the logistical disadvantages of operating in multiple countries as well as to successfully compete with local firms that are usually more familiar with the local environment. Multinationals also engage in limited technology transfer to firms that either supply them or buy their products.

An example can be found in Mexico's automobile industry. After the North American Free Trade Agreement (NAFTA) was ratified in 1992, U.S. car companies set up manufacturing plants in Mexico. Within five years this had led to hundreds of domestic producers of car parts

and accessories springing up<sup>10</sup>. United States and other multinational corporations transferred technology to these Mexican suppliers, who, as a direct result, gained expertise in industry best practices and quality control. The Mexican story is by no means unique. A rich body of evidence indicates that Mexico's experience has been replicated across the world<sup>11</sup>.

According to Sahoo<sup>12</sup> Foreign Direct Investment (FDI) has contributed in a big way in improving export competitiveness and volume of exports particularly technology intensive manufacturing exports in China and Singapore. India has also made earnest efforts in recent years to market itself as an attractive destination for FDI not only to acquire advanced technology but also to enhance its export potential and export competitiveness with emphasis on technology intensive exports. Further, the co-integration and causality analysis with an Error Correction Model (ECM) reveals that there exists a bi-directional causality indicating a positive relationship between FDI and manufacturing exports, in both long- run as well as in short- run, in India. According to Feinberg and Majumdar<sup>13</sup> there were technology spillovers from FDI in the Indian pharmaceutical industry.

### **Current Policy on Technology Transfer: Automatic Route for Technology inputs/brands**

With the issue of press note 8 (2009 series) dated 18<sup>th</sup> December, 2009, the Government liberalized payment of royalty, lump sum fee for transfer of technology and payments of use of trademark/brand-name. These payments were brought under the automatic route, i.e., without any requirement for approval of the Government of India, subject to Foreign Management (current account transaction), Rules 2000, as amended from time to time. However, till 31<sup>st</sup> March, 2011, Government approval was still required for such payments, if the foreign collaborator had any existing tie up, in the 'same field', on or prior to 12th January, 2005. Subsequently, this condition has also since been dispensed with after issue of 'Circular 1 of 2011- Consolidated FDI Policy' dated 31<sup>st</sup> March 2011. Therefore, all payments of royalty, lump sum fee for transfer of technology and payments of use of trademark/brand-name are now under the "Automatic Route".

#### **(ii) Fiscal Incentives**

Import for R&D is given special exemption from general import restriction by many developing countries. Unlike the patent regime, fiscal incentives are not uniformly applicable to

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<sup>10</sup> Moran 1998

<sup>11</sup> Ibid 20

<sup>12</sup> Pravakar Sahoo, 2004. "FDI and Technology Intensive Exports in India," *The IUP Journal of Applied Economics*, IUP Publications, vol. 0(3), pages 25-38, May.

<sup>13</sup> Feinberg S., Majumdar S., 2001., "Technology Spillover from Foreign Direct Investment in the Indian Pharmaceutical Industry., *Journal of International Business Studies*, Vol-32.,No-3.,p.p 421-437

all industries/firms/ownership groups. Very often domestic producers have been given preference over their foreign counterparts. Discrimination has also been made between small-scale firms and large-scale firms within a particular industry in respect of fiscal incentives<sup>14</sup>.

Taking a specific case study of pharmaceutical sector, Ray (2003) observed that fiscal incentives, mostly granted ex-post, have been utilised by firms engaged in R&D, which have given them some financial benefits (liquidity). But incentives have never been a consideration in setting up R&D units or a determinant of the extent of R&D allocation made by private sector units. Large firms appear to have benefited more from the ex-post incentives. Small and medium firms (especially the research based biotech firms) favour ex-ante incentives to provide better access to credit, capital and infrastructure. Ex-ante incentives, granted at the time of R&D investment, would perhaps help new entrants more than the incumbents and thereby enhancing competition. The exact amount of incentives enjoyed by firms is often difficult to ascertain as firms (especially the large and established ones) tend to under-report. This could perhaps be due to misuse of incentives.

On the other hand, for the food-processing sector (the author's second case study), the major problem behind the successful R&D and the growth of the sector is the age-old regulation structure of the Ministry of Health pertaining to the safety and quality specification of processed food. The government regulatory mechanism has not been able to keep pace with the changing nature of Indian food processing industry in recent times. The regulations neither conforms fully to international specification nor do they provide any incentives for local R&D. In fact by restricting the use of artificial calorie-free sweeteners (in place of sugar) and other modern ingredients, it is allegedly discouraging firms from undertaking R&D towards building up of adaptive technological capabilities. It penalises the first moving firm and therefore discourages competitive R&D in this sector. The bottom line is that changing the regulatory norms for food safety has become essential to encourage R&D in processed food.

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<sup>14</sup>Ray A. S., (2003)., A study of R & D incentives in India : Structural Changes and Impact (Incorporating Case Studies of Pharmaceutical and Food Processing),A Project Report, sponsored by Department of Science and Technology, Govt. of India

## Selected List of Incentives Available in Different Countries

INCENTIVE	COUNTRIES
Tax Credit	Australia, Brazil, Canada, France, Ireland, Italy, Japan, Netherlands, South Africa, South Korea, Spain, US
Tax Deduction	Australia, Canada, France, Germany, India, Italy, Malaysia, South Africa, Sweden, UK, US
Grants	Ireland, New Zealand, South Africa
Investment Allowance	Germany, India, Indonesia, Malaysia
Depreciation Allowance	India, Norway, Sweden, Switzerland, Taiwan, UK
Public-Private Partnership	Brazil, Chile, Germany, India, Indonesia, Malaysia, Mexico, Philippines, Singapore, South Korea, UK, US
Information Networking	India, Malaysia, New Zealand, South Africa

**Source:** Ray A. S., (2003)., A study of R&D incentives in India : Structural Changes and Impact (Incorporating Case Studies of Pharmaceutical and Food Processing), A Project Report, sponsored by Department of Science and Technology, Govt. of India

### (iii) *Globalisation of R&D and FDI in R&D*

The Global Innovation Networks appears to have emerged as a key competitive strategy of firms from developed countries and that it offers a potential opportunity for participating firms from the developing countries.

A cross-section analysis of R&D behavior of firms in India in 2002 (post-WTO year) as compared to 1991 (pre-WTO year) has revealed the increasing interest of MNEs in locating R&D activities in India (Subrahmanian and Subramanian, 2008)<sup>15</sup>. The quantitative analysis (Kumar N, 2008)<sup>16</sup> of the factors explaining the locational pattern of overseas R&D by U.S. and Japanese MNEs suggests that countries that are characterized by a large scale technological

<sup>15</sup> Subrahmanian K.K. and Subramanian T.K (2008), Economic Reforms and R&D in Indian Industry, ICFAI Journal of Industrial Economics, 3(2)

<sup>16</sup> Kumar, N., and J. Pradhan. 2007. "Knowledge-based Exports from India: Recent Trends, Patterns and Implications", in N. Kumar and K. J. Joseph, eds., *International Competitiveness and Knowledge-based Industries in India*. Delhi: Oxford University Press.



activity and abundant cheap but qualified R&D manpower are most likely to play host to MNE's overseas R&D activity.

Most recent studies have shown that participation in global technology networks is critical for enhancing export competitiveness of high-tech firms and in enhancing the technological intensity of late industrializing countries. While FDI per se may not typically result in higher exports (econometric studies have shown that once other factors are controlled for, foreign equity may not result in higher exports), the ability of local firms to participate in global innovation networks is critical. Support for training, quality up-gradation, IPRs etc. need to be seen in this context. Often the ability of firms to export (especially high-tech ones) are not able to exploit export opportunities because they do not have the right organizational practices in place (other than quality). For example, absence of supply chain management affects the productivity and competitiveness of firms. Often, inability of firms in this regard emanates from constraints on adopting ICT in their firms. Thus constraints on ICT adoption (power, cost of software and hardware, lack of modularization of software, non-appropriateness of software for Indian realities and so on) adversely affect the ability of high-tech firms to exploit export opportunities.

It is evident that software is an area that attracted maximum FDI in R&D that accounted for nearly 23% of the cases. If we include IT hardware and communication, the share increases to over 39%. This evidence tends to suggest that the India's IT sector that is known during the early years for its comparative advantage in operating in the low end of the value chain of software is moving up the value chain. In addition, the relatively vibrant sectoral innovation system in India's IT and software sector evolved over the years should have been instrumental inducing foreign firms in the IT and software sector to establish their R&D units in India.

**(iv) *Outward Foreign Direct Investment (OFDI)***

During the recent past Indian firms are investing abroad which gives them access to wider market, intangible assets like technology which in turn is likely to help enhancing their exports in general and technological intensity of exports in particular.

The number of approved Indian Joint Ventures (JVs) and Wholly Owned Subsidiaries (IJVs/WOSs) as on end of February, 2008 stood at 8820, nearly 41-fold increase from the number of IJVs/WOSs as on 1st September 1988 at 208. If we look into the regional distribution of this investment during the first wave, we see that destination of greater part of these investments is in developing countries like Africa, South Asia and Latin American countries. However, during the second and third phase, we see that investments from Indian firms are directed towards the developed countries like Europe, North America and other developed nations.

**Table 7.10: Three Phases of OFDI in India- Geographical Destination**

Period	Developing nations	Developed nations
Phase-I (1975-1990)	72	28
Phase-II (1990-2001)	45.9	54.1
Phase-III (2001-2007)	22.5	78.4

**Source :** Pradhan (2008)

Table 7.10 shows that over the years developed countries are becoming the preferable choice of destination for the Indian firms to invest.

There has also been change in the sectoral composition of the Indian OFDI deals. Apart from the traditional motives like access to wider market, raw material, OFDI deals are also made to develop trade-supporting networks, to gain access to intangible assets, managerial expertise etc (Pradhan and Abraham, 2005)<sup>17</sup>.

(v) ***Other Drivers (viz. Import, IPR Regime etc.)***

International trade has long been considered as a channel of technology transfer. The most influential test of this hypothesis is based on open economy versions of endogenous growth models of the early 1970s. It asks whether a country's productivity is higher, all else equal, if it imports predominantly from high-R&D countries. This would be consistent with technology being embodied in the imported goods, and there could also be imports-related learning effects.

IPR regime may affect the innovative activity which in turn is the source of total factor productivity improvements and thus contributes to growth. The IPR regime could affect the inflows of FDI and technology transfers and which could impinge upon the growth. Given the international dimension of IPR regimes, there could be implications for international trade of countries, for instance, on the ability of countries to export certain goods. Finally, the changes in IPR regimes may imply some redistribution of income between the countries and between communities within the country.

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<sup>17</sup> Pradhan, J.P. and V. Abraham (2005) 'Overseas Mergers and Acquisitions by Indian Enterprises: Patterns and Motivations', *Indian Journal of Economics*, 85(33), pp. 385–388

## 8.8 Industry-Research-Academic Institution Linkages

### *Present Scenario in India*

Creating Industry–Research-Academic linkages is very important for a prosperous economy. The importance of Research Academia - Industry linkages for development of an economy today is well recognized.

At the moment, indigenous R&D involves primarily the Government sector R&D institutions and academia, with limited participation of Indian industry. Through this even the best of the arrangement may not bring out the state-of-the-art technology development. In the absence of Industry-Institute linkages Indian industry is mostly dependent on foreign technology from developed countries. One of the most important reasons why linkage between industry and academic could not develop, is the poor work culture in majority of educational institutions, very few or no incentives for carrying-out consultancy/research is available. Indian graduates are paying a huge price for non-commercialization of technology, lacking employability. Academic researches remain only in the Thesis.

In a recent study of India’s manufacturing sector, K. J. Joseph and Vinoj Abraham (2009)<sup>18</sup> find that the incidence of interaction with universities as reflected by the respondents to the survey is very low. Of the 482 firms that undertook the survey only 11.27 percent claimed that they had any form of collaboration with a university.

In the overall, the six decadal experience shows that publicly funded chain of national laboratories like CSIR and other such institutions under other ministries, have had little effect in terms of enhancing the technology depths of the Indian firms (Big, Medium, Small and Micro Enterprises), catering to domestic or export markets. Therefore a mere increase of Govt funded R & D in these laboratories thus increasing the national GERD, will have little effect on the performance of technology intensive manufacturing exports.

The brief review based on several years of actual field experience of technology promotion, facilitating technology transfer etc to industries as well as in trying to create Industry-Academia linkages, indicates that several schemes existing under Ministry of Science and Technology, Ministry of New and Renewable Energy, Ministry of IT and Telecommunication

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<sup>18</sup> K. J. Joseph and Vinoj Abraham (2009), “University-Industry Interactions and Innovation in India: Patterns, Determinants, and Effects in Select Industries”Seoul Journal of Economics 2009, Vol. 22, No. 4

etc are small in size and also too narrow in scope to address all the essentials need of the technology depth chain.

Most Indian firms will require earlier part of the chain. For the latter also there are a few eligible ones, as firms or as possible new start-ups, if policies can be tuned and funds made available.

Instead of leaving these elements to the existing systems which have helped very little, Government may consider creating newer systems with substantive funds to be made available primarily for firms (groups or individual). Models of successes from other countries like China, Taiwan, Korea, Singapore, Israel etc may be studied in detail.

## **Way Forward**

The six decadal experience shows that publicly funded chain of national laboratories like CSIR and other such institutions under other ministries, have had little effect in terms of enhancing the technology depths of the Indian firms (big, medium or MSME's), catering to domestic or export markets. Therefore a mere increase of Govt funded R & D in these laboratories, thus increasing the national GERD, will have little effect on the performance of technology intensive manufacturing exports.

The requirements of the firms exporting manufactured products are very varied. The diversity of requirements even within sectors are further fine-textured. If India's technology intensive manufactured exports had to go up substantially to a respectable level in the global markets, these diversified needs have to be creatively and innovatively addressed without an approach of "one size fit all".

Several schemes existing under Ministry of S &T, Electronics and IT, MNES etc are small in size and also too narrow in the scope to address all the essentials need of the technology depth chain.

## **7.7 Role of International Standard Setting**

Standardization plays an important role in sustenance of quality and technological advancement in manufacturing. Standards are a core part of the complex network of knowledge flow that furthers technology development. Standardization contributes to technology upgradation in manufacturing. It helps in dissemination of technology to the industry.

In India, the standardization efforts at national level formally started with the establishment of the Indian Standards Institution (ISI) in 1947 as a registered society. The

Bureau of Indian Standards (BIS) has since been functioning as the National Standards Body and establishes the Indian Standards.

### **Issues Related to Exports**

In India, the major problems that exporters face are standards, testing, labeling and certification as well as internal domestic barriers like inadequate infrastructure, high transport costs and corruption.

- a. Technology development is thus critical to a country's efforts in improving productivity, efficiency, and competitiveness of its manufacturing sector. Factors such as cost advantages are being replaced by technology-related factors such as zero-defect product quality, product compliances to global standards or even becoming contributors to development of global standards
- b. Standardization plays an important role in upgrading products, sustenance of quality and technological advancement in manufacturing – core constituents of ‘depth in manufacturing’. Standards are an integral part of the complex network of knowledge flow that furthers technology development and setting of international benchmarks. Standards are a form of embodied technical knowledge accessible to all types of business that enables more effective product and process development. They promote and enable the diffusion of technology in a form that is readily assimilated by firms with the complementary capabilities to take up and use the new methods. Standards therefore constitute one of the important foundations for the technological depth in manufacturing, and also reflect the state-of-the-art, reasons why they are accorded high importance by the policy planners in the developed world. Increasingly standards are being pushed higher up the technology ladder, with a clear strategy to give market advantage to technology leaders (companies, economies).
- c. For sectors where India needs to encourage domestic production, Standards can become a very powerful strategy for competitiveness. For these sectors, focused efforts are required to ensure that India stays abreast with latest technologies and becomes a significant player in Standards making in India and internationally.
- d. Another driver for technological growth in some segments is exports to tough markets (EU, US). The food, pharmaceutical and chemical sectors have responded to stringent quality and safety requirements through adoption of standards, most of which are regulatory or buyer consortium standards. With increasing compliance levels and the growth in the number of companies able to show compliance to these standards through the certification/ inspection/ accreditation route is generating capacity both in terms of technology advancement (mainly

through adoption of western technology) but more importantly in making people understand the importance of meeting standards. The migration of knowledgeable people is slowly but surely adding depth to the sectors as a whole. The decrease in number of food consignments getting rejected in EU/US markets has significantly come down. Both standards and the related conformity assessment systems adopted in these sectors have played a key role in the development of the food processing sector, and the improving pharma sector. The Chemical sector, hit by the stringent REACH regulations of Europe is still coming to terms. India needs an urgent policy for managing chemicals and a concerted programme for the development of supply chain and manufacturing standards to sustain the export potential of this sector.

- e. A final driver is the manufacturer's capability and understanding of the importance to have internal benchmarks and standards for manufacturing processes and quality processes, which can stand the scrutiny and compliance to any third party national or international verifications or assurance processes and which in turn can help create brand value like that achieved by GE, Motorola, Honda etc.,. The robustness of the quality processes is an important element of the technology intensity in manufacturing. In IT and service sectors, TCS and Infosys could achieve global acceptance across the world based on their internal standards and emphasis on best practices.

## **7.8 Recommendations**

1. To promote the technology intensity of India's manufactured exports, it is important to focus not only on the so called 'high-tech' category of products at a broad level of classification, but also on products that are conventionally categorized as 'medium tech' and 'low-tech' as they often entail important and distinct technological inputs for their competitiveness and export success. Some examples for such identification are given in this report.
2. It is important to focus on products that are globally dynamic. The government should identify and periodically updates the list of Globally Dynamic products by looking at 4 digit HS data and applying the criterion of global share coupled with growth rate of export.
3. In order to update the information referred to in para 1 above continually and to also update the lists of globally dynamic products referred to in para 2 above, it is essential to build upon this network of current members of the sub-group on Technology Intensity so that their researches are not isolated but become a major tool for a continual watch on globally dynamic manufactured exports, global markets and actions to be done by India. The technology managers from the current sub-group with additional network partners similarly to keep 'Technology Watch' on such

- Quarterly reports about the researched findings of technology intensity in the manufactured products relevant to India and results of 'technology watch' and these reports may be widely disseminated to industries R& D laboratories and academic institutions.
  - Bring out an Annual Report of Status of Technology Intensity of Manufactured Exports from India. Over a period such reports will become trend setter for the Indian industry and R&D institutions.
4. This should have a decadal outlook. The funding requirements will be about Rs.20 crores for 5 years, as it may need such direct surveys, global contacts and some workshops.
  5. There is need to identify and nurture specific sectors with significant export potential and having adequate degree of technology intensity. In this regard, frequent consultations and stake-holder meetings amongst Export Promotion Councils, FIEO, Industry Associations (like CII, FICCI etc.) and major technology agencies like DSIR, DST, TIFAC etc., are highly solicited.
  6. A few case studies from Industry sectors in India have been given in this Chapter. For each of the sectors covered, certain recommendations are given to follow through the finding of the studies. In order to make it effective the following is recommended.
    - a. Since IMTMA has a well laid decadal plan in the "mother sector of manufacturing" namely Machine Tools, MoC and IMTMA may regularly have quarterly formal meetings to actionise many of the tasks therein, in specific context of firms having globally dynamic manufactured exports in order to enhance their capabilities and also for other products in high tech and medium tech which have higher potential.
    - b. Similar quarterly meetings may be held with specific sectoral associations like ACMA, Textiles, Chemicals, Pharma, and Electronics etc.
  7. CII has partnerships with a number of Government departments, for example:
    - With DSIR for Technology Export Development Organisation.
    - With DIPP to establish "India Intellectual Property Foundation" supported by WIPO

- With MHRD and Indian Industries a strong initiative of University-Industry Council
- With DST and MoMSME on establishing India Business & Technology Centre (IBTC) in European and other countries to enhance exports;
- With DST on establishment of GITA (Global Innovation & Technology Alliance)
- With a number of State Govts for Technology Development and Promotion Centres.

Department of Commerce may partner with these efforts with the specific focus of assisting firms and R&D institutions which are attempting to enhance the technology intensity in their manufactured exports.

8. Enabling policy thrust would be to link up the firms with the necessary technology infrastructure so that they can meet the demand of non-tariff barriers such as standards etc. There is a need to have fast response institutional mechanism like MRAs.
9. As regards the policy on IPR, focus needs to shift from mere 'protection' towards generation as well as purchase of IPR geared towards the technological needs of Indian manufacturing sector, through creation of a 'Technology Bank'
10. Providing support for in-house R & D efforts would help firms to reach global market, support should not be merely in the form of fiscal (tax) incentive, but also enabling the firm to network among them and also to collaborate with academic institution.
11. Contribution of high-tech industries in Indian manufacturing is still very low. While detailed case studies could not be done, there is a potential. In the longer term, high-tech products should get into India's export basket. Empirical evidence on high-tech industries in late industrializing countries suggests that many have graduated from participation in 'global production networks' to 'global technology networks'. Policy initiatives should, therefore facilitate participation of Indian hi-tech firms in global production networks and help them transition into being active participants of the global technology (R&D) networks. The following initiatives may be useful in this regard:
  - Create incentives to adopt ICT to streamline their supply chain and internal organizational processes;
  - Provide incentives for appropriate training to enhance quality;



- Since IP management can be critical for hi-tech exports and participation in global technology networks, PPP models may be explored to provide support for this purpose.
  - Evaluate the role of IP policies in helping Indian firms participate in global R&D and production networks. The review of the recent bill for petty patents should explicitly consider this dimension.
  - WTO agreements have restricted our ability to put conditions regarding export on MNCs undertaking manufacturing on Indian soil. One should actively evaluate situations under which policy can result in more exports by such MNCs and also build linkages with other firms in the country.
  - Policies to support development of software for SMEs in India would be useful.
12. All the above specific recommendations for Government enabled support are vital. However, there is a need for coordination in respect to policy support for promoting technological upgradation and export. A networked enabling mechanism (intermediation mechanism) with dedicated expert staff is required. Some of the earlier experiences of TIFAC, and DSIR and the recent ones of CII, IMTMA etc may be noted. However it should be networked under a single overall umbrella so that the various nodes of networks spread all over India will respond to needs of all Industries in India in all sectors (in the category of globally dynamic ones identified and updated by economic/trade researchers). This is a generic recommendation which applies to all paragraphs above.
13. Public funded research could contribute significantly to boosting technology intensity of India's exports across all three categories of products.
- a. In case of high-technology (HT) and medium-technology (MT), creative and inventive ideas generated from public funded research institutes and academia must be tapped for commercial application. This requires nurturing of inventive capability of scientists in public funded research institutions and creating an environment where they take interest in taking forward their inventions to the market-place by partnering with the industry.
  - b. In case of low-technology (LT) products, the industry benefits enormously from the technical inputs and support from public funded institutes in meeting the ever changing goal posts of global standards and norms that act as newer forms of NTBs for exporting their products

## Chapter 8

### Cross Cutting Themes

#### I. Brand India

The emphasis on Brand India is to promote India as a business opportunity by creating positive economic perceptions of India globally as well as effectively present the India business perspective and leverage business partnerships in a globalised market place. The major initiatives in promoting Brand India are *The India Shows* across continents, the *Experience India* programme, *India Now, Business and Economy* bi-monthly business magazine and a study on *Innovations from India: Harbinger of Change*.

Manufacturing exports require strong brand promotion. Different sectors belonging to manufacturing viz. Gems and Jewellery, Leather, Textiles, Engineering etc. are striving to carve an exclusive `Brand India` niche for themselves in the world markets. The important issue is whether each of the sectors need to promote their exclusive Brand India strategy or manufacturing exports as a group should also be promoted.

**Gems and Jewellery** are high value commodities and need constant efforts to ensure sustained attention and loyalty of consumers towards them. Recently, a survey conducted by GJEPC during the India Show 2011 in Basel revealed that in light of very positive customer perceptions, the India G&J brand is well placed to occupy the No.1 spot in the world in the gems and jewellery sector and this is an opportune time to pro-actively promote the “Made in India” brand through a deliberate campaign. An enhanced brand perception would also help our exports move up the value chain. It is estimated that about US\$ 20 million may be required over four to five years for this purpose. Keeping in view the turnover of the sector, the industry could lead such an initiative, and dovetail on-going Government initiatives like India Brand Equity Foundation (IBEF) and Ministry of Tourism led “Incredible India” campaign with it.

The following measures for brand promotions are recommended:

- i) Gems and Jewellery industry may consider setting up a Brand Fund from contributions from its members for brand promotion of the “Made in India brand as no. 1 in the world, with strict internal quality control and standards adherence for participating brands.
- ii) The Council may collaborate with (IBEF) for positioning of gems and jewellery in an international brand promotion campaign.

Brand promotion aimed at creating a brand identity and an associated brand loyalty is necessary for the growth of the **Leather sector** in the international market. The industry has

proposed that Government of India may consider formulating a specific package for brand promotion by creating a separate fund, so as to provide direct financial assistance to individual companies in leather sector. The financial assistance requested is to the extent of about 10% of export turnover of the company for a period of 5 years to enable them to gain a foothold. Eligibility criteria may be drawn for selecting the companies. Activities like advertisements in magazines / news papers / public places, taking floor space in departmental stores / airports etc. could be considered for coverage. A component supporting industry level efforts at creating a 'Made in India' brand could also be included. This fund would to that extent also cover brand promotion activities like organizing buyer get-togethers, fashion shows, etc.

The industry itself should take ownership and assume the lead in initiating and funding brand promotion activities. The dependence on Government should not be the key driver, if the efforts are to be on the scale and the flexible basis required for effectiveness in a dynamic and varied world. Major companies should come forward to create such a fund.

It is recommended that:-

- i) The leather sector may consider setting up a fund through industry contributions for brand promotion, particularly to establish the "Made in India" brand and ensure quality control.
- ii) Leather sector may also work with the IBEF for sector-specific branding.

Brand promotion is a key initiative to expand the **Handicrafts** export market. It is necessary that the presence of Indian products should be known in targeted markets and an attachment created in a systematic manner through promotion and publicity. There is a need to project the Indian handicraft brand "Hand made in India". Generic promotion is a slow process and needs constant focus on the consumer. A "Brand Fund" is proposed for this purpose. Efforts for brand promotion should come from the exporters themselves with their ownership to be fully effective. It is recommended that the creation of a Brand Fund beset up with contribution from major manufacturing and exporting stakeholders in the handicrafts sector. The Export Promotion Council can also work with the IBEF in the Department of Commerce to develop their international campaigns.

In the **Textiles sector** as the products get upgraded in value terms they carve a niche for themselves which should be nurtured to become a Brand. As creation, promotion and sustenance of Brands is highly capital intensive, requiring vast amount of funds, the present allocation for such activities should be substantially increased and 'Brand Promotion Fund' should be created.

### **Action taken by IBEF**

Over the years, the India Brand Equity Fund (IBEF) has emerged as a credible source of information on India business and economy powered by its website [www.ibef.org](http://www.ibef.org). Through its

India Business Kits like 'India Now', a perspective magazine and 'Experience India' CD, it disseminates information on business opportunities in India at various national and international levels. At present IBEF is involved in branding activity in India Shows which are being held across the globe. IBEF will continue promotional branding work through its website, Experience India programme where under it invites business students, academicians and journalists for interaction with stakeholders across the spectrum of Indian economic landscape, participate in major global exhibitions, organise seminars at international and national trade fairs along with participation of key Indian industry players and government officials. IBEF has developed a business 'brand kit' which highlights brand values of India's manufacturing sector, the availability of highly skilled power, technological sophistication besides the world class facilities available in industrial hubs.

