

# Agriculture Sector in India

## Introduction

Agriculture plays a vital role in India's economy. Over 58 per cent of the rural households depend on agriculture as their principal means of livelihood. Agriculture, along with fisheries and forestry, is one of the largest contributors to the Gross Domestic Product (GDP). As per the 2nd advance estimates by the Central Statistics Office (CSO), the share of agriculture and allied sectors (including agriculture, livestock, forestry and fishery) is expected to be 17.3 per cent of the Gross Value Added (GVA).

India is the largest producer, consumer and exporter of spices and spice products. India's fruit production has grown faster than vegetables, making it the second largest fruit producer in the world. India's horticulture output, is estimated to be 287.3 million tonnes (MT) in after the first advance estimate. It ranks third in farm and agriculture outputs. Agricultural export constitutes 10 per cent of the country's exports and is the fourth-largest exported principal commodity. The agro industry in India is divided into several sub segments such as canned, dairy, processed, frozen food to fisheries, meat, poultry, and food grains.

The Department of Agriculture and Cooperation under the Ministry of Agriculture is responsible for the development of the agriculture sector in India. It manages several other bodies, such as the National Dairy Development Board (NDDB), to develop other allied agricultural sectors.

## Market Size

India's GDP is expected to grow at 7.1 per cent, led by growth in private consumption, while agriculture GDP is expected to grow above-trend at 4.1 per cent to Rs 1.11 trillion (US\$ 1,640 billion). As per the 2nd Advance Estimates, India's food grain production is expected to be 271.98 MT in. Production of pulses is estimated at 22.14 MT.

India's exports of basmati rice may rise to Rs 22,000-22,500 crore (US\$ 3.42-3.49 billion), with volume to around 4.09 MT, backed by a rise in average realisations. wheat production in India is expected to touch an all-time high of 98.6 MT during.

Groundnut exports from India are expected to cross 700,000 tonnes as compared to 537,888 tonnes during owing to the expected 70 per cent increase in the crop size due to good monsoons. India's groundnut exports rose to 653,240 MT @ India's export of grapes to Europe and China are expected to increase by 10 to 20 per cent this year on back of higher production on account of good monsoon and higher demand due to competitors such as Chile shifting focus to US market.

Spices exports from India grew by 9 per cent in volume and 5 per cent in value year-on-year to 660,975 tonnes and US\$ 1.87 billion respectively.

## Investments

According to the Department of Industrial Policy and Promotion (DIPP), the Indian agricultural services and agricultural machinery sectors have cumulatively attracted Foreign Direct Investment (FDI) equity inflow of about US\$ 2,315.33 million.

Some major investments and developments in agriculture are as follows:

- India and Brazil have signed a bilateral investment agreement, aimed at enhancing cooperation in areas of agriculture, cattle genomics, ship building, pharmaceuticals, defence production, ethanol production and oil and gas, between the countries.
- Zephyr Peacock, the India-focused private equity fund of US-based Zephyr Management, has invested an undisclosed amount in Bengaluru-based potato seeds firm Utkal Tubers India Pvt Ltd, which will be used to produce high-quality mini-tubers in a tissue culture laboratory and multiply them in its own development farms and through supervised contract farming in different regions of the country.
- Mahindra Agri Solutions Ltd (MASL), a unit of Mahindra & Mahindra Ltd, has agreed to purchase 60 per cent stake in OFD Holding BV, a Netherlands-based fruit distribution company, for Rs 36 crore (EUR 5 million), which will provide MASL access to European and Chinese markets for Indian grapes.

## Government Initiatives

Given the importance of the agriculture sector, the Government of India, planned several steps for the sustainable development of agriculture-

- Total allocation for rural, agricultural and allied sectors for FY 2017-18 has been increased by 24 per cent year-on-year to Rs 1,87,223 crore (US\$ 28.1 billion). A dedicated micro-irrigation fund will be set up by National Bank for Agriculture and Rural Development (NABARD) with a corpus of Rs 5,000 crore (US\$ 750 million). The government plans to set up a dairy processing fund of Rs 8,000 crore (US\$ 1.2 billion) over three years with initial corpus of Rs 2,000 crore (US\$ 300 million).
- The participation of women in Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has increased to 55 per cent and allocation to the scheme has been increased to a record Rs 48,000 crore (US\$ 7.2 billion).
- Short-term crop loans up to Rs 300,000 (US\$ 4,500) at subsidised interest rate of 7 per cent per annum would be provided to the farmers. An additional incentive of 3 per cent is provided to farmers for prompt repayment of loans within due date, making an effective interest rate for them at 4 per cent.

### Some of the recent major government initiatives in the sector are as follows:

- The NITI Aayog has proposed various reforms in India's agriculture sector, including liberal contract farming, direct purchase from farmers by private players, direct sale by farmers to consumers, and single trader license, among other measures, in order to double rural income in the next five years. The Ministry of Agriculture, Government of India, has been conducting various consultations and seeking suggestions from numerous stakeholders in the agriculture sector, in order to devise a strategy to double the income of farmers by 2022.
- The Maharashtra State Agriculture Marketing Board (MSAMB) has operationalised 31 farmer-to-consumer markets in the state, and plans to open 100 more such markets in the future, which would facilitate better financial remunerations for the farmers by allowing them to directly sell their produce in open markets.
- The Ministry of Labour and Employment plans to amend the Minimum Wage Act to raise the daily minimum wage of unskilled agricultural labour in C-class towns to Rs 350 (US\$ 5.2) in the central sphere, from the current wage of Rs 160 (US\$ 2.4) per day.
- The Central Government plans to open at least one Krishi Vigyan Kendra in all districts of the country, which will provide advanced agriculture technical assistance to the farmers near their farms itself.
- The Government of Karnataka plans to invest around Rs 1 trillion (US\$ 15.1 billion) for developing irrigation projects across the state to mitigate the impact of deficient rainfall and resulting drought on agriculture in recent years.
- The Government of India and the Government of Israel have expressed their commitment to further strengthen bilateral relations in the field of agriculture and allied sectors, as well as enhance cooperation at the government-to-government and business-to-business levels between the two countries, in a bid to further enhance the relationship.
- According to the Agriculture Ministry, 50,000 hectares of area is available for coconut cultivation in Bihar, the Coconut Development Board plans to equip the farmers thus making India the world leader in production, productivity, processing for value addition and export of coconut.

### Future to do

The agriculture sector in India is expected to generate better momentum in the next few years due to increased investments in agricultural infrastructure such as irrigation facilities, warehousing and cold storage. Factors such as reduced transaction costs and time, improved port gate management and better fiscal incentives would contribute to the sector's growth. Furthermore, the growing use of genetically modified crops will likely improve the yield for Indian farmers.

India is expected to be self-sufficient in pulses in the coming few years due to concerted efforts of scientists to get early-maturing varieties of pulses and the increase in minimum support price. ##

Exchange rate used: INR 1 = US\$ 0.0155.

**References:** The Economic Survey 2016-17, Agricultural and Processed Food Products Export Development Authority (APEDA), Department of Commerce and Industry, Press Information Bureau, Ministry of Statistics and Programme Implementation, Press Releases, Media Reports,

**Note:** # - as per Investment Information and Credit Rating Agency (ICRA), ! - according to the second advance estimate of the Ministry of Agriculture & Farmers Welfare, @ - as per Agricultural and Processed Food Products Export Development Authority (APEDA), \$ - as per the Central Statistics Office, ^ - according to the Spices Board of India, ## - as per Mr Radha Mohan Singh, Minister for Agriculture and Farmers Welfare,

## Agriculture and Food Industry In India

### Introduction

India's agrarian culture and varied regional climate have significantly contributed to the global food basket.

Indian curries, mangoes, snacks and spices are known for their excellent quality across the globe. Globally, India leads the following food segments:

- India is the second largest producer of fruits in the world and accounts for 10 per cent of the world fruit production with first rank in the production of bananas (30.43 million tonnes 22.94 per cent), papayas (6.1 million tonnes, 44.03 per cent) and mangoes including mangosteens, and guavas (19.21 million tonnes, 37.57 per cent)
- India is the largest milk producer in the world (155.5 million tonnes)
- India has the largest buffalo population (111.0 million heads)
- India is the largest pulses producer in the world (22.14 million tonnes, 25.4 per cent)
- Among vegetables, India ranks second in world (168.59 million tonnes, 10.7 per cent, and first in the production of Okra (6.4 million tonnes, 73.6 per cent)

## Export Highlights

Exports of agricultural and processed food products totalled US\$ 14.275 billion. During the period, export of cereals and animal products accounted for 37.60 per cent of the total exports, followed by livestock products (27.58 per cent), other processed foods (17.92 per cent), fresh fruits and vegetables (9.56 per cent), processed fruits and vegetables (6.38 per cent) and floriculture and seeds (0.96 per cent)

Indian agricultural/horticultural and processed foods are exported to more than 100 countries/regions; chief among them are the Middle East, Southeast Asia, SAARC countries, the EU and the US.

The Agricultural and Processed Food Products Export Development Authority (APEDA) plays a significant role in tapping India's agricultural strengths and works towards expanding the export potential of Indian agricultural and food products.

**Exports of agricultural and processed food products totaled US\$ 14.275 billion.**



Website: [www.apeda.gov.in](http://www.apeda.gov.in)

## Apparel Industry In India

### Introduction

Indian textiles and apparels have a history of fine craftsmanship and global appeal. Cotton, silk and denim from India are highly popular abroad, and with the upsurge in Indian design talent, Indian apparel too has found success in the fashion centres of the world.

India is the world's second-largest manufacturer and exporter of textiles and apparels, with a massive raw material and manufacturing base. The industry is a significant contributor to the economy, both in terms of its domestic share and exports. It contributes about 10 per cent to manufacturing production, 2 per cent to the GDP and 15 per cent to the country's total exports earnings. The sector is the second largest employment provider in the country, employing about 51 million people directly and 68 million people indirectly. The apparel and garment sector provides employment to 12.3 million people and produces 3.6 million tonnes (MT) of apparel and garments.

### Export highlights

- Total textile and apparel exports stood at US\$ 16.81 billion, contributing 14 per cent to India's exports worth US\$ 132 billion.
- Ready-made garments (RMG) exports from India stood at US\$ 17.357 billion.
- The ready-made garment segment contributed 42 per cent to Indian textile exports.
- India's share in global trade of textiles and apparels is 5 per cent.
- India is the largest cotton producer in the world (35.1 million bales of 170 kg each)
- It is the second largest producer of manmade fibre and filament in the world (2.511 million kg production)
- Fibre production in the country stood at 9 million tonnes (MT), and is expected to touch 10 MT.
- Fabric production in the country stood at 66 billion sq mts in FY 2015-16, and is expected to 69 billion sq mts.
- Main markets for Indian textile and apparel exports are:
  - The US
  - European Union
  - Parts of Asia
  - Middle East
- In the future, India's apparel exports are expected to increase considerably. Total exports of textiles and apparel are expected to touch US\$ 82 billion by 2021.

The Apparel Export Promotion Council (AEPIC) is the official body of apparel exporters that provides assistance to Indian exporters as well as to importers/international buyers choosing India as their preferred destination for sourcing garments.

**Total textile and apparel exports stood at US\$ 18.76 billion, contributing 14 per cent to the country's exports.**

Website: [www.aepcindia.com](http://www.aepcindia.com)

# Auto Components Industry in India

## Introduction

The Indian auto-components industry has experienced healthy growth over the last few years. Some of the factors attributable to this include: a buoyant end-user market, improved consumer sentiment and return of adequate liquidity in the financial system.

The auto-components industry accounts for almost seven per cent of India's Gross Domestic Product (GDP) and employs as many as 19 million people, both directly and indirectly. A stable government framework, increased purchasing power, large domestic market, and an ever increasing development in infrastructure have made India a favourable destination for investment.

## Market Size

The Indian auto-components industry can be broadly classified into the organised and unorganised sectors. The organised sector caters to the Original Equipment Manufacturers (OEMs) and consists of high-value precision instruments while the unorganised sector comprises low-valued products and caters mostly to the aftermarket category.

Over the last decade, the automotive components industry has scaled three times to US\$ 39 billion, while exports have grown even faster to US\$ 10.8 billion. This has been driven by strong growth in the domestic market and increasing globalisation (including exports) of several Indian suppliers.

The Indian Auto Component industry is expected to grow by 8-10 per cent, based on higher localisation by Original Equipment Manufacturers (OEM), higher component content per vehicle, and rising exports from India, as per ICRA Limited.

According to the Automotive Component Manufacturers Association of India (ACMA), the Indian auto-components industry is expected to register a turnover of US\$ 100 billion by 2020 backed by strong exports ranging between US\$ 80- US\$ 100 billion by 2026, from the current US\$ 11.2 billion.

## Investments

The cumulative Foreign Direct Investment (FDI) inflows into the Indian automobile industry during the period April 2000 – September 2016 were recorded at US\$ 15.80 billion, as per data by the Department of Industrial Policy and Promotion (DIPP).

Some of the major investments made into the Indian auto components sector are as follows:

- Gestamp, a Spanish automobile component manufacturing company, has invested Rs 260 crore (US\$ 38.63 million) in a new hot stamping plant in Pune, in order to cater to the increasing demand for lighter vehicles in India.
- Exide Industries, India's biggest automotive battery maker, plans to invest around Rs 300 crore (US\$ 45 million) in West Bengal to expand its capacity for advanced motorcycle batteries over a period of 18 months.
- Motherson Sumi Systems Ltd, an automobile components manufacturer, has acquired Finland-based truck wire maker PKC Group Pte for € 571 million (US\$ 609.57 million), which will help the company expand its presence in the global wiring harness business for commercial vehicles.
- Sundaram Clayton, part of the TVS group, plans to invest US\$ 50 million in US and Rs 400 crore (US\$ 59.76 million) in India over the next three years.
- Mercedes Benz India Private Limited has set up India's largest spare parts warehouse in Pune, with an area of 16,500 square meters which can stock up to 44,000 parts. It will also include a vehicle preparation centre that can stock up to 5,700 cars to customise them before delivery.
- JK Tyre and Industries Ltd, India's leading tyre manufacturer, has acquired Cavendish Industries Ltd (CIL) for Rs 2,200 crore (US\$ 329.2 million), which will enable JK's entry into the fast-growing two-wheeler and three-wheeler tyre market.
- Japanese auto major Honda is planning to step up supply and target exporting of auto components worth Rs 1,500 crore (US\$ 224.45 million) from India to its various international operations.
- Auto components maker Bharat Forge Ltd (BFL), the flagship company of the US\$ 3 billion Kalyani Group, has formalised agreement with Rolls-Royce Plc which will supply BFL with critical and high integrity forged and machined components
- Canada's Magna International Incorporated has started production at two facilities in Gujarat's Sanand, which will supply auto parts to Ford Motor Co in India
- Everstone Capital, a Singapore-based private equity (PE) firm, has purchased 51 per cent in Indian auto components maker SJS Enterprises for an estimated Rs 350 crore (US\$ 51.35 million).
- Arcelor Mittal signed a joint venture agreement with Steel Authority of India Ltd (SAIL) to establish an automotive steel manufacturing facility in India.
- German auto components maker Bosch Ltd opened its new factory at Bidadi, near Bengaluru, which is its fifth manufacturing plant in Karnataka. The company has also signed a memorandum of understanding (MoU) with Indian Institute of Science (IISc), Bengaluru with a view to strengthen Bosch's research and development in areas including mobility and healthcare thereby driving innovation for India-centric requirements.
- French tyre manufacturer Michelin announced plans to produce 16,000 tonnes of truck and bus tyres from its Indian facility this year, a 45 per cent rise from last year.
- Amtek Auto Ltd acquired Germany-based Scholz Edelstahl GmbH through its 100 per cent Singapore-based subsidiary Amtek Precision Engineering Pte Ltd.

