# SELECT STATISTICS on India's Foreign Trade and Global Environment on Merchandise Trade and Commercial Services

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## INDIA'S FOREIGN TRADE (2004-16)

*Sources:* Indian Publications



Compiled by

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# INDIA'S FOREIGN TRADE (2004-16)

## 1. INTRODUCTION

Statistical compendium on foreign trade of India (exports and imports) and trade in different countries and different groupings has been brought together for facilitating a comparative study of country trends in relation to the global economic dynamism. Section I presents data for India from the available Indian publications. Original source of foreign trade of India data is Directorate of Commercial Intelligence & Statistics, KolKata under Department of Commerce of the Union Ministry of Commerce and Industry. Data presented here are mobilised from the concerned all India publications. These include: a) Ministry of Finance, Economic Survey of India (annual), b) Annual Report of Department of Commerce, c) Annual Report of Reserve Bank of India (RBI), and d) Handbook of Statistics on Indian Economy (annual) of RBI. Section II deals with the comparative account of trade in goods and services of select economies including India as well as select country groups, and the world as a whole. Source is World Trade Report 2015 (WTR 2015). This report is published annually by World Trade Organisation (WTO), Geneva. www.wto.org. This section also covers useful information on economic grouping of countries in the globe as well as the list of 164 member countries of WTO at the end of July 2016. It is hoped that this statistical collection will be of use for researchers working on various aspects of international business, including WTO associated specific topics. Graphic description of the coverage and findings of World Trade Report 2015 with focus on Trade Facilitation Agreement of WTO is given in the Book Review of WTR 2015, separately.

Contents page gives the serial number of items covered. Many of the items have tables, with table numbering given in the respective items. Serial number given on the contents page and the corresponding page number given there, help the researcher to locate the appropriate matter including tables.

**Ranking of India in International Business**

India's position among 30 leading exporters and inporters of the world in merchandise goods and commercial services exports and imports in 2014 as presented in World Trade Report 2015 of the World Trade Organisation (WTO) is reviewed here. Relative position of other countries and broader economic groupings is presented in a number of Tables in section II of this Statistical Compendium.

**Merchandise Trade**

In 2014, India's merchandise exports were US$ 322 billion, with a share of 1.7% of world exports, and an annual percentage change of 2 in 2014; and ranked at 19 among leading merchandise exporters. Annual percentage change in certain years was as follows: 2005-14: 14; 2012: -2; 2013: 6. In 2014, India's merchandise imports were US$ 463 billion, with a share of 2.4 per cent of world imports, and an annual percentage change of -1 in 2014; and ranked at 12 among leading merchandise importers. Annual percentage change in earlier years was as follows: 2005-14: 14; 2012: 5; 2013: -5. When Intra-European Union Trade is excluded, India's rank becomes 13 for exports and 8 for imports.

**Commercial Services Trade**

In 2014, India's exports in commercial services were US$ 154 billion, with a share of 3.2%. of world exports, and annual percent change of 4 in 2014; and ranked at 8 among leading commercial services exporters. Annual percent change in earlier years was as follows: 2005-14 : 13, 2012: 5, 2013: 2. In 2014, India's imports in commercial services were US$ 124 billion, with a share of 2.6% of world imports, and an annual percent change of -1 in 2014; and ranked at 10 among leading commercial services importers. Annual percent change in earlier years was as follows: 2005-14: 11, 2012: 4; 2013: -3. When Intra–European Union Trade is excluded, India's rank becomes 5 for exports, and 6 for imports.

In 2014, India's commercial services exports accounted for 47.8 percent of India's merchandise exports; and India's commercial services imports accounted for 26.8% of India's merchandise imports. Total external trade of India covering goods and services in 2014 stood at US$ 1.063 trillion. Trade balance in merchandise trade was US$ -141 billion & net of services trade was US$ 30 billion. Net services could bridge the deficit of merchandise trade by 21.3%. In earlier years, bridging provided by services trade went up to 35% to 40%. Details are indicated in the table given here.

**Table 1: Merchandise Trade and Commercial Services Trade of India in 2014**

(in US $ billion)

| Particulars | Exports | Imports | Total Trade | Trade Balance |
|---|---|---|---|---|
| Merchandise Goods | 322 | 463 | 785 | -141 |
| Rank in the World | 19 | 12 | .... | ... |
| Commercial Serivices | 154 | 124 | 278 | +30 |
| Rank in the World | 8 | 10 | ... | ... |

**Source:** WTO (2015), World Trade Report 2015, Geneva

**Note:** One million: 10 lakh; One billion: 1000 million or 100 crore; One Trillion: 1000 billion or one lakh crore or $10^{12}$

## 2. INDIA'S FOREIGN TRADE – RECENT TRENDS

### 2(a) Emerging Global Economic Realities & India

Since the onset of global financial crisis, global economy is still struggling to revive and grow at a healthy rate. A large number of political and economic disturbances have been witnessed over the past one year, from uprisings in the Middle East, economic turmoil in Euro Area with deepening of the Greece Crises, devaluation of Yuan by China and finally rate hike by the US Federal Reserves. The continuous decline in Crude oil prices, volatility in commodity prices and general uncertainty has impacted business environment across the globe and recovery pace in both mature and emerging markets.

The crisis has produced a wide-ranging yet differentiated impact across the globe which includes economic slowdown, and contraction in world trade. For India the most significant risks to the outlook stem from the banking sector and financing requirements of infrastructure companies, as well as the pace of implementation of structural reforms (World Bank, 2015).

Indian economy grew at the rate of 7% in Q1 of 2015-16. Growth performance improved in Q2 of 2015-16 as India recorded growth of 7.4%. Coming to India's external Sector, India's merchandise export growth is in negative territory. Exports during December, 2015-16 were valued at US$ 22.29 billion which was 14.75 per cent the level of US$ 26.15 billion during December, 2014-15. Cumulative value of exports for the period April-December 2015-16 was US$ 196.60 billion as against US$ 239.92 billion registering a negative growth of 18.06 per cent in Dollar terms over the same period last year. Slowdown in global economy has led to fall in demand for India's merchandise exports. As per the World Bank, strong domestic demand and subdued exports are likely to lead to wider current account deficit for India.

Talking about the monetary policy encouraged by numbers on inflation front, Reserve Bank of India (RBI) in its 2nd bi-monthly policy statement reduced the policy repo rate under the Liquidity Adjustment Facility (LAF) by 25 basis points from7.5 per cent to 7.25 per cent. In the light of macroeconomic situation, RBI further reduced the policy repo rate under the LAF by 50 basis points from 7.25 per cent to 6.75 per cent. The annual rate of inflation, based on monthly WPI, stood at -0.73% (provisional) for the month of December, 2015 as compared to -1.99% for the previous month and -0.50% during the corresponding month of the previous year. India's performance with regard to business environment improved in 2016. World Bank under its flagship report on doing business ranked India at 130th position in 2016.

**Source:** India. Ministry of Commerce and Industry, Department of Commerce (2016), *Annual Report 2015-16,* New Delhi.

**Table 1: World Economic Growth Estimates for 2014–2016 (Annual Percentage Change)**

| Region/year | UN | | | IMF | | | World Bank | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2014 | 2015e | 2016f | 2014e | 2015e | 2016p | 2014 | 2015e | 2016f |
| **World** | **2.6** | **2.4** | **2.9** | **3.4** | **3.1** | **3.4** | **2.6** | **2.4** | **2.9** |
| Developed Economies/ Advanced Economies/ High Income | 1.7 | 1.9 | 2.2 | 1.8 | 1.9 | 2.1 | 1.7 | 1.6 | 2.1 |
| Euro Area | 0.9 | 1.6 | 1.9 | 0.9 | 1.5 | 1.7 | 0.9 | 1.5 | 1.7 |
| USA | 2.4 | 2.4 | 2.6 | 2.4 | 2.5 | 2.6 | 2.4 | 2.5 | 2.7 |
| Japan | -0.1 | 0.5 | 1.3 | 0 | 0.6 | 1 | -0.1 | 0.8 | 1.3 |
| Developing Countries/ EMDEs | 4.3 | 3.8 | 4.3 | 4.6 | 4 | 4.3 | 4.9 | 4.3 | 4.8 |
| Latin America & Caribbean (LAC) | 1 | -0.5 | 0.7 | 1.3 | -0.3 | -0.3 | 1.5 | -0.7 | 0.1 |
| Brazil | 0.1 | -2.8 | -0.8 | 0.1 | -3.8 | -3.5 | 0.1 | -3.7 | -2.5 |
| Russia | 0.6 | -3.8 | 0 | 0.6 | -3.7 | -1 | 0.6 | -3.8 | -0.7 |
| **India** | **7.2** | **7.2** | **7.3** | **7.3** | **7.3** | **7.5** | **7.3** | **7.3** | **7.8** |
| China | 7.3 | 6.8 | 6.4 | 7.3 | 6.9 | 6.3 | 7.3 | 6.9 | 6.7 |

**Source:** UN. World Economic Situation and Prospects, 2016, IMF, World Economic Outlook, January 2016, World Bank, Global Economic Prospects, January 2016.

e: estimates, f: forecast, p: projections

**Global Economic Growth:**

The IMF has projected global growth for 2016 & 2017 at 3.4% and 3.6% respectively, a 0.2% reduction for both the years in comparison to the forecast made in October 2015 WEO. As per IMF, growth in world output remained at 3.1% for 2015. IMF cuts its Global growth forecast citing a sharp slowdown in China and weak commodity prices that are affecting recovery world-wide (Table 1).