Indian manufacturing sector represents a robust industry with a growing international market share and reach. IBEF has suggested a brand promotion strategy for developing the Indian manufacturing sector which gives a powerful message of India as a quality and creditable supplier of goods and position India as a reliable business partner. Besides, it will now start product specific branding activity. It is starting with Brand Pharma India project with the objective of positioning India's pharmaceutical industry as a quality, credible, reasonably priced high quality product.

### **Proposed Strategy**

IBEF has suggested that a multipronged brand strategy should be developed to build and promote a brand identity for the sector. The proposed brand strategy should coalesce in itself the brand values of the manufacturing sector viz. quality, skilled manpower, innovation, technology sophistication, value for money, resilience and market adaptability. As a first step, the strategy may combine the following essential elements that may assist in positioning the Indian manufacturing sector.

a) Audits and assessments - Product and market perception: A robust export promotion strategy would require two pronged action at the policy level and the promotional level. While the first is intrinsic to the Department of Commerce, as regards a product-market promotion strategy, it would be essential to first undertake an assessment and audit of the product promotion strategy currently being pursued across manufacturing, which would help gain an understanding of the areas wherein minimal/major interventionist action is required. It is also important to undertake a perception survey of the Indian manufacturing sector in important target markets to understand the product competitiveness vis-à-vis other competitor nations/companies in the market. Quality certification parameters and quality perception would be key elements of such a perception survey. Such studies are primary for developing and planning effective and targeted export promotion strategy.

- b) **Collate the brand aspects:** It is important that workshops with stakeholders associated with the manufacturing sector be organised to ensure that all facets and aspects of the brand do get integrated into the brand strategy.
- c) **Create a logo and standardise a business brand kit:** A logo should be developed that coalesces in itself the brand values of the manufacturing sector listed above. It is important that a standard brand kit be developed, which can be used as a promotional tool by players associated with the sector. This will help ensure a consistent message being relayed across markets about the sector and its brand strengths. This kit should be widely disseminated across markets to Indian missions abroad, foreign missions in India, industry players to ensure consistency in perspective positioning. IBEF is preparing a fact book on Indian manufacturing, which highlights the nation prowess and the opportunity in the sector, which is to be disseminated across markets.
- d) **Position the India business perspective at international exhibitions/seminars:** A list of premier international and national trade fairs, seminars, exhibitions should be identified across markets wherein the India perspective is projected consistently. Participation of key industry players with government representatives must be encouraged at such meets.
- e) **Experience India programme:** It is important that India's perspective is regularly communicated and made known to global media. A lot happens within the country but rarely the extent of it gets communicated to the audiences abroad. A strong global media and PR initiative is necessitated to ensure as well timely responses to issues that may emerge in the media. Media has a strong role to play in building brand perceptions. It may be feasible to invite foreign media from identified markets to visit/engage/interact with the Indian industry.
- f) **Leverage the net:** In the net-age, the power of the internet must be leveraged consistently to communicate updated information of the Indian industry as well as to provide links with possible suppliers/exporters/manufacturers of products through an Indian website. The website should be developed as a powerful medium, must be contemporary in look and feel and should ensure ease of navigation. Advertising online, including postings on Twitter, facebook and other social media should also be effectively used to position India related articles.
- g) **Brand messaging: Quality and certification:** Undeniably the brand is made by the product quality, which is integral for the promotion of the brand. As part of brand messaging, IBEF would integrate quality and certification parameters to project compliance with international standards. For example, few know that the highest recipients of the Deming Award outside of Japan – the highest award in manufacturing – come from India. Whilst IBEF could do a study on quality standards across key manufacturing sectors in India to understand how Indian products compare with key competitors in terms of quality and price, for now, we are not well-placed to comment on the issue. Subject to the approval of the Department of Commerce, IBEF could consider undertaking research on the subject to report back with credible data and facts on

quality parameters and adherence in India to be able to integrate the issue as part of the broad messaging theme.

## **II) Non-Tariff Measures**

### **Introduction**

Countries use many mechanisms to restrict imports. Till the beginning of 1970s, tariffs (custom duties) were the principle mode of protectionism. But with successive rounds of GATT negotiations, there was a large drop in the average tariff levels of manufactured goods in the developed country markets. When tariffs paled into insignificance, countries resorted to a form of administered protection known as Non-Tariff Measures (NTM). In the Uruguay Round, the approach for dealing with NTMs was to bring existing barriers into the realm of multilateral negotiations, strengthen rules governing their use, develop surveillance mechanisms to enforce compliance, and offer improved dispute settlement procedures – the aim was to minimize trade distorting and trade restricting effect of NTMs. Some notable success was also achieved in reaching substantive agreements limiting, clarifying or discipline the system that members may use – Article III.8.b of GATT allowing subsidies to domestic producers; Article III.9 allowing members to have internal price control measures; Article VI of GATT on Anti-dumping and countervailing duties; Article VII of GATT on methods of customs valuation; the Agreement on Agriculture, converting all quantitative restrictions into tariffs; the Technical Barriers to Trade (TBT) Agreement defining the rights and obligations of members with respect to development and application of technical regulations and the ways in which products are to be assessed to determine whether they meet the specified technical standards; and similarly, the Sanitary and Phytosanitary Measures (SPS) Agreement with respect to human, animal and plant life.

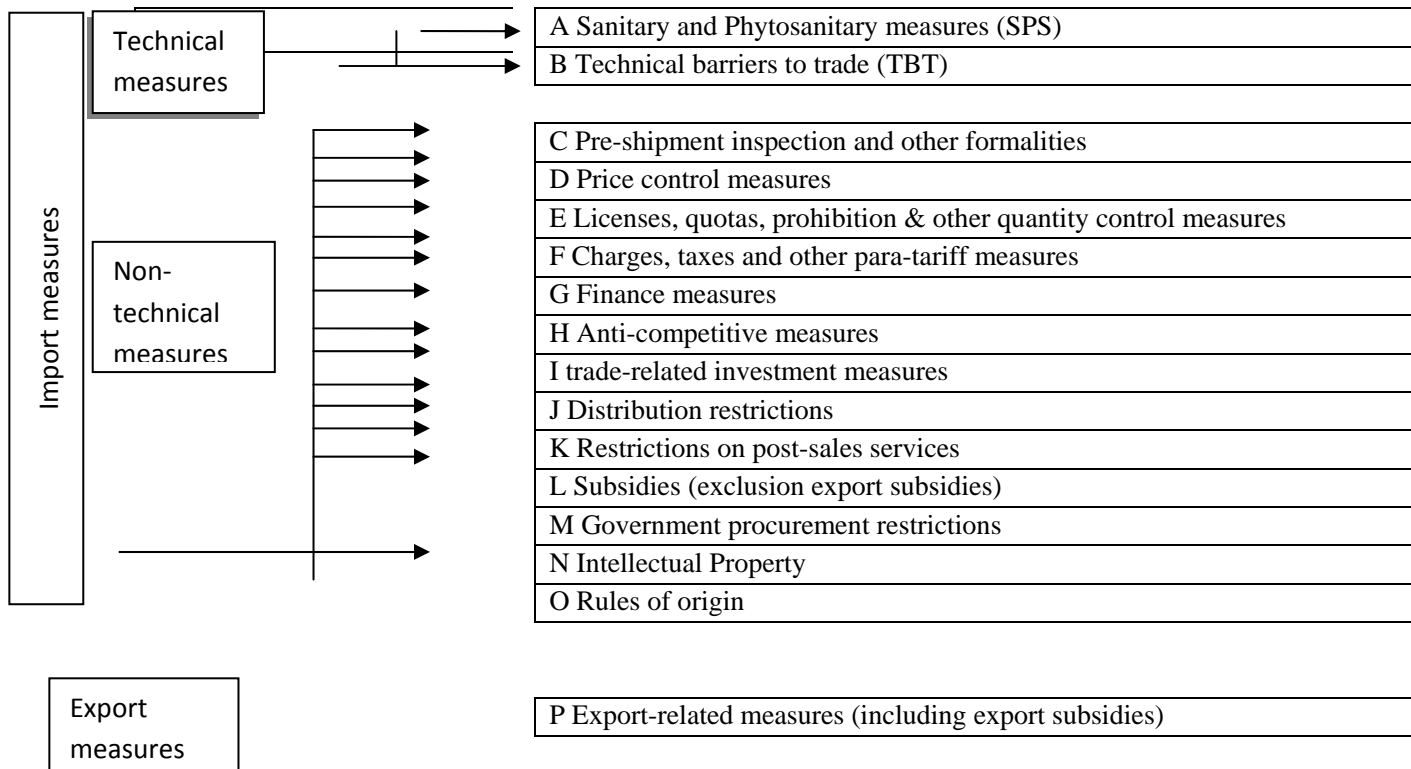
The ascent of NTMs holds special significance to developing countries like India. These countries have been encountering difficulties in accessing developed country markets because of restrictive standards, burdensome regulations, and expensive compliance costs. To assess the extent of the problem of NTM's, and to suggest policies for handling them the effort should be to:

- a) Identify and trace the type structure of NTM's affecting India's exports
- b) Examine these commodity-wise/ category-wise with the main focus on developed country markets.
- c) Suggest or recommend policy options.

### **Type of NTMs**

There is no single internationally agreed list of NTMs. In general, NTMs cover all measures affecting trade, other than tariffs, and hence any list of NTMs will be very long, and is probably continuously growing as governments invent new measures.

A brief analysis of NTBs faced by Indian Exporters is as follows:



Some of the NTMs which require specific mention are as follows:

**A. Standards and Related Regulations and Procedures:** Restrictive standards and burdensome regulations and procedures in several countries have been acting as barriers that significantly affect exports as also the capacity to trade. There are several issues involved which are briefly discussed below. Some measures clubbed hereunder affect individual consignments while some like those involving costs put additional burden on exports.

**(a) Harmonization** – Both the SPS and TBT agreements seek harmonization on as wide a basis as possible and for the applied measures to conform to international standards, guidelines or recommendations. A higher level of protection may be introduced or maintained if there is scientific justification (in case of SPS measures) or for legitimate objectives (in case of TBT measures). However, it has been observed that certain countries are at times laying down norms more stringent than those specified by relevant international bodies which are difficult to meet. Similarly testing methods are specified for very high levels of sensitivity which may not be justified or required and due to which the cost of testing becomes disproportionately high and prohibitive. Sometimes, levels of sensitivity are raised only because better technology or testing equipment becomes available, and not due to any scientific evidence that a higher sensitivity is required to meet a health concern. Moreover, the standards are revised, mostly upwards, at regular intervals making it very difficult for developing countries to adapt to these changing

requirements. Harmonization of both standards and procedures applicable within a common customs territory is necessary for predictability. Harmonization with international standards and use of agreed testing methods with scientific justification will reduce the trade restrictive impact.

**(b) Transparency** - It has often been observed that there is absence of information and lack of transparency on the procedural norms and regulations of various countries regarding specifications as well as methods of sampling, inspection and testing. New Regulations are brought out and implemented without even giving the producers in the exporting country a chance to get familiar with these. Often the standards are available only in the language of the importing country or are presented in a very complicated manner. The result is that exporters are, at times, not clear about the specific requirements prescribed by the country of destination, which has led to rejection at the point of import.

**(c) Conformity Assessment Issues** – Several conformity assessment issues have the effect of restricting trade, these include:

- Excessive costs levied for testing - for developing country exporters these are a significant barriers;
- Location of testing facilities including testing being done only at single/limited centre(s);
- Limited validity of certificates, requiring re-testing with the attendant costs;
- Procedures involving site/ factory visits by the certifying authorities – both the time taken and costs involved act as hindrances;
- Non-recognition of certificates from accepted International Bodies.

**(d) Risk-based Approach** - While risk to consumers resulting from hazard, particularly in food, has been identified as a significant concern at the international level, it has been observed that some importing countries are fixing standards without carrying out comprehensive risk assessment work and despite repeated requests details of the basis for the standard are not made available. This may at times be in contravention of Article 5 of the SPS Agreement which requires that sanitary and phyto-sanitary measures should be based on risk assessment and take into account an appropriate assessment of the actual risk involved and if requested by the exporting country make known details of this assessment.

**(e) Safety Management Systems Approach** - In addition to end product criteria, a systems approach which builds in quality and safety throughout the food chain from primary production to final consumption is increasingly being used to ensure that food products are safe for consumption. Such a 'safety management systems' approach is being insisted upon by many countries for allowing import of products such as marine products. This system allows building in controls in a flexible manner based on conditions applicable in a country/ industry etc. However, certain countries are building in prescriptions in the production process. Process standards based on conditions and production systems prevalent in the importing country are not relevant for the developing countries for achieving the required product standard. It is



internationally accepted that alternate equivalent measures should be permitted if these meet the requirements of the importing country in the use of the final product.

**(f) Equivalence** - Equivalence agreements between Members are seen in the WTO as the means to address the standards related trade problems as they enable pooling and utilization of resources more effectively, avoiding duplication of inspection and testing, and ensuring that health and safety requirements are met effectively without unduly restricting trade. Such agreements would generally benefit exporters in a developing country as financial burden as well as risk of rejection would be reduced. However, it is observed, Members often do not enter into such Agreements even after receipt of a formal request as either the administrative burden of entering into these is high or they don't want to lose their control over imports. Some countries use regulatory standards to address demand supply conditions. Further, at times it is seen that important components such as provision for re-testing and appeal in case of rejections are not addressed in such Agreements as these are not considered to be in the interest of the importing country.

**(g) Rejection & Destruction of Consignments** - Health Authorities in certain importing countries have recently started destroying the contaminated/ damaged consignments instead of returning them to the exporting countries as requested by the exporters/importers. The decision regarding destruction of a consignment is often not a correct decision and is also not justified.

- The consignments found contaminated in the importing country may need to be brought back to enable the competent authority to re-test them and ascertain whether the consignments were contaminated or not as certified. And if contaminated examine the cause and take immediate corrective measures to control/eliminate its recurrence.
- Destruction of a consignment leads to wastage of a large amount of money as some cases of contamination can be taken care of through reprocessing.
- Sometimes the importing country adopts different methods for sampling and testing and also testing for parameters/contaminants, which are not notified in their standards, which at times become reasons for rejections.
- In certain cases the importing country may have higher standards than those followed by the country of export. The returned consignments could be utilised in domestic trade/ purposes.
- Sometimes a product is rejected based on a national standard by a buyer, and it is accepted after price discounts; this shows that at times standards are used primarily to depress prices by the buyer. It may also be noted that Codex has brought out a guideline for the exchange of information between countries on rejection of imported foods (CAC/GL-25-97) wherein the standard provides for destruction of the consignment, retesting of the consignment, re-export of the consignment to countries which state in advance that they are prepared to accept the consignment knowing that it has been refused entry elsewhere.

**(h) Other Standards related issues - Voluntary Standards** - Imposition of voluntary international standards such as ISO 14000 on Environmental Management Systems by buyers on their suppliers in exporting countries has the effect of not only restricting market access for at least sometime until the industry upgrades itself, but also leading to high cost of implementation. The standard on Social Accountability, SA 8000 is another international standard for management systems primarily dealing with working conditions. Under the guise of Social Accountability, the imports of various products can be restricted.

## **B. Customs Procedures**

Customs procedures including valuation rules in certain countries have been identified to be acting as trade barriers.

## **C. Marketing Restrictions including Labelling Practices**

Various requirements for marketing a product in different markets prove to be cumbersome and onerous to developing country exporters. These requirements include detailed labelling requirements with extensive product/ content description. Such labelling requirements become a hindrance especially if the product is being exported to different countries each with different regulations. In several countries there are registration requirements for firms before exporting, distributing and selling, with the registration process itself being costly, time consuming and not always granted. In the case of pharmaceutical products, import in several countries are tacitly encouraged/ allowed only from particular countries and sources, such policies are enabled by the registration mechanism which is not transparent and favours producers only from certain countries even for applying. Some buyer requirements like comprehensive product liability insurance also restrict the export and marketing ability of developing country exporters.

## **D. Restrictions on Port of Import**

The restrictions on port of import i.e. allowing imports of particular goods or goods from a particular country only through designated ports restrict exports. This increases the transit time and transaction cost in clearance of consignments. While in some cases it is demonstrably for administrative reasons with the facilities required for clearance of the goods being available only at the designated port, in some of the other cases the underlying reason for imposing such restriction is more to restrict trade than on account of any administrative necessity.

## **E. Non-preferential Rules of Origin**

Several Textiles Non preferential rules of origin have often been cited in the context of exports of textile products, as an NTM. The issues involve non-recognition of certain processes as origin conferring in addition to discriminatory and unilateral changes to the rules. Such Rules which are established/ changed to favour imports from particular origins are barriers to trade and also

discourage value addition taking place in the traditional region of production. In some cases they adversely impact on the quota utilization of some countries. In some countries for fabrics made from wool, dyeing, printing and finishing operations are not recognised as origin conferring. Similarly for made-up articles made of Cotton or cotton blends the origin is now being determined on the basis of where the constituent fabric is formed, thereby ignoring all operations such as dyeing, printing, finishing, designing, cutting, sewing, embroidery etc. contrary to prevailing manufacturing or processing practices.

## **F. Restrictive Practices Tolerated by Governments**

Attention has been drawn to the increasing instances of campaigns carried out to create public opinion as well as to force buyers to change their source of imports on grounds other than trade related e.g. ethical treatment to animals. These campaigns could have various motivations not necessarily based on truth and certainly not based on any trade issues. There may be two aspects to discussing such measures. First is that they do not follow from any governmental action and therefore the extent to which they could be discussed/disciplined in WTO would need to be deliberated upon. The second aspect is the increasing use of such methods and potential for these to divert trade and restrict market access especially from developing countries which may be vulnerable due to their own priorities thus making it important to be discussed.

### **Strategy for addressing NTMs**

Department of Commerce has adopted a multi-pronged plan and strategy to deal with issues relating to NTMs. These are explained below.

(a) In pursuance of the decision in the Committee of Secretaries meeting held on 31 October, 2008, the Department of Commerce constituted an Inter-Ministerial Committee (IMC) to coordinate the plan and strategy for dealing with issues related to NTMs and to increase India's market access abroad. A Technical Committee (TC) was also constituted to provide technical support and generate scientific data to deal with specific technical and scientific issues concerning NTMs. So far six meetings of the IMC and two meetings of TC have been held by the Department of Commerce.

(b) Strengthen domestic regulatory regime by upgrading existing regulations or creating new technical regulations, standards and conformity assessment procedures on Indian imports in a phased manner, over a period of time. This will make an accurate assessment of the capacity of domestic industry to comply with the same. Such an arrangement would not only check the flood of imports in sensitive sectors but also help safeguard consumers from sub-standard/ spurious goods. Also, such a regulatory environment would encourage a regime of quality production and thereby indirectly promote exports. This would necessitate the up gradation of our testing facilities considerably to meet the requirements of new standards and also increase in the number of laboratories with international recognition/accreditation. Concerned Department/Ministries/

Organizations will be required to upgrade their infrastructure and surveillance systems at major ports, air ports and within the domestic market to ensure due compliance of India's standards, technical regulations and conformity assessment procedures thereof.

(c) On the export side, various Departments/Ministries/Organizations will identify clearly the NTMs faced by our exporters so that they may be taken up at the appropriate level in the SPS/TBT Committee Meetings at the WTO or bilaterally with the concerned countries in the FTA negotiations. The Department of Commerce raises 3-4 four issues in every regular SPS/TBT Committee Meetings at the WTO to get suitable redressal of our export concerns. For example, Specific Trade Concerns (STCs) on the issue of EU'S Regulation, Evaluation, Authorization and Restriction of Chemicals (REACH), EU's Traditional Herbal Medicine Product Directive 2004/27/EC (THMPD), EU's legislation on animal welfare and health etc. have been raised.

(d) In order to facilitate our exporters, review our existing standards and consider benchmarking these regulations against international standards. Once we harmonize our standards and technical regulations with the international standards our products will have smooth entry in foreign markets rather than being subject to re-examination.

The Department of Commerce (DoC) has initiated a number of steps, often in coordination with concerned Departments/Ministries/Organisations, as part of the above mentioned strategy to deal with NTMs. For example, DoC has installed a web-based Compendium on Import Policy of India, for South Asia. It furnishes information on tariff lines and requisite SPS/TBT compliance requirements the products have to go through. It has also institutionalized a system under APEDA of downloading SPS notifications of all member countries of the WTO from the WTO website; of analyzing and identifying the notifications from the angle of India's export interests; disseminate the notifications to stakeholders; seeking their feedback and preparing notes to raise the relevant issues in the SPS Committee of the WTO and also bilaterally with concerned countries. A similar process for TBT notifications has also been institutionalized.

### **III Regional Trading Agreements**

Regional Trading Agreements (RTAs), variously named as FTAs, CECAs or CEPAs, and the multilateral arrangements under the WTO share the common objective of trade liberalization and global integration. Critics may however hold that the former is discriminatory while the latter is not. The pursuance of similar objectives but according to different approaches inevitably creates some tension in this relationship, and benefits of RTAs only flow between chosen parties. The WTO Agreement provides for RTAs.

Over the years there has been a gradual erosion of the MFN principle with the proliferation of RTAs. Considering the slow pace of the multilateral process of trade

liberalisation the appeal for RTAs has grown stronger over the years. RTAs allow countries to single out trade liberalisation with specific markets and negotiations are less lumbering than the multi-lateral process. RTAs also make it possible for building tailor-made regulatory and trade policy disciplines.

RTAs are generally viewed as building blocks towards an eventual free trade regime in the multilateral arena under the assumption that preferential concessions under the RTAs would at some point be extended at the MFN level. Proponents of RTAs argue that they help nations gradually work towards global free trade by allowing countries to increase the level of competition slowly and give domestic industries time to adjust. In addition, RTAs can be valuable arenas for tackling volatile trade issues such as agricultural subsidies and trade in service. These proponents describe RTAs as circles of free trade that expand until they finally converge to form expansive multilateral agreements.

Opponents of RTAs describe them as a complex web of competing trade interests that hinder multilateral agreement. Because RTAs create preference systems that transcend regional boundaries, some argue that political and economic tensions will lead to hostility and increased retaliation. Additionally, RTAs may negatively impact global trade because regional preferences and rules of origin distort production by making location of production or source of raw materials the driving incentive. Others fear that RTAs prevent complete liberalization in the multilateral arena. Countries that benefit from regional trade agreements may be reluctant to expose themselves to the risks of opening their markets on a multilateral level if they expect relatively insignificant returns.

The configuration of RTAs is diverse and becoming increasingly more complex with overlapping RTAs and the emergence of a trend towards cross-regional RTAs. These developments have given rise to multiple systems of rules, unequal access to world markets and the undermining of the MFN principle.

There is little doubt that the main economic advantages to participants in RTAs would be even greater if the liberalization were carried out on a wider, multilateral scale. However, with the multilateral process of trade liberalisation losing traction, the allure for RTAs may become irresistible and it may be worthwhile for India to engage with its major trading partners in the RTA process as it may lose out due to the trade diverting effect of any RTA.

India has always stood for an open, equitable, predictable, no-discriminatory and rule-based international trading system. FTAs, in India's point of view, should be 'building blocks' towards the overall objective of trade liberalisation and should complement the multilateral trading system.

In the past, India had adopted a cautious approach towards FTAs and was initially engaged only in a few initiatives such as the Bangkok Agreement (signed in 1975) the Global

System of Trade Preferences (GSTP - signed in 1988 and SAPTA (Signed in 1993). On account of the limited trade liberalisation coverage, these engagements achieved inadequate results in terms of increasing trade volumes with member countries.

However, recognising the fact that the ambitious Comprehensive Economic Cooperation Agreements (CECA) seeking deeper market access as opposed to the limited coverage agreements have become an important tool globally for achieving economic objectives and increased market access, India, beginning this century, began engaging with its important trading partners with a view to conclude such agreements.

As a result, India has so far concluded 10 FTAs with its important trading partners like ASEAN, Singapore, Korea, Japan, Malaysia and 5 limited scope preferential trading agreement. India is also negotiating/ expanding 17 more agreements. At least 9 more proposals for FTAs are under consideration. When completed, these agreements would cover over 100 countries spread across 5 continents.

All of India's FTAs have been notified to the WTO under the "Enabling Clause" of Article XXIV of GATT 1994 and meet the four conditions prescribed therein.

Except for the agreement with Singapore, none of the other operational FTAs have been in force long enough to make a meaningful assessment of the impact they may have on the domestic manufacturing sector.

The Table below lists the top 50 items imported under preferential tariffs under the India-Singapore CECA from the ports of Chennai, Kolkata and Mumbai during the period 2007-10. It is interesting to note that barring a few finished products like needles for injection, syringes etc. most of the items are in the nature of raw materials or intermediates for use by the domestic manufacturing industry.

It is also interesting to note that except for needles for injection, butanoic acid and alkyl phenols, none of the other items imported under preferential terms constitutes more than 10% of our global imports. It would therefore be safe to assume that these preferential imports would have had little impact on the domestic manufacturers of similar products. It could be argued that these imports have fed into the value chain of our manufacturing output and possibly even to the export of finished product where these items were used as inputs.

India's exports of manufactured items (NAMA lines excluding fishery products) has grown from USD 74.89 billion during 2004-05 to USD 162.87 billion during 2009-10. While it is still too early to assess the exact impact our RTAs would have in accelerating our exports of manufactured goods the preferential market access under these RTAs would definitely contribute beneficially – the extent of such contribution would emerge after these RTAs run their course of

full implementation. Of course, one would still need to establish a causal link between any such increase and the preferential market access under the RTAs.

The multilateral trade liberalisation efforts under the WTO would have little impact on our domestic manufacturers in terms increased competition since we would still have sufficient water between our applied and bound tariffs. Sectoral commitments would have an impact. However sectoral commitments are voluntary and we would only undertake commitments taking our domestic sensitivities into consideration.

The multilateral liberalisation could have a beneficial impact on our manufactured exports as tariffs of the developed economies are expected to be significantly reduced from their present levels. Such reductions would present opportunities for enhanced market access as well as opening of new markets.