- MRF Ltd plans to invest Rs 4,500 crore (US\$ 660.231 million) in its two factories in Tamil Nadu as part of its expansion plan.
- Hero MotoCorp is investing Rs 5,000 crore (US\$ 733.59 million) in five manufacturing facilities across India, Colombia and Bangladesh, to increase its annual production capacity to 12 million units by 2020.

## Future to do

The rapidly globalising world is opening up newer avenues for the transportation industry, especially while it makes a shift towards electric, electronic and hybrid cars, which are deemed more efficient, safe and reliable modes of transportation. Over the next decade, this will lead to newer verticals and opportunities for auto-component manufacturers, who would need to adapt to the change via systematic research and development.

The Indian auto-components industry is set to become the third largest in the world by 2025. Indian auto-component makers are well positioned to benefit from the globalisation of the sector as exports potential could be increased by up to four times to US\$ 40 billion by 2020.

Exchange Rate Used: INR 1 = US\$ 0.015

# Automobile Industry in India

## Introduction

The Indian auto industry is one of the largest in the world. The industry accounts for 7.1 per cent of the country's Gross Domestic Product (GDP). The Two Wheelers segment with 81 per cent market share is the leader of the Indian Automobile market owing to a growing middle class and a young population. Moreover, the growing interest of the companies in exploring the rural markets further aided the growth of the sector. The overall Passenger Vehicle (PV) segment has 13 per cent market share.

India is also a prominent auto exporter and has strong export growth expectations for the near future. overall automobile exports grew by 1.91 per cent. PV, Commercial Vehicles (CV), and Two Wheelers (2W) registered a growth of 5.24 per cent, 16.97 per cent, and 0.97 per cent respectively. In addition, several initiatives by the Government of India and the major automobile players in the Indian market are expected to make India a leader in the 2W and Four Wheeler (4W) market in the world by 2020.

## Market Size

The sales of PVs, CVs and 2Ws grew by 9.17 per cent, 3.03 per cent and 8.29 per cent respectively.

## Investments

In order to keep up with the growing demand, several auto makers have started investing heavily in various segments of the industry during the last few months. The industry has attracted Foreign Direct Investment (FDI) worth US\$ 15.79 billion during the period April 2000 to September 2016, according to data released by Department of Industrial Policy and Promotion (DIPP).

Some of the major investments and developments in the automobile sector in India are as follows:

- Electric car maker Tesla Inc. is likely to introduce its products in India.
- South Korea's Kia Motors Corp is close to finalising a site for its first factory in India, slated to attract US\$1 billion (Rs 6,700 crore) of investment. It is deciding between Andhra Pradesh and Maharashtra. The target for operationalising the factory at earliest.
- Several automobile manufacturers, from global majors such as Audi to Indian companies such as Maruti Suzuki and Mahindra & Mahindra, are exploring the possibilities of introducing driverless self-driven cars for India.
- BMW plans to manufacture a local version of below-500 CC motorcycle, the G310R, in TVS Motor's Hosur plant in Tamil Nadu, for Indian markets.
- Honda Motorcycle and Scooter India (HMSI) has inaugurated its 900th Honda Authorised Exclusive Dealership in India, thereby taking its total dealership network to 4,800 across the country and further plans to increase its network.
- Hero Moto Corp Ltd seeks to enhance its participation in the Indian electric vehicle (EV) space by pursuing its internal EV Programme in addition to investing Rs 205 crore (US\$ 30.75 million) to acquire around 26-30 per cent stake in Bengaluru-based technology start-up Ather Energy Pvt Ltd.
- Just Ride, a self-drive car rental firm, has raised US\$ 3 million in a bridge round of funding led by a group of global investors and a trio of Y Combinator partners, which will be utilised to amplify Just Ride's car sharing platform Just Connect and Yabber, an internet of things (IoT) device for cars that is based on the company's smart vehicle technology (SVT).
- Ford Motor Co. plans to invest Rs 1,300 crore (US\$ 195 million) to build a global technology and business centre in Chennai, which will be designed as a hub for product development, mobility solutions and business services for India and other markets.
- Cummins has plans to make India an export hub for the world, by investing in top components and technologies in India.
- Suzuki Motor Corporation, the Japan-based automobile manufacturer, plans to invest Rs 2,600 crore (US\$ 390 million) for setting up its second assembly plant in India and an engine and transmission unit in Mehsana, Gujarat.

- Mr Masayoshi Son, Chief Executive Officer, Soft Bank Group, has stated that Ola Cabs may introduce a fleet of one million electric cars in partnership with an electric vehicle maker and the Government of India, which could help reduce pollution and thereby transform the electric mobility sector in the country.
- China's biggest automobile manufacturer, SAIC Motor, plans to invest US\$ 1 billion in India by 2018, and is exploring possibilities to set up manufacturing unit in one of three states – Maharashtra, Andhra Pradesh and Tamil Nadu.
- Suzuki Motorcycle India Pvt Ltd has started exports of made-in-India flagship bike Gixxer to its home country of Japan, which will be in addition to current exports to countries in Latin America and surrounding countries.
- General Motors plans to invest US\$ 1 billion in India by 2020, mainly to increase the capacity at the Talegaon plant in Maharashtra from 130,000 units a year to 220,000 by 2025.
- FIAT Chrysler Automobiles has recently invested US\$280 million in its Ranjangaon plant to locally manufacture Jeep Compass, its new compact SUV which will be launched in India in August 2017.

## Government Initiatives

The Government of India encourages foreign investment in the automobile sector and allows 100 per cent FDI under the automatic route.

Some of the major initiatives taken by the Government of India are:

- The Government of India plans to introduce a new Green Urban Transport Scheme with a central assistance of about Rs 25,000 crore (US\$ 3.75 billion), aimed at boosting the growth of urban transport along low carbon path for substantial reduction in pollution, and providing a framework for funding urban mobility projects at National, State and City level with minimum recourse to budgetary support by encouraging innovative financing of projects.
- Government of India aims to make automobiles manufacturing the main driver of 'Make in India' initiative, as it expects passenger vehicles market to triple to 9.4 million units by 2026, as highlighted in the Auto Mission Plan (AMP) 2016-26.
- The Government plans to promote eco-friendly cars in the country i.e. CNG based vehicle, hybrid vehicle, and electric vehicle and also made mandatory of 5 per cent ethanol blending in petrol.
- The government has formulated a Scheme for Faster Adoption and Manufacturing of Electric and Hybrid Vehicles in India, under the National Electric Mobility Mission 2020 to encourage the progressive induction of reliable, affordable and efficient electric and hybrid vehicles in the country.

## Future to do

India's automotive industry is one of the most competitive in the world. It does not cover 100 per cent of technology or components required to make a car but it is giving a good 97 per cent, as highlighted by Mr Vicent Cobee, Corporate Vice-President, Nissan Motor's Datsun.

Leading auto maker Maruti Suzuki expects Indian passenger car market to reach four million units by 2020, up from 1.97 million units.

Mr Young Key Koo, Managing Director, Hyundai Motor India Ltd, has stated that India is a key market for the company, not only in terms of volumes but also as a hub of small products for exports to 92 countries.

Mr Joachim Drees, Global CEO, MAN Trucks & Bus AG, has stated that India has the potential to be among the top five markets, outside of Europe, by 2020 for the company, which is reflected in the appointment of its most experienced managers to India for increasing volumes and exports out of India.

The Indian automotive aftermarket is estimated to grow at around 10-15 per cent to reach US\$ 16.5 billion by 2021 from around US\$ 7 billion in 2016. It has the potential to generate up to US\$ 300 billion in annual revenue by 2026, create 65 million additional jobs and contribute over 12 per cent to India's Gross Domestic Product#.

According to Mr Guillaume Sicard, president, Nissan India Operations, the income tax rate cut from 10 per cent to 5 per cent for individual tax payers earning under Rs 5 lakh (US\$ 7,472) per annum will create a positive sentiment among likely first time buyers for entry level and small cars.

**References:** *Media Reports, Press Releases, Department of Industrial Policy and Promotion (DIPP), Automotive Component Manufacturers Association of India (ACMA), Society of Indian Automobile Manufacturers (SIAM), Union Budget*

Notes: \* - As per the Society of Indian Automobile Manufacturers (SIAM)

# - As per the Automotive Mission Plan 2016-26 prepared jointly by the Society of Indian Automobile Manufacturers (SIAM) and government

# Aviation Industry in India

## Introduction

India's civil aviation industry is on a high-growth trajectory. India aims to become the third-largest aviation market by 2026.

The Civil Aviation industry has ushered in a new era of expansion, driven by factors such as low-cost carriers (LCCs), modern airports, Foreign Direct Investment (FDI) in domestic airlines, advanced information technology (IT) interventions and growing emphasis on regional connectivity.

## Market Size

As per the IATA, India will become the third largest aviation market in the world in terms of passengers by 2026. Furthermore, the IATA also expects the air passengers to grow at a compound average growth rate (CAGR) of 3.7 per cent to double from 3.8 billion air passengers in 2016 to 7.2 billion air passengers by 2035. India's air cargo is estimated to grow at 9 per cent over the next few years, according to Mr Ashok Gajapathi Raju, Secretary of Ministry of Civil Aviation, Government of India.

India has become the world's fastest growing domestic travel market for the 22nd time in a row, recording a 26.6 per cent year-on-year growth, according to the IATA.

India has replaced Japan to become the third largest domestic aviation market globally, recording a total of 100 million domestic flyers in coming year, as compared to 97 million flyers in Japan during the same period, according to Centre for Asia Pacific Aviation (CAPA).

According to CAPA, domestic air traffic is expected to grow 25 per cent and cross 130 million in financial year .

The number of departures from India increased 20 per cent year-on-year to touch 131 million, according to the data by the IATA.

CAPA estimates that India's airlines reported a combined profit of US\$ 122 million in fiscal year.

## Investment

According to data released by the Department of Industrial Policy and Promotion (DIPP), FDI inflows in air transport (including air freight) stood at US\$ 1.01 billion.

### Key investments and developments in India's aviation industry include:

- Rolls-Royce Holdings Plc, the UK-based aircraft engine manufacturer, has opened a new defence service delivery centre (SDC) in Bengaluru, which would deliver real-time solutions for improving capability and provide faster front-line support to over 750 aircraft engines used by the Indian Air Force, Indian Navy and State-owned Hindustan Aeronautics Ltd (HAL).
- Qatar Airways is planning to start India's first fully owned foreign airline in partnership with Qatar Government's investment arm, Qatar Investment Authority, as per Qatar Airways.
- Indian budget airline carriers Indigo and Go Air, plan to expand their network to Gulf cities like Doha, Sharjah and Dammam, which would likely boost the growth of Indian aviation sector.
- GVK Power & Infrastructure Ltd., which operates the existing airports in Mumbai and Bangalore, has won the right to build Mumbai's second airport in Navi Mumbai, which will require an investment of Rs 16,000 crore (US\$ 2.48 billion) to build the airport with a capacity to handle 10 million passengers annually in the first phase, expected to be operational by 2019 and 60 million passengers a year by 2030.
- IndiGo, having 42 per cent of the Indian aviation market has entered into a partnership with global distribution system services operator Travel port, to expand its global presence by distributing its ancillary products to the portal's customers across 180 countries.
- Several European countries, including Greece, Netherlands, Georgia and Sweden, have shown interest in signing an open sky agreement with India, following the change of rules in India's National Civil Aviation Policy (NCAP), which is expected to significantly enhance the country's international connectivity.
- During the International Civil Aviation Negotiations (ICAN) 2016 held in Nassau in December 2016, India has signed Open Skies Agreement to encourage connectivity and passenger travel between India and Jamaica, Guyana, Czech Republic, Finland, Spain and Sri Lanka, apart from resolving other issues such as greater traffic rights, new service agreements and code sharing with several other countries.

### *Some major initiatives undertaken by the government are:*

- Indian airline companies like Air India, Air Deccan, SpiceJet, Air Odisha and Turbo Megha, have been awarded with the right to fly to 128 routes across India, requiring them to cap half the seats at nearly 50 per cent of the fare, under the Government of India's regional aviation scheme named UDAN.
- The Government of India has approved the construction of 18 Greenfield airports in the country, which would be executed and financed by the respective airport promoters, and are estimated to require an investment of Rs 30,000 crore (US\$ 4.66 billion).
- The Cabinet Committee on Economic Affairs, Government of India, has approved the proposal to revive 50 un-served and under-served airstrips in three financial years starting at an estimated cost of Rs 4500 crore (US\$ 698.7 million).
- The Government of India has started a new regional connectivity scheme (RCS) called Ude Desh ka Aam Nagrik (UDAN) under which fares will be capped at Rs 2,500 (US\$ 37.5) for half the seats in an one-hour flight, as per Mr Jayant Sinha, Minister of State Civil Aviation. The Government of India has also received bids from 11 airlines for the same.
- Mr Jayant Sinha, Minister of State for Civil Aviation, has stated that the government plans to double the number of airports in India over the next two to three years to cater to the increased passenger traffic due to developing regional air travel market.

- The Ministry of Civil Aviation along with Airports Authority of India (AAI) plans to develop small airports with frugal facilities, and encourage private airlines to bid for routes connecting these small airports with existing larger airports, thereby increasing regional air traffic.
- AAI plans to increase its capital expenditure by 25 per cent to Rs 2,500 crore (US\$ 375 million), primarily to expand capacity at 12 airports to accommodate rising air traffic, as per Chairman, AAI.
- The Ministry of Civil Aviation has revised its air services agreement with Netherlands, which would enable air carriers from both the countries to operate up to 28 flights each week, up from current weekly limit of 21 flights, which would benefit regional carriers as well as enhance connectivity between the countries.
- The Executive Development Programme of Rajiv Gandhi National Aviation University in collaboration with Indo US – American Cooperation Program, inaugurated by Minister for Civil Aviation, aims to promote skill development of senior leadership and close the gap of increasing demand for trained people in the aviation sector.

## Future to do

India's aviation industry is largely untapped with huge growth opportunities, considering that air transport is still expensive for majority of the country's population, of which nearly 40 per cent is the upwardly mobile middle class.

The industry stakeholders should engage and collaborate with policy makers to implement efficient and rational decisions that would boost India's civil aviation industry. With the right policies and relentless focus on quality, cost and passenger interest, India would be well placed to achieve its vision of becoming the third-largest aviation market by 2026 .

**References:** Media Reports, Press Releases, Press Information Bureau, Directorate General of Civil Aviation (DGCA), Airports Authority of India (AAI), Union Budget ,

# Banking Sector in India

## Introduction

As per the Reserve Bank of India (RBI), India's banking sector is sufficiently capitalised and well-regulated. The financial and economic conditions in the country are far superior to any other country in the world. Credit, market and liquidity risk studies suggest that Indian banks are generally resilient and have withstood the global downturn well.

Indian banking industry has recently witnessed the roll out of innovative banking models like payments and small finance banks. RBI's new measures may go a long way in helping the restructuring of the domestic banking industry.