As per United Nations World Economic Situation and Prospects, 2016 (WESP, 2016) Global economy is projected to grow at the rate of 2.4 per cent in 2015, and by 2.9 per cent in 2016, supported by generally less restrictive fiscal and still accommodative monetary stances worldwide. The United Nations maintained that World economy stumbled in 2015, amid weak aggregate demand, falling commodity prices and increasing financial market volatility in major economies

World Bank also reduced its projection for global growth, as per the Global Economic Prospects 2016 (GEP, 2016) the unsatisfactory performance was mainly due to a continued deceleration of economic activity in emerging and developing economies amid weakening commodity prices, global trade, and capital flows. The global economy is projected to grow at the rate of 2.4% in 2015 and 2.9% in 2016.

**Downside Risk:**

In keeping with the viewpoint of World Bank, the forecast is subject to substantial downside risks, including a sharper-than-expected slowdown in major emerging and developing economies or financial market turmoil arising from a sudden increase in borrowing costs that could combine with deteriorating fundamentals and lingering vulnerabilities in some countries.

While, as per the IMF risks to the global outlook remain tilted to the downside and relate to ongoing adjustments in the global economy: a generalized slowdown in emerging market economies, China's rebalancing, lower commodity prices, and the gradual exit from extraordinarily accommodative monetary conditions in the United States. If these key challenges are not successfully managed, global growth could be derailed.

India's economic situation improved significantly in 2014-15 due to macro-economic stability. As per the projections made by International Monetary Fund (IMF) for India in its World Economic Outlook (WEO), January 2016, India maintained a percentage growth of 7.3% for 2015. India is projected to grow at the rate of 7.5% in 2016 and 2017. The International Monetary Fund (IMF) retained India's growth forecast for the next two years even as it pared the global estimate citing subdued demand and diminished prospects in its latest update of the World Economic Outlook. As per WESP, India's Gross Domestic Product (GDP) is projected to grow at 7.2% in 2015, 7.3% in 2016, and 7.5% in 2017. As per World Bank Report on India, growth in India is expected to improve to 7.3% in 2015 and further to 7.8% in 2016.

**Slowdown in Trade:**

World Trade Organization (WTO) lowered its forecast for world trade growth in 2015 to 2.8% from the 3.3% forecast made in April, and reduced its estimate for 2016 to 3.9% from 4.0%. The projected trade growth of 3.9% in 2016 is still below the average for the last 20 years (1995-2015) of 5%. The downward revision by WTO is due to several factors including falling import demand in China, Brazil and other emerging economies; falling prices for oil and other primary commodities; significant exchange rate fluctuations, Volatility in financial markets, uncertainty regarding monetary policy of the United States, etc.

**Trade Slowdown and Economic Development in 2015-16:**

During 2015 there has been global slowdown in trade, as discussed above, WTO itself has marked down its projection for Global trade growth in comparison to earlier forecast made in April 2015.

The first major thing which affected India's export Annual performance, which was on very high trajectory, was contraction in demand from its major exporting destinations in the second half of the 2014-15 and more importantly in the last months of 2014-15. The second factor, which explains why India fails to achieve its exports target is the dismal performance of its top exporting products mainly petroleum products and Gems & Jewellery. Exports earning from petroleum products (which accounts for 12.20% of India's total exports in Apr-Dec 2015-16) declined by 50.61% due to decline in global oil price. Same is the story of Gems & Jewellery sector where exports earning declined by 8.15% in Apr-Dec 2015-16. These two sectors together accounts for around 26.80% of India's total export earnings. Other major sector where India recorded decline in export revenue are agriculture and allied sector, marine products, Ores and minerals, Leather and Leather Manufactures, Sports goods, Plastic rubber and articles, articles of stone, plaster, cement, etc., base metals, Optical medical and surgical instruments, electronic items, Machinery, Transport Equipments, Projects goods, textiles & allied products.

## TRADE COMPOSITION

### Export composition

There were substantial changes in the composition of exports between 2009-10 and 2014-15 with the share of petroleum, crude and products increased from 15.77 per cent in 2009-10 to 18.3 per cent in 2014-15, while the share of RMG cotton including accessories fell from 4.49 per cent in 2009-10 to 2.99 per cent in 2014-15. However, the petroleum products, pearl, precious, semiprecious, stones and iron and steel were in negative growth in 2014-15. The share of cotton fabrics, made ups etc. decreased from 2.07% in 2009-10 to 1.78% in 2014-15. In terms of exports of Principal commodities groups, the Gems & Jewellery had 2nd largest share of 13.30% in India's total exports showing a negative growth of 0.3% during 2014-15. During 2014-15, some commodities like products of iron and steel, motor vehicle/cars, aircraft, spacecraft and parts, registered positive growth in exports - Tables 2(A) & 2 (B).

India's share in world merchandise exports moderately improved to 1.69 per cent in 2014 from a level of 1.66 per cent in 2013 mainly on account of a modest and uneven recovery in advanced economies. Similarly, India's share in world commercial services exports remained stagnant during last two years of 2013 and 2014, after declining from ever high level of 3.25 per cent in 2012.

Besides these, there are a host of other forces which affected global trade and also India's External sector varying from China's Devaluation of Yuan, Transpacific Partnership (TPP) and Trans-Atlantic Trade and Investment Partnership (TTIP) agreement, and finally rate hike by Federal Reserve.

China surprised the whole world by devaluing its currency in 2015 fuelling concerns of a currency war. One of the main reasons for the devaluation was fall in Chinese exports. The devaluation of the yuan affected India's external sector as rupee volatility increased. Continuous decline in Rupee would make imports costlier, leading to inflation forcing the Reserve Bank to maintain status quo on policy rates. This might affect the ongoing recovery as India runs a trade deficit with China.

Given the fact that there is large overlap between India and China, in terms of Products and markets, and that economic slowdown in China and sharper yuan devaluation may help boosting China Exports plus it will also help China dump goods into the Indian market. This will impact domestic manufacturing sector badly.

In 2015 group of 121 Pacific Rim nations led by the United States signed the mega regional trade agreement which is expected to set higher standards for trade in goods and services. The other two large regional trade agreements being negotiated are the TTIP between the US and the European Union, and the Regional Comprehensive Economic Partnership (RCEP) between the ten ASEAN members and its Free Trade Agreement (FTA) partners viz, Australia, China, India, Japan, Korea and New Zealand.

**Table 2 (A): Shift of Export Composition**
**India's Top Ten Commodities of Exports 2014-15 (Values in US$ billion)**

| Rank | Commodity | 2014-15 | % Growth over last year | % Share |
|---|---|---|---|---|
| 1 | Petroleum Products | 56.79 | -10.1 | 18.3 |
| 2 | Pearl, Precious, Semiprecious, Stones | 24.76 | -8.84 | 7.98 |
| 3 | Gold and Other Precious Metal Jewellery | 13.24 | 21.96 | 4.27 |
| 4 | Drug Formulations, Biologicals | 11.22 | 5.13 | 3.61 |
| 5 | RMG Cotton incl. Accessories | 9.28 | 1.94 | 2.99 |
| 6 | Iron and Steel | 8.68 | -5.84 | 2.8 |
| 7 | Products of Iron and Steel | 7.56 | 11.54 | 2.44 |
| 8 | Motor Vehicle/Cars | 6.68 | 8.72 | 2.15 |
| 9 | Aircraft, Spacecraft and Parts | 6.16 | 34.34 | 1.98 |
| 10 | Cotton Fabrics, Madeups etc. | 5.52 | 7.77 | 1.78 |
| | **Total exports incl. other items** | **310.34** | **-1.29** | **100** |

**Source:** India. Ministry of Finance, Department of Economic Affairs (2016), *Economic Survey 2015-16,* New Delhi.

**Table 2 (B): Shift of Export Composition**
**India's Top Ten Commodities of Exports 2009-10 (Values in US$ billion)**

| Rank | Commodity | 2009-10 | % Growth over last year | % Share |
|---|---|---|---|---|
| 1 | Gems & Jewellary | 29.08 | 2.36 | 16.27 |
| 2 | Petroleum (Crude & Products) | 28.19 | 2.34 | 15.77 |
| 3 | Transport Equipments | 9.79 | -12.94 | 5.48 |
| 4 | Machinery and Instruments | 9.58 | -13.25 | 5.34 |
| 5 | Drugs, Pharmacutes & Fine Chemicals | 8.97 | 2.08 | 5.02 |
| 6 | RMG Cotton incl. Accessories | 8.03 | -3.99 | 4.49 |
| 7 | Iron Ore | 6.03 | 26.44 | 3.37 |
| 8 | Manufactures of Metals | 5.53 | -27.18 | 3.09 |
| 9 | Electronic Goods | 5.45 | -20.23 | 3.05 |
| 10 | Cotton Yarn, Fabrics, Madeups, etc. | 3.70 | -11.06 | 2.07 |
| | **Total exports incl. other items** | **178.75** | **-3.53** | **100** |

**Source:** *ibid.*

The TPP Agreement is proposed to have 30 Chapters dealing with issues like IPR, Rules related to SPS & TBT, Market Access, Investment, Labour and Environment etc. With coverage of 30 issues ranging from IPR to regulatory coherence TPP may have influence on other free trade initiatives underway. Due to trade diversion India may lose market share in TPP markets. However, the loss may not be that much as significant as India already have FTAs with some TPP participants – Japan, Malaysia, and Singapore and with ASEAN as a whole.