**Table on the top 50 items imported under preferential tariffs under the India-Singapore CECA from the ports of Chennai, Kolkata and Mumbai during 2007-10**

*(in Rs` crores)*

<b>SNo</b>	<b>HS</b>	<b>Description</b>	<b>Imports under CECA (Avg 2007-10)</b>	<b>Avg Global Imports (2007-10)</b>	<b>CECA Imports as % of Global Imports</b>
1	29023000	Toluene	43.92	632.63	6.94%
2	29024100	o-Xylene	30.89	380.26	8.12%
3	90183220	Hollow needles, for injection, aspiration, biopsy and transfusion	12.63	21.35	59.15%
4	29156010	Butanoic acids, their salts and esters	6.91	41.17	16.79%
5	90183100	Syringes, with or without needles	6.64	76.14	8.72%
6	84145930	Industrial fans blowers and similar blowers	6.24	133.87	4.66%
7	84483990	Other textile machinery	5.83	283.52	2.06%
8	38112900	Other additives for lubricating oils	2.80	119.47	2.34%
9	37079010	Chemical products mixed or compounded for photographic uses (for example developers & fixers) whether or not in bulk	2.06	26.41	7.82%
10	29071950	Alkyl phenols	1.93	4.91	39.29%
11	38123090	Other anti-oxidising preparations and other compound stabilisers for rubber or plastics	1.60	248.85	0.64%
12	38119000	Other anti-knock preparations	1.49	236.16	0.63%
13	39021000	Polypropylene	1.37	1454.61	0.09%
14	39074000	Polycarbonates	1.35	566.25	0.24%
15	90328990	Other automatic regulating or controlling instruments and apparatus	1.22	833.58	0.15%
16	84798999	Other (other than Apparatus for growing or pulling minicrystal semi-conductor boules, Epitaxial deposition machines for semi-conductor wafers, Apparatus for physical deposition by sputtering on semi-conductor wafers, Apparatus for wet etching, developing,	1.21	2783.12	0.04%
17	38220090	Other diagnostic or laboratory reagents	1.06	474.50	0.22%
18	39023000	Propylene copolymers	1.03	163.54	0.63%
19	39053000	Poly (vinyl alcohol), whether or not containing unhydrolysed acetate groups	0.80	189.06	0.42%
20	39069090	Other Acrylic polymers in primary forms	0.80	388.90	0.21%
21	32061110	Pearl sent pigment (Titanium dioxide, coated	0.74	374.59	0.20%



		micananeous and lustres pearl pigment)			
22	68071090	Other Articles of asphalt or of similar materials	0.54	15.56	3.45%
23	29161400	Esters of methacrylic acid	0.46	163.63	0.28%
24	29053200	Propylene glycol (propane-1,2-diol)	0.45	158.62	0.29%
25	73182300	Rivets	0.35	42.09	0.82%
26	90283090	Other Electricity meters	0.34	29.68	1.14%
27	44189000	Other Assembled flooring panels	0.33	24.80	1.33%
28	68071010	Tarfelt roofing in rolls	0.28	11.91	2.36%
29	29173960	Isophthalic Acid	0.22	103.15	0.22%
30	38109090	Other Pickling preparations for metal surfaces	0.17	64.29	0.27%
31	29171200	Adipic acid, its salts and esters	0.15	80.18	0.18%
32	28111940	Sulphonic acid	0.14	3.98	3.43%
33	39029000	Other Polymers of propylene or of other olefins, in primary forms	0.11	187.62	0.06%
34	90183930	Cannulae	0.10	55.05	0.18%
35	48204000	Manifold business forms and interleaved carbon sets	0.10	0.91	10.65%
36	84483310	For cotton spinning machines	0.09	16.87	0.56%
37	90132000	Lasers, other than laser diodes	0.08	47.81	0.18%
38	84193200	For wood, paper pulp, paper or paperboard	0.07	3.94	1.76%
39	84149040	Of Industrial fans, blowers	0.06	71.59	0.08%
40	44181000	Windows, French-Windows and their frames	0.06	1.94	2.91%
41	39019090	Other Polymers of ethylene, in primary forms	0.04	404.55	0.01%
42	29173990	Other Aromatic polycarboxylic acids, their anhydrides, halides, peroxides, peroxyacids and their derivatives	0.04	79.87	0.05%
43	39061090	Other Poly (methyl methacrylate)	0.04	56.58	0.06%
44	44182090	Other Doors and their frames and thresholds	0.03	13.61	0.25%
45	73181600	Nuts	0.02	185.38	0.01%
46	73181900	Other Threaded articles	0.02	210.58	0.01%
47	85371000	For a voltage not exceeding 1,000 V	0.02	703.86	0.00%
48	28129000	Other Halides and halide oxides of non-metals	0.02	17.71	0.10%
49	38111900	Other Anti-knock preparations	0.02	40.29	0.04%
50	84145990	Other industrial fans	0.02	263.91	0.01%

Source : DGCIS and DRI

## Chapter 8

### Cross Cutting Themes

#### I. Brand India

The emphasis on Brand India is to promote India as a business opportunity by creating positive economic perceptions of India globally as well as effectively present the India business perspective and leverage business partnerships in a globalised market place. The major initiatives in promoting Brand India are *The India Shows* across continents, the *Experience India* programme, *India Now, Business and Economy* bi-monthly business magazine and a study on *Innovations from India: Harbinger of Change*.

Manufacturing exports require strong brand promotion. Different sectors belonging to manufacturing viz. Gems and Jewellery, Leather, Textiles, Engineering etc. are striving to carve an exclusive `Brand India` niche for themselves in the world markets. The important issue is whether each of the sectors need to promote their exclusive Brand India strategy or manufacturing exports as a group should also be promoted.

**Gems and Jewellery** are high value commodities and need constant efforts to ensure sustained attention and loyalty of consumers towards them. Recently, a survey conducted by GJEPC during the India Show 2011 in Basel revealed that in light of very positive customer perceptions, the India G&J brand is well placed to occupy the No.1 spot in the world in the gems and jewellery sector and this is an opportune time to pro-actively promote the “Made in India” brand through a deliberate campaign. An enhanced brand perception would also help our exports move up the value chain. It is estimated that about US\$ 20 million may be required over four to five years for this purpose. Keeping in view the turnover of the sector, the industry could lead such an initiative, and dovetail on-going Government initiatives like India Brand Equity Foundation (IBEF) and Ministry of Tourism led “Incredible India” campaign with it.

The following measures for brand promotions are recommended:

- i) Gems and Jewellery industry may consider setting up a Brand Fund from contributions from its members for brand promotion of the “Made in India brand as no. 1 in the world, with strict internal quality control and standards adherence for participating brands.
- ii) The Council may collaborate with (IBEF) for positioning of gems and jewellery in an international brand promotion campaign.

Brand promotion aimed at creating a brand identity and an associated brand loyalty is necessary for the growth of the **Leather sector** in the international market. The industry has

proposed that Government of India may consider formulating a specific package for brand promotion by creating a separate fund, so as to provide direct financial assistance to individual companies in leather sector. The financial assistance requested is to the extent of about 10% of export turnover of the company for a period of 5 years to enable them to gain a foothold. Eligibility criteria may be drawn for selecting the companies. Activities like advertisements in magazines / news papers / public places, taking floor space in departmental stores / airports etc. could be considered for coverage. A component supporting industry level efforts at creating a 'Made in India' brand could also be included. This fund would to that extent also cover brand promotion activities like organizing buyer get-togethers, fashion shows, etc.

The industry itself should take ownership and assume the lead in initiating and funding brand promotion activities. The dependence on Government should not be the key driver, if the efforts are to be on the scale and the flexible basis required for effectiveness in a dynamic and varied world. Major companies should come forward to create such a fund.

It is recommended that:-

- i) The leather sector may consider setting up a fund through industry contributions for brand promotion, particularly to establish the "Made in India" brand and ensure quality control.
- ii) Leather sector may also work with the IBEF for sector-specific branding.

Brand promotion is a key initiative to expand the **Handicrafts** export market. It is necessary that the presence of Indian products should be known in targeted markets and an attachment created in a systematic manner through promotion and publicity. There is a need to project the Indian handicraft brand "Hand made in India". Generic promotion is a slow process and needs constant focus on the consumer. A "Brand Fund" is proposed for this purpose. Efforts for brand promotion should come from the exporters themselves with their ownership to be fully effective. It is recommended that the creation of a Brand Fund beset up with contribution from major manufacturing and exporting stakeholders in the handicrafts sector. The Export Promotion Council can also work with the IBEF in the Department of Commerce to develop their international campaigns.

In the **Textiles sector** as the products get upgraded in value terms they carve a niche for themselves which should be nurtured to become a Brand. As creation, promotion and sustenance of Brands is highly capital intensive, requiring vast amount of funds, the present allocation for such activities should be substantially increased and 'Brand Promotion Fund' should be created.

### **Action taken by IBEF**

Over the years, the India Brand Equity Fund (IBEF) has emerged as a credible source of information on India business and economy powered by its website [www.ibef.org](http://www.ibef.org). Through its

India Business Kits like 'India Now', a perspective magazine and 'Experience India' CD, it disseminates information on business opportunities in India at various national and international levels. At present IBEF is involved in branding activity in India Shows which are being held across the globe. IBEF will continue promotional branding work through its website, Experience India programme where under it invites business students, academicians and journalists for interaction with stakeholders across the spectrum of Indian economic landscape, participate in major global exhibitions, organise seminars at international and national trade fairs along with participation of key Indian industry players and government officials. IBEF has developed a business 'brand kit' which highlights brand values of India's manufacturing sector, the availability of highly skilled power, technological sophistication besides the world class facilities available in industrial hubs.

Indian manufacturing sector represents a robust industry with a growing international market share and reach. IBEF has suggested a brand promotion strategy for developing the Indian manufacturing sector which gives a powerful message of India as a quality and creditable supplier of goods and position India as a reliable business partner. Besides, it will now start product specific branding activity. It is starting with Brand Pharma India project with the objective of positioning India's pharmaceutical industry as a quality, credible, reasonably priced high quality product.

### **Proposed Strategy**

IBEF has suggested that a multipronged brand strategy should be developed to build and promote a brand identity for the sector. The proposed brand strategy should coalesce in itself the brand values of the manufacturing sector viz. quality, skilled manpower, innovation, technology sophistication, value for money, resilience and market adaptability. As a first step, the strategy may combine the following essential elements that may assist in positioning the Indian manufacturing sector.

a) Audits and assessments - Product and market perception: A robust export promotion strategy would require two pronged action at the policy level and the promotional level. While the first is intrinsic to the Department of Commerce, as regards a product-market promotion strategy, it would be essential to first undertake an assessment and audit of the product promotion strategy currently being pursued across manufacturing, which would help gain an understanding of the areas wherein minimal/major interventionist action is required. It is also important to undertake a perception survey of the Indian manufacturing sector in important target markets to understand the product competitiveness vis-à-vis other competitor nations/companies in the market. Quality certification parameters and quality perception would be key elements of such a perception survey. Such studies are primary for developing and planning effective and targeted export promotion strategy.

- b) **Collate the brand aspects:** It is important that workshops with stakeholders associated with the manufacturing sector be organised to ensure that all facets and aspects of the brand do get integrated into the brand strategy.
- c) **Create a logo and standardise a business brand kit:** A logo should be developed that coalesces in itself the brand values of the manufacturing sector listed above. It is important that a standard brand kit be developed, which can be used as a promotional tool by players associated with the sector. This will help ensure a consistent message being relayed across markets about the sector and its brand strengths. This kit should be widely disseminated across markets to Indian missions abroad, foreign missions in India, industry players to ensure consistency in perspective positioning. IBEF is preparing a fact book on Indian manufacturing, which highlights the nation prowess and the opportunity in the sector, which is to be disseminated across markets.
- d) **Position the India business perspective at international exhibitions/seminars:** A list of premier international and national trade fairs, seminars, exhibitions should be identified across markets wherein the India perspective is projected consistently. Participation of key industry players with government representatives must be encouraged at such meets.
- e) **Experience India programme:** It is important that India's perspective is regularly communicated and made known to global media. A lot happens within the country but rarely the extent of it gets communicated to the audiences abroad. A strong global media and PR initiative is necessitated to ensure as well timely responses to issues that may emerge in the media. Media has a strong role to play in building brand perceptions. It may be feasible to invite foreign media from identified markets to visit/engage/interact with the Indian industry.
- f) **Leverage the net:** In the net-age, the power of the internet must be leveraged consistently to communicate updated information of the Indian industry as well as to provide links with possible suppliers/exporters/manufacturers of products through an Indian website. The website should be developed as a powerful medium, must be contemporary in look and feel and should ensure ease of navigation. Advertising online, including postings on Twitter, facebook and other social media should also be effectively used to position India related articles.
- g) **Brand messaging: Quality and certification:** Undeniably the brand is made by the product quality, which is integral for the promotion of the brand. As part of brand messaging, IBEF would integrate quality and certification parameters to project compliance with international standards. For example, few know that the highest recipients of the Deming Award outside of Japan – the highest award in manufacturing – come from India. Whilst IBEF could do a study on quality standards across key manufacturing sectors in India to understand how Indian products compare with key competitors in terms of quality and price, for now, we are not well-placed to comment on the issue. Subject to the approval of the Department of Commerce, IBEF could consider undertaking research on the subject to report back with credible data and facts on

quality parameters and adherence in India to be able to integrate the issue as part of the broad messaging theme.

## **II) Non-Tariff Measures**

### **Introduction**

Countries use many mechanisms to restrict imports. Till the beginning of 1970s, tariffs (custom duties) were the principle mode of protectionism. But with successive rounds of GATT negotiations, there was a large drop in the average tariff levels of manufactured goods in the developed country markets. When tariffs paled into insignificance, countries resorted to a form of administered protection known as Non-Tariff Measures (NTM). In the Uruguay Round, the approach for dealing with NTMs was to bring existing barriers into the realm of multilateral negotiations, strengthen rules governing their use, develop surveillance mechanisms to enforce compliance, and offer improved dispute settlement procedures – the aim was to minimize trade distorting and trade restricting effect of NTMs. Some notable success was also achieved in reaching substantive agreements limiting, clarifying or discipline the system that members may use – Article III.8.b of GATT allowing subsidies to domestic producers; Article III.9 allowing members to have internal price control measures; Article VI of GATT on Anti-dumping and countervailing duties; Article VII of GATT on methods of customs valuation; the Agreement on Agriculture, converting all quantitative restrictions into tariffs; the Technical Barriers to Trade (TBT) Agreement defining the rights and obligations of members with respect to development and application of technical regulations and the ways in which products are to be assessed to determine whether they meet the specified technical standards; and similarly, the Sanitary and Phytosanitary Measures (SPS) Agreement with respect to human, animal and plant life.

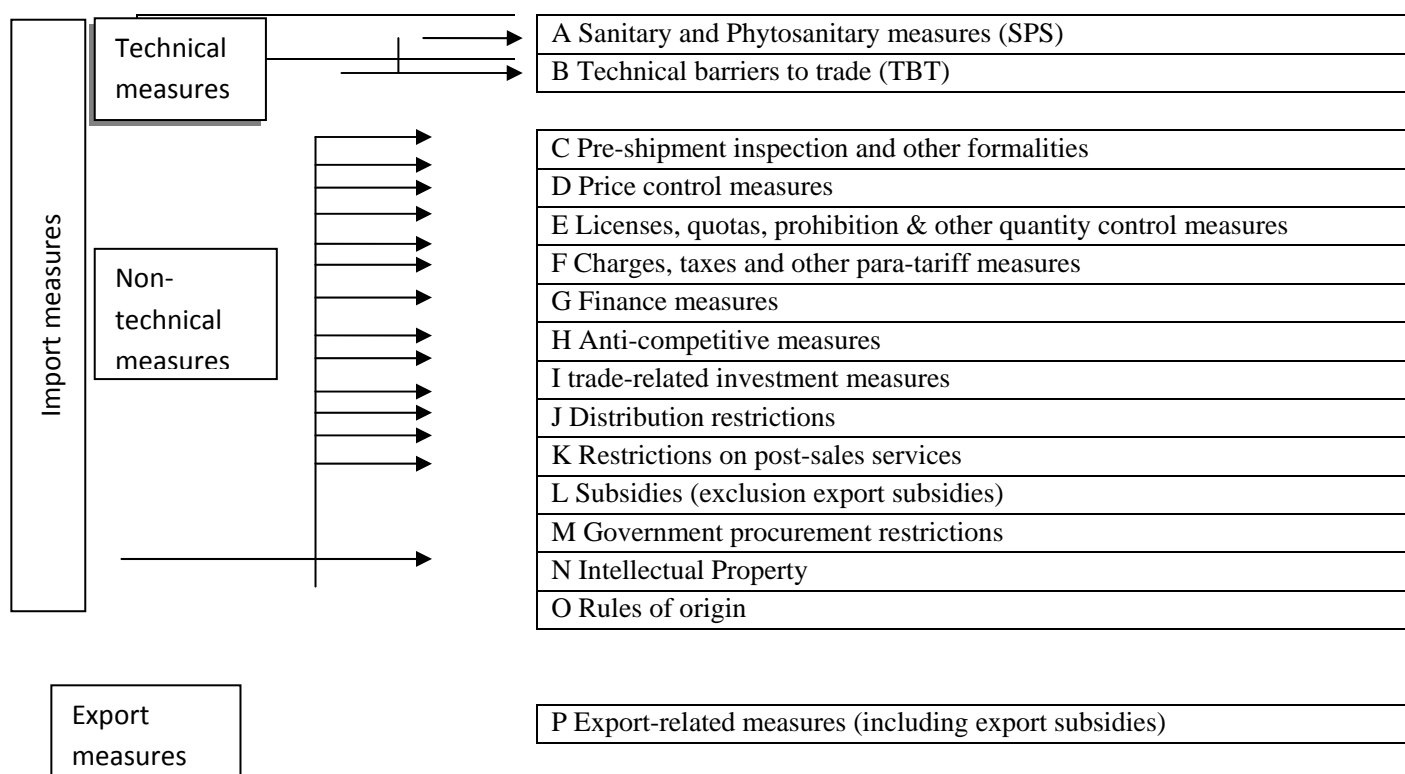
The ascent of NTMs holds special significance to developing countries like India. These countries have been encountering difficulties in accessing developed country markets because of restrictive standards, burdensome regulations, and expensive compliance costs. To assess the extent of the problem of NTM's, and to suggest policies for handling them the effort should be to:

- a) Identify and trace the type structure of NTM's affecting India's exports
- b) Examine these commodity-wise/ category-wise with the main focus on developed country markets.
- c) Suggest or recommend policy options.

### **Type of NTMs**

There is no single internationally agreed list of NTMs. In general, NTMs cover all measures affecting trade, other than tariffs, and hence any list of NTMs will be very long, and is probably continuously growing as governments invent new measures.

A brief analysis of NTBs faced by Indian Exporters is as follows:



Some of the NTMs which require specific mention are as follows:

**A. Standards and Related Regulations and Procedures:** Restrictive standards and burdensome regulations and procedures in several countries have been acting as barriers that significantly affect exports as also the capacity to trade. There are several issues involved which are briefly discussed below. Some measures clubbed hereunder affect individual consignments while some like those involving costs put additional burden on exports.

**(a) Harmonization** – Both the SPS and TBT agreements seek harmonization on as wide a basis as possible and for the applied measures to conform to international standards, guidelines or recommendations. A higher level of protection may be introduced or maintained if there is scientific justification (in case of SPS measures) or for legitimate objectives (in case of TBT measures). However, it has been observed that certain countries are at times laying down norms more stringent than those specified by relevant international bodies which are difficult to meet. Similarly testing methods are specified for very high levels of sensitivity which may not be justified or required and due to which the cost of testing becomes disproportionately high and prohibitive. Sometimes, levels of sensitivity are raised only because better technology or testing equipment becomes available, and not due to any scientific evidence that a higher sensitivity is required to meet a health concern. Moreover, the standards are revised, mostly upwards, at regular intervals making it very difficult for developing countries to adapt to these changing

requirements. Harmonization of both standards and procedures applicable within a common customs territory is necessary for predictability. Harmonization with international standards and use of agreed testing methods with scientific justification will reduce the trade restrictive impact.

**(b) Transparency** - It has often been observed that there is absence of information and lack of transparency on the procedural norms and regulations of various countries regarding specifications as well as methods of sampling, inspection and testing. New Regulations are brought out and implemented without even giving the producers in the exporting country a chance to get familiar with these. Often the standards are available only in the language of the importing country or are presented in a very complicated manner. The result is that exporters are, at times, not clear about the specific requirements prescribed by the country of destination, which has led to rejection at the point of import.

**(c) Conformity Assessment Issues** – Several conformity assessment issues have the effect of restricting trade, these include:

- Excessive costs levied for testing - for developing country exporters these are a significant barriers;
- Location of testing facilities including testing being done only at single/limited centre(s);
- Limited validity of certificates, requiring re-testing with the attendant costs;
- Procedures involving site/ factory visits by the certifying authorities – both the time taken and costs involved act as hindrances;
- Non-recognition of certificates from accepted International Bodies.

**(d) Risk-based Approach** - While risk to consumers resulting from hazard, particularly in food, has been identified as a significant concern at the international level, it has been observed that some importing countries are fixing standards without carrying out comprehensive risk assessment work and despite repeated requests details of the basis for the standard are not made available. This may at times be in contravention of Article 5 of the SPS Agreement which requires that sanitary and phyto-sanitary measures should be based on risk assessment and take into account an appropriate assessment of the actual risk involved and if requested by the exporting country make known details of this assessment.

**(e) Safety Management Systems Approach** - In addition to end product criteria, a systems approach which builds in quality and safety throughout the food chain from primary production to final consumption is increasingly being used to ensure that food products are safe for consumption. Such a 'safety management systems' approach is being insisted upon by many countries for allowing import of products such as marine products. This system allows building in controls in a flexible manner based on conditions applicable in a country/ industry etc. However, certain countries are building in prescriptions in the production process. Process standards based on conditions and production systems prevalent in the importing country are not relevant for the developing countries for achieving the required product standard. It is



internationally accepted that alternate equivalent measures should be permitted if these meet the requirements of the importing country in the use of the final product.

**(f) Equivalence** - Equivalence agreements between Members are seen in the WTO as the means to address the standards related trade problems as they enable pooling and utilization of resources more effectively, avoiding duplication of inspection and testing, and ensuring that health and safety requirements are met effectively without unduly restricting trade. Such agreements would generally benefit exporters in a developing country as financial burden as well as risk of rejection would be reduced. However, it is observed, Members often do not enter into such Agreements even after receipt of a formal request as either the administrative burden of entering into these is high or they don't want to lose their control over imports. Some countries use regulatory standards to address demand supply conditions. Further, at times it is seen that important components such as provision for re-testing and appeal in case of rejections are not addressed in such Agreements as these are not considered to be in the interest of the importing country.

**(g) Rejection & Destruction of Consignments** - Health Authorities in certain importing countries have recently started destroying the contaminated/ damaged consignments instead of returning them to the exporting countries as requested by the exporters/importers. The decision regarding destruction of a consignment is often not a correct decision and is also not justified.

- The consignments found contaminated in the importing country may need to be brought back to enable the competent authority to re-test them and ascertain whether the consignments were contaminated or not as certified. And if contaminated examine the cause and take immediate corrective measures to control/eliminate its recurrence.
- Destruction of a consignment leads to wastage of a large amount of money as some cases of contamination can be taken care of through reprocessing.
- Sometimes the importing country adopts different methods for sampling and testing and also testing for parameters/contaminants, which are not notified in their standards, which at times become reasons for rejections.
- In certain cases the importing country may have higher standards than those followed by the country of export. The returned consignments could be utilised in domestic trade/ purposes.
- Sometimes a product is rejected based on a national standard by a buyer, and it is accepted after price discounts; this shows that at times standards are used primarily to depress prices by the buyer. It may also be noted that Codex has brought out a guideline for the exchange of information between countries on rejection of imported foods (CAC/GL-25-97) wherein the standard provides for destruction of the consignment, retesting of the consignment, re-export of the consignment to countries which state in advance that they are prepared to accept the consignment knowing that it has been refused entry elsewhere.

**(h) Other Standards related issues - Voluntary Standards** - Imposition of voluntary international standards such as ISO 14000 on Environmental Management Systems by buyers on their suppliers in exporting countries has the effect of not only restricting market access for at least sometime until the industry upgrades itself, but also leading to high cost of implementation. The standard on Social Accountability, SA 8000 is another international standard for management systems primarily dealing with working conditions. Under the guise of Social Accountability, the imports of various products can be restricted.

## **B. Customs Procedures**

Customs procedures including valuation rules in certain countries have been identified to be acting as trade barriers.

## **C. Marketing Restrictions including Labelling Practices**

Various requirements for marketing a product in different markets prove to be cumbersome and onerous to developing country exporters. These requirements include detailed labelling requirements with extensive product/ content description. Such labelling requirements become a hindrance especially if the product is being exported to different countries each with different regulations. In several countries there are registration requirements for firms before exporting, distributing and selling, with the registration process itself being costly, time consuming and not always granted. In the case of pharmaceutical products, import in several countries are tacitly encouraged/ allowed only from particular countries and sources, such policies are enabled by the registration mechanism which is not transparent and favours producers only from certain countries even for applying. Some buyer requirements like comprehensive product liability insurance also restrict the export and marketing ability of developing country exporters.

## **D. Restrictions on Port of Import**

The restrictions on port of import i.e. allowing imports of particular goods or goods from a particular country only through designated ports restrict exports. This increases the transit time and transaction cost in clearance of consignments. While in some cases it is demonstrably for administrative reasons with the facilities required for clearance of the goods being available only at the designated port, in some of the other cases the underlying reason for imposing such restriction is more to restrict trade than on account of any administrative necessity.

## **E. Non-preferential Rules of Origin**

Several Textiles Non preferential rules of origin have often been cited in the context of exports of textile products, as an NTM. The issues involve non-recognition of certain processes as origin conferring in addition to discriminatory and unilateral changes to the rules. Such Rules which are established/ changed to favour imports from particular origins are barriers to trade and also

discourage value addition taking place in the traditional region of production. In some cases they adversely impact on the quota utilization of some countries. In some countries for fabrics made from wool, dyeing, printing and finishing operations are not recognised as origin conferring. Similarly for made-up articles made of Cotton or cotton blends the origin is now being determined on the basis of where the constituent fabric is formed, thereby ignoring all operations such as dyeing, printing, finishing, designing, cutting, sewing, embroidery etc. contrary to prevailing manufacturing or processing practices.

## **F. Restrictive Practices Tolerated by Governments**

Attention has been drawn to the increasing instances of campaigns carried out to create public opinion as well as to force buyers to change their source of imports on grounds other than trade related e.g. ethical treatment to animals. These campaigns could have various motivations not necessarily based on truth and certainly not based on any trade issues. There may be two aspects to discussing such measures. First is that they do not follow from any governmental action and therefore the extent to which they could be discussed/disciplined in WTO would need to be deliberated upon. The second aspect is the increasing use of such methods and potential for these to divert trade and restrict market access especially from developing countries which may be vulnerable due to their own priorities thus making it important to be discussed.

### **Strategy for addressing NTMs**

Department of Commerce has adopted a multi-pronged plan and strategy to deal with issues relating to NTMs. These are explained below.

(a) In pursuance of the decision in the Committee of Secretaries meeting held on 31 October, 2008, the Department of Commerce constituted an Inter-Ministerial Committee (IMC) to coordinate the plan and strategy for dealing with issues related to NTMs and to increase India's market access abroad. A Technical Committee (TC) was also constituted to provide technical support and generate scientific data to deal with specific technical and scientific issues concerning NTMs. So far six meetings of the IMC and two meetings of TC have been held by the Department of Commerce.

(b) Strengthen domestic regulatory regime by upgrading existing regulations or creating new technical regulations, standards and conformity assessment procedures on Indian imports in a phased manner, over a period of time. This will make an accurate assessment of the capacity of domestic industry to comply with the same. Such an arrangement would not only check the flood of imports in sensitive sectors but also help safeguard consumers from sub-standard/ spurious goods. Also, such a regulatory environment would encourage a regime of quality production and thereby indirectly promote exports. This would necessitate the up gradation of our testing facilities considerably to meet the requirements of new standards and also increase in the number of laboratories with international recognition/accreditation. Concerned Department/Ministries/

Organizations will be required to upgrade their infrastructure and surveillance systems at major ports, air ports and within the domestic market to ensure due compliance of India's standards, technical regulations and conformity assessment procedures thereof.