## Market Size

The Indian banking system consists of 27 public sector banks, 26 private sector banks, 46 foreign banks, 56 regional rural banks, 1,574 urban cooperative banks and 93,913 rural cooperative banks, in addition to cooperative credit institutions. Public-sector banks control more than 70 per cent of the banking system assets, thereby leaving a comparatively smaller share for its private peers. Banks are also encouraging their customers to manage their finances using mobile phones.

ICRA estimates that credit growth in India's banking sector would be at 7-8 per cent in coming year.

## Key investments and developments in India's banking industry include:

- The Reserve Bank of India (RBI) has proposed to allow banks to invest in real estate investment trusts (REITs) and infrastructure investment trusts (Inv ITs) which is expected to benefit both real estate and banking sector in diversifying investor base and investment avenues respectively.
- The Canada Pension Plan Investment Board (CPPIB) and the Caisse de Depot Quebec (CDPQ) have acquired a 1.5 per cent stake in Kotak Mahindra Bank from Mr Uday Kotak, Executive vice-chairman and Managing director, Kotak Mahindra Bank, for a total consideration of Rs 2,254 crore (US\$ 350.0 million).
- Fullerton India Credit Co Ltd, a non-banking finance company (NBFC), has raised Rs 500 crore (US\$ 75 million) through masala bonds, to support its onward lending and other financing activities.
- The Insurance Regulatory and Development Authority of India (IRDA) has allowed insurers to invest up to 10 per cent in additional tier I (ATI) bonds, that are issued by banks to augment their tier I capital, in order to expand the pool of eligible investors for the banks.
- Qatar's Doha Bank plans to apply to the Qatar Central Bank and Reserve Bank of India for permission to establish a local subsidiary in India, with the vision to create a retail branch network in India.
- Fairfax Financial Holdings, a Canada-based financial services firm, has received an approval from the RBI to acquire a majority 51 per cent stake in Kerala-based Catholic Syrian Bank for Rs 1,000 crore (US\$ 150 million), which will be the first takeover of an Indian bank by a non-banking financial entity, after RBI tweaked ownership norms.
- India Post has received the final license from RBI to start its payment bank operations, thus becoming the third entity in India after Bharti Airtel and Paytm to receive payment bank license from RBI.

- Microfinance firm Ujjivan Financial Services Ltd has announced starting of banking services across its branches under the name of Ujjivan Small Finance Bank Ltd, thus becoming the largest among five small banks which are scheduled to start their operations or have already started.

## **The government and the regulator have undertaken several measures to strengthen the Indian banking sector.**

- Government of India has decided to amend Section 35 A of the Banking Regulation Act that will allow the Reserve Bank of India (RBI) to direct banks for the recovery of non-performing assets (NPAs)
- The Reserve Bank of India (RBI) has proactively instructed banks to increase their levels of provision on the loans provided to the telecom sector as a prudent measure, which will help to shore up provisions for future recognition of any non-performing assets arising out of the sector.
- The RBI has allowed banks in India to raise funds through issuance of rupee-denominated bonds overseas, also called masala bonds, within the current limit of Rs 2,44,323 crore (US\$ 36.6 billion) set for foreign investment in corporate bonds.
- The Ministry of Labour and Employment has successfully opened around 3,840,863 bank accounts as on December 26, 2016, for workers especially in the unorganized sector, as part of its campaign to promote and ensure cashless transfer of wages to workers.
- The National Bank for Agriculture and Rural Development (NABARD) plans to provide around 200,000 point-of-sale (PoS) machines in 100,000 villages and distribute Ru Pay cards to over 34 million farmers across India, to enable farmers to undertake cashless transactions.
- The Government of India's indigenous digital payments application, BHIM (Bharat Interface for Money), has recorded 18 million downloads since its launch on December 30, 2016, according to Mr Amitabh Kant, Chief Executive Officer, NITI Aayog.
- The Ministry of Finance has lowered the threshold for making electronic payments to suppliers, contractors or institutions from Rs 10,000 (US\$ 150) to Rs 5,000 (US\$ 75), in order to attain the goal of complete digitisation of government payments.

## **Future to do**

Enhanced spending on infrastructure, speedy implementation of projects and continuation of reforms are expected to provide further impetus to growth. All these factors suggest that India's banking sector is also poised for robust growth as the rapidly growing business would turn to banks for their credit needs.

Also, the advancements in technology have brought the mobile and internet banking services to the fore. The banking sector is laying greater emphasis on providing improved services to their clients and also upgrading their technology infrastructure, in order to enhance the customer's overall experience as well as give banks a competitive edge.

Many banks, including HDFC, ICICI and AXIS are exploring the option to launch contact-less credit and debit cards in the market shortly. The cards, which use near field communication (NFC) mechanism, will allow customers to transact without having to insert or swipe.

Mr Bill Gates, Co-founder of Microsoft Corp, has stated that India will move quite rapidly to a digital payments economy in as little as seven years, based on the introduction of digital payment banks combined with other things like direct benefit transfers, universal payments interface and Aadhaar.

**References:** *Media Reports, Press releases, Reserve Bank of India, Press Information Bureau, [www.pmjdy.gov.in](http://www.pmjdy.gov.in), Union Budget.*

# **Biotechnology industry in India**

## **Introduction**

The biotechnology sector of India is highly innovative and is on a strong growth trajectory. The sector, with its immense growth potential, will continue to play a significant role as an innovative manufacturing hub. The sector is one of the most significant sectors in enhancing India's global profile as well as contributing to the growth of the economy.

India is among the top 12 biotech destinations in the world and ranks third in the Asia-Pacific region. India has the second-highest number of US Food and Drug Administration (USFDA)-approved plants, after the USA and is the largest producer of recombinant Hepatitis B vaccine. Out of the top 10 biotech companies in India (by revenue), seven have expertise in bio-pharmaceuticals and three specialise in agri-biotech.

India has no dearth of talent in biotechnology, as a number of institutions, both government and autonomous, provide the necessary opportunities for the students seeking to obtain a degree in this sector. The Government of India has provided adequate scope to this sector by providing facilities for Research and Development (R&D) in the field of biotechnology.

## **Market size**

The Indian biotech industry holds about 2 per cent share of the global biotech industry. The biotechnology industry in India, comprising about 800 companies, is expected to be valued at US\$ 11.6 billion. The government has to invest US\$ 5 billion to develop human capital, infrastructure and research initiatives if it is to realise the dream of growing the sector into a US\$ 100 billion industry by 2025, as per Union Minister for Science and Technology.

Bio pharma is the largest sector contributing about 62 per cent of the total revenue followed by bio-services (18 per cent), bio-agri (15 per cent), bio-industry (4 per cent), and bio-informatics contributing (1 per cent).

The high demand for different biotech products has also opened up scope for the foreign companies to set up base in India. India has emerged as a leading destination for clinical trials, contract research and manufacturing activities owing to the growth in the bio-services sector.

## Investments

India's biotech sector has attracted significant amount of attention over the past two decades. Several global companies have aggressively joined hands with Indian companies due to India's strong generic biotechnology potential. Some of the recent investments and developments in this sector are as follows:

- The Telangana state government's flagship pharma and biotech event – Bio Asia attracted investments to the tune of Rs 3,382 crore (US\$ 507.3 million).
- During the Vibrant Gujarat Global Summit, 54 MoUs worth Rs 5,022 crore (US\$ 736.1 million) in the biotechnology sector were signed by 37 companies.
- Syngene International Ltd, the contract research services arm of Biocon Ltd, is setting up a drug discovery and development center in Bengaluru for Amgen Inc., a biotechnology company based in the US.

## Government Initiatives

A Network of Technology Centers and promotion of start-ups by Small Industries Development Bank of India (SIDBI) are among the steps taken by the Government of India to promote innovation and entrepreneurship in the agro industry proposed by the Ministry of Micro, Small & Medium Enterprises (MSME) in a new scheme. The Government of India has taken several initiatives to improve the biotechnology sector in the country as well as offer enough scope for research in this field. The Department of Biotechnology (DBT) along with other government funded institutions such as National Biotechnology Board (NBTB) and many other autonomous bodies representing the biotechnology sector, are working together in order to project India as a global hub for biotech research and business excellence. Some of the recent major initiatives are as follows:

- In the Union Budget, the Department of Biotechnology (DBT) received Rs 2,222.11 crore (US\$ 333.31 million), an increase of 22 per cent, to continue implementing the department's national biotech strategy and target increasing the turnover from the sector to \$100 billion by 2025 from \$7 billion.
- The Telangana government also inked an MoU with PE firm Cerestra to explore a 'Life Sciences Infrastructure Fund' with a corpus of Rs 1,000 crore (US\$ 150 million) to create a sophisticated modular plug and play infrastructure for pharma, biotech and medical devices industry.

## Future to do

With the country offering numerous comparative advantages in terms of R&D facilities, knowledge, skills, and cost effectiveness, the biotechnology industry in India has immense potential to emerge as a global key player.

India constitutes around 8 per cent of the total global generics market, by volume, indicating a huge untapped opportunity in the sector. Outsourcing to India is projected to spike up after the discovery and manufacture of formulations. Hybrid seeds, including GM seeds, represent new business opportunities in India based on yield improvement.

India currently has a marginal share in the global market for industrial enzymes. Hence, there is an opportunity in focused R&D and knowledge-based innovation in the field of industrial enzymes, which can innovatively replace polluting chemical processes into eco-friendly processes that also deliver environmental sustainability. Another interesting field of study is the area of bio-markers and companion diagnostics, which will enable to optimise the benefits of biotech drugs.

*References: Press Information Bureau (PIB), Media Reports and Press Releases, Department of Industrial Policy and Promotion (DIPP), Department of Biotechnology, Union Budget.*

# Carpet Industry In India

## Introduction

Carpet weaving is an ancient Indian tradition, with the industry flourishing in the country 16th century onwards. Today, India is the world's largest producer and exporter of handmade carpets in terms of value and volume. Around 75–85 per cent of carpets manufactured in India are exported. Indian carpets are known worldwide for their excellent design, fascinating colours and quality.

## KEY MARKETS AND EXPORT DESTINATIONS

Exports of handmade carpets and other floor coverings from India stood at US\$ 1.45 billion in FY 2015-16. India is responsible for around 40 per cent of worldwide export of handmade carpets. Indian handmade carpets are exported to 73 countries in the world, the US being the largest importer.

## CARPET EXPORT PROMOTION COUNCIL

The Carpet Export Promotion Council (CEPC) is the apex body of exporters of hand-made carpets and other floor coverings in India. The Council assists exporters by identifying new markets, providing financial aid, sponsoring participation in worldwide events, arranging buyer-seller meets and resolving trade disputes.

**Total export for carpets stood at US\$ 1.45 billion in fiscal year, growing by 4.9 per cent Y-o-Y**

Source: Carpet Export Promotion Council (CEPC)

Total export for carpets stood at US\$ 1.8 billion in fiscal year, growing by 15.24 per cent Y-o-Y



Website: [www.indiancarpets.com](http://www.indiancarpets.com)

## Cashew Industry in India

### Introduction

Cashew (*Anacardium occidentale* L.), a tree native of Eastern Brazil, was introduced in India by the Portuguese nearly five centuries ago. In India, cashew was first introduced in Goa, from where it spread to other parts of the country. Initially, it found use in soil binding to check erosion. Commercial cultivation began in the early 1960s and, over the years, cashew became a crop with high economic value and attained the status of an export-oriented commodity, earning considerable foreign exchange for the country.

### KEY MARKETS AND EXPORT DESTINATIONS

- India is the largest cashew processor in the world (25 lt of raw cashew nut per annum)
- Export of cashewnut shell liquid/Cardanol from India stood at 3,394 tonnes, valued at Rs 13.01 crore (US\$ 2.01 million) during fiscal year, while exports of cashew kernels stood at 81,110 MT (provisional), valued at Rs 5,077 crore (US\$ 786.59 million).
- Export earnings from cashew and allied products stood at US\$ 765 million.
- India accounts for about 65 per cent of global cashew exports.
- India exports cashew kernels to over 60 countries. Its major markets are the US, the Netherlands, Japan, Spain, France, Germany, the UK as well as Middle East countries such as the UAE and Saudi Arabia.
- The US is the largest market for Indian cashew kernels, followed by the UAE and the Netherlands, while Indian Cashew nut shell liquid is largely exported to South Korea, followed by China and the US.

### CASHEW EXPORT PROMOTION COUNCIL OF INDIA

The Cashew Export Promotion Council of India (CEPCI) works to promote the export of cashew kernels and CNSL. The council serves as an intermediary between importers of cashew kernels and exporters who are members of the council. It also deals with disputes on exports/imports arising due to quality standards and breach of contractual obligations, among others. It undertakes numerous activities, such as organising global buyer-seller meets as well as studies on nutritional aspects of cashew, and providing support to cashew processors and exporters for improving infrastructure.

*Export earnings from cashew and allied products stood at US\$ 765 million.*



Website: [www.cashewindia.org](http://www.cashewindia.org)

## Cement industry in India

India is the second largest producer of cement in the world. No wonder, India's cement industry is a vital part of its economy, providing employment to more than a million people, directly or indirectly. Ever since it was deregulated in 1982, the Indian cement industry has attracted huge investments, both from Indian as well as foreign investors.

India has a lot of potential for development in the infrastructure and construction sector and the cement sector is expected to largely benefit from it. Some of the recent major government initiatives such as development of 98 smart cities are expected to provide a major boost to the sector.

Expecting such developments in the country and aided by suitable government foreign policies, several foreign players such as Lafarge-Holcim, Heidelberg Cement, and Vicat have invested in the country in the recent past. A significant factor which aids the growth of this sector is the ready availability of the raw materials for making cement, such as limestone and coal.

## Market Size

Cement prices in India recorded a 6.7 per cent month-on-month growth, thereby indicating the probability of growth in volume and profitability of cement companies.

The housing sector is the biggest demand driver of cement, accounting for about 67 per cent of the total consumption in India. The other major consumers of cement include infrastructure at 13 per cent, commercial construction at 11 per cent and industrial construction at 9 per cent.

The cement capacity in India is estimated to be at 420 MT with production growing at 5-6 per cent per year. The country's per capita consumption stands at around 225 kg.

The Indian cement industry is dominated by a few companies. The top 20 cement companies account for almost 70 per cent of the total cement production of the country. A total of 188 large cement plants together account for 97 per cent of the total installed capacity in the country, with 365 small plants account for the rest. Of these large cement plants, 77 are located in the states of Andhra Pradesh, Rajasthan and Tamil Nadu.

## Investments

On the back of growing demand, due to increased construction and infrastructural activities, the cement sector in India has seen many investments and developments in recent times.

According to data released by the Department of Industrial Policy and Promotion (DIPP), cement and gypsum products attracted Foreign Direct Investment (FDI) worth US\$ 5.24 billion.

### Some of the major investments in Indian cement industry are as follows:

- Emami Ltd, a fast-moving consumer goods (FMCG) company, plans to invest around Rs 8,500 crore (US\$ 1.32 billion) to scale up its cement production capacity from 2.4 million tonnes (MT) to 15-20 MT in the next three to five years.
- The Gujarat-based Nirma group, with presence in detergent, soap and chemicals sector, has bought Lafarge India's cement business, consisting of 11 MT production capacity, for US\$ 1.4 billion.
- FL Smidth, a global engineering company based in Copenhagen, has signed a contract with India's Larsen & Toubro Limited for engineering, procurement and supply of equipment for a complete cement production line with a capacity of 3,000 tonne in Tamil Nadu.