Talking about the implications of TPP, it may challenge India's industry in many ways. Firstly, they will erode existing preferences for Indian products in established traditional markets such as the US and EU benefitting those who are partners to these agreements. Secondly, they are likely to develop a rules architecture which will place a greater burden of compliance on India's manufacturing and services standards for access to the markets of the participating countries.

Much larger impact of TPP would be through standards or non-tariff measures. The inclusion of two of the largest economic markets (the US and Japan) in TPP implies these norms will effectively become global standards. Therefore, in order to get the benefit from the new world order, India will have to improve its standards in line with the higher requirements. TPP will put additional pressure in Indian companies as they compete for increased market share for manufactured products and for lucrative government contract against companies from Malaysia, Vietnam and Mexico.

However, India is in a better position in comparison to 2013, though the year 2015 ended with Federal Reserve raising interest rate in December. India's external balances have significantly improved as foreign exchange reserves has touched US $ 352.1 billion as on 25th December 2015. The current account deficit came down but is under pressure because of decline in exports and global slowdown. The other thing which goes in India's favour is impressive growth rate, if we go by IMF then India is all set to overtake China and other major economies in terms of growth.

## CONCLUSION

Given this situation and all available number of trade variables, it can be said that global growth is still fragile and uneven. However, even during this gloomy picture, Institutions likes IMF, World Bank and United Nations project that India is all set to overtake China. No doubt that downside risk remains with geo political crises, exchange rate fluctuation, and more importantly when trend of decline in oil prices get reversed. However, these are the factors which are out of the control of any globally integrated economy. What is more important is to take appropriate and enabling measures as outlined in the Foreign Trade Policy (FTP) 2015-20 along with improving the regulatory environment of doing business by digitizing the trade process, infrastructure development, working on building the Brand India, and addressing in house challenges.

## 2(b) Trends In India's Foreign Trade – Overview, and Principal Commodities and Destinations

**Trade Performance:**

India's merchandise exports reached a level of US $310.34 billion during 2014-15 registering a negative growth of 1.29 percent as compared to a positive growth of 4.66 percent during the previous year. Despite the recent setback faced by India's export sector due to global slowdown, merchandise exports recorded a Compound Annual Growth Rate (CAGR) of 14.02 percent from 2004-05 to 2014-15. (Tables 3&4)

**World Trade Scenario:**

In their latest forecast made by IMF, in its World Economic Outlook (WEO) Update, January, 2016, the growth projection for India is 7.5 per cent for both the years 2016 and 2017. The world output growth is projected at 3.4 per cent and 3.6 per cent for 2016 and 2017 respectively. While the advanced economies are expected to grow at 2.1 per cent in 2016 and the same in 2017, growth of emerging and developing economies is projected at 4.3 per cent and 4.7 per cent for 2016 and 2017 respectively.

The expected growth in world trade volume has decreased in 2015 to 2.6 per cent from 3.4 per cent in 2014. However it is expected to recover to 3.4 per cent in 2016 and 4.1 per cent in 2017. As per WTO's International Trade Statistics 2015, in merchandise trade, India is the 19th largest exporter in the world with a share of 1.7 per cent and the 12th largest importer with a share of 2.4 per cent in 2014.

**Exports:** Exports recorded a negative growth of 18.03 per cent during Apr-Dec 2015-16 (P) over the corresponding period of the previous year in US$ terms. The merchandise exports have reached US $196.68 billion in Apr-Dec 2015-16(P).

**Import:** Cumulative value of import during Apr-Dec 2015-16 (P) was US $295.82 billion as against US $351.61 billion during the corresponding period of the previous year registering a negative growth of 15.87 per cent in US$ terms. Oil import were valued at US $54.62 billion during Apr-Dec 2015-16 (P) which was 44.59 per cent lower than oil import valued at US $98.57 billion in the corresponding period of previous year. Non-oil imports were valued at US $241.20 billion during Apr-Dec 2015-16 (P) which was 4.68 per cent lower than nonoil import of US $253.05 billion in previous year.

**Trade Balance:** The Trade deficit in Apr-Dec 2015-16 (P) was estimated at US $99.14billion which was lower than the deficit of US $111.69 billion during the corresponding period of the previous year. Performance of Exports, Import and Balance of Trade during 2004-05 to 2015-16 (Apr- Dec) (P) is given in the table below:

**Source:** India. Ministry of Commerce and Industry, Department of Commerce (2016), *Annual Report 2015-16*, New Delhi.

**Exports by Principal Commodities:**

Disaggregated data on exports of Principal Commodities, Dollar terms is available for the period Apr-Dec 2015-16(P) as compared to Apr-Dec 2014-15. Exports of the top five commodities during the period Apr-Dec 2015-16 (P) registered a share of 32.60 per cent mainly due to significant contribution in the exports of Petroleum Products; Pearl, precious, semi-precious Stones; Drug Formulations Biological; Gold and other Precious Metal Jewellery; and RMG Cotton Including Accessories.

**Table 3: Trade Data for the period 2004-05 to 2015-16**

(Value in ₹ crore)

| S.No | Year | Exports | Percentage Growth | Imports | Percentage Growth | Trade Balance |
|---|---|---|---|---|---|---|
| 1 | 2004-05 | 375340 | 27.94 | 501065 | 39.53 | -125725 |
| 2 | 2005-06 | 456418 | 21.6 | 660409 | 31.8 | -203991 |
| 3 | 2006-07 | 571799 | 25.28 | 881515 | 27.27 | -309736 |
| 4 | 2007-08 | 655864 | 14.71 | 1012312 | 14.8 | -356448 |
| 5 | 2008-09 | 840755 | 28.19 | 1374436 | 35.77 | -533680 |
| 6 | 2009-10 | 845534 | 0.57 | 1363736 | -0.78 | -518202 |
| 7 | 2010-11 | 1136964 | 34.47 | 1683467 | 23.45 | -546503 |
| 8 | 2011-12 | 1465959 | 28.94 | 2345463 | 39.32 | -879504 |
| 9 | 2012-13 | 1634318 | 11.48 | 2669162 | 13.8 | -1034844 |
| 10 | 2013-14 | 1905011 | 16.56 | 2715434 | 1.73 | -810423 |
| 11 | 2014-15 | 1896445 | -0.45 | 2737087 | 0.8 | -840641 |
| 12 | 2015-16 | 1716380 | -9.5 | 2490300 | -9.0 | -773920 |

**Source:** ibid.

**Table 4: Trade Data for the period 2004-05 to 2015-16**

(Value in US $ million)

| S.No | Year | Exports | Percentage Growth | Imports | Percentage Growth | Trade Balance |
|---|---|---|---|---|---|---|
| 1 | 2004-05 | 83536 | 30.85 | 111517 | 42.7 | -27981 |
| 2 | 2005-06 | 103091 | 23.41 | 149166 | 33.76 | -46075 |
| 3 | 2006-07 | 126414 | 22.62 | 185735 | 24.52 | -59321 |
| 4 | 2007-08 | 163132 | 29.05 | 251654 | 35.49 | -88522 |
| 5 | 2008-09 | 185295 | 13.59 | 303696 | 20.68 | -118401 |
| 6 | 2009-10 | 178751 | -3.53 | 288373 | -5.05 | -109621 |
| 7 | 2010-11 | 251136 | 40.5 | 369769 | 28.23 | -118633 |
| 8 | 2011-12 | 305964 | 22.48 | 489319 | 32.33 | -183356 |
| 9 | 2012-13 | 300401 | -1.82 | 490737 | 0.29 | -190336 |
| 10 | 2013-14 | 314405 | 4.66 | 450200 | -8.26 | -135794 |
| 11 | 2014-15 | 310352 | -1.29 | 448033 | -0.48 | -137681 |
| 12 | 2015-16 | 262290 | -15.49 | 381007 | -14.96 | -118717 |

**Source:** ibid.

**Import by Principal Commodities:**

Disaggregated data on import by principal commodities, in Dollar terms, is available for the period Apr-Dec 2015-16 (P) as compared to Apr-Dec 2014-15. Import of the top five commodities during the period Apr-Dec 2015-16 (P) registered a share of 41.15 per cent mainly due to significant import of Petroleum Crude; Gold; Pearls, precious and semiprecious stones; Petroleum Products; and Telecom instruments.