(c) On the export side, various Departments/Ministries/Organizations will identify clearly the NTMs faced by our exporters so that they may be taken up at the appropriate level in the SPS/TBT Committee Meetings at the WTO or bilaterally with the concerned countries in the FTA negotiations. The Department of Commerce raises 3-4 four issues in every regular SPS/TBT Committee Meetings at the WTO to get suitable redressal of our export concerns. For example, Specific Trade Concerns (STCs) on the issue of EU'S Regulation, Evaluation, Authorization and Restriction of Chemicals (REACH), EU's Traditional Herbal Medicine Product Directive 2004/27/EC (THMPD), EU's legislation on animal welfare and health etc. have been raised.

(d) In order to facilitate our exporters, review our existing standards and consider benchmarking these regulations against international standards. Once we harmonize our standards and technical regulations with the international standards our products will have smooth entry in foreign markets rather than being subject to re-examination.

The Department of Commerce (DoC) has initiated a number of steps, often in coordination with concerned Departments/Ministries/Organisations, as part of the above mentioned strategy to deal with NTMs. For example, DoC has installed a web-based Compendium on Import Policy of India, for South Asia. It furnishes information on tariff lines and requisite SPS/TBT compliance requirements the products have to go through. It has also institutionalized a system under APEDA of downloading SPS notifications of all member countries of the WTO from the WTO website; of analyzing and identifying the notifications from the angle of India's export interests; disseminate the notifications to stakeholders; seeking their feedback and preparing notes to raise the relevant issues in the SPS Committee of the WTO and also bilaterally with concerned countries. A similar process for TBT notifications has also been institutionalized.

### **III Regional Trading Agreements**

Regional Trading Agreements (RTAs), variously named as FTAs, CECAs or CEPAs, and the multilateral arrangements under the WTO share the common objective of trade liberalization and global integration. Critics may however hold that the former is discriminatory while the latter is not. The pursuance of similar objectives but according to different approaches inevitably creates some tension in this relationship, and benefits of RTAs only flow between chosen parties. The WTO Agreement provides for RTAs.

Over the years there has been a gradual erosion of the MFN principle with the proliferation of RTAs. Considering the slow pace of the multilateral process of trade

liberalisation the appeal for RTAs has grown stronger over the years. RTAs allow countries to single out trade liberalisation with specific markets and negotiations are less lumbering than the multi-lateral process. RTAs also make it possible for building tailor-made regulatory and trade policy disciplines.

RTAs are generally viewed as building blocks towards an eventual free trade regime in the multilateral arena under the assumption that preferential concessions under the RTAs would at some point be extended at the MFN level. Proponents of RTAs argue that they help nations gradually work towards global free trade by allowing countries to increase the level of competition slowly and give domestic industries time to adjust. In addition, RTAs can be valuable arenas for tackling volatile trade issues such as agricultural subsidies and trade in service. These proponents describe RTAs as circles of free trade that expand until they finally converge to form expansive multilateral agreements.

Opponents of RTAs describe them as a complex web of competing trade interests that hinder multilateral agreement. Because RTAs create preference systems that transcend regional boundaries, some argue that political and economic tensions will lead to hostility and increased retaliation. Additionally, RTAs may negatively impact global trade because regional preferences and rules of origin distort production by making location of production or source of raw materials the driving incentive. Others fear that RTAs prevent complete liberalization in the multilateral arena. Countries that benefit from regional trade agreements may be reluctant to expose themselves to the risks of opening their markets on a multilateral level if they expect relatively insignificant returns.

The configuration of RTAs is diverse and becoming increasingly more complex with overlapping RTAs and the emergence of a trend towards cross-regional RTAs. These developments have given rise to multiple systems of rules, unequal access to world markets and the undermining of the MFN principle.

There is little doubt that the main economic advantages to participants in RTAs would be even greater if the liberalization were carried out on a wider, multilateral scale. However, with the multilateral process of trade liberalisation losing traction, the allure for RTAs may become irresistible and it may be worthwhile for India to engage with its major trading partners in the RTA process as it may lose out due to the trade diverting effect of any RTA.

India has always stood for an open, equitable, predictable, no-discriminatory and rule-based international trading system. FTAs, in India's point of view, should be 'building blocks' towards the overall objective of trade liberalisation and should complement the multilateral trading system.

In the past, India had adopted a cautious approach towards FTAs and was initially engaged only in a few initiatives such as the Bangkok Agreement (signed in 1975) the Global

System of Trade Preferences (GSTP - signed in 1988 and SAPTA (Signed in 1993). On account of the limited trade liberalisation coverage, these engagements achieved inadequate results in terms of increasing trade volumes with member countries.

However, recognising the fact that the ambitious Comprehensive Economic Cooperation Agreements (CECA) seeking deeper market access as opposed to the limited coverage agreements have become an important tool globally for achieving economic objectives and increased market access, India, beginning this century, began engaging with its important trading partners with a view to conclude such agreements.

As a result, India has so far concluded 10 FTAs with its important trading partners like ASEAN, Singapore, Korea, Japan, Malaysia and 5 limited scope preferential trading agreement. India is also negotiating/ expanding 17 more agreements. At least 9 more proposals for FTAs are under consideration. When completed, these agreements would cover over 100 countries spread across 5 continents.

All of India's FTAs have been notified to the WTO under the "Enabling Clause" of Article XXIV of GATT 1994 and meet the four conditions prescribed therein.

Except for the agreement with Singapore, none of the other operational FTAs have been in force long enough to make a meaningful assessment of the impact they may have on the domestic manufacturing sector.

The Table below lists the top 50 items imported under preferential tariffs under the India-Singapore CECA from the ports of Chennai, Kolkata and Mumbai during the period 2007-10. It is interesting to note that barring a few finished products like needles for injection, syringes etc. most of the items are in the nature of raw materials or intermediates for use by the domestic manufacturing industry.

It is also interesting to note that except for needles for injection, butanoic acid and alkyl phenols, none of the other items imported under preferential terms constitutes more than 10% of our global imports. It would therefore be safe to assume that these preferential imports would have had little impact on the domestic manufacturers of similar products. It could be argued that these imports have fed into the value chain of our manufacturing output and possibly even to the export of finished product where these items were used as inputs.

India's exports of manufactured items (NAMA lines excluding fishery products) has grown from USD 74.89 billion during 2004-05 to USD 162.87 billion during 2009-10. While it is still too early to assess the exact impact our RTAs would have in accelerating our exports of manufactured goods the preferential market access under these RTAs would definitely contribute beneficially – the extent of such contribution would emerge after these RTAs run their course of

full implementation. Of course, one would still need to establish a causal link between any such increase and the preferential market access under the RTAs.

The multilateral trade liberalisation efforts under the WTO would have little impact on our domestic manufacturers in terms increased competition since we would still have sufficient water between our applied and bound tariffs. Sectoral commitments would have an impact. However sectoral commitments are voluntary and we would only undertake commitments taking our domestic sensitivities into consideration.

The multilateral liberalisation could have a beneficial impact on our manufactured exports as tariffs of the developed economies are expected to be significantly reduced from their present levels. Such reductions would present opportunities for enhanced market access as well as opening of new markets.

**Table on the top 50 items imported under preferential tariffs under the India-Singapore CECA from the ports of Chennai, Kolkata and Mumbai during 2007-10**

(in Rs` crores)

SNo	HS	Description	Imports under CECA (Avg 2007-10)	Avg Global Imports (2007-10)	CECA Imports as % of Global Imports
1	29023000	Toluene	43.92	632.63	6.94%
2	29024100	o-Xylene	30.89	380.26	8.12%
3	90183220	Hollow needles, for injection, aspiration, biopsy and transfusion	12.63	21.35	59.15%
4	29156010	Butanoic acids, their salts and esters	6.91	41.17	16.79%
5	90183100	Syringes, with or without needles	6.64	76.14	8.72%
6	84145930	Industrial fans blowers and similar blowers	6.24	133.87	4.66%
7	84483990	Other textile machinery	5.83	283.52	2.06%
8	38112900	Other additives for lubricating oils	2.80	119.47	2.34%
9	37079010	Chemical products mixed or compounded for photographic uses (for example developers & fixers) whether or not in bulk	2.06	26.41	7.82%
10	29071950	Alkyl phenols	1.93	4.91	39.29%
11	38123090	Other anti-oxidising preparations and other compound stabilisers for rubber or plastics	1.60	248.85	0.64%
12	38119000	Other anti-knock preparations	1.49	236.16	0.63%
13	39021000	Polypropylene	1.37	1454.61	0.09%
14	39074000	Polycarbonates	1.35	566.25	0.24%
15	90328990	Other automatic regulating or controlling instruments and apparatus	1.22	833.58	0.15%
16	84798999	Other (other than Apparatus for growing or pulling minicrystal semi-conductor boules, Epitaxial deposition machines for semi-conductor wafers, Apparatus for physical deposition by sputtering on semi-conductor wafers, Apparatus for wet etching, developing,	1.21	2783.12	0.04%
17	38220090	Other diagnostic or laboratory reagents	1.06	474.50	0.22%
18	39023000	Propylene copolymers	1.03	163.54	0.63%
19	39053000	Poly (vinyl alcohol), whether or not containbing unhydrolysed acetate groups	0.80	189.06	0.42%
20	39069090	Other Acrylic polymers in primary forms	0.80	388.90	0.21%



21	32061110	Pearlsent pigment (Titanium dioxide, coated micaceous and lustres pearl pigment)	0.74	374.59	0.20%
22	68071090	Other Articles of asphalt or of similar materials	0.54	15.56	3.45%
23	29161400	Esters of methacrylic acid	0.46	163.63	0.28%
24	29053200	Propylene glycol (propane-1,2-diol)	0.45	158.62	0.29%
25	73182300	Rivets	0.35	42.09	0.82%
26	90283090	Other Electricity meters	0.34	29.68	1.14%
27	44189000	Other Assembled flooring panels	0.33	24.80	1.33%
28	68071010	Tarfelt roofing in rolls	0.28	11.91	2.36%
29	29173960	Isophthalic Acid	0.22	103.15	0.22%
30	38109090	Other Pickling preparations for metal surfaces	0.17	64.29	0.27%
31	29171200	Adipic acid, its salts and esters	0.15	80.18	0.18%
32	28111940	Sulphonic acid	0.14	3.98	3.43%
33	39029000	Other Polymers of propylene or of other olefins, in primary forms	0.11	187.62	0.06%
34	90183930	Cannulae	0.10	55.05	0.18%
35	48204000	Manifold business forms and interleaved carbon sets	0.10	0.91	10.65%
36	84483310	For cotton spinning machines	0.09	16.87	0.56%
37	90132000	Lasers, other than laser diodes	0.08	47.81	0.18%
38	84193200	For wood, paper pulp, paper or paperboard	0.07	3.94	1.76%
39	84149040	Of Industrial fans, blowers	0.06	71.59	0.08%
40	44181000	Windows, French-Windows and their frames	0.06	1.94	2.91%
41	39019090	Other Polymers of ethylene, in primary forms	0.04	404.55	0.01%
42	29173990	Other Aromatic polycarboxylic acids, their anhydrides, halides, peroxides, peroxyacids and their derivatives	0.04	79.87	0.05%
43	39061090	Other Poly (methyl methacrylate)	0.04	56.58	0.06%
44	44182090	Other Doors and their frames and thresholds	0.03	13.61	0.25%
45	73181600	Nuts	0.02	185.38	0.01%
46	73181900	Other Threaded articles	0.02	210.58	0.01%
47	85371000	For a voltage not exceeding 1,000 V	0.02	703.86	0.00%
48	28129000	Other Halides and halide oxides of non-metals	0.02	17.71	0.10%
49	38111900	Other Anti-knock preparations	0.02	40.29	0.04%
50	84145990	Other industrial fans	0.02	263.91	0.01%

Source : DGCIS and DRI

## Chapter 9

### Suggested Schemes for the Twelfth Plan

The Sub Groups under the Working Group have generally recommended that various export incentives provided for different sectors under the Foreign Trade Policy should be continued in the 12<sup>th</sup> Plan. In addition, some new schemes for engineering goods, leather sector, MSME`s etc. have been recommended for consideration. Most of the suggested schemes would be administered by Departments other than the Department of Commerce and therefore their details have not been firmed up. However, their broad contours are explained below.

#### Engineering

- (i) **Technology Upgradation and Development Scheme for Auto components and the casting industry** : The estimated investment on this scheme is Rs. 15,000 crores to be spread over the next five years towards technology and R & D to maintain and enhance the industry`s competitiveness. An interest subvention scheme for a five-year period wherein the industry would invest a matching amount equivalent to government`s contribution needs to be considered. R& D and technological intervention is required in areas of light weighting, engine and power train and manufacturing technologies.
- (ii) **Technology Upgradation Fund Scheme for the Engineering Sector, particularly, the MSME Sector**: In consultation with the Ministry of MSME, consider the proposal mooted by the Prime Minister`s Task Force on Micro Small and Medium Scale Enterprises regarding constitution of a Rs 2500 crore Technology Upgradation Fund Scheme for the Engineering Sector. This will help in MSME exporters move up the value chain.

Till a Technology Upgradation Fund Scheme for the MSME Sector is put in place, the Credit Linked Capital Goods Scheme (CLCGS) should be extended. The CLCGS is available till 2012. The CLCGS, at present, provides capital subsidy of 15% for loans up to Rs 1 crore. The CLCGS was launched in the year 2000, revised in 2005 and has been extended from the 10th Plan to the 12th Plan. Under the scheme, approximately 7396 units, largely in the engineering and textile sectors, have availed subsidy of Rs. 315.21 crores up to August, 2009. It is further suggested that not only should the CLCGS be extended till the TUFs for the MSME sector is formulated, but in view of the inflationary situation, both internally and externally, the Capital Subsidy should be increased from 15% to 25% and the loans should be provided up to Rs 5 crore, given the high cost of modern and green technology.

- iii) **Expanding FMS, FPS and MLFPS Benefits and Identification of Thrust Markets and Thrust Products :** The revival of engineering exports in 2010-11 in the aftermath of a negative 19% growth in 2009-10 and the dispersal of engineering exports to hitherto untapped countries during 2010-11 indicates the contribution of schemes like Focus Market Scheme (FMS), Focus Product Scheme (FPS) and the Market Linked Focus Product Scheme (MLFPS) in promoting engineering exports from the country. Since there is a likelihood of world demand slackening in the next couple of years and the revival may happen with a lag, these export promotion schemes should be expanded and strengthened to bolster competitiveness of engineering goods. The FPS and MLFPS schemes may be utilized for the benefit of those tariff lines which can be identified as Thrust Products directed towards Thrust Markets. This could be an annual exercise based on which these benefits could be provided during the 12<sup>th</sup> Five year Plan period. Similarly, an enhanced FMS benefit could be used to increase India's engineering exports to countries with potential export growth possibilities.
- iv) **Create a Fund to develop Service and Distribution Outlets in Difficult Markets :** An innovative idea is to create a fund to develop Service and Distribution Outlets in Difficult Markets. Detailed proposals may be sought from EPCs and other Industry organizations for this purpose.

## **Gems and Jewellery**

**Support under the Foreign Trade Policy and other initiatives:** A number of incentives were provided to the gems and jewellery sector in the Foreign Trade Policy 2004-09, which have been continued in the current Foreign Trade Policy (2009-2014). Similarly, a number of incentives have been given to the sector in successive Union budgets. These measures include abolition of Licensing regime for rough diamonds and abolition of import duty on rough as well as cut and polished diamonds, reduction of customs duties on coral; polished cubic zirconia, benign assessment scheme; reduction in transaction costs, drawback duty on gold and silver jewellery; import of gold through nominated agencies and Star Trading Houses etc. In addition, liberal financial assistance was made available to the sector under the Market Assess Initiative (MAI), Market Development Assistance (MDA) scheme of the Department of Commerce to participate in international exhibitions; organise B2B meetings and export related activities. **All these incentives/concession/schemes which have helped in the growth of the sector should be continued.** The Government should encourage gems and jewellery industry participation in B2B interactions in untapped markets with a focus under MAI and MDA schemes.

## **Leather sector**

- (a) **Scheme for Up-gradation of Common Effluent Treatment Plants (CETPs) with Zero Liquid Discharge (ZLD) technology:** Zero Liquid Discharge (ZLD) is an eco-friendly technology wherein not even a drop of tannery waste is discharged into the

environment. Establishment of a CETP with the ZLD technology with a 1000 m<sup>3</sup> capacity involves a huge investment of about Rs. 20 Crore, of which the cost of the ZLD technology component alone is about Rs.12 Crore. It is estimated that the Operations and Maintenance (O&M) cost of a Common Effluent Treatment Plant with ZLD with a 1000 m<sup>3</sup> capacity is about Rs.4 Crore per annum. This is a very huge financial requirement, which will be difficult to sustain by tanneries, most of them being in the SME segment. In view of the increasing of critical role of environmental standards worldwide, we need to urgently address this issue providing financial support to the tanning sector for implementing ZLD technology and for meeting the recurring O&M cost. Department of Industrial Policy and Promotion has a scheme for setting up of CETPs. It is recommended that these ZLD projects ideally be made a part of that scheme. If that is not possible, it would be in the interest of expanding leather exports to even consider a full fledged stand alone scheme to fast track the environmental standards upgradation measures necessary.

- (b) **Access to Capital: Corporatization of the Industry:** Creation of a Venture Capital Fund under Exim Bank / ECGC / any Nationalized Bank with equity participation for capital requirements by various financial institutions could support creation of new corporatized entities and corporatization and growth of existing leather sector entities. Such equity can be paid back by the unit in periodical manner within a span of 5 years to create a rotating pool of funds. This is critical to addressing financial constraints facing the sector and would be useful for capacity enhancement and modernization of existing leather units and also in establishment of new units in a corporatized mode. It is recommended that given the importance of the Sector in terms of employment targeting of lower income groups and value added potential, a new Plan scheme to facilitate corporatization –is essential to achieve 12<sup>th</sup> Plan goals. Government can work out the scheme in consultation with RBI, SEBI, Exim Bank, ECGC etc, as also industry stake holders. A scheme to implement this suggestion effectively should be taken up in the 12<sup>th</sup> Plan on priority.

## Jute sector

**Jute Technology Mission:** The only Scheme implemented in the 11<sup>th</sup> Plan was the Jute Technology Mission. It was divided into four Mini Missions and the implementing agencies of each Mission are given below:-

Mission	Implementing Agencies	Fund Allotted (Rs. Crores)
Mini Mission-I	Ministry of Agriculture(ICAR)	7.06
Mini Mission-II	Ministry of Agriculture (DARE)	49.90
Mini Mission-III	Ministry of Textiles (JCI)	64.58
Mini Mission-IV	Ministry of Textiles (JMDC)	234.02
<b>Total :</b>		<b>355.56</b>

Ministry of Textiles funded the MM III & MM IV part only. This scheme will have to be the driver of key elements of the strategy e.g. improved productivity, and it is proposed to be continued in the 12<sup>th</sup> Plan with increased allocation and more innovative elements.

## MSME`s

- i) **Interest subsidy scheme for exporting MSMEs** –Budgetary provision Rs 300 crores.

The rationale of the proposed scheme is that additional interest outgo over and above inflation plus a particular percentage (say 2%) should be given as subsidy to exporting MSMEs in proportion to their export. For e.g. if inflation is 8% and rate of interest is 14%, then 4% should be given as interest subsidy.

- ii) **Market Development and Brand Building for MSME exporters-** Budgetary provision Rs.1000 crores.

An overarching scheme may be launched for undertaking various export promotion activities for MSMEs viz. Brand Building, organizing Trade Fairs and Buyer-Seller Meets , Partial refund of overseas marketing expenditure (say 50%) to aggressively market their products in global markets in initial years, support for establishing/acquiring foreign companies, show rooms etc, assistance to MSME Associations / Cluster Associations for setting up office in a focused market place abroad, ( 25% cost to be borne by MSMEs, 75% by Govt. for 3 yrs, max. Rs 1 crore), undertaking product specific studies and country specific studies, creating awareness on labelling, packaging, bar-coding, standardization, new markets and new products,strengthening of international marketing intelligence, structured export support programme on the lines of Centre for the Promotion of Imports from Developing Countries (CBI), Netherlands , identification of export worthy MSMEs, etc. In addition to above, the following schemes are also proposed to be introduced: -

- a) Assistance for establishing Export Development Companies (EDCs) floated collectively by at least 10 MSMEs or cluster units (of same/ similar products/customer segment/country specific). (25% cost to be borne by MSMEs, 75% by Govt. for 3 yrs, max. Rs 2.5 crore). Target 100 EDCs in 12<sup>th</sup> Plan. - Rs 250 crores.
- b) Trading Houses (Private or PPP) for export of MSME products, especially labour intensive sectors with competencies of market development and

international trade. [Export incentive @ 5% on purchases from MSMEs worth Rs. 5000 Cr] - Rs 250 crores

**iii) Skill Development and Training for MSME exporters** - Budgetary provision Rs 200 crores.

Under the scheme various kind of Training programmes / Seminars will be organised to create awareness amongst exporters regarding value added products, on improving competitiveness, export procedures/documentation and incentives. In addition, MSME Associations and EPCs will be involved in Skill Development and Export capacity building activities for MSMEs. Export Related Business Skill Development Programmes with support of trained export consultants for providing a complete range of export related strategic services like gathering market intelligence, organizing professional and planned participation in trade fairs, undertaking matchmaking services with potential international buyers, risk management, etc. will be introduced .

**iv) Building Institutional structure for MSME exports**

Setting up of MSME- Export Promotion Institutes in major exporting States. Ten Institutes to be set up in the 12<sup>th</sup> Plan, which would co-ordinate/implement various export promotion schemes of the Central Government- Market development assistance programmes and Skill development assistance programmes as mentioned above. The capital and manpower related expenditure would be in the range of Rs 20-25 crore per Institute excluding land acquisition. Land would be provided by the State concerned. Priority would be given to such States which would provide land.

Strengthening of Database on Exports from MSMEs with provision of financial assistance to EPCs/ IIFT to maintain up-to-date data. 20 EPCs/Institutions to be supported for capacity building. IIFT to co-ordinate creation and regular updation of database. A system of regular online transmission of export data from the exporting units may be established. The EPCs should have the task of updating the list of exporting MSMEs relating to their sector on a continuing basis. Further they have to pursue with the units for on-line transmission of export data on a regular basis. The overall compilation and analysis of the export data may be done at IIFT with input from the concerned EPC.

Budgetary provision of Rs.100 crores which would also include the infrastructure/manpower related expenditure including putting in place a system of on-line transmission of data and follow-up of non-responding units)

Setting up of a professionally managed apex Public Institution (like EXIM Bank, with capabilities to provide strategic guidance and oversee assisted Companies) to support Private & PPP initiatives of different types.

Establishment of Export promotion fund for taking care of various other export promotion activities like Special support for MSMEs exporters.

To sum up, an overarching Plan Budget of Rs 2500 crore is proposed to finance various activities for MSME export promotion as per details given below.

<b>S. No.</b>	<b>Name of the scheme/programme</b>	<b>Budget (Rs. crores)</b>
1.	Interest subsidy scheme for exporting MSMEs	300
2.	Market Development and Brand Building for MSME exporters	1000
3.	Skill Development and Training for MSME exporters	200
4.	Building Institutional structure for MSME exports	500
5.	Establishment of Export promotion Fund	500
	<b>Total</b>	2500

Remarks:

1. Capital expenditure wherever figures in the proposed schemes will be under PPP mode with 25% on Govt. account and 75 % on private account.
2. Budgetary provisions do not include expenditure to be borne by other administrative ministries / departments, under different proposed schemes.

### **Technology intensity in manufacturing exports**

India figures very low when it comes to technology intensity in manufacturing exports when compared even with countries like Malaysia, Singapore etc. in East Asia. It is important to focus on products that are globally dynamic. The government should identify and periodically update the list of Globally Dynamic products by looking at 4 digit HS data and applying the criterion of global share coupled with growth rate of export. There is need for efforts to bring together and maintain a network of researchers and representatives of industry to update the lists of globally dynamic products. This network may be funded directly by Department of Commerce and sustained with a decadal outlook. The funding requirements will be about Rs.20 Crores for 5 years, as it may need some direct surveys, global contacts and workshops. An appropriate institutional mechanism, may be created by the DoC to sustain and nurture the network of academics researchers and practicing technology managers. To give concrete goals for such a mechanism, DoC to begin with may bring out:

- Quarterly reports about the researched findings of technology intensity in the manufactured products relevant to India and results of 'technology watch' and these reports may be widely disseminated to industries R& D laboratories and academic institutions.
  
- Bring out an Annual Report of Status of Technology Intensity of Manufactured Exports from India. Over a period such reports will become trend setter for the Indian industry and R&D institutions.



## Chapter 10

### Conclusions and Recommendations

The report recognizes that for boosting manufacturing exports so as to achieve the sector wise projected targets, manufacturing capacity has to be augmented very rapidly and the manufacturing processes need to become more efficient and globally competitive. The recommended sectoral strategies explained below underline that measures for enhancing production as well as for export promotion have to be adopted. The report considers the steps required to tackle the common set of problems holding up exports growth viz. inadequate infrastructure, skill deficit, high cost of capital, low level of technology intensity and value addition, non tariff measures adopted by developed countries, difficulty in accessing new markets etc. The Working Group dwelt at more length on product market strategy. As for 'geographic market' strategy broadly the strategy currently being followed by the Department of Commerce and planned to be extended as envisaged in the Strategy Paper released in May, 2011 has been recommended to be pursued.

#### **A.1. Engineering**

##### **(a) General Engineering**

Strengthening the base of the general engineering segment of India's engineering industry which includes Basic Metals, Machinery and Equipment, Electrical Equipment and Fabricated Metal products are the key elements to increase engineering exports. In order to expand capacity and move up the value chain the Indian Ferrous and Non-ferrous metals industry must aim to:

- (i) increase the inflow of FDI in manufacturing sector by linking it with India's market access in engineering related products and preferential incentives in high-potential products (where the domestic market is nearly nonexistent)
- (ii) improve Implementation Ratio to encourage value addition through implementation of National Manufacturing and Investment Zones (NMIZs) as envisaged in Draft National Manufacturing Policy
- (iii) introduce a Technology Upgradation Fund Scheme (TUFS) for the Engineering Sector, particularly, the MSME Sector needs. Extension of the Credit Linked Capital Goods Scheme (CLCGS) beyond 2012 till the TUFS for the MSME sector is formulated and in view of the inflationary situation, the capital subsidy should be increased from 15%

to 25% and loan should be provided up to Rs 5 crore, given the high cost of modern and green technology.