## Future to do

The eastern states of India are likely to be the newer and virgin markets for cement companies and could contribute to their bottom line in future. In the next 10 years, India could become the main exporter of clinker and gray cement to the Middle East, Africa, and other developing nations of the world. Cement plants near the ports, for instance the plants in Gujarat and Visakhapatnam, will have an added advantage for exports and will logistically be well armed to face stiff competition from cement plants in the interior of the country.

A large number of foreign players are also expected to enter the cement sector, owing to the profit margins and steady demand. In future, domestic cement companies could go for global listings either through the FCCB route or the GDR route.

With help from the government in terms of friendlier laws, lower taxation, and increased infrastructure spending, the sector will grow and take India's economy forward along with it.

**References:** Media Reports, Press releases, Union Budget, Edelweiss Securities Ltd .

Notes: # – 'India Cement' report by Nomura Research .

# Chemicals industry in India

## Introduction

Basic chemicals and their related products (petrochemicals, fertilisers, paints, varnishes, glass, perfumes, toiletries, pharmaceuticals, etc.) constitute a significant part of the Indian economy. Among the most diversified industrial sectors, chemicals cover an array of more than 70,000 commercial products. total Foreign Direct Investments (FDI) in chemicals (excluding fertilisers) stood at US\$ 783 million whereas cumulative FDI was US\$ 12.683 billion.

India is the sixth largest producer of chemicals globally and third largest producer in Asia in terms of output. The country ranks third globally in the production of agro chemicals and contributes around 16 per cent to the global dyestuff and dye intermediates production.

## Key Markets and Export Destinations

Total exports of dyes and dye intermediates, organic and inorganic chemicals, including agro chemicals, cosmetics and toiletries, essential oils, incense sticks and castor oil, stood at US\$ 8.72 billion (provisional).

The US, the UAE, the UK, Bangladesh and Saudi Arabia are the leading importers of cosmetics, toiletries and essential oils.

Over (provisional), exports of dyes increased 0.48 per cent year-on-year to US\$ 1.42 billion and exports of intermediates stood at US\$ 140.48 million. During the period, exports of essential oils increased 3.68 per cent to US\$ 82.56 million and exports of castor oil stood at US\$ 487.18 million. Exports of inorganic, organic and agro chemicals stood at US\$ 508.34 million, US\$ 3.47 billion and US\$ 1.52 billion respectively.

## BASIC CHEMICALS, PHARMACEUTICALS AND COSMETICS EXPORT PROMOTION COUNCIL

The promotion of product groups such as dyes and dye intermediates, basic inorganic and organic chemicals, including agro-chemicals, cosmetics, toiletries, essential oils, incense sticks, castor oil and its derivatives, is handled by the Basic Chemicals, Pharmaceuticals and Cosmetics Export Promotion Council, which is popularly known as CHEMEXCIL. The Council organises promotional events and fairs to help exporters identify potential markets abroad and providing publicity and marketing back-up.

**Total export for chemicals stood at US\$ 8.72 billion in fiscal year, growing by 0.40 per cent Y-o-Y**

Source: Basic Chemicals, Pharmaceuticals and Cosmetics Export Promotion Council

**Total export for inorganic chemicals stood at US\$ 1.42 billion in fiscal year, growing by 4.8 per cent Y-o-Y**



Website: [www.chemexcil.gov.in](http://www.chemexcil.gov.in)

## Coffee Industry in India

### Introduction

In India, coffee is grown in regions that receive 2,500–4,000mm rainfall across more than 100 days, followed by a continuous dry period of a similar duration. Coffee growing areas in the country have diverse climatic conditions, which are suitable for the cultivation of different varieties of coffee.

### Key Markets and Export Destinations

- India is the third-largest producer and exporter of coffee in Asia, and the sixth-largest producer and fifth-largest exporter of coffee in the world.
- The country accounts for 3.92 per cent of the global coffee production.
- The post-monsoon coffee production is estimated at 316,700 million tonnes (MT), as against 348,000 tonnes.
- Coffee exports from India stood at 358,458 tonnes valued at US\$ 848.60 million, registering a year-on-year growth of 12.70 per cent.
- Italy, Russia, Germany, Belgium, Turkey, Slovenia, Jordan, Australia, Greece and Poland are the leading importers of Indian coffee.
- Of the total coffee produced in India, ~70 per cent is exported and ~30 per cent is consumed domestically.

## COFFEE BOARD OF INDIA

The Coffee Board of India is engaged in the research, development, extension, quality upgrade, market information, and domestic and international promotion of Indian coffee. Since 2002, the board has been conducting the India International Coffee Festival, a biennial event held in India in collaboration with other industry stakeholders.

*The overall production of coffee is expected to reach 320,000 tonnes in fiscal year.*



Website: [www.indiacoffee.org](http://www.indiacoffee.org)

## Electronic and Computer Software Industry In India

### Introduction

The IT & electronics industry is one of the fastest-growing industries in India, both in terms of production and exports. In fact, software development and IT-enabled services (ITeS) have made India's brand equity a force to reckon with. According to a study by Assocham and Ernst and Young (EY), the Indian electronics and hardware industry is expected to grow at a compound annual growth rate (CAGR) of 13-16 per cent to touch US\$ 112-130 billion in coming year.

The Indian information technology-business process management (IT-BPM) sector contributes 56 per cent in the total global outsourcing market, and accounts for the largest share in India's services export (45 per cent). In 2015, the sector contributed around 9.3 per cent to India's gross domestic product (GDP).

### Advantage India

Total IT-BPM exports from India stood at US\$ 107.8 billion, out of which IT services export stood at US\$ 61.0 billion, BPM industry exports stood at US\$ 24.4 billion, and ER&D and Software Product Development exports stood at US\$ 22.4 billion.

- In the technology driven startups, India ranks third in the world (4,200 technology start-ups in year)
- India has favorable government policy and regulatory support for the electronics & IT industry.
- The industry offers a range of services, from low-end application development to high-end integrated IT solutions across multiple verticals, with a well-developed vendor base.
- The Indian IT & software industry adheres to quality processes and standards, with most companies aligning operations with international standards.
- Software technology parks and special economic zones in India provide an affordable real estate space for IT companies.

### ELECTRONICS AND COMPUTER SOFTWARE EXPORT PROMOTION COUNCIL

The Electronics and Computer Software Promotion Council (ESC) was formed to provide a platform for India's IT & electronics industry. With exports to more than 200 countries, ESC has successfully steered the direction of India's electronics and software exports. ESC offers a comprehensive database of industry companies, and products and capabilities of all major players.

- The council facilitates import/export collaborations, joint ventures, sub-contracting tie-ups, and technology transfers for industry players.
- It provides access to published reports on markets, products and trade statistics, business opportunities, and government policies.

**The Indian electronics and hardware industry is expected to grow at a compound annual growth rate (CAGR) of 13-16 per cent to touch US\$ 112-130 billion. Total exports for Electronics good and components stood at US\$ 3.4 billion for fiscal year.**



Electronics and Computer Software  
Export Promotion Council

Website: [www.escindia.in](http://www.escindia.in)

# Cotton Industry In India

Cotton plays an important role in the Indian economy as the country's textile industry is predominantly cotton based. India is one of the largest producers as well as exporters of cotton yarn. The Indian textile industry contributes around 4 per cent to country's gross domestic product (GDP), 14 per cent to industrial production and 15 per cent to total exports earnings. The industry is also the second-largest employer in the country after agriculture, providing employment to over 51 million people directly and 68 million people indirectly, including unskilled women.

The states of Gujarat, Maharashtra, Telangana, Andhra Pradesh, Karnataka, Madhya Pradesh, Haryana, Rajasthan, and Punjab are the major cotton producers in India.

## Key Markets and Export Destinations

- Total value of textiles and clothing exports from India stood at US\$ 36.8 billion in fiscal year.
- The value of cotton yarn exported from India in 2015-16 stood at US\$ 3.6 billion, while export of cotton fabrics, cotton made ups and raw cotton stood at US\$ 2.1 billion, US\$ 5.2 billion, and US\$ 1.9 billion respectively.
- India has overtaken Italy and Bangladesh, and is now the second largest textile & clothing exporter in the world, contributing around 5 per cent to the global textile and clothing trade.
- USA is the biggest importer of cotton textiles from India with a share of 22.7 per cent, followed by China (13.9 per cent), Bangladesh (9.0 per cent), UAE (5.7 per cent) and Germany (3.1 per cent), among others

Various reputed foreign retailers and brands such as Carrefour, Gap, H&M, JC Penney, Levi Strauss, Macy's, Marks & Spencer, Metro Group, Nike, Reebok, Tommy Hilfiger and Wal-Mart import Indian textile products.

### Cotton Textile Export Promotion Council

The Cotton Textile Export Promotion Council (TEXPROCIL) takes part in national and international events to enhance the visibility of Indian products, advertises and promotes Indian products in various media vehicles such as fashion magazines, event-related pull-outs, India reports and leading trade magazines, and organises buyer-seller meets (BSM) and trade delegation visits.

**India's cotton production is expected to grow by 3.8 per cent year-on-year to 35.1 million bales of 170 kg each for the fiscal year.**

**India's export of cotton is projected at 5 million bales of 170 kg each in fiscal year.**

Website: [www.texprocil.org](http://www.texprocil.org)

# Education Sector in India

## Introduction

India holds an important place in the global education industry. The country has more than 1.5 million schools with over 260 million students enrolled and about 751 universities and 35,539 colleges. India has one of the largest higher education systems in the world. However, there is still a lot of potential for further development in the education system.

India has become the second largest market for e-learning after the US. The sector is currently pegged at US\$ 2 billion and is expected to reach US\$ 5.7 billion by 2020. The distance education market in India is expected to grow at a Compound Annual Growth Rate (CAGR) of around 11 per cent\* during 2016-2020. Moreover, the aim of the government to raise its current gross enrolment ratio to 30 per cent by 2020 will also boost the growth of the distance education in India.

## Market Size

The education sector in India is poised to witness major growth in the years to come as India will have world's largest tertiary-age population and second largest graduate talent pipeline globally by the end of 2020. The education market in India is currently valued at US\$ 100 billion and is expected to nearly double to US\$ 180 billion by 2020.\* Currently, the school segment is valued at US\$ 52 billion and contributes 52 per cent to the education market in India, higher education contributes 15 per cent of the market size, text-book, e-learning and allied services contribute 28 per cent and vocational education in manufacturing and services contributes 5 per cent. Higher education system in India has undergone rapid expansion. Currently, India's higher education system is the largest in the world enrolling over 70 million students while in less than two decades, India has managed to create additional capacity for over 40 million students. It witnesses spending of over Rs 46,200 crore (US\$ 6.93 billion).

## Investment

The total amount of Foreign Direct Investments (FDI) inflow into the education sector in India stood at US\$ 1.42 billion from April 2000 to March 2017, according to data released by Department of Industrial Policy and Promotion (DIPP).

The education and training sector in India has witnessed some major investments and developments in the recent past. Some of them are:

- Talent Sprint, a skill development company based in Hyderabad, has announced the launch of 'Smart Campus', where it plans to skill around 1 million people in the areas of IT and banking by the year 2020.
- KKR and Co Lp, the US-based private equity giant, plans to invest around Rs 700 crore (US\$ 105 million) in coaching firm Resonance Eduventures Limited, which will be used to buy back shares from existing investors and expand its presence to more geographies.
- UAE-based Gamma Group, outlined plans of investing around Rs 3,000 crore (US\$ 450 million) in the infrastructure, health and education sectors of Kerala, which is expected to generate around 2,000 indirect and direct jobs in the state.
- Welingkar Institute of Management Development and Research has signed two memorandum of understanding (MoUs) with Israeli universities, namely Hafia University of Israel and IDC Herzliya, which includes pledging cooperation in the fields of study of technology, agriculture, archaeology, biology, etc.
- International Finance Corporation (IFC) has invested US\$ 15 million in education venture Byju's for a minority stake, which is expected to help the test-preparation platform to expand domestically and internationally.
- Education technology companies in India raised around US\$ 323 million across 26 deals in fiscal year, as against US\$ 98 million raised through 23 deals in previous year.
- New York Life Insurance Company, the largest mutual life insurance company in the US, has invested Rs 121 crore (US\$ 18.15 million) in Max Ventures and Industries Ltd for a 22.51 per cent stake, which will be used by Max for investing in new focus areas of education and real estate.

## Government Initiatives

Some of the other major initiatives taken by the Government of India are:

- The Union Budget has made the following provisions for the education sector:
  - The Budget has pegged an outlay of Rs 79,685.95 crore (US\$ 11.952 billion) for the education sector for financial year, up from Rs 72,394 crore (US\$ 10.859 billion) in fiscal year—a 9.9 per cent rise.
  - The Government of India has allocated around Rs 17,000 crore (US\$ 2.55 billion) towards skilling, employment generation, and providing livelihood to millions of youth, in order to boost the Skill India Mission.
- The Government of India has approved an all-time record of over 4,000 post-graduation (PG) medical seats to be added in various medical colleges and hospitals for the academic session, said Union Minister of Health and Family Welfare.
- The Cabinet Committee on Economic Affairs, Government of India, has approved the proposal to open 50 new Kendriya Vidyalayas (KV) under Civil/Defence sector in the country requiring an investment of Rs 1,160 crore (US\$ 180.11 million).
- The Government of India and the World Bank have signed a US\$ 201.50 million International Development Association (IDA) credit agreement for the Third Technical Education Quality Improvement Programme (TEQIP III), aimed at improving the efficiency, quality and equity of engineering education across several focus states.
- The Ministry of Skill Development and Entrepreneurship has launched the Pradhan Mantri Yuva Yojana, which will provide entrepreneurship education and training to over 700,000 students in 5 years through 3,050 institutes.
- The Cabinet Committee on Economic Affairs has approved opening of one Jawahar Navodaya Vidyalaya (JNV) in each of the 62 uncovered districts with an outlay of Rs 2,871 crore (US\$ 430.6 million), which is expected to benefit over 35,000 students in rural areas and provide direct permanent employment to 2,914 individuals.
- The Catalyst initiative by the Government of India and United States Agency for International Development (USAID) is expected to create awareness about digital payments across 60 million traders and merchants in the country.
- The Ministry of Labour and Employment will set up Model Career Centres (MCC) across the country. Out of the 950 employment exchanges in India, 100 would be developed as model centres with an investment of Rs 350 crore (US\$ 52.5 million). The Union Government also plans to set up 100 driver training institutes across India.
- Minister for Law and Justice and Information Technology, has stated that the Government of India will likely educate over 10 million people on e-payments in rural India, through the newly-launched Digi Dhan Abhiyan or digital financial literacy programme.
- The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved 'Pradhan Mantri Gramin Digital Saksharta Abhiyan' (PMGDISHA) to make 60 million rural households digitally literate. The outlay for this project is Rs 2,351.38 crore (US\$ 353.70 million) to usher in digital literacy in rural India.
- Prime Minister Mr Narendra Modi launched the Skill India initiative – 'Kaushal Bharat, Kushal Bharat'. Under this initiative, the government has set itself a target of training 400 million citizens by 2022 that would enable them to find jobs. The initiatives launched include various programmes like: Pradhan Mantri Kaushal Vikas Yojana (PMKVY), National Policy for Skill Development and Entrepreneurship, Skill Loan scheme, and the National Skill Development Mission.