**Direction of India's Foreign Trade:**

During the period 2015-16 (Apr-Dec) (P), the share of Asia comprising of East Asia, ASEAN, West Asia, Other West Asia, North East Asia and South Asia accounted for 48.71 per cent of India's total exports. The share of Europe and America in India's exports stood at 18.92 per cent and 20.23 per cent respectively of which EU countries (27) comprises 16.72 per cent. During the period, USA (15.37 per cent) has been the most important country of export destination followed by UAE (11.47 per cent), Hong Kong (4.46 per cent), China P RP (3.54 per cent) and U K (3.38 per cent). Asia accounted for 58.44 per cent of India's total import during the period 2015-16 (Apr-Dec) (P), followed by Europe (16.87 per cent) and America (11.70 per cent). Among individual countries, the share of China (15.94 per cent) stood highest followed by Saudi Arabia (5.51 per cent), Switzerland (5.46 per cent), USA (5.25 per cent) and UAE (5.20 per cent).

## 3. SPECIAL PROGRAMMES WITH EXPORT AND MODERNISATION ORIENTATION

### 3(a) Agri Export Zones

Agricultural and Processed Food Products Export Development Authority(APEDA) has approved 60 locations for Agri Export Zones (AEZS), spread over 230 districts in 20 states during 2001 to 2005. A few locations are known as spices parks. The crops covered include fruits, vegetables, spices, cashew, tea, basmati rice, medicinal plants, pulses, etc. In all, 35 crops were identified for promotion in these zones. Total investment committed under the AEZ programme by all agencies stands at ₹ 1724 crore (17.24 billion), including private investment of ₹ 970 crore (9.7 billion). APEDA is under the Department of Commerce of the Union Ministry of Commerce and Industry.

The EXIM policy 2001 introduced the concept of Agricultural Export Zones to give primacy to promotion of agricultural exports and effect a reorganisation of our export efforts on the basis of specific products and specific geographical areas. By focusing specifically on areas wherever there is convergence of these two factors, the intention is to transform these zones into Regional Rural Motors of the Export economy. The scheme is centred around the cluster approach of identifying the potential products, the geographical region in which these products are grown, and adopting an end-to-end approach of integrating the entire process right from the stage of production till it reaches the market. Such an approach would strengthen backward linkages with a market oriented approach, enhance product acceptability, and its competitiveness abroad as well as in the domestic market, increase value addition to basic agricultural produce, and reduce cost of production through economies of scale. The approach will also provide remunerative returns to the farming community in a sustained manner, improve access to produce/products of agricultural and allied sectors in the international market, improve product quality and packaging, promote trade related research and development, and increase employment opportunities.

Spices parks are administered by the Spices Board. The main objective of a spices park is to empower the farmers with better price realisation and wider markets for their produce. Spices Park is a well conceived approach to have an integrated operation for cultivation, post harvesting, processing for value addition, packaging and storage of spices and spices products. The farmers can utilise the common infrastructure facilities for cleaning, grading and steam sterilisation which will ensure the quality of the product, and thus a higher price. The scientific packing and warehousing facilities in the park, and the quality of testing facility in the laboratory will improve the overall quality of spices produced in the locality.

**A few Prominent AEZs with Produce covered in Select States**

| | |
|---|---|
| Andhra Pradesh | Mango, chillies, other spices, vegetables |
| Telangana | Gherkins, grapes, vegetables |
| Karnataka | Flowers, gherkins, vanilla |
| Maharashtra | Flowers, grapes |
| Gujarat | Sesame seed, onion |
| Odisha | Ginger, turmeric |
| West Bengal | Darjiling tea, litchi, potatoes, mango |
| Punjab | Potatoes, basmati rice |
| Rajasthan | Cumin, coriander |
| Jammu & Kashmir | Apples, walnut |
| Uttarakhand | Basmati rice, flowers |

**Agri Export Zones Sanctioned in eight States with Districts, and Produce covered**

| Agri produce | State (no. of districts covered) | Districts covered |
|---|---|---|
| Mango pulp, & vegetables (Chittoor), Chillies and other spices (Guntur), Mango Pulp (Krishna) | Andhra Pradesh (3) | Chittoor, Guntur, Krishna |
| Gherkins, grapes, vegetables | Telangana (3) | Rangareddy, Medak, Mahabubnagar |
| Lemon, Lehsun | Gujarat (6) | Bhavnagar, Surendranagar, Amreli, Rajkot, Junagadh, Jamnagar |
| Wheat | Madhya Pradesh (3) | Ujjain, Indore, Bhopal |
| Potato, onion, lehsun | Madhya Pradesh (9) | Malwa, Ujjain, Indore, Dewas, Dhar, Mandesaur, Shajapur, Ratlam, Neemuch |
| Mangoes, Basmati rice | Uttar Pradesh (9) | Lucknow, Unnao, Hardoi, Sitapur, Barabanki, Eastern UP (Basmati Rice) |
| Apples | Himachal Pradesh (5) | Shimla, Sirmaur, Kullu, Mandi, Kinnaur |
| Apples | Jammu & Kashmir (4) | Srinagar, Baramula, Anantnag,Kupwara |
| Potato | West Bengal (5) | Hugali, Burdwan, Medinipur, Narayanpur, Haora |

### 3(b) Mega Food Parks Scheme

The Scheme of Mega Food Parks envisages a well-defined agri/horticultural processing zone containing state-of-the art processing facilities with support infrastructure and well established supply chain. The Scheme is administered by the Union Ministry of Food Processing Industries. The project provides modern infrastructure for food processing in selected clusters to be identified in a demand driven manner. The project addresses the issue of small and medium nature of processing industries through a cluster approach with stakeholders managing the supply chain. It provides an institutional mechanism for producers, processors, and retailers to work together to build the supply chain.

Mega food parks were approved in phases from 2008. The years in which approval was given for setting up the parks are 2008, 2010, 2011 and 2013. In a phased manner, 29 projects were approved. For a few more projects, in-principle approval was given, and subsequently cancelled. The distribution of 29 approved projects in 20 states which are functioning is as follows: States with the number of functioning mega food parks given in parenthesis Andhra Pradesh(2), Karnataka(1), Gujarat(2), Maharashtra(5), Madhya Pradesh(1), Chhattisgarh(2), Punjab(1), Haryana(1), Rajasthan(1), Jammu & Kashmir (1), Himachal Pradesh(1), Uttar Pradesh(2), Uttarakhand(1), Bihar(2), Jharkhand(1), Odisha(1), West Bengal(1), Sikkim(1), Assam(1), and Tripura(1).

### 3(c) Food Parks Scheme

The Scheme of food parks which was implemented during 8thto 10thplan periods, envisaged making available common infrastructure facilities for food processing industries, especially small and medium enterprises. The Ministry approved 56 projects. Out of them, 32 have been funded fully, 15 partially, and 9 have been closed. 47 food parks have been implemented. This scheme has now been subsumed in the National Mission on Food Processing to be implemented by The State / Union Territory Governments.

### 3(d) Integrated Texttile Parks

The Scheme for Integrated Textile Parks (SITP) was approved during the 10thplan period to provide the industry with world class infrastructure facilities for setting up textile units by merging the erstwhile Apparel Parks for Export, Scheme (APES) and Textile Centre Infrastructure Development Scheme (TCIDS). The Scheme targets industrial clusters/locations with high growth potential which require strategic interventions by way of providing world class infrastructure support. The project will cover common infrastructure and buildings for production/support activities (including textile engineering, accessories and packaging), depending on the needs of the ITP. The Scheme is administered by the Union Ministry of Textiles.

| **Sanction was given in the 10th & 11th 11th plan periods for 40 projects in the following states** | **21 new projects were sanctioned in November 2012 in the following states** |
|---|---|
| Andhra Pradesh (5) | Andhra Pradesh (2) |
| Karnataka (1) | Karnataka (1) |
| Tamil Nadu (7) | Tamil Nadu (2) |
| Gujarat (7) | Gujarat (1) |
| Maharashtra (9) | Maharashtra (6) |
| Madhya Pradesh (1) | Himachal Pradesh (1) |
| Punjab (3) | Jammu & Kashmir (1) |
| Rajasthan (6) | Rajasthan (4) |
| West Bengal(1) | Uttar Pradesh (1) |
| Out of 40 projects sanctioned, 9 have been cancelled. These are 2 in Andhra Pradesh, 1 in Tamil Nadu, 3 in Maharashtra and 3 in Rajasthan. | West Bengal (1) |
| | Tripura (1) |

There are at present 52 integrated textile parks (31+21) being implemented in 13 states as shown above. The parks with processing units should necessarily plan for CETP (Common effluent treatment plant).

### 3(e) Comprehensive Powerloom Cluster Development Scheme/Powerloom Mega Cluster Projects

The Scheme was formulated in 2008-09 to develop powerloom mega clusters by the Ministry of Textiles. The Scheme was modified in 2013. Under the modified scheme, Government assistance for a powerloom mega cluster is limited to 40% of the project cost subject to a maximum of ₹ 50 crore. Four projects have been approved under this scheme. These are at Erode (Tamil Nadu), Bhiwandi and Ichalkaranji (Maharashtra), and Bhilwara (Rajasthan). The broad objective of the mega cluster approach scheme is to enhance the competitiveness of the clusters in terms of increased market share, and to ensure increased productivity by higher unit value realisation of the products. The scheme provides requisite support/linkages in terms of adequate infrastructure, technology, product diversification, design development, raw material bank, marketing and promotion, credit, social security, and other components needed in the decentralised powerloom sector.