- (iv) initiate a R&D mapping exercise for the engineering sector covering the entire spectrum of R&D institutes as well as individual firms (wherever applicable). To achieve this, there is a need to create central coordinating machinery which can initiate the 'discovery' process to encourage and facilitate effective creation, development and marketing of intellectual property/innovative technology in the engineering sector.
- (v) relaxation of the RBI's External Commercial Borrowings (ECBs) to allow all categories of engineering exporters to raise ECBs for import of capital goods and equipments.
- (vi) expand capacities with the objective to enable MSMEs reap economies of scale by reducing the rate of interest on term loans and increasing the repayment period to 12 or 14 years.
- (vii) increase investment in power generation and transmission capacities by encouraging merchant and captive power plants to bridge the huge gap between demand and supply. Continue privatization of distribution to tackle losses and improve operational efficiency through increased investment in the necessary infrastructure.
- (viii) ensure formulation of suitable policies to provide engineering raw materials like steel, pig iron and other non ferrous metals at international prices, particularly to the MSME and the light engineering sectors,
- (ix) amend Section 10 of Contract Labour (Regulation and Abolition) Act, 1970 so that ambiguity about continuance of contract labour and absorption following abolition is clarified. Amend Section V-B of the Industrial Disputes Act for easier exit option for firms without adversely affecting the interests of labour.
- (x) drawing up action plans by Engineering Industry Bodies and leading companies for the development of skills for the general engineering industries. The infrastructure developed in the Tool Rooms to be better utilized and possible linkages with the private sector may be considered as a matter of policy.
- (xi) early implementation of full GST for introducing the notion of one Common Market .

#### **(b) Promoting specific Engineering Industries**

##### **Automobile industry :**

- (i) Establish two dedicated automobile export berths at Chennai Port and another port in the in the West Coast, each equipped to handle output

of 5 lakh vehicles annually by 2015 and earmark space for parking, vehicle repair at these ports to accommodate at least 20,000 vehicles at a time - like the proposed multi-level facility at Chennai port.

- (ii) Minimum Alternate Tax (MAT) to be waived for export earnings. Automobile market access through Quota System (if it is not possible to negotiate on reduction in the import duty) to be negotiated with competing countries (including FTAs). It is important to consider either through EXIM Bank or other leading Government owned banks an arrangement to provide long term finance for vehicle exports to support institutional bulk deals as well as retail financing. Focus to remain on developing a technology roadmap for Hybrid and Electric Vehicles, exploring the likely market for these vehicles in India and promoting manufacturing of such vehicles in India.
- (iii) The Auto component and the casting industry needs to invest Rs. 15,000 crores for a Technology Upgradation and Development Scheme over the next five years towards technology and R & D to maintain and enhance its competitiveness. An interest subvention scheme for a five-year period wherein the industry would invest a matching amount equivalent to government's contribution needs to be considered. R& D and technological intervention is required in areas of light weighting, engine and powertrain and manufacturing technologies.
- (iv) **Defence sector** : FDI in the defence sector by liberalization of FDI rules in a phased manner to be considered as an important element in expanding the manufacturing capabilities in the country. The Ministry of Defence should come out with a short term procurement plan on a regular basis as it will help the domestic private firms in adequately preparing themselves by means of - finalizing domestic/foreign collaborators; and raising sufficient funds. The threshold for offset policy for procurement should be reduced to Rs 75 crore in line with what is practised in other countries to ensure participation from a larger breadth of the domestic industry. The tenure of banked offset clause, which has been recently introduced, needs to be increased to around 5 years.

### (c) Promoting Engineering Exports

- (i) A **stable and comprehensive policy** for promotion of exports, with reference to incentive structure, thrust focus, market penetration efforts and procedural issues.

- (ii) **Lower rate of Export Credit** for the Engineering Sector to be ensured by restarting Interest Subvention Scheme on Rupee Export Credit till Interest Rates come down to reasonable levels. Move to the earlier system of RBI refinancing of Export Credit at the Repo Rate to banks and provide export credit to exporters at Repo rate plus 0.25% and Providing Export Credit in Foreign Currency (PCFC) as per RBI's guidelines.
- (iii) Amend the draft Shipping Trade Practices Bill by incorporating a provision to set up a **National Shipping Regulator** like the regulatory mechanisms that are being followed in the Telecom, Insurance and Electricity sectors with the purpose of fixation of freight rates based on certain objective criteria that takes into account the views of all stakeholders.
- (iv) **Upgrading Export Infrastructure** through: (a) deepening of draughts at berths; (b) anytime working in Ports; (c) deployment of shore mobile cranes for engineering cargo, etc and LPG and (d) CNG connection through pipes by making them available in every town.
- (v) **Promotion and Strengthening of Brand Image of Indian Engineering Goods** to be done through extension of line of Credit for Developing Countries, make India a Vendor Development Hub, INDIA SHOWS in Latin American Countries and enhancement of Promotional Budgets.
- (vi) The **FPS and MLFPS** schemes to be utilized for the benefit of those tariff lines which can be identified as 'Thrust Products' directed towards 'Thrust Markets'. This could be an annual exercise based on which these benefits could be provided during the 12<sup>th</sup> Five year Plan period. Similarly, an enhanced FMS benefit could be used to increase India's engineering exports to countries with potential export growth possibilities.
- (vii) EPCs and other Industry organizations to prepare detailed proposals for **creating a Fund to develop Service and Distribution Outlets in Difficult Markets**.

## A.2 Electronics

- (a) **Domestic Electronics Manufacturing**
  - (i) Change in strategy from 'Design led Manufacturing' to 'Demand led Manufacturing: Feeder industries and adequate infrastructure should be created and supported.
  - (ii) Development of clusters for Electronics – 'design to marketing' clusters. : Promote Cluster manufacturing by setting up Industrial Parks.

- (iii) Promotion of tax holidays and incentives for Electronic Manufacturing Services (EMS) companies investing in the country.
- (iv) Attract investment in setting up of ecosystem companies through-
  - Policies to encourage investments in the feeding industries
  - Extended period tax breaks for emerging companies in the feeding industries
  - Initiatives to promote technology transfers through joint ventures with overseas companies in the feeding industries

**(b) Electronics Export**

- Identify new opportunities in Repair, Reconditioning and Refurbishing of Electronics Hardware
- Set up two Semiconductor Wafer Fabs
- Provide preferential access to “Manufactured-in-India” Electronics Products and “Indian Electronics Products” for all government procurements and procurement by Government Licensees.
- Set up a dedicated Electronics Development Fund
- Provide Capital grant and creation of electronic manufacturing clusters to encourage manufacture of specific high priority electronic product line in India
- Skill Development
- Relocation: There are a large number of companies in US/ Europe who would like to migrate their manufacturing to India but retain brand/ marketing in US/ Europe as the case may be. Specific incentives should be provided for attracting them. Industry associations may be engaged in the effort of identifying such companies abroad.
- Intelligent manufacturing for advanced technology products.
- The entire Electronics Systems Design and Manufacturing (ESDM) Sector may be extended the benefits of Focus Products Scheme (FPS) and Market Linked Focus Product Scheme (MLFPS).
- The Duty Drawback Scheme benefit should be provided for the entire ESDM Sector. Today some items are included in the scheme but in order to promote export of entire ESDM Sector, the entire sector may be extended this benefit. As IT goods are at Zero duty, a new window has to be carved out.

- ITA goods may be treated as physical exports and extended all the benefit of export schemes.

## **B.1 Chemicals**

### **Production related**

(i) For **ensuring Feed Stock availability** Government needs to provide:

- Concessions on the feedstock by way of Duty/ Tax reductions with a rider of actual user condition.
- Reduce / eliminate duty concession for export of raw material / intermediate inputs used in various chemicals so as to encourage / promote domestic value addition in India.
- To have strategic alliance with feedstock rich countries such as Middle East and Russia. Utilization of rupee debt could be explored.
- Incentivizing refineries to produce feedstock meant for exports instead of only fuels.
- Encourage cultivation of bio crops giving bio fuels/feedstock such as palm, castor, algae, etc.
- Encourage Cluster approach for common purchase of feedstock.
- In order to reduce extreme dependence of feedstock on China, Indian Manufacturing Units need to work at backward integration and diversification.

(ii) **Consolidation** Since the Indian Chemical industry is fragmented, consolidation is required and possibly needs to be incentivized.

### **(iii)Infrastructure**

- Creating common infrastructure facilities in the clusters such as roads, Common Effluent Treatment Plants, power etc. for the units to have plug in and plug out approach
- Encouraging policies such as Petroleum, Chemicals and Petrochemical Investment Regions (PCPIRs) for encouraging additional investments in these regions. Ancillary units using the feedstock produced as a by product of mother plant should be encouraged to relocate to such

PCPIR's However experience so far is not very encouraging and needs corrective actions.

- A mapping of the common facility gaps need to be undertaken and specific proposals for bridging the gaps need to be given.

**(iv) R&D**

- Put up centers of excellences in each of chemical clusters housing common R&D facilities.
- Initiating fiscal incentives for encouraging investment in R&D.
- While formulating the schemes, facilities available in the CSIR Labs and other National Labs should be extensively utilized for sponsored R&D by the industry.
- The chemical industries have to gear up in a more effective way to face successfully the challenges of product patent regime. There is an urgent need to raise their R&D expenditure to international level.

**(v) Technology Up-gradation**

- Technological tie ups with the global companies who could undertake to buyback the resultant output.
- Encourage and subsidize pilot plants for technology up-gradation which would yield world class state of the art products.

**(vi) Skilled Manpower**

- Full fledged industry oriented skill development programme under the expert guidance of NSDC to be initiated/implemented
- Government should facilitate first tailor made mobile business skill development programmes (pilot project). Trainers training should be held in all the chemical clusters. These should be conducted by Export Promotion Councils, in collaboration with the respective local manufacturing associations & National Skill Development Corporation (NSDC) which would aim at doubling the exports of manufactured goods in that area.

- **Exports related**

**(i) Development of Scientific Regulatory Frame Work.**

- India needs to have its own inventory of chemicals to monitor production, import and export of chemicals in all its totality.
  - A **Chemical Management Programme** is required to ensure that the safe green chemicals are being manufactured, imported and exported into India, to maintain databank of their Safety Datasheets and facilitate movement towards Clean Green India using Environmental friendly chemicals. A domestic Chemical Management Programme will facilitate compliance of Reach/GHS/SAICAM. These programmes could be implemented with financial help under MAI or any other scheme of Government of India.
- (ii) **Export finance/packing credit for exports** should be made available with minimum threshold of value addition in India.
- (iii) **Reduction in export turnaround time:** Promotion of Infrastructure investments in reducing the turnaround time

## **B.2 Plastics**

### **a) Production related**

- (i) **Stepping up Manufacturing Base of the Plastic Processing Sector:** Enhancing the manufacturing base of the plastic processing industry to ensure that value is added to the raw materials available both from within and outside India and value added plastic items dominate our export basket. This is to be undertaken through technological upgradation and by attracting fresh investments both from within and outside India for plastic processing.
- (ii) **Facilitating fresh investments**
- **Plastic processing parks:** Plastic processing parks to be set up in PCPIRs (Petroleum, Chemicals and Petrochemical Investment Regions). An incentive package be designed for investors in these areas.
  - **Cluster development:** As a corollary to the above concepts, clusters to manufacture highly labour oriented items like plastic stationery and items of artificial leather be set up.

### **b) Export related**



- (i) **Focus on high-value-added and & high technology items like** plastic components for the automobile sector, various equipments, aviation and spaceships.
- (ii) **Setting up of common facility centers for design and prototyping of plastic items & mould & dye design centers and tool rooms** by Plexconcil under adequate funding from the Government. Facilitation in terms of investments for setting up of more tool rooms is also necessary to supplement the production of plastic components. The proposed common facility centers for design and prototyping of plastic items and mould and dye design centers and tool rooms are to be located at places which are required based on detailed analysis of various clusters. These may be set up in PPP mode for higher involvement of the industry and demand driven approach.
- (iii) **Widening product base in existing markets/exploring new markets:** While our major markets comprise of the developed world comprising of the European Union and the USA (and, of course, many more), an analysis of our export basket vis-à-vis the imports of these regions/countries is to be done which would enable us to tap new exports products/markets in different parts of the world for which adequate assistance under MAI or other Schemes be provided.
- (iv) **Market Research/Intelligence:** It is essential that Export Promotion Councils conduct regular market research and also develop mechanisms to maintain market intelligence for the benefit of their members. This idea is to be worked out and implemented to really supplement the marketing efforts of the exporting community (given that the SME sector is ill-equipped to do this on its own).

### **B.3 Pharmaceuticals**

- (i) **Cluster Development:** There is an urgent need for providing common facilities in the major pharma clusters such as cogent power, Transmission & Distribution lines, effluent treatment facilities, and allied common infrastructure. The Common Facility Centers proposed to be set up in clusters should have all necessary equipments for testing quality and standards. This infrastructure should urgently come up in at least 5 emerging clusters. The user fees can be charged to cover the expenses of running the common facilities. The competitive advantage the industry will build up consequent to such infrastructure will bring back intermediates and fermentation industry to India. However, the initiatives for investment in various clusters should be

based on detailed studies and assessment for its potential growth and benefit facilitating higher exports and full realization of final product values.

- (ii) **Financial support to pharma industry:** Pharma sector has a long gestation period as the benefits by way of margins accrue to the companies after lot of investments. Regulatory approvals as also R&D and emerging technologies require lot of investments which the pre-dominant SME sector at present is not able to arrange. Banks/financial institutions should be sensitized for funding both tangible and intangible assets especially in around 200 complex API/Intermediates and formulation technologies that are untapped by Indian industry.
- (iii) **Funding through SPVs** is necessary for the future growth of the domestic Indian pharma industry. Out of over 250 sustained release technologies; India has not progressed beyond ten to fifteen products. However, each ANDA costs a couple of million dollars. Hence, the need for SPVs. These SPVs floated by key banks can own the IP and contract the research work to the applicants through an agreement. Through an escrow mechanism the sale proceeds can come back to SPVs. Once the SPV obtains an agreed IRR, the IP can be transferred to the companies.
- (iv) **Aggressive Diffusion of Knowledge:** Understanding of global markets, IP issues, GMP & Compliance, legal contract capabilities etc are limited to top companies. There is an urgent need for starting training programmes in centres like NIPER with additional focus of providing industrial support like advanced testing services, facilitating education needs, promoting incubation centers to foster new ideas.
- (v) **Shared services in foreign countries:** There is a need to promote shared services in foreign countries such as setting up of warehouses and office space for initial launch period; purchase of RLD drugs, information on market, regulatory guidelines and other procedures, facilitating initial entry work into the country like submission of regulatory documents on behalf of SMEs, etc., Such a move will result in significant cost savings to domestic companies enhancing their competitiveness.
- (vi) **Herbal Industrial Parks:** Herbal industrial parks in line with model concept of JNPC should be developed wherein the national priority 25 herbals are processed into GMP facilities and infrastructure for necessary conversion into end use formulations is provided.
- (vii) **Setting up of Pharma Zones** - Ensuring creation of Pharma zones to provide temperature control storage facilities at ports and airports with large pharma trade to preserve quality and efficacy of drugs.
- (viii) **SEZs:** SEZs are essential for the growth of Industry. The gestation period to commence and obtain regulatory approvals takes at least 4 to 5 years. Hence

the direct tax code related limits for setting up of new units and new SEZs should not apply to this strategic sector. Allow the use of SEZ unit for domestic purpose until the regulatory approvals take place i.e, in first five years. ( of course without tax advantage ). Consider the first year of profit to begin the calculation of tax holiday. Also the industry urges ministry to influence banking sector to recognize the long gestation of the projects and develop such term loans structure for tangible and intangible assets. SME export credit hurdles at banks should be resolved consistent with Govt policy on expanding ties with African countries etc

- (ix) **Standards:** Establishing mandatory standards in this sector will on the one hand prevent dumping of sub-standard products by foreign enterprises while on the other hand it will help the domestic industry to raise its manufacturing capability to provide better quality drugs to local consumers in the short run. It will also make industry better equipped to meet international norms in the long run without having to invest in parallel 'export only' facilities.
- (x) **Brand :** There is a need to develop, promote and implement a large campaign in important markets to build a strong brand image for Indian pharmaceuticals and position them as safe, effective, affordable products of high quality.
- (xi) **Industry –Research institution Linkage:** Pharmaceutical sector is highly dependent on skilled human resource and international successes have been propelled by availability of good quality human resources around pharma manufacturing centres. To further build on small initiatives like NIPER undertaken by Indian pharma, there is a need to develop partnership or leverage the research capacities of large research institutions, universities and centres of excellence.
- (xii) **Define high tech value addition :** Frontier areas in the pharma industry are those which are based on development of new chemical entities. These are followed by efforts to develop non-infringing processes for existing drugs. The lowest end involves formulations from imported APIs with little local value addition. It is imperative to define high-tech/high value add products and develop schemes to support their production and export.
- (xiii) **Strengthening of DCGI:** Ease of compliance with global regulatory requirements ensures quality in both domestic markets and imports, enhances competition among domestic and foreign generic cos. ,enables capturing business of regulated markets and establishes much required confidence in Indian capabilities among foreign buyers. Strict implementation of cGMP to include mandatory bio-equivalence tests.
- (xiv) **Bioequivalence Centres:** Mechanisms to have access to bioequivalence centres to conduct studies at concessional price for Indian pharma exporters. Reimbursement of 50% of bioequivalence expenses incurred, upon proof of adequate sales.

## **C. Textile and Clothing Sector (T & C)**

### **(a) Product Strategy**

- (i) Special support to Manufacturing-Exporters of Value Added Products** like lingerie, suits, sportswear, specialty fibers, technical textiles, etc. to be given in the form of capital subsidy on specialized plant and equipment items, accelerated depreciation of such plant and machinery, subsidy on interest on working capital loans, duty exemption on inputs, establishment of a dedicated fund for promotion of these products in major export markets, interest subvention on pre and post shipment rupee export credit and providing financial support to companies to conduct location analysis for establishing such manufacturing units.
  
- (ii) Readymade garment (RMG) sector:** To encourage fresh investment in RMG sector higher depreciation on capital expenditure on Textile Machinery should be allowed. Capacity building should be done through introduction of Common Compliance Code for Apparel Industry and schemes such as Integrated Apparel Development Scheme, Integrated Skill Development Scheme, Integrated Processing Development Scheme and Extension of Knit Wear Technology Mission. Initiation of a Productivity Improvement Programme for the Apparel industry with financial assistance of Rs 50 crores from the Government is required. An allocation of Rs. 25 crores will be required for setting up of centres of excellence for garment and apparel sector, design studios and product innovation centres for encouraging Indigenous Design Development, product improvement, fashion adoption and absorption. A new Wovenwear Technology Mission to be launched to give a boost to the wovenwear segment of the garment sector at a plan outlay of Rs 30 crores. A programme to launch an anthropometric study and design standard sizes for Indian garments and apparels under “Size India” scheme is should be implemented in the 12<sup>th</sup> Plan with an outlay of Rs 9 crores. The Skill development Programme for the T&C sector to be continued in the 12<sup>th</sup> plan to improve the skill set of garment workers.
  
- (iii) Manmade fibres:** To reduce high custom tariffs and eliminate non-tariff barriers more preferential trade agreements with major trading partners such as Latin American MERCOSUR countries, Egypt and Morocco in WANA region, Russia and Uzbekistan in CIS countries. Rational policy approach for the MMF fibre segment such as a Fibre Neutral Excise Policy, Excise duty and customs duty exemption for specialised MMF (which are not produced indigenously) and certain raw materials and additives (that are primarily imported) is required. Export oriented incentives like graduation scheme for three years can be introduced under the Focus product scheme with benefits

of 10% in first year, 7% in second year and 3% in third year needs to be introduced for MMF textiles and garments for a limited period . Synthetic fibres should be covered under TUFs with fund support from their administrative Ministry i.e. Department of Chemicals and Petrochemicals. A MMF advisory council with all the stakeholders may be set up to monitor that the excise duty and other concessions have been passed on by the MMF manufacturers and also to take on integrated approach to solving the problems of MMF producers and users of MMF and to accelerate their growth. MMF manufacturing and processing units should be given a priority under the gas allocation policy, at par with the power sector.

- (iv) **Cotton sector:** Long term export policy on cotton and yarn and a National Cotton Council (as in the US) must be created. Home Textiles must be treated at par with Readymade Garments for all incentives under the EXIM Policy. Select Made-ups must be made eligible for the benefit of Duty Credit Scrip at 2% under “Focus Product Scheme” on the lines of Toilet Linen and Kitchen Linen. The list in New Focus Market Scheme must be expanded so as to include some more potential markets like Brazil, Mexico, South Africa, Kenya, Australia, Middle East and South America, Vietnam, Egypt, Morocco.
- (v) **Jute sector:** Improvement in quality of raw jute and production of the same should be encouraged through subsidizing distribution of certified seeds, dissemination of improved agronomical practices and bridging the gap between the jute growers and users. To improve efficiency of jute industry sufficient incentive to jute industry for large scale adoption of available new technology machines should be provided. To improve delivery system of Jute Technology Mission (JTM) Schemes under JTM must be streamlined and made more attractive to textile machinery manufacturers for development of modern machines. The eco-friendly and renewable characteristics of jute must be highlighted for removal of all trade barriers. Suitable marketing strategies for value added jute products must be adopted. Incentives should be provided to the entrepreneurs to take up development and manufacture of value added jute diversified products. A Disposal Protocol accepted at the global level should be facilitated to ensure eco-labeling for better standardization of jute products. National Jute Board should be operationalized.
- (vi) **Silk sector:** In order to provide adequate protection to the twisting and weaving sector there is a need to revise the basic customs duty on twisted yarn and silk fabrics from the present level of 10% to 15% and 20% respectively. A price support scheme to encourage farmers to adopt

sericulture practices should be implemented, along with rationalization of the duty structure. A quality-based pricing mechanism for cocoons for appropriate and better price realization by the cocoon growers is also needed to incentivize better quality production. Increase thrust on developing silkworm races that are not only resistant to drought/change in climatic conditions, but are also disease-resistant, and high-yielding. Thrust on product and design development and promotion of Indian silk such as Vanya Silk in overseas markets should be taken up in mission mode during the 12<sup>th</sup> plan.

- (vii) **Wool sector:** The duty on raw wool imports should be exempted (from current 5%) and on woollen yarn & fabrics and waste wool should be reduced to 5% (from current 10%). There should be increased thrust on cross-breeding programmes with an aim to bring down the micron structure of the carpet grade wool, and also to improve the quality of Deccani wool. Efforts should be focused on implementing programmes for producing highland wool in the hilly tracts of India. Provisions must be made for better health management of sheep at farmers' level. Collaborative research projects must be undertaken with focus on breed improvement and overcoming the diseases in sheep breeds and producing disease-resistant stud rams. Steps should be taken for building Database, Common facility centres, Grading system and marketing support system and for Strengthening of the Central Wool Development Board.
- (viii) **Speciality Fibre (Technical Textiles):** Import duty and CVD on additives used in Flame retardant speciality fibres and other speciality fibres should be removed and Capital equipment used in the manufacture of identified speciality fibres should be exempted from Custom duty. Excise duty on focus speciality fibres should be reduced to 4% (from the current level of 8%). The government should consider introduction of a Special Incentive Package for enabling Indian or foreign companies to set up manufacturing facilities for speciality fibres. The customs duty exemption may be allowed even to an independent manufacturer of aramid fabric, which will be used for production of bullet-proof jackets for defence and police personnel. VAT rates should be uniform for technical textiles products irrespective of the base fibre used and irrespective of the source of origin of the product. An R&D centre with a funding of at least Rs 50 crores is recommended at either NCL Pune, one of the IITs or UICT Mumbai and incubation centres should be set-up for transfer of technology and acceptance of innovative technologies by the industry. Well-equipped laboratories should be set-up in the four Centres of Excellence to extend support to the industry in fields of testing and development, as per the requirements. Specific segments of

Technical Textiles where standardization is required on a priority basis include Geotech, Buildtech, Protech, Meditech, and Agrotech. Some Ministries could issue guidelines which would increase the level of adoption and awareness levels of Technical Textile products and aid in creation of a large market for these products in India.

**b) Export related**

- i) Continuation of present level of incentives:** Continue with the existing incentive schemes such as Duty Drawback, Tax benefits, and Interest Subvention schemes and make these schemes more user- friendly.
- ii) Full reimbursement of all Taxes and Levies:** Schemes are required to be formulated to enable the exporters get full refund or rebate of all Taxes and Levies in a stipulated time frame to enable the industry to retain its competitiveness.
- iii) Reduction in Transaction Costs:** Simplifying the processing of documentation, trade facilitation, reducing human interface with exporters, working out web based solutions to reduce trade related transaction cost.
- iv) Strengthening of Trade Related Infrastructure:** Schemes for market development and access need to be expanded substantially to reduce critical gaps pertaining to export related infrastructure in the States and Central agencies.
- v) Availability of Export Finance on easy terms:** Export finance to be available at a reasonable rate of interest to neutralize the interest cost differential compared to competing economies.
- vi) Negotiating preferential access to prospective markets:** The policy of working out preferential access to new markets and putting in place conducive trading arrangements with trading partners through Preferential Trade Arrangements (PTAs), Free Trade Agreements (FTAs) and Comprehensive Economic Cooperation / Partnership Agreements (CECAs/CEPAs) to be continued and expanded.
- vii) Market Strategy:** The core of the marketing strategy must be to maintain share in “tried and tested” markets, capture higher value in the products exported to traditional markets and explore new opportunities in emerging and secondary markets.
- viii) Technologies and R&D:** R&D efforts to be redoubled and adequate tax breaks given to enhance adoption of Eco-friendly products and Green Technology. Towards this end the Textile Research Associations should be

- ix) **Brand Image building:** As creation, promotion and sustenance of Brands is highly capital intensive, requiring vast amount of funds, the present allocation for such activities should be substantially increased and 'Brand Promotion Fund' should be created.

#### **D. 1 Gems and Jewellery**

- a) **Securing availability of raw material** by entering into FTAs/PTAs with countries possessing raw materials to directly source from the country; mining exploration/investment in major African countries on the lines of China with strong support from Government of India by way of guarantees to investors etc.; facilitation for opening of offices of overseas diamond mining companies in Bharat Diamond Bourse and other designated areas; free import of gold completely and de-canalise for manufacturing sector to eliminate 4.5% processing cost.; bring gold import in any form and purity under OGL and permit Import of precious metals through selected nominated agencies authorised by Government of India and 20 banks authorised by RBI.
- b) **Skill Development :** As the training requirement of the sector is very specific, the industry itself should take the lead in designing and implementing need based training programmes by seeking support through windows like the National Skill Development Mission / Corporation. The industry may assess existing and likely future work force training requirement and suggest an industry led PPP scheme to set up specialised training institutes linked to industry needs. Government may consider providing incentives to big corporate in the sector for on the job training programmes, in the form of tax relief, preferential and enhanced availability of raw materials, duty concessions etc.
- c) **Infrastructure Development :** Development of a world class Convention Centre in Mumbai by expediting efforts for acquiring land for setting up a convention centre. The Centre could be developed under an industry led PPP initiative, with the State Govt. facilitating the provisioning of and the Central Government assisting the participating organisations/Councils through provision of a competitively determined viability gap funding under ASIDE, a separate Plan scheme or the existing Viability Gap Scheme run by the Ministry of Finance.
- (e) **Setting up of Gems and Jewellery Manufacturing Parks/clusters:** Gems and Jewellery industry may commission a study for setting up manufacturing parks/clusters across the country on the lines of software industry under a PPP model, while working out the facilities required in the nature of Common Facility



Centres with advanced machinery and technology, design centres etc. and submit it to the Government for consideration.