- PMKVY is the flagship program under the Skill India Initiative. The Union Government plans to set up skill development centres across India with an investment of Rs 12,000 crore (US\$ 1.8 billion) to create job opportunities for 10 million individuals by 2020 under PMKVY, as per Mr Bandaru Dattatreya, Minister of Labour and Employment.
- National Policy for Skill Development and Entrepreneurship 2015 is India's first integrated program to develop skill and promote entrepreneurship simultaneously. The Union Government plans to provide Rs 7,000 crore (US\$ 1.05 billion) to states to spend on skill development, and thereby accelerate the ambitious task of skilling 500 million Indians by 2022, and encourage creation of an ecosystem of entrepreneurs.
- The National Skill Development Mission has created an elaborate skilling eco-system and imparted training to 7.6 million youth since its launch in 2015 and the government now plans to set up 1,500 Multi Skill Training Institutes across the country.

## Future to do

Various government initiatives are being adopted to boost the growth of distance education market, besides focussing on new education techniques, such as E-learning and M-learning.

Education sector has seen a host of reforms and improved financial outlays in recent years that could possibly transform the country into a knowledge haven. With human resource increasingly gaining significance in the overall development of the country, development of education infrastructure is expected to remain the key focus in the current decade. In this scenario, infrastructure investment in the education sector is likely to see a considerable increase in the current decade.

Moreover, availability of English speaking tech-educated talent, democratic governance and a strong legal and intellectual property protection framework are enablers for world class product development, as per Mr Amit Phadnis, President-Engineering and Site Leader for Cisco (India).

The Government of India has taken several steps including opening of IIT's and IIM's in new locations as well as allocating educational grants for research scholars in most government institutions. Furthermore, with online modes of education being used by several educational organisations, the higher education sector in India is set for some major changes and developments in the years to come.

**References:** *Media Reports, Press Releases, Press Information Bureau, RNCOS Report, Department of Industrial Policy and Promotion (DIPP), Union Budget*

Note: # – As per the report 'Distance Learning Market in India 2016-2020' by Technavio, ## - According to data from Venture Intelligence, \* - According to report by Technopak

# Engineering Industry in India

## Introduction

The Indian Engineering sector has witnessed a remarkable growth over the last few years driven by increased investments in infrastructure and industrial production. The engineering sector, being closely associated with the manufacturing and infrastructure sectors, is of strategic importance to India's economy.

India on its quest to become a global superpower has made significant strides towards the development of its engineering sector. The Government of India has appointed the Engineering Export Promotion Council (EEPC) as the apex body in charge of promotion of engineering goods, products and services from India. India exports transport equipment, capital goods, other machinery/equipment and light engineering products such as castings, forgings and fasteners to various countries of the world.

India became a permanent member of the Washington Accord (WA) in June 2014. The country is now a part of an exclusive group of 17 countries who are permanent signatories of the WA, an elite international agreement on engineering studies and mobility of engineers.

## Market size

The capital goods & engineering turnover in India is expected to reach US\$ 125.4 billion by FY17.

India exports its engineering goods mostly to the US and Europe, which accounts for over 60 per cent of the total exports. Recently, India's engineering exports to Japan and South Korea have also increased with shipments to these two countries rising by 16 and 60 per cent respectively. Sri Lanka, Nepal and Bangladesh have also emerged as the major destinations for India's engineering exports.

According to data from the Engineering Export Promotion Council of India, engineering exports from India grew 11.33 per cent year-on-year to reach US\$ 65.23 billion in FY 2016-17.

## Investments

The engineering sector in India attracts immense interest from foreign players as it enjoys a comparative advantage in terms of manufacturing costs, technology and innovation. The above, coupled with favourable regulatory policies and growth in the manufacturing sector has enabled several foreign players to invest in India.

The foreign direct investment (FDI) inflows into India's miscellaneous mechanical and engineering industries during April 2000 to March 2017 stood at around US\$ 3.31 billion, as per data released by the Department of Industries Policy and Promotion (DIPP).

In the recent past there have been many major investments and developments in the Indian engineering and design sector:

- Larsen and Toubro Ltd (L&T) has been awarded with projects worth Rs 2,170 crore (US\$ 336.93 million), which includes an order worth Rs 1,169 crore (US\$ 181.51 million) from Oman Electricity Transmission Company SAOC.
- Warburg Pincus is in advance talks with Tata Technologies to acquire up to 40 per cent minority stake for about Rs 2,300 crore (US\$ 357.11 million).

- Engineers India Ltd and Gazprom PJSC, the respective domestic companies of India and Russia in the engineering and oil and gas sectors, will prepare a blueprint for laying a gas pipeline between India and Russia, which is expected to help India diversify its energy mix and increase trade with Russia.
- [Hexagon Capability Centre India \(HCCI\)](#) in collaboration with National Institute of Technology Karnataka (NITK), Surathkal, launched first-of-its-kind NextGen 3D Lab costing Rs 7.7 crore (US\$ 1.15 million) at NITK Campus. The lab aims at making budding engineers industry-ready by the time they graduate.
- Engineering and construction major L&T entered into a joint venture with European defence major Matra BAE Dynamics Alenia (MBDA) Missile Systems for development of missiles in India. L&T will own 51 per cent stake in the JV named L&T MBDA Missile Systems and the rest 49 with the European partner.
- American plane maker Boeing Corporation has launched the Boeing India Engineering & Technology Center in Bengaluru. The centre will employ hundreds of locals who will work to support Boeing, including its information technology & data analytics, engineering, research and technology, and tests.
- Reliance Defence and Engineering Ltd said it has signed an agreement with the US Navy for undertaking service, maintenance and repair of Seventh Fleet of US Navy at the Reliance Shipyard at Pipavav in Gujarat.

### Government Initiatives

The Indian engineering sector is of strategic importance to the economy owing to its intense integration with other industry segments. The sector has been de-licensed and enjoys 100 per cent FDI. With the aim to boost the manufacturing sector, the government has relaxed the excise duties on factory gate tax, capital goods, consumer durables and vehicles.

- The Government of India is planning to merge 6 engineering consulting Public Sector Units (PSUs) to create a mega consultancy firm that can take up projects across sectors and compete with the likes of Bechtel of the US and domestic majors like Larsen & Toubro (L&T).

### Future to do

The engineering sector is a growing market. Spending on engineering services is projected to increase to US\$ 1.1 trillion by 2020.

## Export Highlights

Engineering is by far the largest segment in the Indian industry, employing approximately four million skilled and semi-skilled workers. growth, led by significant investments in power projects and infrastructure development. In FY 2016-17, the share of engineering exports in India's total merchandise exports stood at 23.75 per cent.

- Engineering exports from India stood at US\$ 65.23 billion in fiscal year.
- The top 25 nations out of 228 export destinations accounted for around 74.3 per cent of India's overall engineering exports.
- Top ten importers of Indian engineering products during FY 2016-17 were US (US\$ 7.06 billion), UAE (US\$ 4.03 billion), Singapore (US\$ 2.80 billion), UK (US\$ 2.48 billion), Mexico (US\$ 2.45 billion), Malaysia (US\$ 2.39 billion), Germany (US\$ 2.21 billion), Nepal (US\$ 2.16 billion), Italy (US\$ 2.08 billion) and Bangladesh (US\$ 1.99 billion).
- The EU, ASEAN+2 and North America recorded the highest shipment of engineering products from India, with a share of 21 per cent, 16 per cent and 15 per cent respectively in total engineering exports .

### EEPC INDIA (FORMERLY ENGINEERING EXPORT PROMOTION COUNCIL)

The export of engineering goods grew by 11.33 per cent year-on-year to reach US\$ 65.23 billion.

Source : EEPC India

The export of engineering goods grew by 14.7 per cent to reach US\$ 70 billion in fiscal year.

Website: [www.eepcindia.org](http://www.eepcindia.org)

## Food Processing Industry in India

### Introduction

The Indian food industry is poised for huge growth, increasing its contribution to world food trade every year. In India, the food sector has emerged as a high-growth and high-profit sector due to its immense potential for value addition, particularly within the food processing industry.

The food industry, which is currently valued at US\$ 39.71 billion!, is expected to grow at a Compounded Annual Growth Rate (CAGR) of 11 per cent to US\$ 65.4 billion. Food and grocery account for around 31 per cent of India's consumption basket.

Accounting for about 32 per cent of the country's total food market, The Government of India has been instrumental in the growth and development of the food processing industry. The government through the Ministry of Food Processing Industries (MoFPI) is making all efforts to encourage investments in the business. It has approved proposals for joint ventures (JV), foreign collaborations, industrial licenses, and 100 per cent export oriented units.

### Market Size

The Indian food and grocery market is the world's sixth largest, with retail contributing 70 per cent of the sales. The Indian food retail market is expected to reach Rs 61 lakh crore (US\$ 915 billion) by 2020.

The Indian food processing industry accounts for 32 per cent of the country's total food market, one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth. It contributes around 14 per cent of manufacturing Gross Domestic Product (GDP), 13 per cent of India's exports and six per cent of total industrial investment. Indian food service industry is expected to reach US\$ 78 billion by 2018. The Indian gourmet food market is currently valued at US\$ 1.3 billion and is growing at a Compound Annual Growth Rate (CAGR) of 20 per cent. India's organic food market is expected to increase by three times by 2020##.

The online food ordering business in India is in its nascent stage, but witnessing exponential growth. The organised food business in India is worth US\$ 48 billion, of which food delivery is valued at US\$ 15 billion. With online food delivery players like FoodPanda, Zomato, TinyOwl and Swiggy building scale through partnerships, the organised food business has a huge potential and a promising future. The online food delivery industry grew at 150 per cent year-on-year with an estimated Gross Merchandise Value (GMV) of US\$ 300 million.

### Investments

According to the data provided by the Department of Industrial Policies and Promotion (DIPP), the food processing sector in India has received around US\$ 7.47 billion worth of Foreign Direct Investment (FDI) during the fiscal year. The Confederation of Indian Industry (CII) estimates that the food processing sectors have the potential to attract as much as US\$ 33 billion of investment over the next 10 years and also to generate employment of nine million person-days.

The Ambassador of the Republic of Poland had also highlighted the keen interest shown by Polish companies looking for opportunities in India to expand collaboration and invest food processing.

Some of the major investments in this sector in the recent past are:

- US-based food company Cargill Inc, aims to double its branded consumer business in India by 2020, by doubling its retail reach to about 800,000 outlets and increase market share to become national leader in the sunflower oil category which will help the company be among the top three leading brands in India.
- Mad Over Donuts (MoD), outlined plans of expanding its operations in India by opening nine new MoD stores.
- Danone SA plans to focus on nutrition business in India, its fastest growing market in South Asia, by launching 10 new products in 2017, and aiming to double its revenue in India by 2020.
- Uber Technologies Inc plans to launch Uber EATS, its food delivery service to India, with investments made across multiple cities and regions.
- Di Bella, the Australia-based coffee chain, plans to invest Rs 67 crore (US\$ 10 million) for setting up around 20 new outlets in Mumbai, besides entering Delhi and Bangalore.
- KKR & Co LP, the US-based private equity firm, plans to invest about Rs 520 crore (US\$ 77.38 million) in dairy company Kwality Ltd, which will be used to strengthen its milk procurement infrastructure and increase processing capacity.
- Henry Ford Health Systems (HFHS), a US-based health and wellness group, plans to enter India by signing a franchise partnership with Chandigarh-based hospitality and food services firm KWalls Hospitality, and set up 'Culinary Wellness' branded stores across the country.
- Mondelez International, the US-based confectionery, food, and beverage major, inaugurated its new manufacturing plant in Andhra Pradesh set up for Rs 1,265 crore (US\$ 190 million), with an annual production capacity of 250,000 tonnes.
- Pure Circle, a Malaysia-based natural sweetener producer, plans to invest around Rs 1,300 crore (US\$ 200 million) in India to set up a manufacturing plant and make the country its regional production and export hub in the next five years.
- Swiggy, a food delivery start-up owned by Bundl Technologies Private Limited, has raised Rs 230.34 crore (US\$ 33.80 million) in a Series C funding round, with its existing investors SAIF Partners, Accel Partners, Norwest Venture Partners and Apoletto Asia Ltd contributing 79 per cent of the new funds raised.
- Gujarat Cooperative Milk Marketing Federation (GCMMF), popularly known as 'Amul', plans to invest Rs 5,000 crore (US\$ 733.6 million) to establish ten new processing plants as well as expand the current capacity to touch 32 million litres per day (MLPD) capacity by 2020.
- Private Equity (PE) firm India Value Fund Advisors (IVFA) plans to invest around US\$ 100-150 million in the food business in India over the next two years.
- Zomato, a restaurant search and discovery platform, has raised US\$ 60 million from Singapore government-owned investment company Temasek, along with existing investor Vy Capital, in order to explore new business verticals.
- ITC Limited plans to invest Rs 800 crore (US\$ 117.4 million) to set up a world-class food processing facility in Medak, a district located in Telangana. The company has also formulated plans to enter the dairy market.

## Future to do

Going forward, the adoption of food safety and quality assurance mechanisms such as Total Quality Management (TQM) including ISO 9000, ISO 22000, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practices (GMP) and Good Hygienic Practices (GHP) by the food processing industry offers several benefits. It would enable adherence to stringent quality and hygiene norms and thereby protect consumer health, prepare the industry to face global competition, enhance product acceptance by overseas buyers and keep the industry technologically abreast of international best practices

**References:** Ministry of Food Processing Industries (MoFPI), Agricultural and Processed Food Products Export Development Authority (APEDA), Media reports and Press Releases, Department of Industrial Policy and Promotion (DIPP), Press Information Bureau (PIB), Confederation of Indian Industries (CII), Union Budget.

Note: ! - A joint report by IIM-Calcutta and Academic Foundation, @ - India Food Report 2016, # - Venture Intelligence report, ## - According to a joint study by the Associated Chambers of Commerce and Industry of India (ASSOCHAM) and TechSci Research

# Gems and Jewellery Industry in India

## Introduction

The Gems and Jewellery sector plays a significant role in the Indian economy, contributing around 6-7 per cent of the country's GDP. One of the fastest growing sectors, it is extremely export oriented and labour intensive.

Based on its potential for growth and value addition, the Government of India has declared the Gems and Jewellery sector as a focus area for export promotion. The Government has recently undertaken various measures to promote investments and to upgrade technology and skills to promote 'Brand India' in the international market.

India is deemed to be the hub of the global jewellery market because of its low costs and availability of high-skilled labour. India is the world's largest cutting and polishing centre for diamonds, with the cutting and polishing industry being well supported by government policies. Moreover, India exports 95 per cent of the world's diamonds, as per statistics from the Gems and Jewellery Export Promotion Council (GJEPC). India's Gems and Jewellery sector has been contributing in a big way to the country's foreign exchange earnings (FEEs). The Government of India has viewed the sector as a thrust area for export promotion. The Indian government presently allows 100 per cent Foreign Direct Investment (FDI) in the sector through the automatic route.

## Market size

The gems and jewellery market in India is home to more than 500,000 players, with the majority being small players.