### 3(f) Mega Handloom Clusters

The Comprehensive Handloom Development Scheme was introduced in 2008-09 by the Ministry of Textiles for development of mega clusters for integrated and holistic development of handlooms. Each cluster will cover 25,000 handlooms, and will be developed at an upper Government of India share of ` 70 crore in a period of 5 years. In 2008-09, two projects were selected: Varanasi (Uttar Pradesh) and Sivasagar (Assam). In 2009-10, two more were selected: Virudhnagar (Tamil Nadu), and Murshidabad (West Bengal). In 2012-13, two more mega clusters were approved: Prakasam and Guntur districts (Andhra Pradesh). At present therer are six projects.

### 3(g) Mega Handicrafts Clusters

The infrastructure and technology development scheme aims at development of world class infrastructure to support handicrafts production, and enhance product quality and cost to enable it to compete in the World market through enhanced competitiveness. The centres identified for mega handicrafts clusters are five in four states: Varanasi, and Bhadohi-Mirzapur (Uttar Pradesh), Narsapur (Andhra Pradesh), Jodhpur (Rajasthan), and Srinagar (Jammu and Kashmir). The scheme is administered by the Ministry of Textiles.

### 3(h) Export Development Clusters

The Government of India has planned to invest about ? 500 billion for developing world class infrastructure in 34 export development clusters, also referred to as clusters of export excellence with reference to a wide variety of products. These were identified by the Union Ministry of Commerce and Industry in 1995-96, with the major investment to be made by the private sector. The list of cities identified State-wise, and products on which attention is to be focused for export are given here. State-wise the number of cities is as follows: Andhra Pradesh (2), Kerala (1), Tamil Nadu (5), Gujarat (4), Maharashtra (1), Uttar Pradesh (5), Bihar (1), Haryana (1), Punjab (4), and ten other cities.

| | | | |
|---|---|---|---|
| 1. | Visakhapatnam.................. | (Andhra Pradesh) | Pharmaceuticals and Sea foods including fish and fish products. |
| 2. | Bhimavaram..................... | (Andhra Pradesh) | Sea foods and Aquaculture |
| 3. | Alappuzha........................ | (Kerala) | Coconut and Coir |
| 4. | Tiruppur........................... | (Tamil Nadu) | Hosiery and Weaving |
| 5. | Kanchipuram.................... | (Tamil Nadu) | Silk weaving |
| 6. | Sivakasi............................. | (Tamil Nadu) | Match boxes |
| 7. | Salem................................ | (Tamil Nadu) | Handmade items |

| | | | |
|---|---|---|---|
| 8. | Ranipet (Amboor).......... | (Tamil Nadu) | Leather |
| 9. | Surat.............................. | (Gujarat) | Diamonds, gems and jewellery |
| 10. | Rajkot............................ | (Gujarat) | Diesel engines and pumpsets |
| 11. | Jamnagar......................... | (Gujarat) | Brass spare parts |
| 12. | Vapi (Ankleshwar).......... | (Gujarat) | Chemicals |
| 13. | Nagpur............................ | (Maharashtra) | Handmade equipment |
| 14. | Moradabad....................... | (Uttar Pradesh) | Brassware handicrafts |
| 15. | Aligarh............................ | (Uttar Pradesh) | Brass locks |
| 16. | Agra................................ | (Uttar Pradesh) | Leather shoes |
| 17. | Meerut............................ | (Uttar Pradesh) | Sports goods |
| 18. | Khurja............................ | (Uttar Pradesh) | Clay pottery |
| 19. | Panipat........................... | (Haryana) | Handloom textiles |
| 20. | Bhagalpur........................ | (Bihar) | Weaving |
| 21. | Ludhiana......................... | (Punjab) | Heavy machinery and hosiery |
| 22. | Ambala........................... | (Punjab) | Scientific instruments |
| 23. | Batala............................. | (Punjab) | Machine equipment |
| 24. | Jalandhar......................... | (Punjab) | Sports goods |

25 to 34 Ten other cities

## 4. INDIAN IT SCENARIO

### IT and ITeS

Software development and information technology (IT) enabled services (ITeS) including business process management (BPM), software engineering R&D services and product development has emerged as one of the most dynamic and vibrant sectors in India's economy. It is the single largest contributor to services exports. As per AT Kearney's Global Services Location Index 2014, India ranked first and remains the pre-eminent destination for offshore services with excellence in IT, BPO (business process outsourcing), and voice services. The sector continues to be one of the largest employers in the country, directly employing nearly 3.7 million people (National Association for Software and Service Companies - NASSCOM). It is playing a key role in promoting diversity within the industry, with more than 34 per cent women employees, over 170,000 foreign nationals, and a greater share of employees from non-tier 1 Indian cities, including rural areas.

India's IT-BPM sector demonstrated flexibility and resolve to adjust, and is expected to touch an estimated share of 9.5% in GDP and more than 45% in total services exports in FY 2016 as per NASSCOM. Computer and related services with a share of 3.5% in India's GVA (gross value added) increased by 9.7% in FY 2015 as per Central Statistics Office. In FY 2014, the growth rate was 14.4%.

Total revenues from the IT-BPM services excluding hardware stand at US $ 143 billion in FY 2016, with growth rate of 7.44% over the previous year. In FY 2015, growth rate was 25.21% (Table 1). In FY 2016, exports from this sector account for US $ 108 billion (75.5%), the balance being services in the domestic market. In the total IT services in FY 2016, IT services constitute the longest segment of 52%, followed by BPM with a share of around 20%, software products, engineering research and development, together accounting for 19% share, and hardware with around 10%.

**Table 1: IT-BPM Revenues (excluding hardware) - Exports and Domestic (2009-16)**

**(Value in US $ billion)**

| **Category** | **2009-10** | **2013-14** | **2014-15** | **2015-16** |
|---|---|---|---|---|
| IT-BPM Service revenues-Total | 60 | 106.3 | 133.1(25.21) | 143 (7.44) |
| Exports | 50 | 87.3 | 98.1 (12.37) | 108 (10.20) |
| Domestic | 14 | 19 | 35 (84.21) | 35 (-) |
| Break up of Exports - total | 50 | 87.3 | 98.1 (12.4) | 108 (10.2) |
| IT Services | Na | 49.2 | 55.4 (12.6) | na |
| ITeS/BPM | Na | 20.4 | 22.7 (11.3) | na |
| Software products & engineering services | Na | 17.7 | 20.0 (13.0) | na |
| **Total merchandise exports** | **178.75 (3.5)** | **314.41 (4.7)** | **310.34 (1.3)** | **261.14 (15.9)** |

**Note:** Figures given in parentheses indicate percentage variation over the previous year.

**Source:** GoI, Ministry of Finance, Economic Division (2016). Economic Survey 2015-16, Ministry of Finance in association with Young Global Publications, New Delhi.

E-commerce is expected to grow at 21.4% in FY 2016 to reach US $ 17 billion. The Government's Digital India campaign, which envisages a US $ 20 billion investment covering mobile connectivity throughout the country, re-engineering of government process via technology and enabling e-delivery of citizen services, will give a further push to the IT sector. The domestic market offers huge potential that remains to be tapped. Software products with 4.5% year-on-year growth is the fastest growing segment in the Indian market, expanding on the back of demand for mobile app development, security software, system software, customer analytics products, and increased adoption of software as a service (SAAS), and cloud.

The Indian technology start-ups landscape has seen tremendous growth to move towards innovative start-ups India, home to the new breed of young start-ups, has clearly evolved to become the third largest base of technology start-ups in the world, next only to USA and UK. The number of start-ups has grown to 4,200 mark, recording 40% growth over the previous year; an addition of nearly 1,200, creating about 85,000 jobs in 2015. Start-ups in India are spread across the digital (social, mobile, analyses and cloud), high tech (augmented reality, internet of things, robotics), and vertical domains (edu-tech, health-tech, fin-tech, ad-tech) that are identifying white spaces and delivering domestic-specific solutions. This emerging sector is set to get a fillip with the start-up India programme.

One of the important components of this programme is people's empowerment through availability of entitlements on the cloud, coupled with Aadhaar Authentification platform. A National Rural Internet and Technology Mission for Services in villages and schools and E-Kranti for Government service delivery are other initiatives. Recognising the importance of IT, the government's Make in India Mission has included IT and BPM among the 25 focus sectors.

Rapid technology transformation is leading to altered and dynamic client engagement, which in turn is fueling business transfiguration, speeding up delivery services, and driving innovation capabilities across practices and operations. It is imperative that the Indian IT industry evolves and raises its game to take advantage of the tectonic shifts happening in the industry. In the new landscape, intellectual property, creativity and accelerated time to market are going to be critical. This requires large, established companies to focus on innovation, not as a 'nice to have', but as the foremost priority. The industry continues to prioritise on enhancing efficiency, enabling transformation and agility, and partnering for digital initiatives. ER&D and product development segment is the fastest growing at 13.2 per cent, driven by higher value-added solutions from the existing players, and expansion of the GIC landscape.