- f) **Tapping Potential Markets:** The Government should encourage gems and jewellery industry participation in B2B interactions in untapped markets with a focus under MAI and MDA schemes. GJEPC may consider organising events like IIJF in countries like China, Australia, Brazil, Turkey and Russia and these countries should be invited in the IIJS Exhibition also. The Government should initiate steps to create facilitating trading regimes / agreements with countries with high import potential that may be earnestly impeded by high tariffs on import from India.
- g) **Brand Promotion:** Keeping in view the turnover of the sector, the industry could lead such an initiative for Brand promotion, and dovetail it with on-going Government initiatives like IBEF and Ministry of Tourism led “Incredible India” campaign. The Gems and Jewellery industry may consider setting up a Brand Fund from contributions from its members for brand promotion of the “Made in India brand as no. 1 in the world, with strict internal quality control and standards adherence for participating brands.
- h) **Financial/Fiscal Incentives:** GJEPC may take up its suggestions for specific fiscal and financial incentives with the concerned Ministries / Departments for suitable decisions.
- i) The **incentives/concession/schemes** which have helped in the growth of the sector should be continued.

## **D.2 Leather sector**

- (a) **Access to Capital: Corporatization of the Industry:** Creation of a Venture Capital Fund under Exim Bank / ECGC / any Nationalized Bank with equity participation for capital requirements by various financial institutions to support creation of new corporatized entities and corporatization and growth of existing leather sector entities. Such equity to be paid back by the unit in periodical manner within a span of 5 years to create a rotating pool of funds. A new Plan scheme to facilitate corporatization is essential to achieve XII Plan goals. Government can work out the scheme in consultation with RBI, SEBI, Exim Bank, ECGC etc, as also industry stake holders.
- (b) **Up-gradation of Common Effluent Treatment Plants (CETPs) with Zero Liquid Discharge (ZLD) technology:** Zero Liquid Discharge (ZLD) is an eco-friendly technology wherein not even a drop of tannery waste is discharged into the environment. Establishment of a CETP with the ZLD technology with a 1000 m3 capacity involves a huge investment of about Rs. 20 Crore, and Operations

and Maintenance (O&M) cost is about Rs.4 Crore per annum. This is a very huge financial requirement, which will be difficult to sustain by tanneries, most of them being in the SME segment. Therefore financial support be provided to the tanning sector for implementing ZLD technology and for meeting the recurring O&M cost. Department of Industrial Policy and Promotion has a scheme for setting up of CETPs. It is recommended that these ZLD projects ideally be made a part of that scheme. If that is not possible, it would be in the interest of expanding leather exports to even consider a full fledged stand alone scheme to fast track the environmental standards up gradation measures necessary.

- (c) **Securing Availability of Raw Material:** The Council for Leather Exports (CLE) may utilize the existing schemes such as MAI which provides financial assistance for organizing visits to countries rich in raw leather supplies. Government may discuss the issue of raw material supplies with the countries mentioned above under bilateral trade interactions.
- (d) **Simplification of Regulation for import of hides, skins and leathers:** Import of pickled hides and skins be allowed on the basis of Veterinary Certificate of the supplying country in their own format as against the present practice of allowing their import on the basis of Veterinary Certificate prescribed by DAHD&F. Allow import of finished leather without any Animal Quarantine Clearance since finished leather itself is a finished product, which is ready to use in manufacture of value added leather products and footwear.
- (e) **Production, Design and Productivity:** The present MAI Scheme guidelines be revised for providing enhanced grant of 75% for hiring consultants/designers, inclusion of technicians/resource persons/experts also in the grant component, removal of the restriction that the exporter can avail grant only 2 times, as the services of such persons are required on continuous basis.
- (f) **Skill Development:** Industry to make use of the additional capacity created at the Footwear Design and Development Institute in Chennai, Kolkata, Rohtak and Chindwara.

Training requirements of the leather sector are very specific. Council for Leather Exports and FDDI may work out an action plan on the long term requirement for additional FDDI branches, designing and up-grading ongoing training curricula and seeking support from National Skill Development Corporation.

(g) **Infrastructure**

- I) **Development of Mega Leather Clusters:** The Government has announced setting up of seven mega leather clusters in different parts of the country. The Department of Industrial Policy and Promotion, has held preliminary

discussions on the guidelines of the scheme. Council for Leather Exports has suggested that in the scheme's guidelines, the cost of land, ready-to-use factory sheds, common infrastructure (like training facilities, trade centre, design studios etc.) a grant of Rs.125 Crore (80% of the estimated expenditure of Rs.156.25 Crore) per cluster be provided. Views of the Council for Leather Exports should be incorporated in finalising the scheme's guideline. The work of setting up the leather clusters should be expedited. Preparatory work should be finalized by 2011-12 so that implementation can begin at the commencement of the 12<sup>th</sup> Plan. Projects like Trade & Exhibition Centres, Warehouses, Design Studios, Testing Labs, Social Infrastructure and basic infrastructure like roads and islanding of power supply should be included in the mega leather cluster scheme, which could be adequately stepped up based on the initial experience.

**ii) ASIDE scheme:** As most of the companies in the leather sector are concentrated in the SME segment, they need support for infrastructure development and creation of common facilities. To meet these requirements, the industry has suggested grant funding under central ASIDE component for creation of Common Facilities like Trade & Exhibition Centres, warehouse, design studios, testing labs, social and basic infrastructure like roads and islanding of power supply in export clusters, on priority. In addition the Central Govt. may encourage State Governments to provide land on long term lease at competitive prices to SPVs formed for infrastructure development. If specific individual projects are required to be implemented in areas not included in the mega cluster project to serve existing leather clusters, CLE may prepare projects for the same and seek assistance under the ASIDE scheme.

**(h) Tapping New markets:** 11 countries account for nearly 75% of India's leather exports. The US market which is the largest importer of leather and our market share is only 1.4%, has not been fully tapped. A special package for USA comprising of inclusion of USA under Focus market Scheme, provision of 5% duty credit scrip under Focus Market Scheme and 100% grant for inviting US designers and technicians to India should be implemented.

In other major markets where our share is low and potential is high, 100% MAI grant should be permitted for activities like participation in fairs, inviting designers / technician to India, establishing show rooms / warehouses, organizing leather shows and undertaking market studies to penetrate these markets.

**(i) Brand Promotion:** Brand promotion aimed at creating a brand identity and an associated brand loyalty is necessary for the growth of leather sector in the

(j) **Continuance of existing schemes:** Increase in export of leather goods was made possible by timely, well-conceived interventions by the Government through provision of incentives in the form of grants under various schemes, measures under the Foreign Trade Policy, financial concessions by way of reduction in duties etc. These schemes/ concessions be continued in the 12<sup>th</sup> Plan.

(k) **Financial/ fiscal concessions:**

The leather industry has requested the following concessions / incentives:

- Enhancement of duty limit under Duty Free Import Scheme from 3% to 5%
- 3% Duty Free Import Scheme for finished leather
- Restoration of the 2% interest subvention scheme on rupee export credit (packing credit) available for the Leather Sector from Dec. 2008 to March 2011, as the revenue implications of the scheme are only to the tune of about Rs.40 Crore per annum. It may be reintroduced for a 5 year period from 2011-12 to 2015-16.
- Reduction in transactions costs by opening of Animal Quarantine Certification Stations at Kanpur & Jalandhar and by making Wild Life Clearance officers available on all week days.
- Notification of Ranipet, Gurgaon and Unnao as towns of export excellence (TEE) under the Foreign Trade Policy as these towns are producing goods exceeding of Rs.750 Crore in value. Notification as TEE will facilitate up-gradation of common and specific infrastructure in these clusters.

The above issues relating to various Ministries/ Departments such as Ministry of Finance may be taken up with them.

### **D.3 Jute sector**

**(i) Increased productivity**

Active steps need to be taken to increase productivity of raw jute to at least 3500 kg. per hectare by the end of the 12th Plan by using initiatives like new varieties of HYV seeds, promoting modern farm practices and extension services. Appropriate intervention for improving the quality of jute by modernizing jute decortication, ribboning and ridding techniques and propagation of such modern techniques also needs to be taken up during the 12th Plan Period.

**(ii) Capacity Building for Export**

Over the last few years, the share of domestic consumption has been increasing in total production. The dominance of domestic consumption has arisen due to increase in demand for sacking products for reserved items. Thus for increasing exports, jute supply needs to be gradually freed from the constraint of being a reserved product. Appropriate changes in government policy related to determining the levels of reservations under the Jute Packaging Materials (Compulsory use in Packing Commodities) Act 1987 need to be considered. Over the 12th Plan, Government could consider adoption of a policy to bring down the demand created by reservation (as a percentage of total production) back to around 40% by the end of the 12th plan.

**(iii) Leveraging Eco-friendliness of Raw Jute**

“Eco-labelling” is one of the voluntary methods of environmental performance certification and labelling that is practised around the world. Eco-labelled Indian Jute products will give the Jute goods manufacturers an additional tool to market and push their products against competing suppliers and products. Special emphasis should be given for eco-labelling of Jute Products & its disposal protocol in the 12<sup>th</sup> Plan and Industry could be encouraged to take the initiative.

**(iv) Continuation of Existing Schemes**

**Jute Technology Mission:** The only Scheme implemented under the 11<sup>th</sup> Plan was the Jute Technology Mission. The Jute Technology Mission was divided into four Mini Missions. Ministry of Textiles funded the MM III & MM IV part only. This scheme will have to be the driver of key elements of the strategy e.g. improved productivity, and it is proposed to be continued in the 12<sup>th</sup> Plan with increased allocation and more innovative elements.

**(v) Changes in the Foreign Trade Policy**

The Jute exporters have sought the following changes in the Foreign Trade Policy to promote exports during the 12<sup>th</sup> Plan:

- Include hessian cloth and bags, sacking cloth and jute yarn under VKGUY and focus product scheme.
- Extend deemed export benefits on sales to foreign buyers visiting India.
- Include Argentina, China, South Africa, Egypt, Kenya, Ghana and Turkey in Focus Market Scheme.
- Include jute bags, blended jute carpets, JGT and jute technical composites in duty drawbacks scheme.
- Increase cap under DEPB scheme on specified items.
- HS codes for export promotion of JGT to precisely monitor its production.

It is recommended that the above incentives be considered for inclusion in the next Foreign Trade Policy.

#### **D.4 Carpets sector**

**(i) Continuation of existing schemes**

The ongoing projects / schemes under implementation in the 11<sup>th</sup> Plan may be continued in the 12<sup>th</sup> Plan. Efforts may be made to strengthen linkages between entrepreneurship and marketing and design development, linkage of clusters with markets and setting up of exclusive Common Facilities Centres in large and established clusters to promote its manufacturing activities. Existing MDA, MAI, ASIDE and similar schemes operated by other Ministries / Departments may be continued for the sector in the 12<sup>th</sup> Plan. There is also need for opening of Carpet Weaving Training Centres for survival of the traditional art of carpet weaving.

**(ii) Exploring new markets**

There is need to explore new markets to increase export of Indian carpets and floor coverings. The overseas markets with good potential which may be targeted through various market access and promotional instruments are Gulf countries, Russia, South East Asia such as Indonesia, Malaysia, Singapore, Thailand, Hong Kong, China, Latin American Countries, South African and Other African Countries. The suggested strategies include market studies / surveys, organizing Made in India Shows in various markets in association with local big importers/chain stores as well as by participating in established international fairs/exhibitions, invitation to buying missions to India, holding large BSMs in India and abroad,

encouraging industry to opening warehouses for direct marketing & distribution of stocks to retailers.

**(iii) Financial incentives/concessions**

The Carpets exporters have sought the following financial incentives for the promotion of exports:

- Export Credit Guarantee Corporation Ltd. (ECGC) coverage to Carpet Exporters- Claims of carpet exporters who have been provided insurance cover under ECGC may be settled on priority once coverage is provided. The premium charged for policy cover from carpet exporters may be reduced by 50%. Pre-shipment should also be covered under ECGC cover.
- Exemption from payments of service tax: Waiving of service tax in relation to business exhibitions [RBSMs] organized within India and waiving of service tax on membership fees of the Council.
- Continuation of GSP benefits to carpets and other floor coverings: Withdrawal of increase in processing fees for certificate of origin for Indian exports under generalized system preferences (GSP) scheme.
- Increase in duty Drawback Rates: As per the new all Industry Rate of Duty Drawback for 2010-11 announced on the 17.09.2010, the Drawback Rates have been decreased across all carpet categories. Drawback Rates may be increased keeping in view the increase in prices of raw-materials.
- Extension of interest subvention of 2% beyond 31.03.2011.
- Non-recovery of drawback paid in case of non realization of proceeds – Conditions like ECGC cover, RBI consent and Foreign office certification may be relaxed and fulfilment of any two conditions by exporters may be mandated. Recovery of drawback paid should not be done in case sale proceeds are not realized.
- Re-introduction of 80HHC specially for carpet and cottage sector.
- Removal of 1% Excise duty on handmade carpets imposed in the Finance Bill, 2011.
- Liberalization of labour laws for cottage based carpet industry on par with Agricultural Industry.

These issues relate to a number of Ministries/ Departments, such as Ministry of Finance, Ministry of Labour and Employment, DGFT etc. It is recommended that these may be taken up with the concerned Ministries/ Departments.

## **D.5 Handicrafts sector**

### **(i) Infrastructure Development: Design & Production Capacity**

#### **Development of Clusters**

Feasibility reports for 25 theme based handicraft clusters have been completed, and needs of the clusters in terms of designs, product development, market and infrastructure have been identified. These clusters will be spread across the country. The strategy for developing these clusters during the XII Plan period is proposed as follows:

- Set up 2 mega clusters every year over the plan period
- Set up five testing labs in major craft clusters every year
- Set up five Common Facilities Centres in major craft clusters every year
- Other amenities such as Effluent Treatment Plants to be set up in clusters
- Strengthen supply chain management

Keeping in view, the projected increase in manufacturing / export activities and employment generation in the coming years, the Ministry of Textiles and Ministry of MSME may examine the feasibility reports for cluster development and formulate appropriate proposals to ensure availability of Plan funds for developing these clusters.

#### **Additional Infrastructure**

The handicrafts exporters have proposed the following additional infrastructure proposals for the 12<sup>th</sup> Plan for funding under the ASIDE / SEZ scheme:

- Establishment of 6 Sector specific Special Economic Zones for handicrafts namely Firozabad, Saharanpur, Agra, Jaipur, Narsapur and Chennai.
- Setting up of Design Centers at Clusters with 100% grant for first three years.
- Setting up of 40 products specific Common Facility Centres (CFCs).
- Five Testing Labs in major craft clusters every year
- Setting up of Packaging unit

Setting up of Design Centres, Common Facilities Centres, testing laboratories etc. from ASIDE scheme may not be feasible on the scale requested given the limited budget available under it. These programs should be included as part of the Cluster Development Program. On the development of Sector Specific SEZs, the scheme for establishment of SEZs is already in operation, and should be suitably accessed with appropriate proposals from promoters.



**(ii) Tapping New Markets**

Two thirds of handicrafts exports are to the traditional markets of USA, Canada, France, Germany, Italy, Japan, Netherlands, UAE, Switzerland and UK. However, the high potential market segments such as LAC, Middle East, Far East, have not been fully tapped due to focus on traditional markets by the exporters. The Handicraft sector should take advantage of MAI, MDA, MSS and similar schemes run by ministry of Textiles/other Ministries to promote exports in untapped markets.

**(iii) Brand Promotion**

Brand promotion is a key initiative to expand the export market. It is necessary that the presence of Indian products should be known in targeted markets and an attachment created in a systematic manner through promotion and publicity. There is a need to project the Indian handicraft brand “Hand made in India”. Generic promotion is a slow process and needs constant focus on the consumer. A “Brand Fund” is proposed for this purpose. Efforts for brand promotion should come from the exporters themselves with their ownership to be fully effective. It is recommended that the creation of a Brand Fund with contribution from major manufacturing and exporting stakeholders in the handicrafts sector. The Export Promotion Council can also work with the IBEF in the Department of Commerce develop their international campaigns.

**(iv) Continuation of Existing Schemes**

The sector utilizes all existing schemes such as Market Access Initiative (MAI), Market Development Assistance (MDA), ASIDE etc. for participation in international exhibitions and development of infrastructure. Some proposals for increased grants in some of the areas, such as reimbursement of airfare, space rentals, 100% grant for warehouses, publication of catalogues, publicity etc have been received. It is recommended that existing MDA, MAI, ASIDE and similar schemes operated by other Ministries/ Departments may be continued in the 12th Plan. Proposals for increased assistance under schemes may be considered by the Department Commerce for appropriate action comprehensively across sectors.

**(v) Financial / Fiscal incentives**

The following proposals were received to provide financial / fiscal incentive to the sectors:

- Restoration of deemed export benefits on sale of handicrafts to foreign tourists in foreign exchange
- Extension of interest subvention of 2% beyond 31.03.2011
- Reduction of customs duty from 30% to zero per cent for sea shells.
- Export Credit Guarantee Corporation Ltd (ECGC) coverage to Handicrafts Exporters [under MDA scheme or a special scheme]
- Exemption from payment of service tax

- Waiving of service tax on business exhibitions organized within India
- Waiving of service tax on membership fee of the council
- Continuation of US GSP benefits to handicrafts items beyond 31.12.10
- Withdrawal of increase in processing fees of Certificate Of Origin for India's exports under Generalized System Of Preferences (GSP) scheme
- Exemption from income tax under section 10BA of I.T. act, 1961 for all handicrafts items
- Increase in duty drawback rates.
- Duty Credit Scrip of 3% over and above existing (5% + 2%) for units located in NER, J&K, HP and Uttaranchal and export to LAC.

In addition, a request has been made to liberalize labour laws for the sector at par with Agriculture. These issues relate to a number of Miniseries / Departments such as Ministry of Finance, Ministry of Labour and Employment, DGFT etc. and the Handicraft Export Council may take up these issues with the concerned Ministries / Departments.

#### **E. Micro, Small and Medium Enterprises (MSME)**

- (a) An interest subsidy scheme to be introduced for MSME exporters with a budgetary provision Rs 300 crore.**
- (b) Export promotion activities :** Brand Building, organizing Trade Fairs and Buyer-Seller Meets , Partial refund of overseas marketing expenditure to aggressively market their products in global markets, Support for establishing/ acquiring foreign companies, show rooms etc, assistance to MSME Associations / Cluster Associations for setting up office in a focused market place abroad, undertaking Product specific studies, Country specific studies, creating awareness on labelling, packaging, bar-coding, standardization , new markets and new products, strengthening of international marketing intelligence, structured export support programme on the lines of Centre for the Promotion of Imports from Developing Countries (CBI), Netherlands , identification of export worthy MSMEs ,etc .
- (c) Export Promotion Fund for MSME exporters to be created with a budget provision of Rs. 500 crore .**
- (d) Skill Development and Training for MSME exporters** with a budgetary provision for Rs. 200 crore. Training programmes / Seminars to create awareness amongst exporters regarding value added products and on improving competitiveness, Export procedures/documentation and incentives will be organised. In addition, MSME

Associations and EPCs will be involved in Skill Development and Export capacity building activities for MSMEs.

**(e) Building Institutional structure for MSME exports**

The following steps to be taken up:

- Setting up of MSME- Export Promotion Institutes in major exporting States. Five Institutes to be set up in the 12<sup>th</sup> Plan, with estimated expenditure - Rs 5crore.
- Strengthening of Database on Exports from MSMEs with provision of financial assistance to EPCs/ IIFT to maintain up-to-date data. Budgetary provision –Rs 10 crore may be sought.
- Setting up of a professionally managed apex Public Institution (like EXIM Bank, with capabilities to provide strategic guidance and oversee assisted Cos) to support Private & PPP initiatives of different types.
- Assistance for establishing 100 Export Development Companies (EDCs) is required.
- Trading Houses (Private or PPP) for exports of MSME products, especially labour intensive sectors with competencies of market development and international trade need to be established.

**F.1 Brand India**

Develop a multipronged brand strategy which should coalesce in itself the brand values of the manufacturing sector viz. quality, skilled manpower, innovation, technology sophistication, value for money, resilience and market adaptability. The strategy may combine the following essential elements that may assist in positioning the Indian exports:-

- a) Audits and assessments - Product and market perception: Undertake an assessment and audit of the product promotion strategy currently being pursued across manufacturing, which would help gain an understanding of the areas wherein minimal/major interventionist action is required. In addition undertake a perception survey of the Indian manufacturing sector in important target markets to understand the product competitiveness vis-à-vis other competitor nations/companies in the market. Quality certification parameters and quality perception would be key elements of such a perception survey.
- b) Collate the brand aspects: Organise workshops with stakeholders associated with the manufacturing sector to ensure that all facets and aspects of the brand do get integrated into the brand strategy.

- c) Create a logo and standardise a business brand kit: A logo should be developed that coalesces in itself the brand values of the manufacturing sector listed above. A standard brand kit be developed, which can be used as a promotional tool by players associated with the sector. This will help ensure a consistent message being relayed across markets about the sector and its brand strengths. This kit should be widely disseminated across markets to Indian missions abroad, foreign missions in India, industry players to ensure consistency in perspective positioning.
- d) Position the India business perspective at international exhibitions/seminars: A list of premier international and national trade fairs, seminars, exhibitions should be identified across markets wherein the India perspective is projected consistently. Participation of key industry players with government representatives must be encouraged at such meets.
- d) Experience India programme: It is important that India's perspective is regularly communicated and made known to global media. A lot happens within the country but rarely the extent of it gets communicated to the audiences abroad. A strong global media and PR initiative is necessitated to ensure as well timely responses to issues that may emerge in the media. Media has a strong role to play in building brand perceptions. Invite foreign media from identified markets to visit/engage/interact with the Indian industry.
- f) Brand messaging: Quality and certification: As part of brand messaging, IBEF would integrate quality and certification parameters to project compliance with international standards. IBEF could do a study on quality standards across key manufacturing sectors in India to understand how Indian products compare with key competitors in terms of quality and price.

## **F.2 Non-Tariff Measures**

There is absence of information and lack of transparency on the procedural norms and regulations of various countries regarding specifications as well as methods of sampling, inspection and testing. New Regulations are brought out and implemented without even giving the producers in the exporting country a chance to get familiar with these.

Several conformity assessment issues have the effect of restricting trade, these include excessive costs levied for testing, location of testing facilities including testing being done only at single/limited centre(s), limited validity of certificates, requiring re-testing with the attendant costs, procedures involving site/ factory visits

by the certifying authorities – both the time taken and costs involved act as hindrances, non-recognition of certificates from accepted International Bodies.

An Inter-Ministerial Committee (IMC) has been constituted by the Department of Commerce to coordinate the plan and strategy for dealing with issues related to NTMs and to increase India's market access abroad. A Technical Committee (TC) was also constituted to provide technical support and generate scientific data to deal with specific technical and scientific issues concerning NTMs.

The effort so far has been to strengthen domestic regulatory regime by upgrading existing regulations or creating new technical regulations, standards and conformity assessment procedures on Indian imports in a phased manner, over a period of time. This ensures an accurate assessment of the capacity of domestic industry to comply with the regulations. Such an arrangement not only checks the flood of imports in sensitive sectors but also help safeguard consumers from sub-standard/ spurious goods and indirectly promote quality in exports. This necessitates the up gradation of our testing facilities considerably to meet the requirements of new standards and also increase in the number of laboratories with international recognition/accreditation. Concerned Department/Ministries/ Organizations have to upgrade their infrastructure and surveillance systems at major ports, air ports and within the domestic market to ensure due compliance of India's standards, technical regulations and conformity assessment procedures.

On the export side, various Departments/Ministries/Organizations will identify clearly the NTMs faced by our exporters so that they may be taken up at the appropriate level in the SPS/TBT Committee Meetings at the WTO or bilaterally with the concerned countries in the FTA negotiations. The Department of Commerce raises 3-4 four issues in every regular SPS/TBT Committee Meetings at the WTO to get suitable redressal of our export concerns. For example, Specific Trade Concerns (STCs) on the issue of EU'S Regulation, Evaluation, Authorization and Restriction of Chemicals (REACH), EU's Traditional Herbal Medicine Product Directive 2004/27/EC (THMPD), EU's legislation on animal welfare and health etc. have been raised.

To facilitate our exporter we need to review our existing standards and consider benchmarking these regulations against international standards. Once we harmonize our standards and technical regulations with the international standards our products will have smooth entry in foreign markets rather than being subject to re-examination.

The Department of Commerce (DoC) has initiated a number of steps, often in coordination with concerned Departments/Ministries/Organisations, as part of the

above mentioned strategy to deal with NTMs. For example, DoC has installed a web-based Compendium on Import Policy of India, for South Asia. It furnishes information on tariff lines and requisite SPS/TBT compliance requirements the products have to go through. It has also institutionalized a system under APEDA of downloading SPS notifications of all member countries of the WTO from the WTO website; of analyzing and identifying the notifications from the angle of India's export interests; disseminate the notifications to stakeholders; seeking their feedback and preparing notes to raise the relevant issues in the SPS Committee of the WTO and also bilaterally with concerned countries. A similar process for TBT notifications has also been institutionalized.

### **F.3 Technology Intensity**

In empirical literature it is clearly brought out that technology intensity is a major determinant of manufacturing export growth, working through higher ends of the value chain and by creating higher demand in export destinations. There is need for India to shift fast from natural resources based and low technology intensity exports to medium and high tech exports, keeping in view her latent strengths. India figures very low when it comes to technology intensity in manufacturing exports when compared even with countries like Malaysia, Singapore etc. in East Asia. Recently China has overtaken the US to be the biggest high tech exporter of the world.

India needs to create and regularly update a database on dynamic products, which are generally technology intensive in nature. Investment in R&D by India is abysmally low. Government sector spending in R&D dominates in India overwhelmingly unlike in other countries where investment by industry is dominant. Industry-Research Institution linkage is an important gap in India and Indian industry depends on foreign firms for technology through licensing and technology transfer. There is need for incentivizing investment in R&D by Indian industry through fiscal incentives, in particular, and through preferential access to credit for the purpose. FDI - inward as well as outward - plays an important role in enhancing technology content in manufacturing output as well as exports. IP regulations and import regime in place also influence technology intensity in output and exports.

Case studies on sectors like automotives, chemicals, pharma, non-electrical machinery, electronics and machine tools have been looked at. With appropriate supporting measures and awareness building among industry all these sectors can help enhance India's share in high tech manufacturing exports. A new scheme estimated to cost Rs 20 crores has been recommended. The objective of the scheme is improving the country's technology intensity in manufacturing exports

by establishing an institutional mechanism which brings together a network of researchers and representatives of industry to update the lists of globally dynamic products.

## **G. Geographic Market Strategy**

Economic power balance at the international level has been undergoing changes at an accelerated pace during the past few decades. GDP and trade performance of the South has been improving. Europe and the US who dominated the manufacturing sector in 1970 with above 45 per cent and above 27 per cent of world output respectively, have seen PR China emerging from the position of about 3 per cent share in 1970 to nearly 20 per cent share in 2009. As regards technology content in manufacturing as well China has emerged as the country with the highest high technology content in manufacturing exports, ahead of even the US, which dominated the scene until 2009. South East Asian countries are also doing very well.

The geography of world manufacturing output and export destinations has also undergone drastic changes, and this transformation is still continuing. The capacity of developing countries to absorb more and more imports is unfolding. The recent economic meltdown originated in and affected the developed countries more substantially, with the developing countries and emerging economies remaining relatively less affected.