India is one of the largest exporters of gems and jewellery and the industry is considered to play a vital role in the Indian economy as it contributes a major chunk to the total foreign reserves of the country. UAE, US, Russia, Singapore, Hong Kong, Latin America and China are the biggest importers of Indian jewellery. India's gems and jewellery exports to the US rose 7.81 per cent year-on-year due to a revival in the overall economic activity in the US.

The overall net exports of Gems & Jewellery stood at Rs 175,879.24 crore (US\$ 26.28 billion), whereas exports of cut and polished diamonds stood at Rs 113,171.17 crore (US\$ 16.91 billion). Exports of gold coins and medallions stood at Rs 25,819.48 crore (US\$ 3.86 billion) and silver jewellery export stood at Rs 18,010.72 crore (US\$ 2.69 billion). According to GJEPC, gems and jewellery exports are likely to witness a growth of about 10 per cent this fiscal due to increasing demand in the US and Europe.

According to a report by Research and Markets, the jewellery market in India is expected to grow at a Annual Growth Rate (CAGR) of 15.95 per cent over the period.

## Investments/Developments

The Gems and Jewellery sector is witnessing changes in consumer preferences due to adoption of western lifestyle. Consumers are demanding new designs and varieties in jewellery, and branded jewellers are able to fulfil their changing demands better than the local unorganised players. Moreover, increase in per capita income has led to an increase in sales of jewellery, as jewellery is a status symbol in India.

The cumulative Foreign Direct Investment (FDI) inflows in diamond and gold ornaments in the period were US\$ 851.34 million, according to Department of Industrial Policy and Promotion (DIPP).

Some of the key investments in this industry are listed below.

- The International Institute of Diamond Grading & Research (IIDGR) has invested US\$ 5 million for expanding its synthetic diamond testing facility in Surat.
- Kalyan Jewellers plans to invest Rs 500 crore (US\$ 75 million) to add 15 new showrooms in 2017, to add to their on-going expansion in Northern and Eastern regions of India as well as expansion in West Asia. They also have plans to invest Rs 900 crore (US\$ 133.55 million) over the next three years to expand its presence in the international markets like Sri Lanka, Singapore and Malaysia.
- London's ultra-luxury jeweller for the super-rich, Faberge, owned by the world's top emeralds and rubies-miner Gemfields Plc., has decided to enter India; Delhi and Mumbai, India's economic hotspots will be Faberge's beachhead in the country, where the jeweller will sell its products by select trunk shows for the uber-rich.
- Rajesh Exports Limited (REL), a jewellery exporter and retailer, has won an export order contract worth Rs 1,045 crore (US\$ 154.85 million) of designer range of gold and diamond-studded jewellery and medallions from Singapore.

- KSS Limited, a digital and entertainment major, has forayed into the jewellery retailing business under the franchise model and is looking to open 500 stores under brand 'Bjewelz' which is owned by Birla Jewels Limited, a wholly owned subsidiary of KSS Limited.
- Melorra, a Bengaluru-based online jewellery start-up, has raised US\$ 5 million funding from venture capital firm Lightbox Ventures, to build its brand, enhance its technology platform, and talent acquisition.
- Major mining companies such as Rio Tinto, De Beers and Alrosa have decided to participate in the Indian Diamond Trading Centre (IDTC) which has been set up to eliminate the middlemen in diamond trade and allow Indian manufacturers to deal directly with miners.
- India Bullion and Jewellers Association (IBJA) has signed an pact with the Bombay Stock Exchange (BSE) for setting up India's first bullion exchange through a Special Purpose Vehicle (SPV), wherein IBJA and its constituents will hold 70 per cent and BSE will hold 30 per cent stake.
- Global luxury brand Montblanc International has entered into a joint venture with India's largest watch maker Titan Co Ltd and plans to start the retail operations in India by opening five Montblanc boutiques in Mumbai, Delhi, Hyderabad and Pune.
- Jewellery major Joyalukkas plans to invest Rs 1,500 crore (US\$ 220.08 million) on setting up 20 stores in India and 10 overseas. The new stores, which will come up almost in a year's time, will add to the Thrissur-headquartered company's existing 95 outlets.
- London-headquartered Gemfields, a multi-national firm specialising in colour gemstones mining and marketing, is planning to acquire colour gemstone mines in Odisha and Jharkhand, and participate in the exploration of the Kashmir sapphire mines in Jammu & Kashmir.
- The India arm of US private equity (PE) firm Warburg Pincus picked up a minority stake in Kerala-based Kalyan Jewellers for Rs 1,200 crore (US\$ 176 million). The jeweller plans to use the proceeds to fund its retail and manufacturing expansion plans.
- Creador, a PE firm focused on long-term investments in growth-oriented businesses in Indonesia, India, Malaysia and Singapore, invested Rs 135 crore (US\$ 20.28 million) for a minority stake in PC Jeweller Limited.

## Future to do

In the coming years, growth in Gems and Jewellery sector would be largely contributed by the development of large retailers/brands. Established brands are guiding the organised market and are opening opportunities to grow. Increasing penetration of organised players provides variety in terms of products and designs. Also, the relaxation of restrictions of gold import is likely to provide a fillip to the industry. The improvement in availability along with the reintroduction of low cost gold metal loans and likely stabilisation of gold prices at lower levels is expected to drive volume growth for jewellers over short to medium term. The demand for jewellery is expected to be significantly supported by the recent positive developments in the industry.

References: Media Reports, Press Releases, Department of Industrial Policy and Promotion (DIPP), Reserve Bank of India, Gem & Jewellery Export Promotion Council.

The Indian Gems and Jewellery (GGJ) sector is one of the largest in the world, contributing around 29 per cent to the global jewellery consumption. The sector provides employment to over 2.5 million and is home to over 300,000 gems and jewellery players. The sector contributes 6-7 per cent to the Gross Domestic Product (GDP) of the country.

Indians have always been connoisseurs of precious stones and ornaments. Trade secrets of the jewellery business have been handed down over generations, ensuring continuity of traditional craft. Thus, India is today the world's largest diamond cutting and polishing centre. India has been adding modern techniques to its traditional know how that are more in tune with global market trends.

## Key highlights

India is the most preferred country in terms of gems and jewellery export. The facts listed below give us an idea of India's position on the global gems and jewellery export map. Indian gems and jewellery are exported across continents.

- Net GGJ exports from India stood at US\$ 35.54 billion (year-on-year growth of 9.09 per cent).
- Over April 2016-March 2017, exports of silver jewellery registered a growth of 35.87 per cent, cut and polished diamonds registered a growth of 10.24 per cent; while gold jewellery registered a growth of 1.92 per cent.
- India is the largest cut and polished diamond manufacturer in the world and exports 93 per cent of its production.
- India exported 75 per cent of the world's polished diamonds.
- India exports over 95 per cent of the world's processed diamonds.
- India is the world's largest gold consumer, and third largest diamond consumer, accounting for 29 per cent share and 8 per cent share respectively, of the total global consumption.
- According to GJEPC Chairman gems and jewellery exports are likely to witness a growth of about 10 per cent due to increasing demand in the US and Europe.
- The domestic GGJ market is expected to grow at a rate of compound annual growth rate (CAGR) of 13 per cent to US\$ 80-85 billion, from US\$ 50 billion.

The Gem and Jewellery Export Promotion Council (GJEPC) undertakes direct promotional activities, including joint participation in international jewellery shows, sending and hosting trade delegations, and sustained image-building exercises.

**The domestic Gems and Jewellery market is expected to grow at a rate of compound annual growth rate (CAGR) of 13 per cent to US\$ 80-85 billion mark.**

## Handicrafts Industry In India

### Introduction

The handicrafts sector is important for the Indian economy as it is one of the largest employment generators and accounts for a significant share in the country's exports. The state and regional clusters contribute significantly to handicrafts export. The Indian handicrafts industry is fragmented, with more than seven million regional artisans and more than 67,000 exporters/export houses promoting regional art and craftsmanship in the domestic and global markets.

### KEY MARKETS AND EXPORT DESTINATIONS

- Handicraft exports from India increased by 11.07 per cent year-on-year to US\$ 3.66 billion. During this period, the exports of various segments registered positive growth like Shawls as Artwares (26.79 per cent), Hand printed Textiles & Scarves (25.96 per cent), Artmetal wares (19.04 per cent), Agarbatis and attars (6.76 per cent) and Embroidered & Crocheted goods (5.85 per cent).
- Indian handicrafts are exported across geographies, with the top 10 destinations being the US, the UK, the UAE, Germany, France, Latin American countries (LAC), Italy, the Netherlands, Canada and Australia.

The EXPORT PROMOTION COUNCIL FOR HANDICRAFTS (EPCH) is the apex government body and operates under the administrative control of the Ministry of Textiles, Government of India. EPCH has the distinction of being considered a 'model council', a self-sustaining body that self-finances all its promotional activities.

**Total export of handicrafts from India grew by 11.07 per cent to US\$ 3.66 billion in fiscal year.**

*The total export of handicrafts is expected to nearly double to US\$ 2.7 billion in FY 2015-16 and further increase to US\$ 3.8 billion by FY 2020-21.*

## Handloom Industry in India

### Introduction

Along with the artistry of weavers, the Indian handloom industry demonstrates the richness and diversity of Indian culture. With over 4.3 million people directly involved in the production, the handloom industry is the second-largest employment provider for the rural population in India after agriculture. Indian handloom products are known for their unique designs and finesse. The trend is to mix old designs with new techniques and create original products.

The industry has strong infrastructure, with about 2.4 million looms of varied designs and construction, indicating significant production capacity.

### KEY MARKETS AND EXPORT DESTINATIONS

- The export of handloom products from India stood at US\$ 360.02 million.
- The US was the major importer of Indian handloom products, with estimated purchases of US\$ 106.13 million, followed by the UK and UAE at US\$ 22.42 million and US\$ 19.42 million, respectively. Italy, Germany, France, Spain, Japan, Netherlands, and Australia were some other export destinations.
- During 2015-16, export of fabrics stood at US\$ 35.34 million, floor coverings stood at US\$ 125.27 million, clothing accessories stood at US\$ 25.54 million, and made-ups stood at US\$ 173.88 million.

The Handloom Export Promotion Council (HEPC) is a statutory body constituted under the Ministry of Textiles, Government of India, to promote the export of all handlooms products such as fabrics, home furnishings, carpets and floor coverings. HEPC was constituted in 1965 with 65 members, and its present membership is about 2,000.

**The total export of handloom stood at US\$ 360.02 million for the fiscal year.**

Website: [www.hepcindia.com](http://www.hepcindia.com)

## Healthcare Industry in India

### Introduction

Healthcare has become one of India's largest sectors - both in terms of revenue and employment. Healthcare comprises hospitals, medical devices, clinical trials, outsourcing, telemedicine, medical tourism, health insurance and medical equipment. The Indian healthcare sector is growing at a brisk pace due to its strengthening coverage, services and increasing expenditure by public as well private players.

Indian healthcare delivery system is categorised into two major components - public and private. The Government, i.e. public healthcare system comprises limited secondary and tertiary care institutions in key cities and focuses on providing basic healthcare facilities in the form of primary healthcare centres (PHCs) in rural areas. The private sector provides majority of secondary, tertiary and quaternary care institutions with a major concentration in metros, tier I and tier II cities.

India's competitive advantage lies in its large pool of well-trained medical professionals. India is also cost competitive compared to its peers in Asia and Western countries. The cost of surgery in India is about one-tenth of that in the US or Western Europe.

## Market Size

Deloitte Touche Tohmatsu India has predicted that with increased digital adoption, the Indian healthcare market, which is worth around US\$ 100 billion, will likely grow at a CAGR of 23 per cent to US\$ 280 billion by 2020.

The revenue of India's corporate healthcare sector is estimated to grow at 15 per cent in fiscal year.\*

India is experiencing 22-25 per cent growth in medical tourism and the industry is expected to double its size from present (April 2017) US\$ 3 billion to US\$ 6 billion. Medical tourist arrivals in India increased more than 50 per cent to 200,000.

The Healthcare Information Technology (IT) market is valued at US\$ 1 billion currently (April 2016) and is expected to grow 1.5 times by 2020. #

Over 80 per cent of the antiretroviral drugs used globally to combat AIDS (Acquired Immuno Deficiency Syndrome) are supplied by Indian pharmaceutical firms^.

There is a significant scope for enhancing healthcare services considering that healthcare spending as a percentage of Gross Domestic Product (GDP) is rising. Rural India, which accounts for over 70 per cent of the population, is set to emerge as a potential demand source.

A total of 3,598 hospitals and 25,723 dispensaries across the country offer AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy) treatment, thus ensuring availability of alternative medicine and treatment to the people.

## Investments

The hospital and diagnostic centres attracted Foreign Direct Investment (FDI) worth US\$ 4.34 billion, according to data released by the Department of Industrial Policy and Promotion (DIPP). Some of the major investments in the Indian healthcare industry are as follows:

- Kerala Institute of Medical Sciences (KIMS) has raised US\$ 200 million from True North, a private equity fund, for a 40 per cent stake in the company, which will be utilised towards funding its growth plans.
- Syngene, a subsidiary of Biocon Ltd, has acquired a contract from Herbalife Nutrition, a nutrition company, to develop nutrition based products that can be sold by Herbalife in India.
- CureFit, a healthcare and fitness start-up, has acquired Kristys Kitchen, an online health-food delivery company, in a cash and stock deal.
- STEER Engineering has announced research collaboration with Merck, a German healthcare and life sciences firm, for creating a technology useful for processing special effect pigments for the plastic industry.
- Max Healthcare, a healthcare institute based in New Delhi, has plans to invest Rs 320 crore (US\$ 48 million) to build a cancer care hospital in Delhi, being a part of Max's larger plan to develop its hospital in Saket.
- Thyrocare Technologies, a diagnostic laboratory chain, plans to expand its lab centres from 7 to 25 and franchisees from 1,200 to 5,000 to achieve a target revenue of Rs 1,000 crore (US\$ 150 million) by 2020.
- Orbi Med, a healthcare-dedicated investment firm, plans to invest around US\$ 40 million in Kolkata-based pathology and radiology services chain Suraksha Diagnostics for expanding the diagnostics chain's laboratory network across India and enhancing its equipment technology backbone.
- International Finance Corporation (IFC), the investment arm of World Bank, has invested around Rs 450 crore (US\$ 67.5 million) for a 29 per cent stake in Healthcare major Apollo Group's subsidiary Apollo Health and Lifestyle Ltd for funding Apollo's expansion activities.
- Abraaj Group, a Dubai-based private equity investment firm, is in advanced discussions to acquire a controlling stake in south India's leading diagnostics services provider Medall Healthcare Pvt Ltd, at an enterprise value of around Rs 1,500 crore (US\$ 225 million).
- Practo Technologies Pvt Ltd, a digital healthcare start-up, has raised US\$ 55 million in series D round of funding led by Chinese investment holding company, Tencent Holdings Ltd, which will be used for expanding its product portfolio.
- Japanese financial services firm Orix Corp. is in talks to buy a minority stake in Bengaluru-based fertility clinic chain Nova IVI Fertility, from the company's promoters and existing private equity investors for Rs 250-300 crore (US\$ 37.5-45 million).
- UAE-based Gamma Group has outlined plans of investing around Rs 3,000 crore (US\$ 449.68 million) in the infrastructure, health and education sectors of Kerala, which is expected to generate around 2,000 indirect and direct jobs in the state.