Digital solutions around Social, Mobile, Analytics and Cloud (SMAC) - upgrading legacy systems to be SMAC enabled, greater demand for ERP, CRM, mobility and user experience technologies are driving growth in IT services during the last couple of years. Infrastructure outsourcing, software outsourcing, and software testing segment outpaced the industry growth rate. The BPM sector is being driven by automation, expanding omni-channel presence, application of analytics across the entire value chain, etc.

The Confederation of Indian Industry (CII) has been emphasising the need for doubling of the strength of teachers in the IT sector in various educational institutions. There is need for preparing the students in line with the needs of the IT industry. The industry is witnessing rapid challenges mainly in regard to the educational curriculum. The need is felt for producing industry ready students, and for expediting large scale collaborations between industry and academic institutions substantially. Collaborative effort between academic institutions and the industry should be taken to a larger platform besides using technology to spread higher education with substitutes like virtual, video, e-learning, and various mobile apps. Students need to upgrade their knowledge in emerging domains like big data analytics, social media, and Internet of Things (IoT). IoT would be a promising career as 40 billion devices are to be connected by 2020 in the country. Regarding curriculum in higher educational courses, a suggestion has been made that the framework for the first two years should be restructured on real time basis, and a year and a half after that should be used to facilitate hands-on-exposure.

## 5. RESEARCH AND DEVELOPMENT (R&D) SERVICES

The R&D sector grew by 20.8 per cent in 2012-13, and contributed 1.4 per cent of GDP (old method). As per the CSO's new method, there is no separate head for R&D. It is a part of the professional scientific & technical activities including R&D classification which grew at 3.8 per cent and 25.5 percent, respectively in 2013-14 and 2014-15. India's R&D expenditure has been low and the science, technology and innovation (STI) policy 2013 envisages raising it to 2 per cent of GDP with enhanced participation of the private sector.

The annual 'Global R&D Services Providers (GSPR) Rating and Landscape Study 2015' by Zinnov, put the overall Indiabased R&D globalisation and R&D services market at US$ 20 billion in 2015, up by 9.9 per cent over 2014. While the R&D services market stood at US$7.76 billion, the R&D globalization market (captives) stood at US$12.25 billion. India's R&D globalization and services market is set to almost double by 2020 to US$38 billion. According to the study, India-based R&D services companies, which account for almost 22 per cent of the global addressed market, grew at 12.67 per cent and India's ER&D services are expected to reach US$15-17 billion by 2020, with North America, contributing to 55 per cent of revenues, continuing to be the largest market.

However, according to the Global Competitiveness Report 2015-16, India's capacity for innovation has been lower than that of many countries like the USA, the UK, South Korea, and even South Africa (Table 1). Even in quality of scientific research institutions, India scores lower than China and South Africa. This is also exhibited through its poor score on university-industry collaboration on R&D as compared to some other BRICS (Brazil, Russia, India, China and South Africa) nations like China and South Africa. In terms of patents granted per million population, India fares badly compared to other BRICS countries. In terms of company spending on R&D also, India ranks below China. Only in terms of availability of scientists and engineers, does India score better or is equal to other BRICS countries.

The government has taken many initiatives to promote the R&D sector in India, which include the weighted tax deduction of 200 per cent for R&D expenditure and the Budget 2015-16 announcement for establishment of the Atal Innovation Mission (AIM) in the National Institution for Transforming India (NITI) Aayog. This will be an innovation promotion platform involving academics, entrepreneurs, and researchers, and draw upon national and international experiences to foster a culture of innovation, R&D and scientific research in India. The platform will also promote a network of world-class innovation hubs. Initially, a sum of R150 crore has been earmarked for this purpose. This along with other initiatives like the Self Employment and Talent Utilization (SETU) programme, which aims to set up world class technology business incubators to promote start-up business in India coupled with Start-up-India, Make in India, which aims to make India the manufacturing hub and IMPRINT (Impacting Research Innovation and Technology), a Pan-IIT and IISc joint initiative to develop a roadmap for research to solve major engineering and technology challenges in ten technology domains relevant to India, will help in improving the research and innovation ranking of India in the world.

**Table 1: Global Competitiveness Index: R&D Innovation**

| **Country** | **Capacity for innovation** | | **Quality of scientific research institutions** | | **Company spending on R&D** | | **University-Industry collaboration on R&D** | | **Availability of scientists and engineers** | | **PCT patents granted/million population** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Score | Rank | Score | Rank | Score | Rank | Score | Rank | Score | Rank | Score | Rank |
| USA | 5.9 | 2 | 6.1 | 4 | 5.6 | 3 | 5.8 | 2 | 5.4 | 4 | 160.3 | 11 |
| UK | 5.4 | 10 | 6.3 | 2 | 4.9 | 17 | 5.7 | 4 | 4.9 | 18 | 89.9 | 18 |
| South Korea | 4.8 | 24 | 4.8 | 27 | 4.6 | 21 | 4.6 | 26 | 4.4 | 40 | 220.7 | 7 |
| South Africa | 4.6 | 32 | 4.7 | 33 | 3.8 | 32 | 4.5 | 31 | 3.4 | 106 | 6.9 | 46 |
| China | 4.2 | 49 | 4.2 | 42 | 4.2 | 23 | 4.4 | 32 | 4.5 | 36 | 13.4 | 32 |
| Brazil | 3.8 | 80 | 3.6 | 80 | 3.3 | 60 | 3.8 | 54 | 3.3 | 115 | 3.5 | 51 |
| India | 4.2 | 50 | 4.1 | 45 | 3.9 | 31 | 3.9 | 50 | 4.2 | 49 | 1.6 | 61 |
| Russia | 3.8 | 84 | 4 | 58 | 3.2 | 75 | 3.6 | 67 | 4.1 | 64 | 7.7 | 41 |

**Note:** PCT-Patent Cooperation Treaty.

**Source:** Global Competitiveness Report 2015-16, World Economic Forum.

## 6. SOFTWARE TECHNOLOGY PARKS OF INDIA (STPI)

Software Technology Parks of India (STPI) was established as an autonomous society under the then Department of Electronics (the present Department of Electronics and Information Technology), Ministry of Communications and Information Technology, Government of India on 5th June 1991, with the objective to implement STP / EHTP schemes, set up and mange infrastructure facilities, and provide other services like technology assessment and professional training.

Objectives of the STPI are:

a) To promote the development and export of software and software services including ITeS/Bio-IT;

b) To provide statutory and other promotional services to the exporters by implementing Software Technology Park (STP) / Electronics Hardware Technology Park (EHTP) schemes, and such other schemes which may be formulated and entrusted by the Government from time to time;

c) To provide data communication services including value added services to IT/ITeS related industries;

d) To promote micro, small and medium entrepreneurs by creating conducive environment for entrepreneurship in the fields of IT/ITeS.

STPI has been providing statutory services on a single window clearance mechanism from various STPI centres spread across the country under the following schemes since inception in 1991: (a) Software Technology Park (STP) Scheme, (b) Electronic Hardware Technology Park (EHTP) Scheme.

At the end of December 2015, a total of 53 STPI centres are operational in the country across 22 States and two Union Territories. Out of them, 46 are located in Tier II and Tier III cities. A few States are more prominent in the distribution of STPs, particularly in Tier II and Tier III cities. State-wise distribution of these centres is given in Appendix I. States with more than 2 centres, along with the present number of centres given in brackets are as follows: Andhra Pradesh (4), Karnataka (5), Tamil Nadu (5), Maharashtra (6), Uttar Pradesh (4), Odisha (3), and West Bengal (5) - totaling 32 out of 53 (60.4%) centres in seven states. The overall exports from STP- IT/ ITeS units increased from ₹ 2,733.13 billion in FY 2014 to ? 2,937.97 billion in FY 2015, an increase of 7.5%. Leading states with the value of exports from STPs in FY 2015 are as follows: Karnataka (₹ 1,098 billion), Maharashtra (₹ 613 billion), Telangana (₹ 392 billion), Tamil Nadu (₹ 333 billion), Haryana (₹ 179 billion), and Uttar Pradesh (₹ 137 billion). These six states account for ₹ 2,752 billion (93.7% of STP exports). Performance of a few other states is as follows: West Bengal (₹ 70 billion), Kerala (₹ 29 billion), Delhi (₹ 22 billion), Odisha (₹ 19 billion), Gujarat (₹ 19 billion), Chandigarh (₹ 5 billion), and Andhra Pradesh (₹ 4 billion). Exports from Electronic Hardware Technology Parks (EHTPs) was ₹ 199.52 billion in FY 2015, decrease by 26.4% from ₹ 270.92 billion in FY 2014.

The 2020 vision of US $ 300 billion export from the country from the IT related activities compared to the level of US $ 143 billion in FY 2016, will be driven by new business models, service lines, and talent structures. Business models have been shifting from the traditional labour-based onsite-offshore model to cloud-based and off-premise solutions. These changing models will bring compelling business innovations with greater breadth and specialisation across key verticals - BFSL, Telecom, Healthcare, Social Entrepreneurship, etc. To sustain growth in the coming years, the industry is going to focus on virtualisation, operational excellence, and expanding global delivery model.