Trade flows within the South has increased substantially in recent years. However, the share of India, though increasing rapidly, is still much low compared to countries like China and those in South East Asia, in particular. There is substantial potential for enhancing India's share in trade with the South. India's export strategy has been weaved around this premise. The pursuit of regional trade agreements in recent years has built in this realisation. This Working Group recommends continuing with this strategy with more vigour.

India has been pursuing geographic market strategy directing her export promotion efforts more intensively at Asia and ASEAN, Latin America and Africa through Focus Market initiatives and through trade agreements. There has been transformation in India's trade with major regions. Share of Europe in India's exports has declined from 24 per cent in 2002-03 to 20 per cent in 2010-11. The Share of Americas (North and South) declined from 24.5 per cent in 2002-03 to 19 per cent in 2006-07 and further to 15 per cent in 2010-11. Asia and ASEAN (including WANA) have recorded substantial increase in their share from 44 per cent in 2002-03 to 56 per cent in 2010-11. Share of Africa has increased from 4.7 per cent in 2002-03 to 6.5 per cent in 2010-11. It is proposed to take advantage of such shifts in the future and formulate policies accordingly.

## **H. Inclusion, employment and development**

The developmental, employment and inclusion objectives of trade policy were considered by the Working Group. While the contribution of trade, especially exports to the inclusion and employment objectives may not be explicit, rapid expansion in exports contributes significantly to economic growth, in general, and to employment generation, in particular. Contribution of exports to employment has been empirically verified, especially in times of rapid export expansion. Employment intensive sectors like textiles, gems and jewellery, leather and handicrafts form an important part of India's export basket. The quality of employment, especially the remuneration, is normally at a higher level when production is for export markets. Labour standards are more closely aligned to international standards in export production, with spillover effects to the economy of the country. However, the developmental objectives of trade can be fully realised only through complementary policies, especially industrial and investment policies.



No. I&M- 3(1)9/2011  
Planning Commission  
(Industries Division)

Yojana Bhavan, Sansad Marg,  
New Delhi, the 9<sup>th</sup> May, 2011

**OFFICE MEMORANDUM**

**Subject: Constitution of Working Group on "Boosting India's Manufacturing Export" for the Twelfth Five Year Plan (2012-2017)**

In the context of preparation of Twelfth Five Year Plan (2012-2017), it has been decided to set up a Working Group on "Boosting India's Manufacturing Export". The Composition and Terms of Reference of the Working Group would be as follows:


**I. Composition**

S.No.	Name	
1	Dr. Rahul Khullar, Secretary, Department of Commerce	Chairman
2	Shri P.K. Chaudhery, Special Secretary, Department of Commerce	Co-Chairman
3	Member-Secretary, National Manufacturing Competitiveness Council or Nominee	Member
4	Secretary, Department of Economic Affairs or Nominee	Member
5	Secretary, Ministry of Micro, Small & Medium Enterprises or Nominee	Member
6	Secretary, Department of Information Technology or Nominee	Member
7	Secretary, Ministry of Textiles or Nominee	Member
8	Secretary, Department of Industrial Policy & Promotion or Nominee	Member
9	Representative of Financial Services	Member
10	Adviser (Industries), Planning Commission	Member
11	Chairman, Gem & Jewellery Export Promotion Council or Nominee	Member
12	Chairman, Apparel Export Promotion Council or Nominee	Member
13	Chairman, Pharmaceuticals Export Promotion Council or Nominee	Member
14	Director General, Federation of Indian Chamber of Commerce & Industry or his Nominee	Member
15	Director General, Confederation of Indian Industry or Nominee	Member
16	Chairman, Engineering Export Promotion Council or Nominee	Member
17	Director, Indian Institute of Foreign Trade or Nominee	Member
18	Secretary General, Federation of Indian Micro & Small and Medium Enterprises (FISME)	Member
19	Shri Bipul Chatterjee, Dy. Executive Director, Consumer Unity & Trust Society (CUTS)	Member
20	Shri Augustine Peter, Economic Adviser, D/o Commerce	Member Secretary

**II. Terms of Reference**

- i. To document the growth of manufacturing exports over the 11th Plan period and to identify bottlenecks that need resolution.
- ii. To lay down goals to be achieved for manufactured exports, taking into account export strategy prepared by Ministry of Commerce, and prepare a broad blueprint for achieving the same.

- iii. To further build on the existing export strategy in order to
    - a. Identify products that have potential for sustained export growth and strategies for promoting them.
    - b. Recommend measures for creating 'Brand India' including standards those related to quality and certification.
    - c. Suggest measures to deal with non-tariff barriers resorted to by developed countries against Indian Exports.
    - d. Recommend how to reduce trade-related transaction costs which impinge upon the competitiveness of Indian goods.
  - iv. To study the implication of WTO related issues and those concerning FTA on manufacturing exports.
  - v. To specify the milestones to be achieved within the 12th Plan period in order to achieve the goals laid out in (2).
  - vi. To suggest/recommend programmes/ schemes that are to be terminated in the 11th Plan or initiated or continued in the 12th Plan period, together with the broad budgetary implications, if any
2. The Chairman may constitute Sub-Groups/Task Forces as considered necessary and co-opt other members to the Working Group for specific inputs.
  3. The Working Group would submit its report to the Chairman of the Steering Committee on Industry by 30<sup>th</sup> August, 2011. The Working Group will be serviced by Department of Commerce.
  4. The expenditure towards Travelling Allowance (TA)/DA in connection with the meetings of the Working Group/Steering Committee in respect of the official members will be borne by their respective Ministry/Department. In case of non-official Members of the Working Group, expenditure towards their TA/DA would be met by the Planning Commission as admissible to the class I officers of the Government of India. As per extant Guidelines, air travel required for attending the meeting may be undertaken on Air India.
  5. Shri Debashis Banerjee, Joint Adviser (Industry), Planning Commission, New Delhi (Room No 464, Yojana Bhavan – Tel: 011- 2335-3437, email: banerjee-pc@nic.in) will act as Nodal Officer for this Working Group and any further query/ communication in this regard may be made with the Nodal Officer.

  
(Dr. Renu S. Parmar)  
Adviser (Industry & VSE)  
Telefax: 2309 6605  
Email: [rsparmar@nic.in](mailto:rsparmar@nic.in)

To  
The Chairman and All Members of the Working Group (As per list attached)

2



Dr. Rahul Khullar,  
Secretary,  
Department of Commerce, Udyog Bhavan  
New Delhi 110011

Shri P.K. Chaudhery,  
Special Secretary,  
Department of Commerce, Udyog Bhavan  
New Delhi 110011

Member-Secretary,  
National Manufacturing Competitiveness Council

Secretary,  
Department of Economic Affairs  
North Block, New Delhi 110001

Secretary,  
Ministry of Micro, Small & Medium Enterprises  
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Secretary,  
Department of Information Technology  
Electronics Niketan, 6, CGO Complex  
Lodhi Road, New Delhi 110003

Secretary, Ministry of Textiles  
Udyog Bhavan  
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Secretary,  
Department of Industrial Policy & Promotion  
Udyog Bhavan  
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Representative of Financial Services

Adviser (Industries),  
Planning Commission

Chairman,  
Gem & Jewellery Export Promotion Council  
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Bandra - East, Mumbai

Chairman,  
Apparel Export Promotion Council  
A - 223, Okhla Industrial Area,  
Phase-I, New Delhi-110020

Chairman,  
Apparel Export Promotion Council  
Apparel House, Institutional Area Sector-44,  
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Chairman,  
Pharmaceuticals Export Promotion Council  
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Director General,  
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Director,  
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Shri Augustine Peter, Economic Adviser,  
D/o Commerce Udyog Bhavan  
New Delhi 110011

**F.No. 15 /1006 /2011-EPL-II  
Government of India  
Ministry of Commerce & Industry  
Department of Commerce  
(Economic Division)**

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**Udyog Bhawan  
New Delhi, the 30<sup>th</sup> May, 2011**

**OFFICE MEMORANDUM**

**Subject: Constitution of Sub-Group on ‘MSMEs’ under the Planning Commission Working Group on “Boosting India’s Manufacturing Exports” for the Twelfth Five Year Plan (2012-17).**

In pursuance of the decision taken in the first meeting of the Planning Commission Working Group on “Boosting India’s Manufacturing Exports” held on 26.5.2011 under the Chairmanship of Dr. Rahul Khullar, Secretary, Department of Commerce, Ministry of Commerce & Industry, it has been decided to set up a Sub-Group on ‘Micro, Small and Medium Enterprises’(MSMEs). The composition and Terms of Reference of the Sub-Group would be as follows:

**I. Composition**

<b>S.No.</b>	<b>Name</b>	
1.	Shri. Shyam Agarwal, Development Commissioner, MSME	Chairman
2.	Shri. Rajat Sachar, Additional Economic Adviser, Department of Commerce	Member
3.	Secretary, General, Federation of Indian Micro and Small & Medium Enterprises, New Delhi	Member
4.	<i>Representative of</i> Indian Institute of Foreign Trade	Member
5.	<i>Representative of</i> Agricultural and Processed Food Products Export Development Authority (APEDA)	Member
6.	<i>Representative of</i> Apparel Export Promotion Council	Member
7.	<i>Representative of</i> Chemicals Pharmaceuticals & Cosmetics Export Promotion Council, (CHEMEXCIL)	Member
8.	<i>Representative of</i> PHARMEXCIL	Member

9.	<i>Representative of</i> Engineering Export Promotion Council	Member
10.	<i>Representative of</i> Gems & Jewellery Export Promotion Council	Member
11.	<i>Representative of</i> Council for Leather Exports	Member
12.	Shri Samarendra Sahu, Additional Development Commissioner, O/o Development Commissioner, MSME	Member Secretary

## II. Terms of reference

- (i) The terms of reference of the Working Group (appended to this OM) will be the basis for deliberations of the Sub Group, but with reference to the sector(s) specified for the Sub Group.
- (ii) The work of the Sub Group would cover the MEME sector comprehensively, giving due weightage to the actual and potential export performance of sub sectors, from the point of view of 'boosting India's manufacturing exports'
- (iii) The focus of the Sub Group should be on assessing the existing policies performance in the sector/major sub sectors, to identify what, if any, may have gone wrong in the past, what is the way forward and what the instruments required are for achieving significant export growth
- (iv) The Strategy paper on 'Doubling Exports in Next Three Years (2011-12 to 2013-14)', prepared by the Department of Commerce ([www.commerce.nic.in](http://www.commerce.nic.in)) could be the starting point of the work of the Sub Group
- (v) Issues related to:
  - (a) The Working Group ToR No. (iii) c (Non Tariff Barriers – SPS, TBT etc.) need not form part of the Report of the Sub Group. Any related issue that may come up may be passed on to Shri Amar Sinha, Joint Secretary, Department of Commerce, Room No. 247, Udyog Bhavan, Tel: 011-23061664; Email: [js2tpd-doc@nic.in](mailto:js2tpd-doc@nic.in); Fax: 011-23061664, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
  - (b) The Working Group ToR (iii) (Trade related transaction costs) need not form part of the Report of the Sub Groups. Any related issue that may come up may be passed on to: Dr. Anup K. Pujari, Director General, Directorate General of Foreign Trade (DGFT), Room No.8, Udyog Bhavan, Tel: 011-2306 2777; Email: [dgft@nic.in](mailto:dgft@nic.in); Fax: 011-23061613, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
  - (c) The Working Group ToR (iv) (Multilateral and regional trade issues) need not form part of the Report of the Sub Group. Any related issue that may come up may be passed on to Shri Amar Sinha, Joint Secretary, Department of Commerce, Room No. 247, Udyog Bhavan, Tel: 011-23061664; Email: [js2tpd-doc@nic.in](mailto:js2tpd-doc@nic.in); Fax: 011-23061664, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
- (vi) The Chairman of the Sub-Group may constitute any further smaller Groups within this Sub Group, if found appropriate, and co-opt other Members to the Sub-Group for specific



inputs as also suitably add elements to the ToR that are relevant to the overall objectives of the Working Group.

- (vii) The Sub Group will hold two meetings in the month of June, 2011 and brief the Working Group in its second meeting scheduled on 24<sup>th</sup> June, 2011.
- (viii) The Sub Group will submit its Report to the Working Group on or before 31<sup>st</sup> July, 2011.
- (ix) The Sub Group will be serviced by the Office of Development Commissioner, Ministry of Micro Small and Medium Enterprises .
- (x) The Expenditure towards travelling allowance (TA/DA in connection with the meetings of the Working Group/Steering Committee in respect of the official members will be borne by their respective Ministry/Department. In case of non-official Members of the Working Group, expenditure towards their TA/DA would be met by the Planning Commission as admissible to the class 1 officers of the Government of India. As per extant Guidelines air travel required for attending the meeting may be undertaken on Air India.
- (xi) Shri Rajat Sachar, Additional Economic Adviser, Department of Commerce, Room No.277, Udyog Bhavan, New Delhi, email: [rsachar@nic.in](mailto:rsachar@nic.in); Tel.: 011-23061888; Fax: 011-23061374, will act as the Nodal Officer for this Sub-Group and any further query/communication in this regard may be made with the Nodal Officer.

Sd/-

(Augustine Peter)  
Economic Adviser  
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**To**

**The Chairman and All Members of the Sub-Group (As per list attached)**

**Copy to:**

- 1. Shri Anup K. Pujari**  
**DGFT**  
**Department of Commerce**  
**Udyog Bhavan**  
**New Delhi**
- 2. Shri Amar Sinha**  
**Joint Secretary**  
**Department of Commerce**  
**Udyog Bhavan**  
**New Delhi**

## List of Sub Group on MSME

(Department of Commerce O.M No. 15 /1006 /2011-EPL-II dated 30.5.2011)

1. Dr. Shyam Agarwal  
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2. Shri Samrendra Sahu  
Additional Development Commissioner  
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4. Shri Anil Bhardwaj  
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6. Shri Asit Tripathy  
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7. Shri Premal Udani

Chairman

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Gurgaon-122003 Haryana

Tel: 0124-2708108, FAX: 0124-2708008

Email: [chairman@aepcindia.com](mailto:chairman@aepcindia.com),

Phone: 0124-2708000-3

Fax : 0124-2708004

8. Shri Satish Wagh

Chairman

CHEMEXCIL

Jhansi Castle 4<sup>th</sup> Floor , 7 Cooperage Road  
Mumbai-400039

Tel: -022-22021330, 22021288

Fax: 022-22026684

Email: [satish@supriyalifescience.com](mailto:satish@supriyalifescience.com)

9. Shri Smitesh C Shah

Chairman and Managing Director,  
Pharmaceuticals Export Promotion Council

101, Aditya Trade Centre,  
Ameerpet, Hyderabad – 500038

Tel: 0251-6698504, 6698505, FAX: 0251-66466401

Email: [smitesh\\_shah@calyxindia.com](mailto:smitesh_shah@calyxindia.com) , [chairman@pharmexcil.com](mailto:chairman@pharmexcil.com)

10. Shri Aman Chadha

Chairman

Engineering Export Promotion Council (EEPC)

4A, Vandhna Building (4<sup>th</sup> Floor)

11, Tolstoy Marg

New Delhi 110001

Tel: 022-40325600, 022-40325678, FAX: 022-23854428

Mail: [aman@nikkobearings.com](mailto:aman@nikkobearings.com)

11. Shri Rajiv Jain,

Chairman,

Gem & Jewellery Export Promotion Council

Office No. AW 1010, Tower A,

G Block, Bharat Diamond Bourse,

Next to ICICI Bank, Bandra-Kurla Complex,

Bandra - East, Mumbai

Tel: 0141-2770539, 2771102, Fax: 0141-2770655, 2771102 M-09829060006

Email: [rajiv.jain@sambhavgems.net](mailto:rajiv.jain@sambhavgems.net)

12. Shri M. Rafeeqe Ahmed  
Chairman  
Council for Leather Exports  
No. 1 CMDA Tower II,  
IIIrd Floor, Gandhi Irwin Road,  
Egmore  
Chennai-600008

**F.No.15/1002/2011-EPL-II  
Government of India  
Ministry of Commerce & Industry  
Department of Commerce  
(Economic Division)**

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**Udyog Bhawan  
New Delhi, the 30<sup>th</sup> May, 2011**

**OFFICE MEMORANDUM**

**Subject: Constitution of Sub-Group on ‘Engineering Exports’ under the Planning Commission Working Group on “Boosting India’s Manufacturing Exports” for the Twelfth Five Year Plan (2012-17).**

In pursuance of the decision taken in the first meeting of the Planning Commission Working Group on “Boosting India’s Manufacturing Exports” held on 26.5.2011 under the Chairmanship of Dr. Rahul Khullar, Secretary, Department of Commerce, Ministry of Commerce & Industry, it has been decided to set up a Sub-Group on ‘Engineering Exports’. The composition and Terms of Reference of the Sub-Group would be as follows:

**I. Composition**

<b>S.No.</b>	<b>Name</b>	
1.	Shri P.K. Chaudhery, Special Secretary, Department of Commerce	Chairman
2.	Najib Shah, Joint Secretary, CBEC, Department of Revenue	Member
3.	Shri. Vinnie Mehta, Executive Director, ACMA	Member
4.	Shri. Vishnu Mathur, Executive Director SIAM	Member
5.	Shri. A. K. Mahendru, Panel Convener, Iron & Steel, EEPC India	Member
6.	Shri Aman Chadha, Chairman, Engineering Export Promotion Council	Member
7.	Shri. Rakesh Shah, Panel Convener, Construction, Earth Moving Machinery etc., Engineering Export Promotion Council	Member
8.	Shri. Sharad Aggarwal, Panel Convener, Hand Tools, Engineering Export Promotion Council	Member
9.	Shri Sanjay Budhia, Chairman, CII National Committee on Exports	Member
10.	Shri. R. Maitra, ED, EEPC	Member

11.	Shri Chetan Bijusre, Additional Director, FICCI	Member
12.	Shri Sumanta Chaudhuri, Joint Secretary, Department of Commerce	Convener

## II. Terms of reference

- (i) The terms of reference of the Working Group (appended to this OM) will be the basis for deliberations of the Sub Group, but with reference to the sector specified for the Sub Group.
- (ii) The work of the Sub Group would cover the Engineering sector comprehensively, giving due weightage to the actual and potential export performance of sub sectors, from the point of view of 'boosting India's manufacturing exports'
- (iii) The focus of the Sub Group should be on assessing the existing policies in the sector/major sub sectors, to identify what, if any, may have gone wrong in the past, what is the way forward and what the instruments required are for achieving significant export growth
- (iv) The Strategy paper on 'Doubling Exports in Next Three Years (2011-12 to 2013-14), prepared by the Department of Commerce ([www.commerce.nic.in](http://www.commerce.nic.in)) could be the starting point of the work of the Sub Group
- (v) Issues related to:
  - (a) The Working Group ToR No. (iii) c (Non Tariff Barriers – SPS, TBT etc.) need not form part of the Report of the Sub Group. Any related issue that may come up may be passed on to Shri Amar Sinha, Joint Secretary, Department of Commerce, Room No. 247, Udyog Bhavan, Tel: 011-23061664; Email: [js2tpd-doc@nic.in](mailto:js2tpd-doc@nic.in); Fax: 011-23061664, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
  - (b) The Working Group ToR (iii) (Trade related transaction costs) need not form part of the Report of the Sub Groups. Any related issue that may come up may be passed on to: Dr. Anup K. Pujari, Director General, Directorate General of Foreign Trade (DGFT), Room No.8, Udyog Bhavan, Tel: 011-2306 2777; Email: [dgft@nic.in](mailto:dgft@nic.in); Fax: 011-23061613, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
  - (c) The Working Group ToR (iv) (Multilateral and regional trade issues) need not form part of the Report of the Sub Group. Any related issue that may come up may be passed on to Shri Amar Sinha, Joint Secretary, Department of Commerce, Room No. 247, Udyog Bhavan, Tel: 011-23061664; Email: [js2tpd-doc@nic.in](mailto:js2tpd-doc@nic.in); Fax: 011-23061664, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
- (vi) The Chairman of the Sub-Group may constitute any further smaller Groups within this Sub Group, if found appropriate, and co-opt other Members to the Sub-Group for specific inputs as also suitably add elements to the ToR that are relevant to the overall objectives of the Working Group.
- (vii) The Sub Group will hold two meetings in the month of June, 2011 and brief the Working Group in its second meeting scheduled on 25<sup>th</sup> June, 2011.
- (viii) The Sub Group will submit its Report to the Working Group on or before 31<sup>st</sup> July, 2011.
- (ix) The Sub Group will be serviced by the Department of Commerce.

- (x) The Expenditure towards travelling allowance (TA/DA in connection with the meetings of the Working Group/Steering Committee in respect of the official members will be borne by their respective Ministry/Department. In case of non-official Members of the Working Group, expenditure towards their TA/DA would be met by the Planning Commission as admissible to the class 1 officers of the Government of India. As per extant Guidelines air travel required for attending the meeting may be undertaken on Air India.
- (xi) Shri Rajat Sachar, Additional Economic Adviser, Department of Commerce, Room No.277, Udyog Bhavan, New Delhi, email: [rsachar@nic.in](mailto:rsachar@nic.in); Tel.: 011-23061888; Fax: 011-23061374, will act as the Nodal Officer for this Sub-Group and any further query/communication in this regard may be made with the Nodal Officer.

Encl.: As above.

Sd/-

(Augustine Peter)  
Economic Adviser  
Telefax: 2306 1374  
Email: [paugustine@nic.in](mailto:paugustine@nic.in)

**To**

**The Chairman and All Members of the Sub-Group (As per list attached)**

**List of Sub-Group on Engineering Exports**  
(Department of Commerce O.M.No.15/1002/2011-EPL.II)

1. Shri P.K. Chaudhery  
Special Secretary  
Department of Commerce  
Udyog Bhawan  
New Delhi-110011
2. Shri Sumanta Chaudhuri  
Joint Secretary  
Department of Commerce  
Udyog Bhawan  
New Delhi-110011
3. Shri Najib Shah  
Joint Secretary  
Department of Revenue  
4<sup>th</sup> Floor, Jeewan Deep Building,  
Parliament Street  
New Delhi-110001
4. Shri Vinnie Mehta  
Executive Director  
Automotive Component Manufacturers  
Association of India (ACMA)  
The Capital Court  
6th Floor, Olof Palme Marg  
Munirka, New Delhi 110 067
5. Shri Vishnu Mathur  
Director General  
Society of Indian Automobile Manufacturers (SIAM)  
Core 4-B, 5th Floor, India Habitat Centre  
Lodhi Road, New Delhi – 110 003
6. Shri A. K. Mahendru  
Panel Convener, Iron & Steel  
EEPC India  
4A, Vandhna Building (4th Floor)  
11, Tolstoy Marg  
New Delhi 110001
7. Shri Aman Chaddha  
Chairman  
4A, Vandhna Building (4th Floor)  
11, Tolstoy Marg  
New Delhi 110001
8. Shri Rakesh Shah



EEPC,  
Panel Convener,  
Construction, Earth Moving Machinery, etc.  
4A, Vandhna Building (4th Floor)  
11, Tolstoy Marg  
New Delhi 110001

9. Shri Sharad Aggarwal  
EEPC,  
Panel Convener,  
Hand Tools  
4A, Vandhna Building (4th Floor)  
11, Tolstoy Marg  
New Delhi 110001
10. Shri Sanjay Budhia  
Chairman  
CII National Committee on Exports  
Confederation of Indian Industry,  
The Mantosh Sondhi Centre,  
23, Institutional Area,  
Lodhi Road,  
New Delhi – 110 003
11. Shri R. Maitra  
Executive Director  
EEPC  
4A, Vandhna Building (4th Floor)  
11, Tolstoy Marg  
New Delhi 110001
12. Shri Chetan Bijusre  
Additional Director  
FICCI  
Federation House, Tansen Marg,  
New Delhi – 110 001.

**Copy to:**

13. Shri Anup K. Pujari  
DGFT  
Department of Commerce  
Udyog Bhavan  
New Delhi
14. Shri Amar Sinha  
Joint Secretary  
Department of Commerce  
Udyog Bhavan  
New Delhi

**F.No. 15 /1007 /2011-EPL-II**  
**Government of India**  
**Ministry of Commerce & Industry**  
**Department of Commerce**  
**(Economic Division)**

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**Udyog Bhawan**  
**New Delhi, the 31<sup>st</sup> May, 2011**

**OFFICE MEMORANDUM**

**Subject: Constitution of Sub-Group on ‘Employment intensive sectors’ under the Planning Commission Working Group on “Boosting India’s Manufacturing Exports” for the Twelfth Five Year Plan (2012-17).**

In pursuance of the decision taken in the first meeting of the Planning Commission Working Group on “Boosting India’s Manufacturing Exports” held on 26.5.2011 under the Chairmanship of Dr. Rahul Khullar, Secretary, Department of Commerce, Ministry of Commerce & Industry, it has been decided to set up a Sub-Group on ‘Employment intensive sectors’. The composition and Terms of Reference of the Sub-Group would be as follows:

**I. Composition**

<b>S.No.</b>	<b>Name</b>	
1.	Dr. Rajan Katoch, Additional Secretary & Financial Adviser, Department of Commerce	Chairman
2	Shri Sujit Gulati, Joint Secretary, Ministry of Textiles	Member
3	Shri S.S Gupta, Development Commissioner(Handicrafts), Ministry of Textiles	Member
4	Shri Raffeeque Ahmed Chairman, Council for Leather Exports	Member
5	Shri Rajiv Jain, Chairman, Gem & Jewellery Export Promotion Council	Member
6	Chairman, Carpet Export Promotion Council	Member
7.	Chairman, Jute Products Development And Export Promotion Council	Member
8.	Shri Anup Wadhawan , Joint Secretary, Department of Commerce	Member Secretary

## II. Terms of reference

1. The terms of reference of the Working Group (appended to this OM) will be the basis for deliberations of the Sub Group, but with reference to the sector specified for the Sub Group.
2. The work of the Sub Group would cover the sectors like Gems & Jewellery, Leather, Jute, Carpets and Handicrafts comprehensively, giving due weightage to the actual and potential export performance of sub sectors, from the point of view of 'boosting India's manufacturing exports'
3. The focus of the Sub Group should be on assessing the existing policies in the sector/major sub sectors, to identify what, if any, may have gone wrong in the past, what is the way forward and what the instruments required are for achieving significant export growth
4. The Strategy paper on 'Doubling Exports in Next Three Years (2011-12 to 2013-14), prepared by the Department of Commerce ([www.commerce.nic.in](http://www.commerce.nic.in)) could be the starting point of the work of the Sub Group
5. Issues related to:
  - a. The Working Group ToR No. (iii) c (Non Tariff Barriers – SPS, TBT etc.) need not form part of the Report of the Sub Group. Any related issue that may come up may be passed on to Shri Amar Sinha, Joint Secretary, Department of Commerce, Room No. 247, Udyog Bhavan, Tel: 011-23061664; Email: [js2tpd-doc@nic.in](mailto:js2tpd-doc@nic.in); Fax: 011-23061664, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
  - b. The Working Group ToR (iii) (Trade related transaction costs) need not form part of the Report of the Sub Groups. Any related issue that may come up may be passed on to: Dr. Anup K. Pujari, Director General, Directorate General of Foreign Trade (DGFT), Room No.8, Udyog Bhavan, Tel: 011-2306 2777; Email: [dgft@nic.in](mailto:dgft@nic.in); Fax: 011-23061613, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
  - c. The Working Group ToR (iv) (Multilateral and regional trade issues) need not form part of the Report of the Sub Group. Any related issue that may come up may be passed on to Shri Amar Sinha, Joint Secretary, Department of Commerce, Room No. 247, Udyog Bhavan, Tel: 011-23061664; Email: [js2tpd-doc@nic.in](mailto:js2tpd-doc@nic.in); Fax: 011-23061664, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
6. The Chairman of the Sub-Group may constitute any further smaller Groups within this Sub Group, if found appropriate, and co-opt other Members to the Sub-Group for specific inputs as also suitably add elements to the ToR that are relevant to the overall objectives of the Working Group.
7. The Sub Group will hold two meetings in the month of June, 2011 and brief the Working Group in its second meeting scheduled on 24<sup>th</sup> June, 2011.
8. The Sub Group will submit its Report to the Working Group on or before 31<sup>st</sup> July, 2011.
9. The Sub Group will be serviced by the Department of Commerce.
10. The Expenditure towards travelling allowance (TA/DA in connection with the meetings of the Working Group/Steering Committee in respect of the official members will be borne by their respective Ministry/Department. In case of non-official Members of the Working Group, expenditure towards their TA/DA would

be met by the Planning Commission as admissible to the class 1 officers of the Government of India. As per extant Guidelines air travel required for attending the meeting may be undertaken on Air India.