## Government Initiatives

Some of the major initiatives taken by the Government of India to promote Indian healthcare industry are as follows:

- In the Union Budget 2017-18, the overall health budget increased from INR 39,879 crore (US\$ 5.96 billion) (1.97% of total Union Budget) to INR 48,878 crore (US\$ 7.3 billion) (2.27% of total Union Budget). In addition, the Government of India made following announcements in the Union Budget:
  - Harmonise policies and rules for the medical devices industry to encourage local manufacturing and move towards improving affordability for patients.
  - Modify the Drugs and Cosmetics Act to promote generics and reduce the cost of medicines.
  - Set up two new All India Institute of Medical Sciences (AIIMS) in Gujarat and Jharkhand.
  - Convert 1.5 lakh sub centres in Indian villages to health and wellness centres
  - Set short and medium term targets for key health indicators and bring down the Maternal Mortality Rate to 100 by 2018-2020 and Infant Mortality Rate to 28 by 2019.
  - Prepare action plans to eliminate Kala Azar and Filariasis by 2017, leprosy by 2018, measles by 2020 and tuberculosis (TB) by 2025.
- The Union Cabinet, Government of India, has approved the National Health Policy, which will provide the policy framework for achieving universal health coverage and delivering quality health care services to all at an affordable cost.
- The Government of India plans to set up a single window approval system for innovation in medical research, in order to grant permission/approvals within 30 days from the date of application to Indian innovation projects who have applied for global patent.
- Mr Shripad Naik, Minister of State with Independent Charge for AYUSH, has verified that the AYUSH Ministry is working with various agencies, institutions and Ayurveda researchers and practitioners across the globe to turn India into a global hub for knowledge, research, practice and developmental projects on traditional medicines.
- The Government of Assam has launched the Atal-Amrit Abhiyan health insurance scheme, which would offer comprehensive coverage for six disease groups to below-poverty line (BPL) and above-poverty line (APL) families, with annual income below Rs 500,000 (US\$ 7,500).
- The Government of India and the Government of the State of Nagaland signed financing agreement and project agreement respectively with The World Bank, for the 'Nagaland Health Project' for US\$ 48 million, which aims to improve health services and increase their utilisation by communities in targeted locations in the state.

## Future to do

India is a land full of opportunities for players in the medical devices industry. The country has also become one of the leading destinations for high-end diagnostic services with tremendous capital investment for advanced diagnostic facilities, thus catering to a greater proportion of population. Besides, Indian medical service consumers have become more conscious towards their healthcare upkeep.

India's competitive advantage also lies in the increased success rate of Indian companies in getting Abbreviated New Drug Application (ANDA) approvals. India also offers vast opportunities in R&D as well as medical tourism. To sum up, there are vast opportunities for investment in healthcare infrastructure in both urban and rural India.

**References:** *Department of Industrial Policy and Promotion (DIPP), RNCOS Reports, Media Reports, Press Information Bureau (PIB), Union Budget*

Note: # - as per National Association of Software and Services Companies (NASSCOM), ^ - According to Minister of Health and Family Welfare, \* - According to a report by India Ratings and Research (Ind-Ra)

# Infrastructure Sector in India

## Introduction

Infrastructure sector is a key driver for the Indian economy. The sector is highly responsible for propelling India's overall development and enjoys intense focus from Government for initiating policies that would ensure time-bound creation of world class infrastructure in the country. Infrastructure sector includes power, bridges, dams, roads and urban infrastructure development. In 2016, India jumped 19 places in World Bank's Logistics Performance Index to rank 35th amongst 160 countries.

## Market Size

Foreign Direct Investment (FDI) received in Construction Development sector (townships, housing, built up infrastructure and construction development projects) stood at US\$ 24.3 billion, according to the Department of Industrial Policy and Promotion (DIPP).

## Investments

India is witnessing significant interest from international investors in the infrastructure space. Some key investments in the sector are listed below.

- The infrastructure sector in India witnessed 33 deals involving US\$ 3.49 billion as against US\$ 2.98 billion raised across 31 deals, with the majority of deals led by the power, roads and renewable sectors, as per investment bank Equirus Capital.
- Meinhardt Group, an engineering company based in Singapore, plans to establish its position in India as it targets the next wave of India's urban development to meet the country's development needs.
- UAE-based firm, DP World, having previously invested US\$ 1 billion in India, is planning to invest another US\$ 1 billion in India's infrastructure sector along with logistics and container terminals, stated Chief Executive Officer (CEO), DP World.
- I Squared Capital, a global infrastructure investment company, plans to raise up to US\$ 4 billion through its second infrastructure fund, which will be invested in infrastructure assets in India and across the globe.
- Abertis Infraestructuras SA, a Spanish infrastructure firm, has agreed to buy two toll road assets in operation in South India from Macquarie Group for Rs 1,000 crore (US\$ 151 million) to scale up its presence in India.
- GVK Power & Infrastructure Ltd won the bid to develop Mumbai's second airport in Navi Mumbai for Rs 16,000 crore (US\$ 2.39 billion).
- UAE-based Gamma Group, outlined plans of investing around Rs 3,000 crore (US\$ 453 million) in the infrastructure, health and education sectors of Kerala.
- Sky Tran Inc., a NASA technology partner specialising in developing pod car systems for urban transport, plans to build a one-kilometre pilot track in India at its own cost as per the requirement of the government, which has shortlisted skyTran as one of the three companies chosen to build pod cars on trial basis.
- Infrastructure Leasing and Financial Services Ltd (IL&FS) and global private equity (PE) firm Lone Star plan to jointly invest US\$ 550 million in stressed infrastructure projects in India.

## Government Initiatives

The Road Transport & Highways Ministry has invested around Rs 3.17 trillion (US\$ 47.7 billion), while the Shipping Ministry has invested around Rs 80,000 crores (US\$ 12.0 billion) in the past two and a half years for building world class highways and shipping infrastructure in the country. The Government of India is expected to invest highly in the infrastructure sector, mainly highways, renewable energy and urban transport, prior to the general elections.

A total of 6,604 km out of the 15,000 km of target set for national highways in 2016-17 has been constructed by the end of February 2017, according to the Minister of State for Road, Transport & Highways and Government of India.

The Government of India is taking every possible initiative to boost the infrastructure sector. Some of the steps taken in the recent past are being discussed hereafter.

- In the Union Budget the Government of India has taken the following measures for the development of infrastructure.
  - Increased total infrastructure outlay and defence capital expenditure by 10 per cent and 20.6 per cent to Rs 396,135 crore (US\$ 59.18 billion) and Rs 86,488 crore (US\$ 13.1 billion) respectively.
  - Railway expenditure allocation has increased by 8 per cent to Rs 131,000 crore (US\$ 19.58 billion) for laying down 3,500 km of railway lines.
  - Affordable housing has been given infrastructure status.
  - Lock-in period for long-term capital gains on land and buildings has been reduced from three to two years.
- The Government of India launched a City Livability Index, which would measure the quality of life in 116 major cities on a set of 79 parameters.
- The Government of India has approved an investment of Rs 67,523 crore (US\$ 10.49 billion) towards urban development in Maharashtra, thereby recording the highest investment outlay towards urban infrastructure in any state in three years.
- The National Highways Authority of India (NHAI) launched its first overseas issue of Masala Bond at the London Stock Exchange, attracting bids worth over Rs 3,000 crore (US\$ 465 million), with aim of raising capital for funding the infrastructure projects in India.
- The Union Cabinet, Government of India, has allowed state government agencies to borrow money from bilateral agencies in other countries to fund its infrastructure projects, in a bid to improve the funding options for infrastructure projects in the country.
- Minister of Housing and Urban Poverty Alleviation, Government of India, launched 352 affordable housing projects worth Rs 38,000 crore (US\$ 5.9 billion) in 53 cities across 17 states for building over 200,000 houses costing Rs 18 lakh (US\$ 27,948) per house on average.
- The Government of India plans to invest Rs 11,421 crore (US\$ 1.77 billion) to improve basic urban infrastructure in 61 cities and towns of Uttar Pradesh, having population exceeding 100,000 each by 2019-20, under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) scheme. The government has also approved investments in Tamil Nadu (Rs 11,237 crore or US\$ 1.74 billion), Maharashtra (Rs 6,759 crore or US\$ 1.05 billion), Haryana (Rs 2,544 crore or US\$ 394.32 million), Chhattisgarh (Rs 2,192 crore or US\$ 339.76 million), Manipur (Rs 180 crore or US\$ 27.90 million) and Sikkim (Rs 39 crore or US\$ 6.05 million) by 2019-20, under the same scheme.

- The Cabinet Committee on Economic Affairs (CCEA), Government of India, has approved the project to widen the Handia-Varanasi section of National Highway-2 in Uttar Pradesh, which would require an investment of Rs 2,147 crore (US\$ 333.36 million).
- The Government of India has sought Parliament's approval for an additional expenditure of Rs 59,978.29 crore (US\$ 8.96 billion) for supporting the government's rural jobs scheme, building rural infrastructure, urban development and farm insurance.
- The Ministry of Shipping plans to undertake development of 37 national waterways (NWs), out of the 111 NWs declared under the National Waterways Act 2016, in the next three years, which would have positive impact on reduction of overall logistics cost.
- The Government of India has laid out a roadmap to complete 23 Priority-I projects and balance 45 Priority projects under the Prime Minister Krishi Sinchayee Yojana (PMKSY) and Accelerated Irrigation Benefits Programme (AIBP).
- The Government of India plans to build 8,000 km of pavements and lay more cycle tracks in 106 cities in the next 5 years with an investment of Rs 80,000 crore (US\$ 11.94 billion), in order to reduce carbon footprint in urban areas and promote activities like walking and cycling.
- The Central Electricity Authority (CEA) expects investment in India's power transmission sector to reach Rs 2.6 lakh crore (US\$ 38.85 billion) during the 13th plan (2017-22), and to enhance the transmission capacity of the inter-regional links by 45,700 megawatt (MW).
- The monetisation of 75 publicly funded highway projects of value Rs 35,600 crore (US\$ 5.32 billion) via toll-operate-transfer (TOT) mode will fetch adequate funds to finance road construction of 2,700 km length of roads.\*
- The Indian Railways plans to set up a US\$ 5 billion Railways of India Development Fund (RIDF), which will serve as an institutional mechanism for the Railways to arrange funds from the market to finance various infrastructure projects.
- The Ministry Of Urban Development has approved investment of Rs 2,863 crore (US\$ 433 million) in six states under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) scheme, for improving basic urban infrastructure over FY 2017-20.
- Airports Authority of India (AAI) plans to increase its capital expenditure by 25 per cent to Rs 2,500 crore (US\$ 0.37 billion), primarily to expand capacity at 12 airports to accommodate increase air traffic, as per the Chairman of AAI.
- The Government of India and the Asian Development Bank (ADB) have signed US\$ 375 million in loans and grants for developing 800 kilometer (km) Visakhapatnam-Chennai Industrial Corridor, which is the first phase of a planned 2,500 km East Coast Economic Corridor (ECEC).

#### Future to do

Sweden is interested in smart cities development in India and has put forward a Common Plan of Action for developing sustainable and environment-friendly public transport solutions and solid waste management for the smart cities under development.

The Ambassador of Japan to India, has conveyed Government of Japan's inclination to invest and offer any other feasible support for various ongoing as well as upcoming development and infrastructure projects in the North-Eastern region of India.

References: <sup>@</sup> - As per a report released by the Indian Construction Equipment Manufacturers' Association (ICEMA), <sup>\*</sup> - As per Indian Credit Rating Agency (ICRA).

## Insurance Industry in India

#### Introduction

The insurance industry of India consists of 53 insurance companies of which 24 are in life insurance business and 29 are non-life insurers. Among the life insurers, Life Insurance Corporation (LIC) is the sole public sector company. Apart from that, among the non-life insurers there are six public sector insurers. In addition to these, there is sole national re-insurer, namely, General Insurance Corporation of India (GIC Re). Other stakeholders in Indian Insurance market include agents (individual and corporate), brokers, surveyors and third party administrators servicing health insurance claims.

Out of 29 non-life insurance companies, five private sector insurers are registered to underwrite policies exclusively in health, personal accident and travel insurance segments. They are Star Health and Allied Insurance Company Ltd, Apollo Munich Health Insurance Company Ltd, Max Bupa Health Insurance Company Ltd, Religare Health Insurance Company Ltd and Cigna TTK Health Insurance Company Ltd. There are two more specialised insurers belonging to public sector, namely, Export Credit Guarantee Corporation of India for Credit Insurance and Agriculture Insurance Company Ltd for crop insurance.

#### Market Size

Government's policy of insuring the uninsured has gradually pushed insurance penetration in the country and proliferation of insurance schemes are expected to catapult this key ratio beyond 4 per cent mark by the end of this year, reveals the ASSOCHAM latest paper.

The number of lives covered under Health Insurance policies during fiscal year was 36 crore which is approximately 30 per cent of India's total population. The number has seen an increase every subsequent year as 28.80 crore people had the policy in the previous fiscal.

The life insurance industry recorded a new premium income of Rs 1.38 trillion (US\$ 20.54 billion), indicating a growth rate of 22.5 per cent. The general insurance industry recorded a 12 per cent growth in Gross Direct Premium underwritten at Rs 105.25 billion (US\$ 1.55 billion). The life insurance industry reported 9 per cent increase in overall annual premium equivalent in the period, overall annual premium equivalent (APE)- a measure to normalise policy premium into the equivalent of regular annual premium- including individual and group business for private players was up 16 per cent to Rs 1,25,563 crore (US\$ 18.76 billion) and Life Insurance Corporation up 4 per cent to Rs 1,50,456 crore (US\$ 22.48).

India's life insurance sector is the biggest in the world with about 360 million policies which are expected to increase at a Compound Annual Growth Rate (CAGR) of 12-15 per cent over the next five years. The insurance industry plans to hike penetration levels to five per cent by 2020.

The country's insurance market is expected to quadruple in size over the next 10 years from its current size of US\$ 60 billion. During this period, the life insurance market is slated to cross US\$ 160 billion.

The general insurance business in India is currently at Rs 78,000 crore (US\$ 11.44 billion) premium per annum industry and is growing at a healthy rate of 17 per cent.

The Indian insurance market is a huge business opportunity waiting to be harnessed. India currently accounts for less than 1.5 per cent of the world's total insurance premiums and about 2 per cent of the world's life insurance premiums despite being the second most populous nation. The country is the fifteenth largest insurance market in the world in terms of premium volume, and has the potential to grow exponentially in the coming years.

### **Investments**

The following are some of the major investments and developments in the Indian insurance sector.