**Source:** GoI, Ministry of Communications and Information Technology, Department of Electronics and Information Technology (2015), Annual Report 2014-15 of Software Technology Parks of India (STPI), New Delhi.

## APPENDIX - I

**Software Technology Parks of India (STPI) Centres**

There are 53 centres throughout the country in 22 States and two Union Territories for software technology parks (STPs), out of which 46 are located in Tier II and Tier III cities. The list excludes New Delhi, which is the headquarters of STPI, under the Union Department of Electronics and Information Technology (E&IT), Ministry of Communications and Information Technology.

1. **Andhra Pradesh (4)**
   Visakhapatnam
   Vijayawada
   Kakinada
   Tirupati

2. **Telangana (2)**
   Hyderabad
   Warangal

3. **Karnataka (5)**
   Bengaluru
   Mysuru
   Mangaluru
   Manipal
   Hubbali

4. **Kerala (1)**
   Thiruvananthapuram

5. **Tamil Nadu (5)**
   Chennai
   Coimbatore
   Tiruchchirapalli
   Madurai
   Tirunelveli

6. **Puducherry (1)**
   Puducherry

7. **Gujarat (1)**
   Gandhinagar

8. **Maharashtra (6)**
   Navi Mumbai
   Nashik
   Pune
   Kolhapur
   Aurangabad,
   Nagpur

9. **Chhattisgarh (1)**
   Bhilai

10. **Madhya Pradesh (2)**
    Indore
    Gwalior

11. **Utta Pradesh (4)**
    Allahabad
    Lucknow
    Kanpur
    Noida

12. **Uttarakhand (1)**
    Dehra Dum

13. **Chandigarh (1)**
    Mohali

14. **Himachal Pradesh (1)**
    Shimla

15. **Jammu & Kashmir (2)**
Jammu
Srinagar

16. **Rajasthan (2)**
Jaipur
Jodhpur

17. **Bihar (1)**
Patna

18. **Jharkhand (1)**
Ranchi

19. **Odisha (3)**
Bhubaneshwar
Brahmapur
Raurkela

20. **West Bengal (5)**
Kolkata
Kharagpur
Haldia
Durgapur
Shiliguri

21. **Assam (1)**
Guwahati

22. **Manipur (1)**
Imphal

23. **Meghalaya (1)**
Shillong

24. **Sikkim (1)**
Gangtok

## 7. SPECIAL ECONOMIC ZONES (SEZS)

To overcome the short-comings on account of multiplicity of controls and clearances, absence of world-class infrastructure, and an unstable fiscal regime, and with a view to attract larger foreign investments in India, Special Economic Zones (SEZs) Policy was announced in April 2000. SEZs in India functioned from November 1, 2000 to February 9, 2006 under the provisions of the Foreign Trade Policy, and incentives were made effective through the provisions of relevant statutes. The Special Economic Zones Act, 2005 was passed by the Parliament in May 2005. The Act came into force w.e.f. February 10, 2006 after SEZ rules were finalised.

The main objectives of the SEZ Act are:

- Generation of additional economic activity;
- Promotion of export of goods and services;
- Promotion of investment from domestic and foreign sources;
- Creation of employment opportunities; and
- Development of World-class infrastructure facilities.

**Current status of approvals for setting up SEZs**

Seven export processing zones set-up by the Central Government were converted into SEZs on announcement of SEZ policy in 2000. These are at Kandla (Gujarat), Santa Cruz (Maharashtra), Kochi (Kerala), Noida (Uttar Pradesh), Chennai (Tamil Nadu), Falta (West Bengal), and Visakhapatnam (Andhra Pradesh). Another EPZ set up in the private sector in Surat (Gujarat) for diamonds, gems and jewellery was also converted to an SEZ. In addition, 11 more SEZs were set up by the State Governments / private sector during

2000-2005 in the States of Tamil Nadu (4), West Bengal (2), Gujarat (2), Madhya Pradesh (1), Uttar Pradesh (1), and Rajasthan (1). SEZs established prior to the SEZ Act, thus, number nineteen. After the SEZ Act came into force on February 10, 2006, up to the end of July 2016, 412 SEZs have been given formal approvals, and 31 in-principle approvals. Approval given for a few other SEZs has been withdrawn. Among the formally approved SEZs, 331 have been notified. By July 2016, 204 SEZs have become operational, and are exporting. State / Union Territory-wise distribution of SEZs is given in Table 1. Table 2 gives sector-wise distribution of SEZs. Total land area involved in approved SEZs is around 51,792 hectares. The six major sectors of IT/ITeS, Hardware, etc., Textiles and Apparel (including wool), pharma and chemicals, bio-tech, engineering, and multi-product, multi-service and Free Trade Ware- housing Zone (FTWZ) constitute bulk of the approvals. IT/ITeS / electronic hardware / semi conductor is the single most important segment, accounting for about 62% of total formal approvals, followed by bio-tech, and engineering SEZs. 331 SEZs have been notified (80.4% of formal approvals). Details of investment and direct employment in SEZs are given in Table 3 as a fact sheet. Total investment, including the earlier investment works out to ₹ 3,735 billion, and employment to 1.6 million persons.

Out of 204 exporting SEZs, State-wise position in major States is as follows: Tamil Nadu (36), Telangana (26), Karnataka (25), Maharashtra (25), Andhra Pradesh (19), Gujarat (18), and Kerala (16) - the seven States together account for 165 out of 204 SEZs (80.9%).

Export performance in 204 operational SEZs in respect of goods and services was US $ 73.02 billion in FY 2014. It declined to US $ 68.54 billion in FY 2015. Exports from 1977 Export oriented Units (EoUs) was US $ 12.13 billion in FY 2014, and US $ 14.60 billion in FY 2015. The two together work out to US $ 85.15 billion in FY 2014, and US $ 83.14 billion in FY 2015, decline by 2.4 per cent. In FY 2015, export revenues from SEZs & EoUs account for 26.8% of total merchandise exports of the country.

The Government announced a package of reforms on 18th April 2013, including easing of land requirement norms and an exit policy, to rekindle investor interest in SEZs. SEZs, once a major attraction for investors, lost the tempo following imposition of MAT and DDT, certain provisions in the proposed direct tax regime, besides the global slowdown. Reforms announced in April 2013 are as follows:

1. The minimum land area requirement for SEZs has been reduced by half for different categories of SEZs.

2. For a multi-product SEZ, minimum land requirement has been brought down from 1000 hectares to 500 hectares, and for sector-specific SEZs from 100 hectares to 50 hectares.
3. There would be no minimum land requirement for setting up IT/ITeS SEZs, besides easing of minimum built up area criterion.
4. The government has decided to allow transfer of ownership of SEZ units including sale.

**Sources:** 1. GoI, Ministry of Commerce and Industry, Department of Commerce (2016), Annual Report 2015-16, New Delhi.

2. Websites: www.commerce.nic.in ( Dept. of Commerce); www.sezindia.nic.in (SEZs)

**Table 1: State-wise Distribution of approved SEZs - All India**

(at end-July 2016)

| Sl. No. | State | Formal approvals | In-principle approvals | Notified SEZs | Exporting SEZs (Central Govt. + State Govt./ Pvt. SEZs + notified SEZs under the SEZ Act, 2005 |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Andhra Pradesh | 29 | 4 | 24 | 19 |
| 2 | Chandigarh | 2 | 0 | 2 | 2 |
| 3 | Chhattisgarh | 2 | 1 | 1 | 1 |
| 4 | Delhi | 2 | 0 | 0 | 0 |
| 5 | Goa | 7 | 0 | 3 | 0 |
| 6 | Gujarat | 31 | 4 | 27 | 18 |
| 7 | Haryana | 23 | 3 | 20 | 7 |
| 8 | Jharkhand | 1 | 0 | 1 | 0 |
| 9 | Karnataka | 61 | 0 | 40 | 25 |
| 10 | Kerala | 29 | 0 | 25 | 16 |
| 11 | Madhya Pradesh | 9 | 1 | 5 | 2 |
| 12 | Maharashtra | 59 | 9 | 51 | 25 |
| 13 | Manipur | 1 | 0 | 1 | 0 |
| 14 | Nagaland | 2 | 0 | 2 | 0 |
| 15 | Odisha | 7 | 0 | 5 | 3 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | Puducherry | 1 | 1 | 0 | 0 |
| 17 | Punjab | 5 | 0 | 2 | 2 |
| 18 | Rajasthan | 9 | 1 | 8 | 4 |
| 19 | Tamil Nadu | 48 | 4 | 46 | 36 |
| 20 | Telangana | 53 | 0 | 44 | 26 |
| 21 | Uttar Pradesh | 24 | 1 | 19 | 11 |
| 22 | West Bengal | 7 | 2 | 5 | 7 |
| | **GRAND TOTAL** | **412** | **31** | **331** | **204** |