11. Shri Rajat Sachar, Additional Economic Adviser, Department of Commerce, Room No.277, Udyog Bhavan, New Delhi, email: [rsachar@nic.in](mailto:rsachar@nic.in); Tel.: 011-23061888; Fax: 011-23061374, will act as the Nodal Officer for this Sub-Group and any further query/communication in this regard may be made with the Nodal Officer.

Sd/-

(Augustine Peter)  
Economic Adviser  
Telefax: 2306 1374  
Email: [paugustine@nic.in](mailto:paugustine@nic.in)

Encl: As above

**To**  
**The Chairman and All Members of the Sub-Group (As per list attached)**

**Copy to :**

1. **Shri Anup K. Pujari**  
**DGFT**  
**Department of Commerce**  
**Udyog Bhavan**  
**New Delhi**
2. **Shri Amar Sinha**  
**Joint Secretary**  
**Department of Commerce**  
**Udyog Bhavan**  
**New Delhi**

## List of Sub-Group on 'Employment intensive sectors'

(Department of Commerce O.M.No. 15/1007/2011-EPL.II dated 31.5.2011)

1. Dr. Rajan Katoch,  
Additional Secretary & Financial Adviser,  
Department of Commerce  
Udyog Bhawan, New Delhi.  
Tel. No. 23063215  
E.mail. [asfa\\_com@nic.in](mailto:asfa_com@nic.in)
2. Shri Sujit Gulati,  
Joint Secretary,  
Ministry of Textiles,  
Udyog Bhawan, New Delhi.  
Tel. No. 23063192  
Fax No: 011-23062451  
E.mail. [sujitgulati59@gmail.com](mailto:sujitgulati59@gmail.com)
3. Shri S S Gupta,  
Development Commissioner,  
O/o DC Handicrafts, West Block No. 7  
R K Puram, New Delhi – 110 066.  
Tel. No. 011-26106902  
Fax No: 011-26163085  
E.mail. [dchejs@ren02.nic.in](mailto:dchejs@ren02.nic.in)
4. Shri Anup Wadhawan ,  
Joint Secretary,  
Department of Commerce,  
Udyog Bhawan, New Delhi.  
Tel. No. 23061818  
E.mail. [wadhawan@nic.in](mailto:wadhawan@nic.in)
5. Shri Rajiv Jain,  
Chairman,  
Gem & Jewellery Export Promotion Council,  
F 17-18, flatted Factories complex,  
Jhandewalan, New Delhi – 110 055.  
Tel: 011046266900, 46266920 to 926  
Mob. No: 09829060006,  
Tel. No. 0141-2770539, 2771102  
  
E.mail. [delhi@gjepcindia.com](mailto:delhi@gjepcindia.com), [rajiv.jain@sambhavgems.net](mailto:rajiv.jain@sambhavgems.net), [chairman@gjepcindia.com](mailto:chairman@gjepcindia.com)
6. Shri Raffeeque Ahmed  
Chairman, Council for Leather Exports,  
CMDA Towers – II, Third Floor, Gandhi Irwin Bridge Road,  
Egmore, Chennai-600008  
Tele No. :044-22522100  
Fax No: 044-22522300  
E.mail. [chairmanpa@farida.in](mailto:chairmanpa@farida.in)  
[rafeeque@farida.in](mailto:rafeeque@farida.in)

**F.No. 15 /1004 /2011-EPL-II  
Government of India  
Ministry of Commerce & Industry  
Department of Commerce  
(Economic Division)**

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**Udyog Bhawan  
New Delhi, the 31<sup>st</sup> May, 2011**

**OFFICE MEMORANDUM**

**Subject: Constitution of Sub-Group on ‘Textiles’ under the Planning Commission Working Group on “Boosting India’s Manufacturing Exports” for the Twelfth Five Year Plan (2012-17).**

In pursuance of the decision taken in the first meeting of the Planning Commission Working Group on “Boosting India’s Manufacturing Exports” held on 26.5.2011 under the Chairmanship of Dr. Rahul Khullar, Secretary, Department of Commerce, Ministry of Commerce & Industry, it has been decided to set up a Sub-Group on ‘Textiles’. The composition and Terms of Reference of the Sub-Group would be as follows:

**I. Composition**

<b>S.No.</b>	<b>Name</b>	
1.	Joint Secretary (Exports), Ministry of Textiles	Chairman
2.	Secretary, Textiles Committee	Member
3.	Joint Textile Commissioner, O/o Textile Commissioner	Member
4.	Nominee of TRU, D/o Revenue	Member
5.	Nominee of Banking Division, D/o Financial Services	Member
6.	Secretary General, AEPC	Member
7.	Executive Director, SRTEPC	Member
8.	Executive Director, Texprocil	Member
9.	Shri Bipul Chatterjee, Deputy Executive Director, CUTS	Member
10.	Director, Exports, Ministry of Textiles	Member Secretary

## II. Terms of reference

- (i) The terms of reference of the Working Group (appended to this OM) will be the basis for deliberations of the Sub Group, but with reference to the sector(s) specified for the Sub Group.
- (ii) The work of the Sub Group would cover the 'Textiles' sector comprehensively, giving due weightage to the actual and potential export performance of sub sectors, from the point of view of 'boosting India's manufacturing exports'
- (iii) The focus of the Sub Group should be on assessing the existing policies performance in the sector/major sub sectors, to identify what, if any, may have gone wrong in the past, what is the way forward and what the instruments required are for achieving significant export growth
- (iv) The Strategy paper on 'Doubling Exports in Next Three Years (2011-12 to 2013-14), prepared by the Department of Commerce ([www.commerce.nic.in](http://www.commerce.nic.in)) could be the starting point of the work of the Sub Group
- (v) Issues related to:
  - (a) The Working Group ToR No. (iii) c (Non Tariff Barriers – SPS, TBT etc.) need not form part of the Report of the Sub Group. Any related issue that may come up may be passed on to Shri Amar Sinha, Joint Secretary, Department of Commerce, Room No. 247, Udyog Bhavan, Tel: 011-23061664; Email: [js2tpd-doc@nic.in](mailto:js2tpd-doc@nic.in); Fax: 011-23061664, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
  - (b) The Working Group ToR (iii) (Trade related transaction costs) need not form part of the Report of the Sub Groups. Any related issue that may come up may be passed on to: Dr. Anup K. Pujari, Director General, Directorate General of Foreign Trade (DGFT), Room No.8, Udyog Bhavan, Tel: 011-2306 2777; Email: [dgft@nic.in](mailto:dgft@nic.in); Fax: 011-23061613, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
  - (c) The Working Group ToR (iv) (Multilateral and regional trade issues) need not form part of the Report of the Sub Group. Any related issue that may come up may be passed on to Shri Amar Sinha, Joint Secretary, Department of Commerce, Room No. 247, Udyog Bhavan, Tel: 011-23061664; Email: [js2tpd-doc@nic.in](mailto:js2tpd-doc@nic.in); Fax: 011-23061664, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
- (vi) The Chairman of the Sub-Group may constitute any further smaller Groups within this Sub Group, if found appropriate, and co-opt other Members to the Sub-Group for specific inputs as also suitably add elements to the ToR that are relevant to the overall objectives of the Working Group.
- (vii) The Sub Group will hold two meetings in the month of June, 2011 and brief the Working Group in its second meeting scheduled on 24<sup>th</sup> June, 2011.
- (viii) The Sub Group will submit its Report to the Working Group on or before 31<sup>st</sup> July, 2011.
- (ix) The Sub Group will be serviced by the Ministry of Textiles .
- (x) The Expenditure towards travelling allowance (TA/DA in connection with the meetings of the Working Group/Steering Committee in respect of the official members will be borne by their respective Ministry/Department. In case of non-official Members of the Working Group, expenditure towards their TA/DA would be

met by the Planning Commission as admissible to the class 1 officers of the Government of India. As per extant Guidelines air travel required for attending the meeting may be undertaken on Air India.

- (xi) Shri Rajat Sachar, Additional Economic Adviser, Department of Commerce, Room No.277, Udyog Bhavan, New Delhi, email: [rsachar@nic.in](mailto:rsachar@nic.in); Tel.: 011-23061888; Fax: 011-23061374, will act as the Nodal Officer for this Sub-Group and any further query/communication in this regard may be made with the Nodal Officer.

Sd/-

(Augustine Peter)  
Economic Adviser  
Telefax: 2306 1374  
Email: [paugustine@nic.in](mailto:paugustine@nic.in)

**To**

**The Chairman and All Members of the Sub-Group (As per list attached)**

**Copy to:**

- 1. Shri Anup K. Pujari**  
**DGFT**  
**Department of Commerce**  
**Udyog Bhavan**  
**New Delhi**
- 2. Shri Amar Sinha**  
**Joint Secretary**  
**Department of Commerce**  
**Udyog Bhavan**  
**New Delhi**



## List of Sub-Group on Textiles

(Department of Commerce O.M.No.15/1004/2011-EPL.II dated 31<sup>st</sup> May 2011)

1. Shri V. Srinivas,  
Joint Secretary (Exports),  
Ministry of Textiles,  
Udyog Bhavan,  
New Delhi  
Email ID: [vsrinivas@nic.in](mailto:vsrinivas@nic.in)  
Contact No. 23062326  
Fax No. 23061929
  
2. Shri B. Balamurugan  
Secretary  
Textiles Committee  
P. Balu Road, Off. Veer Savarkar Marg,  
Prabhadevi Chowk, Prabhadevi,  
Mumbai - 400 025  
Email ID: [secy@giasbm01.vsnl.net.in](mailto:secy@giasbm01.vsnl.net.in)  
Contact No. 91-22-66527507, 66527500 (Board)  
Fax No. 91-22-66527509
  
3. Smt. Shashi Singh  
Joint Textile Commissioner  
O/o Textile Commissioner,  
New C.G.O. Building,  
48- New Marine Lines  
Mumbai-400020  
Email ID : [textilec@gmail.com](mailto:textilec@gmail.com)  
Contact No. 22014446, 22004510  
Fax No. +91.2222004693
  
4. Shri Sunil Mitra  
Revenue Secretary  
Ministry of Finance  
Department of Revenue  
128-B North Block, New Delhi  
Email: [rsecy@nic.in](mailto:rsecy@nic.in)  
Contact No. 23095353  
Fax No. 23092719
  
5. Shri Shashi Kant Sharma  
Secretary  
Department of Financial Services  
Jeevan Deep Building  
Third Floor, Parliament Street  
New Delhi-1  
Email id: [secy-fs@nic.in](mailto:secy-fs@nic.in)  
Contact No. 23340222  
Fax No. 23340027

6. Shri Vimal Kirti Singh  
Secretary General  
Apparel Export Promotion Council (AEPC)  
Apparel House, Sector- 44  
Industrial Area,  
Gurgaon, Haryana-12203  
Email ID: [hosg@aepcindia.com](mailto:hosg@aepcindia.com)  
Contact No.0124-2708009, 9818508887  
Fax No. 0124-2708004
  
7. Shri E.L.Paulo  
Executive Director  
Synthetic & Rayon Textile Export Council, (SRTEPC)  
Resham Bhawan , 78 Veer Nariman Road,  
Mumbai-400020  
Email ID: [ds@srtepc.org](mailto:ds@srtepc.org)  
Contact No. +(91)-(22)-22048797/22048690  
Fax No. +(91)-(22)-22048358
  
8. Shri S. Rajagopal,  
Executive Director,  
The Cotton Textile Export Promotion Council (Texprocil)  
Engineering Centre 5<sup>th</sup> Floor  
9 Mathew Road  
Mumbai-40004  
Email ID: [info@texprocil.org](mailto:info@texprocil.org)  
Contact No. +91-022 23632910/11/12  
Fax No. +91-022 23632914  
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9. Shri S.S.Das  
Director,  
Ministry of Textiles  
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Contact No. 23063446  
Fax No. 23061929

**F.No.15/1011/2011-EPL.II**  
**Government of India**  
**Ministry of Commerce & Industry**  
**Department of Commerce**  
**(Economic Divison)**

**Udyog Bhawan, New Delhi.**  
**Dated: 1<sup>st</sup> July, 2011.**

**OFFICE MEMORANDUM**

**Subject: Constitution of Sub-Group on ‘Technology Intensity in India’s Manufacturing Exports’ under the Planning Commission’s Working Group on ‘Boosting India’s Manufacturing Exports’ for the 12<sup>th</sup> Five Year Plan (2012-17).**

In pursuance of the decision taken in the first meeting of the Planning Commission’s Working Group on “Boosting India’s Manufacturing Exports” held on 26.5.2011 under the Chairmanship of Dr. Rahul Khullar, Secretary, Department of Commerce, Ministry of Commerce & Industry, it has been decided to set up a Sub-Group on ‘Technology Intensity in India’s Manufacturing Exports’. The composition and Terms of Reference of the Sub-Group would be as follows:

**I. Composition**

<b>Sl. No</b>	<b>Name and Designation</b>	
1	Prof. Y.S. Rajan, Dr. Vikram Sarabhai Distinguished Professor, Indian Space Research Organisation.	Chairman
2	Ms. Anjali Prasad, Joint Secretary, Department of Industrial Policy & Promotion	Member
3	Shri Augustine Peter Economic Adviser, Department of Commerce	Member
4	Shri M. M. Chanda, Adviser (International Trade Division), Planning Commission.	Member
5	Shri. Ashwani Gupta, Scientist 'G', Advisor, Department of Scientific & Industrial Research, Ministry of Science & Technology	Member
6	Dr. Amit Shovon Ray, Professor of Economics,	Member

	Centre for International Trade and Development, School of International Studies, Jawaharlal Nehru University (JNU)	
7	Shri R R Abhyankar, Scientist 'G' and Head (TPDU), Department of Scientific & Industrial Research	Member
8	Shri Anjan Das Senior Director, Confederation of Indian Industry (CII)	Member
9	Shri. Chetan Bijasure Additional Director, Federation of Indian Chambers of Commerce and Industry (FICCI)	Member
10	Shri. K. Narayanan Professor Indian Institute of Technology, Bombay	Member
11	Dr. Rakesh Basant Professor, Department of CIIE, Indian Institute of Management (IIM), Ahmedabad.	Member
12	Dr. K. J. Joseph Professor Centre for Development Studies Trivandrum	Member
13	Dr. Sachin Chatudvedi Senior Fellow, RIS	Member
14	Shri. Deepak Bhatnagar Head, Centre for International Trade in Technology(CITT), Indian Institute of Foreign Trade (IIFT)	Member Secretary

\*Dr. S.K. Mohanty, Senior Fellow, RIS was nominated as a Member of the Sub-Group at the first meeting of the Sub-Group.

## II. Terms of Reference

2. The Sub-Group will take note of the Terms of Reference of the Planning Commission's Working Group on 'Boosting India's Manufacturing Exports' (Appended to this O.M.). The objective of the Sub-Group is to examine the extent of technology content in India's manufacturing output, in general, and that in India's manufacturing exports, in particular, and compare it with the same in other emerging market economies and developed countries so as to identify gaps and reasons therefore, as also evaluate implications of such gap for India's trade performance, and suggest ways and means of catching up with and overtaking competitors.

3. With this in view the Sub-Group may:
- (i) Highlight the importance of technology content in manufacturing output and exports, drawing also on international experience
  - (ii) Analyze the status and trends in technology content in India's manufacturing output and exports and compare the same with that of other emerging economies, especially China, Brazil, Mexico and South Korea and also some developed countries
  - (iii) Examine the major drivers of technology development in India, as well as the major channels of technology inflow, *especially*
    - FDI
    - Import
    - IPR regime, and
    - Fiscal incentivesand suggest measures to improve technology transfer through each of the above drivers/ channels
  - (iv) Identify factors determining technology intensity in domestic output, in general, and exports, in particular, and suggest measures to enhance such technology content in output and exports so as to facilitate conducive policies: in this regard also identify sectors where there is substantial potential for increasing technology intensity
  - (v) Examine the extent of trade off between the employment objective and the technology objective in exports
  - (vi) Evaluate the status of 'Industry–Research Institution' linkage and scope for its improvement in India, with particular reference to the experience of countries like China, Brazil, South Korea and Mexico
  - (vii) Examine the role of international standard setting in technology development in India and suggest ways and means of overcoming problems in this regard
  - (viii) Examine the linkage between technology, productivity, competitiveness and export performance in major sub-sectors of manufacturing viz. engineering, electronics, chemicals, pharmaceuticals etc. and how India's experience compares with other major emerging economies and suggest means to enhance such linkage in the case of India
  - (ix) Study any other aspect that may sub-serve the objective of the Sub-Group
  - (x) The Sub Group will submit its Report to the Working Group on or before 10<sup>th</sup> August, 2011.
4. The Sub Group will be serviced by the Department of Commerce.
5. The Expenditure towards travelling allowance (TA/DA) in connection with the meetings of the Sub-Group in respect of the official members will be borne by their respective Ministry/Department. In case of non-official Members of the Sub-Group, expenditure towards their TA/DA would be met by the Department of Commerce as admissible to the class 1 officers of the Government of India. As per extant Guidelines air travel required for attending the meeting may be undertaken on Air India.
6. Shri Rajat Sachar, Additional Economic Adviser, Department of Commerce, Room No.277, Udyog Bhavan, New Delhi, email: [rsachar@nic.in](mailto:rsachar@nic.in); Tel.: 011-23061888; Fax: 011-23061374, will act as the Nodal Officer for this Sub-

Group and any further query/communication in this regard may be made with the Nodal Officer.

Sd/-

(Augustine Peter)  
Economic Adviser  
Telefax: 2306 1374  
Email: [paugustine@nic.in](mailto:paugustine@nic.in)

Encl: As above

**To**

**The Chairman and All Members of the Sub-Group (As per list attached)**

**Copy to :**

**Shri D. Banerjee,  
Joint Adviser,  
Planning Commission,  
Yojana Bhavan ,  
New Delhi.**

## **List of Sub-Group on Technology Intensity in India's Manufacturing Exports'.**

(Department of Commerce O.M.No. 15/1011/2011-EPL.II dated 1<sup>st</sup> July, 2011)

1. Professor Y.S. Rajan  
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**F.No.15/1003/2011-EPL-II  
Government of India  
Ministry of Commerce & Industry  
Department of Commerce  
(Economic Division)**

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**Udyog Bhawan  
New Delhi, the 2<sup>nd</sup> June, 2011**

**OFFICE MEMORANDUM**

**Subject: Constitution of Sub-Group on ‘Chemicals’ under the Planning Commission Working on “Boosting India’s Manufacturing Exports” for the Twelfth Five Year Plan (2012-17).**

In partial supersession of Department of Commerce O.M. of even number dated 30.5.2011 on the above subject, the Composition of Sub-Group on ‘Chemicals’ is modified as under.

**I. Composition**

<b>S.No.</b>	<b>Name</b>	
1.	Shri Rajiv Kher, Additional Secretary, Department of Commerce	Chairman
2.	Shri Arun Jha, Joint Secretary, Department of Pharmaceuticals	Member
3	Shri Najib Shah, Joint Secretary, CBEC, Department of Revenue	Member
4.	Shri Sanjay Bansal, Director , Department of Chemicals & Petro Chemicals	Member
5.	Shri Satish Wagh, Chairman, Chemexcil	Member
6.	Smt. Smita Samant, Executive Director, Chemexcil	Member
7.	Shri Manoj Agarwal, Chairman, Plastics Export Promotion Council	Member
8.	Shri R.P. Kalyanpur Executive Director, Plastics Export Promotion Council	Member
9.	Shri Smitesh C. Shah, Chairman, Pharmexcil	Member
10.	Shri L. Appaji, ED, Pharmexcil	Member
11.	Ms. Mridul Jain, Director, Department of Commerce	Member
12.	Shri Sumanta Chaudhuri, Joint Secretary, Department of Commerce	Member Secretary

## II. Terms of reference

- (i) The terms of reference of the Working Group (appended to this OM) will be the basis for deliberations of the Sub Group, but with reference to the sector(s) specified for the Sub Group.
- (ii) The work of the Sub Group would cover the Chemicals sector comprehensively, giving due weightage to the actual and potential export performance of sub sectors, from the point of view of 'boosting India's manufacturing exports'
- (iii) The focus of the Sub Group should be on assessing the existing policies in the sector/major sub sectors, to identify what, if any, may have gone wrong in the past, what is the way forward and what the instruments required are for achieving significant export growth
- (iv) The Strategy paper on 'Doubling Exports in Next Three Years (2011-12 to 2013-14), prepared by the Department of Commerce ([www.commerce.nic.in](http://www.commerce.nic.in)) could be the starting point of the work of the Sub Group
- (v) Issues related to:
  - (a) The Working Group ToR No. (iii) c (Non Tariff Barriers – SPS, TBT etc.) need not form part of the Report of the Sub Group. Any related issue that may come up may be passed on to Shri Amar Sinha, Joint Secretary, Department of Commerce, Room No. 247, Udyog Bhavan, Tel: 011-23061664; Email: [js2tpd-doc@nic.in](mailto:js2tpd-doc@nic.in); Fax: 011-23061664, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
  - (b) The Working Group ToR (iii) (Trade related transaction costs) need not form part of the Report of the Sub Groups. Any related issue that may come up may be passed on to: Dr. Anup K. Pujari, Director General, Directorate General of Foreign Trade (DGFT), Room No.8, Udyog Bhavan, Tel: 011-2306 2777; Email: [dgft@nic.in](mailto:dgft@nic.in); Fax: 011-23061613, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
  - (c) The Working Group ToR (iv) (Multilateral and regional trade issues) need not form part of the Report of the Sub Group. Any related issue that may come up may be passed on to Shri Amar Sinha, Joint Secretary, Department of Commerce, Room No. 247, Udyog Bhavan, Tel: 011-23061664; Email: [js2tpd-doc@nic.in](mailto:js2tpd-doc@nic.in); Fax: 011-23061664, who will consolidate the issues and prepare consolidated input for the Report of the Working Group to the Planning Commission Steering Committee on Industry
- (vi) The Chairman of the Sub-Group may constitute any further smaller Groups within this Sub Group, if found appropriate, and co-opt other Members to the Sub-Group for specific inputs as also suitably add elements to the ToR that are relevant to the overall objectives of the Working Group.
- (vii) The Sub Group will hold two meetings in the month of June, 2011 and brief the Working Group in its second meeting scheduled on 24<sup>th</sup> June, 2011.

- (viii) The Sub Group will submit its Report to the Working Group on or before 31<sup>st</sup> July, 2011.
- (ix) The Sub Group will be serviced by the Department of Commerce.
- (x) The Expenditure towards travelling allowance (TA/DA in connection with the meetings of the Working Group/Steering Committee in respect of the official members will be borne by their respective Ministry/Department. In case of non-official Members of the Working Group, expenditure towards their TA/DA would be met by the Planning Commission as admissible to the class 1 officers of the Government of India. As per extant Guidelines air travel required for attending the meeting may be undertaken on Air India.
- (xi) Shri Rajat Sachar, Additional Economic Adviser, Department of Commerce, Room No.277, Udyog Bhavan, New Delhi, email: [rsachar@nic.in](mailto:rsachar@nic.in); Tel.: 011-23061888; Fax: 011-23061374, will act as the Nodal Officer for this Sub-Group and any further query/communication in this regard may be made with the Nodal Officer.

Sd/-

(Augustine Peter)  
Economic Adviser  
Telefax: 2306 1374  
Email: [paugustine@nic.in](mailto:paugustine@nic.in)

Encl: As above

**To**

**The Chairman and All Members of the Sub-Group (As per list attached)**

**Copy to:**

- 1. Shri Anup K. Pujari**  
**DGFT**  
**Department of Commerce**  
**Udyog Bhavan**  
**New Delhi**
- 2. Shri Amar Sinha**  
**Joint Secretary**  
**Department of Commerce**  
**Udyog Bhavan**  
**New Delhi**

## List of Sub-Group on Chemicals and others

(Department of Commerce O.M.No.15/1003/2011-EPL.II dated 2.6.2011)

S.No.	Name, Designation and Address	Tel.No./Fax No./E-mail
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2.	Shri Sumanta Chaudhri Joint Secretary Department of Commerce Udyog Bhavan, New Delhi-110011.	Phone No. 23063766 Fax No. 23063766 Email <a href="mailto:sumanta.chaudhuri@nic.in">sumanta.chaudhuri@nic.in</a>
3.	Shri Arun Jha Joint Secretary Department of Pharmaceuticals D-Wing, Shastri Bhavan New Delhi 110011	Phone No: 23074010 Fax No: 23074011 Email <a href="mailto:jointsecy-pharma@nic.in">jointsecy-pharma@nic.in</a>
4.	Shri Najib Shah, Joint Secretary CBEC, Department of Revenue Jeewan Deep Building , Parliament Street New Delh-110001.	Phone No. 23341079 Fax No. 23341079 Email ID – <a href="mailto:jsdbk-rev@nic.in">jsdbk-rev@nic.in</a>
5.	Shri Sanjay Bansal Director (Chemicals) Department of Chemicals & Petro Chemicals Shastri Bhavan New Delhi-110011	Phone No.23387761 Fax No.23388628 Email - <a href="mailto:sanjay.bansal@nic.in">sanjay.bansal@nic.in</a>
6.	Sh. Satish Wagh, Chairman, Chemexcil Jhansi Castle 4 <sup>th</sup> Floor , 7 Cooperage Road Mumbai-400001	Phone no.022- 22021288 Fax no. 022- Email <a href="mailto:chemexcil@vsnl.com">chemexcil@vsnl.com</a>
7.	Smt. Smita Samant, Executive Director, Chemexcil Jhansi Castle 4th Floor , 7 Cooperage Road Mumbai-400001	Phone no.022- 22021288 Fax no. 022- Email <a href="mailto:chemexcil@vsnl.com">chemexcil@vsnl.com</a>