**Source:** www.sezindia.nic.in

**Table 2: Sector-wise Distribution of approved SEZs - All India (as on 10 May 2016)**

| Sl. No. | State | Formal approvals | In-principle approvals | Notified SEZs | Exporting SEZs (7Central Govt. + 12State Govt./ Pvt. SEZs + notified SEZs under the SEZ Act, 2005 |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Agro | 4 | 2 | 4 | 1 |
| 2 | Airport based multi-product | 3 | 0 | 0 | 0 |
| 3 | Auto and related | 1 | 1 | 1 | 1 |
| 4 | Aviation/Aerospace/ Animation & Gaming/Copper | 6 | 1 | 5 | 5 |
| 5 | Beach & muneral/ Metals | 2 | 0 | 2 | 0 |
| 6 | Biotechnology | 23 | 0 | 16 | 2 |
| 7 | Building prod./mal./ Transport equipments/ ceramic and glass | 2 | 2 | 2 | 2 |
| 8 | Electronic product/ Industries | 2 | 0 | 2 | 2 |
| 9 | Engineering | 15 | 1 | 15 | 13 |
| 10 | Footwear/Leather | 6 | 0 | 5 | 3 |
| 11 | Food Processing | 4 | 0 | 3 | 3 |

| | | | | | |
|---|---|---|---|---|---|
| 12 | Free Trade Warehousing Zone (FTWZ) | 10 | 4 | 7 | 3 |
| 13 | Gems and Jewellery | 7 | 3 | 4 | 3 |
| 14 | Handicrafts & Carpets | 3 | 0 | 2 | 2 |
| 15 | IT/ITES/Electronic Hardware/ Semicondutor/services | 262 | 0 | 204 | 116 |
| 16 | Alumina/Aluminium | 2 | 0 | 2 | 1 |
| 17 | Light Engineering/ Metallurgical Engineering/ Automotive Components | 1 | 0 | 0 | 0 |
| 18 | Multi-Product | 19 | 11 | 17 | 20 |
| 19 | Multi-Services | 7 | 1 | 7 | 2 |
| 20 | Non-Conventional Energy | 2 | 0 | 2 | 2 |
| 21 | Petrochemicals & petro/oil and gas | 2 | 1 | 0 | 0 |
| 22 | Pharmaceuticals/ chemicals | 16 | 2 | 16 | 12 |
| 23 | Port-based nulti-product | 5 | 1 | 3 | 2 |
| 24 | Power/alternate energy/solar | 4 | 1 | 3 | 3 |
| 25 | Textiles/Apparel/Wool | 6 | 1 | 6 | 7 |
| 26 | Writing and printing paper mills | 1 | 0 | 1 | 0 |
| 27 | Granite processing and other allied machinery manufacturing industries | 2 | 0 | 1 | 0 |
| | **GRAND TOTAL** | **417** | **32** | **330** | **205** |

Source: www.sezindia.nic.in

**Table 3: Fact sheet on Special Economic Zones - All India**

| | |
|---|---|
| No. of formal approvals under SEZ Act, 2005 | 412 |
| No. of notified SEZs | 331 |
| No. of operational SEZs | 204 |
| Units approved in SEZs | 4,127 |

(end - July 2016)

**Investment in SEZs Category-wise (in ₹ billion)**

| Category | Investment (as on February 2006) | Incremental investment | Total investment |
|---|---|---|---|
| Central Government SEZs (7) | 22.79 | 125.82 | 148.61 |
| State/private SEZs set up before 2006 (12) | 17.56 | 92.05 | 109.62 |
| SEZs notified under the Act (331) | - | 3476.23 | 3476.23 |
| **Total** | **40.36** | **3694.10** | **3734.46** |

**Employment in SEZs Category-wise**

| Category | Employment (as on February 2006) | Incremental Employment | Total Employment |
|---|---|---|---|
| Central Government SEZs (7) | 1,22,236 | 1,18,816 | 2,41,052 |
| State/private set up before 2006 (12) | 12,468 | 63,816 | 76,284 |
| SEZs notified under the Act (331) | - | 12,39,201 | 12,39,201 |
| **Total** | **1,34,704** | **14,21,833** | **15,56,537** |

**Table 4: Exports from the functioning SEZs and Export Oriented Units (EoUs)**

| Year | Exports from SEZs value ₹ billion (billion US $) * | Exports from EoUs value ₹ billion (billion US $) | Total exports ₹ billion (billion US $) |
|---|---|---|---|
| 2008-09 | 996.89 (14.73) | Na | Na |
| 2009-10 | 2207.11 (32.62) | 841.36 (17.79) | 3048.47 (50.41) |
| 2010-11 | 3158.68 (46.69) | 760.31 (11.23) | 3918.99 (57.92) |
| 2011-12 | 3644.78 (53.86) | 793.43 (11.72) | 4438.21 (65.58) |
| 2012-13 | 4761.59 (70.37) | 920.90 (13.61) | 5682.49 (83.98) |

| | | | |
|---|---|---|---|
| 2013-14 | 4940.77 (73.02) | 820.73 (12.13) | 5761.50 (85.15) |
| 2014-15 | 4637.70 (68.54) | 988.03 (14.60) | 5625.73 (83.14) |
| 2015-16 | 3416.85 (52.76) (up to end- Dec. 2015) | 416.55 (6.15) (up to end- Sept. 2015) | 3833.40 (58.91) |

Notes: * as per current rate of exchange
One billion: 100 crore or 1,000 million; one million: 10 lakh or 1,000,000.

Source: Department of Commerce, Ministry of Commerce and Industry (2016), Annual Report 2015-16, New Delhi.

Export picture given above is for 204 operational SEZs and 1977 Export oriented Units (EoUs) (Table 4). 1977 EoUs are distributed in 29 States and 6 Union Territories. Leading states with the number of EoUs in brackets are: Karnataka (446), Tamil Nadu (410), Maharashtra (224), Gujarat (196), Telangana (171), Andhra Pradesh (83), Haryana (65), Uttar Pradesh (57), Rajasthan (57), and West Bengal (55). These ten states account for 1764 EoUs (89.2%). The product lines of EoUs are mainly in textiles and yarn, food processing, gems & jewellery, computer software, electronics, chemicals, plastics, granites and minerals / ores.

## 8. FOREIGN DIRECT INVESTMENT FLOWS TO INDIA: COUNTRY-WISE AND INDUSTRY-WISE (US $ MILLION)

| Source/Industry | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| **Total FDI** | **23473** | **18286** | **16054** | **24748** | **36068** |
| | | | **COUNTRY-WISE INFLOWS** | | |
| Singapore | 3306 | 1605 | 4415 | 5137 | 12479 |
| Mauritius | 8142 | 8059 | 3695 | 5878 | 7452 |
| USA | 994 | 478 | 617 | 1981 | 4124 |
| Netherlands | 1289 | 1700 | 1157 | 2154 | 2330 |
| Japan | 2089 | 1340 | 1795 | 2019 | 1818 |
| UAE | 346 | 173 | 239 | 327 | 961 |
| Germany | 368 | 467 | 650 | 942 | 927 |
| United Kingdom | 2760 | 1022 | 111 | 1891 | 842 |

| | | | | | |
|---|---|---|---|---|---|
| Luxembourg | 89 | 34 | 539 | 204 | 784 |
| Cyprus | 1568 | 415 | 546 | 737 | 488 |
| China | 73 | 148 | 121 | 505 | 461 |
| France | 589 | 547 | 229 | 347 | 392 |
| Hongkong | 262 | 66 | 85 | 325 | 344 |
| South Korea | 226 | 224 | 189 | 138 | 241 |
| Switzerland | 211 | 268 | 356 | 292 | 195 |
| Spain | 251 | 348 | 181 | 401 | 141 |
| Malaysia | 18 | 238 | 113 | 219 | 73 |
| Others | 890 | 1156 | 1015 | 1251 | 2016 |
| **SECTOR-WISE INFLOWS** | | | | | |
| Manufacturing | 9337 | 6528 | 6381 | 9613 | 8439 |
| Computer Services | 736 | 247 | 934 | 2154 | 4319 |
| Construction | 2634 | 1319 | 1276 | 1640 | 4141 |
| Retail & Wholesale Trade | 567 | 551 | 1139 | 2551 | 3998 |
| Financial Services | 2603 | 2760 | 1026 | 3075 | 3547 |
| Business Services | 1590 | 643 | 521 | 680 | 3031 |
| Communication Services | 1458 | 92 | 1256 | 1075 | 2638 |
| Electricity and other Energy Generation, Distribution & Transmission | 1395 | 1653 | 1284 | 1284 | 1364 |
| Transportation | 410 | 213 | 311 | 482 | 1363 |
| Miscellaneous Services | 801 | 552 | 941 | 586 | 1022 |
| Restaurants and Hotels | 870 | 3129 | 361 | 686 | 889 |
| Mining | 204 | 69 | 24 | 129 | 596 |
| Education, Research & Devt. | 103 | 150 | 107 | 131 | 394 |
| Real Estate Activities | 340 | 197 | 201 | 202 | 112 |
| Trading | 6 | 140 | 0 | 228 | 0 |
| others | 419 | 43 | 292 | 232 | 215 |

**Note** : The data covers FDI received through SIA/FIPB & RBI routes only

**Source :** Reserve Bank of India (2016), Annual Report 2015-16, Mumbai: 178

To be continued...