- New York Life Insurance Company, the largest life insurance company in the US, has invested INR 121 crore (US\$ 18.15 million) in Max Ventures and Industries Ltd for a 22.52 per cent stake, which will be used by Max for investing in new focus areas of education and real estate.
- New York Life Investments, the global asset management division of New York Life, along with other investors like Jacob Ballas, will own a significant minority ownership in Centrum Capital by being one of the leading global investors in buying the available 30 per cent stake worth US\$ 50 million of Centrum Capital.
- Max Life Insurance Co Ltd and HDFC Life Insurance Co Ltd have signed a merger agreement, which is expected to create India's largest private sector life insurance company once the transaction is completed.
- Aviva Plc, the UK-based Insurance company, has acquired an additional 23 per cent stake in Aviva Life Insurance Company India from the joint venture (JV) partner Dabur Invest Corporation for Rs 940 crore (US\$ 141.3 million), thereby increasing their stake to 49 per cent in the company.
- Insurance firm AIA Group Ltd has decided to increase its stake in Tata AIA Life Insurance Co Ltd, a joint venture owned by Tata Sons Ltd and AIA Group from 26 per cent to 49 per cent.
- Canada-based Sun Life Financial Inc plans to increase its stake from 26 per cent to 49 per cent in Birla Sun Life Insurance Co Ltd, a joint venture with Aditya Birla Nuvo Ltd, through buying of shares worth Rs 1,664 crore (US\$ 244.14 million).
- Nippon Life Insurance, Japan's second largest life insurance company, has signed definitive agreements to invest Rs 2,265 crore (US\$ 332.32 million) in order to increase its stake in Reliance Life Insurance from 26 per cent to 49 per cent.
- Bennett Coleman and Co. Ltd (BCCL), the media conglomerate with multiple publications in several languages across India, is set to buy Religare Enterprises Ltd's entire 44 per cent stake in life insurance joint venture Aegon Religare Life Insurance Co. Ltd. The foreign partner Aegon is set to increase its stake in the joint venture from 26 per cent to 49 per cent, following government's reform measure allowing the increase in stake holding by foreign companies in the insurance sector.
- GIC Re and 11 other non-life insurers have jointly formed the India Nuclear Insurance Pool with a capacity of Rs 1,500 crore (US\$ 220.08 million) and will provide the risk transfer mechanism to the operators and suppliers under the CLND Act.
- State Bank of India has announced that BNP Paribas Cardiff is keen to increase its stake in SBI Life Insurance from 26 per cent to 36 per cent. Once the foreign joint venture partner increases its stake to 36 per cent, SBI's stake in SBI Life will get diluted to 64 per cent.

### **Government Initiatives**

The Union Budget has made the following provisions for the Insurance Sector:

- The Budget has made provisions for paying huge subsidies in the premiums of Pradhan Mantri Fasal Bima Yojana (PMFBY) and the number of beneficiaries will increase to 50 per cent in the next two years from the present level of 20 per cent. As part of PMFBY, Rs 9,000 crore (US\$ 1.35 billion) has been allocated for crop insurance.

- By providing tax relief to citizens earning up to Rs 5 lakh (US\$ 7500), the government will be able to increase the number of taxpayers. Life insurers will be able to sell them insurance products, to further reduce their tax burden in future. As many of these people were understating their incomes, they were not able to get adequate insurance cover.
- Demand for insurance products may rise as people's preference shifts from formal investment products post demonetisation.
- The Budget has attempted to hasten the implementation of the Digital India initiative. As people in rural areas become more tech savvy, they will use digital channels of insurers to buy policies.

The Government of India has taken a number of initiatives to boost the insurance industry. Some of them are as follows:

- The Union Cabinet has approved the public listing of five Government-owned general insurance companies and reducing the Government's stake to 75 per cent from 100 per cent, which is expected to bring higher levels of transparency and accountability, and enable the companies to raise resources from the capital market to meet their fund requirements.
- The Insurance Regulatory and Development Authority of India (IRDAI) plans to issue redesigned initial public offering (IPO) guidelines for insurance companies in India, which are to looking to divest equity through the IPO route.
- IRDAI has allowed insurers to invest up to 10 per cent in additional tier 1 (ATI) bonds, that are issued by banks to augment their tier 1 capital, in order to expand the pool of eligible investors for the banks.
- IRDAI has formed two committees to explore and suggest ways to promote e-commerce in the sector in order to increase insurance penetration and bring financial inclusion.
- IRDAI has formulated a draft regulation, IRDAI (Obligations of Insurers to Rural and Social Sectors) Regulations, 2015, in pursuance of the amendments brought about under section 32 B of the Insurance Laws (Amendment) Act. These regulations impose obligations on insurers towards providing insurance cover to the rural and economically weaker sections of the population.
- The Government of Assam has launched the Atal-Amrit Abhiyan health insurance scheme, which would offer comprehensive coverage for six disease groups to below-poverty line (BPL) and above-poverty line (APL) families, with annual income below Rs 500,000 (US\$ 7,500).
- The Uttar Pradesh government has launched a first of its kind banking and insurance services helpline for farmers where individuals can lodge their complaints on a toll free number.
- The select committee of the Rajya Sabha gave its approval to increase stake of foreign investors to 49 per cent equity investment in insurance companies.
- Government of India has launched an insurance pool to the tune of Rs 1,500 crore (US\$ 220.08 million) which is mandatory under the Civil Liability for Nuclear Damage Act (CLND) in a bid to offset financial burden of foreign nuclear suppliers.
- Foreign Investment Promotion Board (FIPB) has cleared 15 Foreign Direct Investment (FDI) proposals including large investments in the insurance sector by Nippon Life Insurance, AIA International, Sun Life and Aviva Life leading to a cumulative investment of Rs 7,262 crore (US\$ 1.09 billion).
- IRDAI has given initial approval to open branches in India to Switzerland-based Swiss Re, French-based Scor SE, and two Germany-based reinsurers namely, Hannover Re and Munich Re.

#### Future to do

India's insurable population is anticipated to touch 750 million in 2020, with life expectancy reaching 74 years. Furthermore, life insurance is projected to comprise 35 per cent of total savings by the end of this decade, as

The future looks promising for the life insurance industry with several changes in regulatory framework which will lead to further change in the way the industry conducts its business and engages with its customers.

Demographic factors such as growing middle class, young insurable population and growing awareness of the need for protection and retirement planning will support the growth of Indian life insurance.

**References:** Media Reports, Press Releases, Press Information Bureau, Union Budget 2017-18, Insurance Regulatory and Development Authority of India (IRDA)

Note: # - as per Assocham Report 2016

## IT & ITeS Industry in India

#### Introduction

India is the world's largest sourcing destination for the information technology (IT) industry, accounting for approximately 67 per cent of the US\$ 124-130 billion market. The industry employs about 10 million workforces. More importantly, the industry has led the economic transformation of the country and altered the perception of India in the global economy. India's cost competitiveness in providing IT services, which is approximately 3-4 times cheaper than the US, continues to be the mainstay of its Unique Selling Proposition (USP) in the global sourcing market. However, India is also gaining prominence in terms of intellectual capital with several global IT firms setting up their innovation centres in India.

The IT industry has also created significant demand in the Indian education sector, especially for engineering and computer science. The Indian IT and ITeS industry is divided into four major segments – IT services, Business Process Management (BPM), software products and engineering services, and hardware.

### Market Size

The Indian IT sector is expected to grow at a rate of 12-14 per cent in constant currency terms. The sector is also expected triple its current annual revenue to reach US\$ 350 billion by FY 2025#.

Employees from 12 Indian start-ups, such as Flipkart, Snapdeal, Makemytrip, Naukri, Ola, and others, have gone on to form 700 start-ups on their own, thus expanding the Indian start-up ecosystem.! India ranks third among global start-up ecosystems with more than 4,200 start-ups##.

Total spending on IT by banking and security firms in India is expected to grow 8.6 per cent year-on-year to US\$ 7.8 billion. India's internet economy is expected to touch Rs 10 trillion (US\$ 146.72 billion) by 2018, accounting for 5 per cent of the country's GDP###.

The public cloud services market in India is slated to grow 35.9 per cent to reach US\$ 1.3 billion according to IT consultancy, Gartner. Increased penetration of internet (including in rural areas) and rapid emergence of e-commerce are the main drivers for continued growth of data centre co-location and hosting market in India. The Indian Healthcare Information Technology (IT) market is valued at US\$ 1 billion currently and is expected to grow 1.5 times by 2020^^. India's business to business (B2B) e-commerce market is expected to reach US\$ 700 billion by 2020 whereas the business to consumer (B2C) e-commerce market is expected to reach US\$ 102 billion by 2020^^^.

Cross-border online shopping by Indians is expected to increase 85 per cent in 2017, and total online spending is projected to rise 31 per cent to Rs 8.75 lakh crore (US\$ 128 billion) .

Post the government's announcement of demonetisation of specific currency denominations, digital payment platforms such as Paytm, MobiKwik, Oxigen witnessed a sharp spike in user transactions, app downloads and merchant enquiries, thereby indicating a greater demand towards digital payments by consumers.

India ranks among the top five countries in terms of digitalisation maturity as per Accenture's Platform Readiness Index, and is expected to be among the top countries with the opportunity to grow and scale up digital platforms by 2020.1

### Investments/ Developments

Indian IT's core competencies and strengths have attracted significant investments from major countries. The computer software and hardware sector in India attracted cumulative Foreign Direct Investment (FDI) inflows worth US\$ 22.83 billion between April 2000 and December 2016, according to data released by the Department of Industrial Policy and Promotion (DIPP).

Leading Indian IT firms like Infosys, Wipro, TCS and Tech Mahindra, are diversifying their offerings and showcasing leading ideas in blockchain, artificial intelligence to clients using innovation hubs, research and development centres, in order to create differentiated offerings.

Some of the major developments in the Indian IT and ITeS sector are as follows:

- Bengaluru-based fintech company ZestMoney, owned by Camden Town Technologies Pvt. Ltd, has raised US\$ 6.5 million in a series A round of funding led by Naspers-owned PayU; and will invest the funds in technology and product development.
- Google plans to set up its first data centre in India in the city of Mumbai by 2017, to improve its services to local customers wanting to host their applications on the internet, and to compete effectively with the likes of Amazon and Microsoft.
- Sagoon Inc, a social network and e-commerce start-up, has filed mini-initial public offering (IPO) papers with the US Securities and Exchange Commission (SEC), to raise around US\$ 20 million, which will be used to set up a campus in India, expand its team in India, the US and Nepal, and support marketing and branding and other general purposes.
- SAP SE, in partnership with the Associated Chambers of Commerce of India (ASSOCHAM), has rolled out a knowledge sharing resource centre which will serve as a one-stop portal for businesses looking to adopt or migrate to technology that will make them future ready for the biggest taxation reform of goods and services tax (GST).
- Freshdesk, one of first companies from India to offer Software-as-a-Service (SaaS) to global companies, has raised US\$ 55 million in the latest round of funding led by Sequoia Capital India and existing investor Accel Partners, estimating to value the company at US\$ 700 million.
- Warburg Pincus LLC, the US-based private equity firm, plans to invest around US\$ 75 million in series C round of funding to buy a significant stake in Capital Float, an online credit platform.
- Helpshift Inc, which makes customer support software for mobile apps, announced raising US\$ 2 million from Cisco Investments, in addition to working with Cisco to integrate its in-app customer support with Cisco's contact centre solutions.
- Knowlarity Communications Pvt Ltd, a cloud telephony provider, has announced raising US\$ 20 million from multiple investors such as Dubai-based private equity investor Delta Partners, existing investors Sequoia Capital Funds and Mayfield Fund, apart from venture-debt from Blacksoil and Trifecta Capital.
- Flipkart, India's largest e-commerce marketplace, has re-entered the private label business by launching Smart Buy, the first of two new private labels, with a view to boost earnings and fill gaps in its product selection.

- Fitpass, a Delhi-based revolutionary app which offers access to gyms and health clubs membership, has raised US\$ 1 million in seed funding from investors in Mumbai, Delhi, and Bengaluru.
- Apple's supplier and assembler, Taiwan-based Winstron, will set up an iPhone assembly facility in Peenya, Bengaluru's industrial hub, thus making India the third country across the world to have an assembly unit for Apple's iPhone.
- Kratikal Tech Pvt Ltd, a cyber-security start-up, has raised around US\$ 500,000 in seed round of funding led by Mr Amajit Gupta, former director of Microsoft India, which will be used for product development and building training modules.
- International Finance Corporation (IFC) plans to invest US\$ 10 million as equity in Bengaluru-based Zinka Logistics Pvt Ltd, which provides a technology platform called Blackbuck for long-haul trucking market in India, estimated at US\$ 70 billion.
- Paytm's online marketplace unit raised US\$ 200 million in a funding round led by a US\$ 177 million investment to be made by Alibaba Group Holding Ltd, and balance by SAIF Partners.
- Intel Corporation plans to invest in Digital India related solutions such as India stack, Unique Identification (UID), e-government 2.0 and other government initiatives, and scale up operations of its data centre group (DCG), as per Mr Prakash Mallya, Director DCG, Asia for Intel Corporation.
- Reliance Industries Ltd (RIL) plans to set up entrepreneurship hubs in key cities and towns, and a Rs 5,000 crore (US\$ 748 million) fund, under the name of Jio Digital India Startup Fund, to invest in technology based startups.
- Gurgaon-based digital wallet start-up MobiKwik, which is owned and operated by One MobiKwik Systems Private Limited, has raised US\$ 40 million from Nasdaq-listed firm Netl, a South African payments technology company.
- Orange Business Services, the business services arm of Orange Group, has launched a state data centre for Himachal Pradesh government, which will be the first data centre in India to be designed using 'green' data centre concepts that minimise power requirements and increase power utilisation efficiency.
- PurpleTalk Inc, a US based mobile solutions company, has invested US\$ 1 million in Nukkad Shops, a Hyderabad based uber-local commerce platform that helps neighbourhood retail stores take their businesses online through a mobile app.
- KartRocket, a Delhi based e-commerce enabler has completed its US\$ 8 million funding round by raising US\$ 2 million from a Japanese investor, which will be used to enhance Kraftly, a mobile-first online-to-offline marketplace targeting small sellers, individuals and home-based entrepreneurs in India in product categories such as apparel and accessories.
- Xpressbees, an e-commerce logistics firm operated by Busybees Logistics Solutions Private Limited, has raised US\$ 12.5 million in a Series A funding, led by its existing investors SAIF Partners, IDG Ventures, Vertex Ventures and Valiant Capital, which will be used to strengthen technology initiatives and processes of the firm.
- Housejoy, an online home services provider, has raised Rs 150 crore (US\$ 22 million) in a Series B round of funding led by Amazon, and which also includes new investors such as Vertex Ventures, Qualcomm and Ru-Net Technology Partners.
- Nasscom Foundation, a non-profit organisation which is a part of Nasscom, has partnered with SAP India to establish 25 National Digital Literacy Mission (NDLM) centres in 12 cities across India, as a part of Government of India's Digital India initiative.

### Government Initiatives

In the Union Budget, the Government of India announced the following key proposals:

- The Government of India has allocated Rs 10,000 crore (US\$ 1.5 billion) for BharatNet project under which it aims to provide high speed broadband to more than 150,000 gram panchayats.
- Prime Minister of India, has launched the Bharat Interface for Money (BHIM) app, an Aadhaar-based mobile payment application that will allow users to make digital payments without having to use a credit or debit card. The app has already reached the mark of 10 million downloads.

*Some of the major initiatives taken by the government to promote IT and ITeS sector in India are as follows:*

- Mr Ravi Shankar Prasad, Union Minister of Law & Justice and Information Technology, has launched a free Doordarshan DTH channel called DigiShala, which will help people understand the use of unified payments interface (UPI), USSD, aadhaar-enabled payments system, electronic wallets, debit and credit cards, thereby promoting various modes of digital payments.
- The Government of India plans to revamp the United Payment Interface (UPI) and Unstructured Supplementary Service Data (USSD), to make it easier for consumers to transact digitally either with or without an Internet connection with the aim of strengthening its push towards making India a digital economy.
- The Telecom Regulatory Authority of India (TRAI) will soon release consultation papers ahead of framing regulations and standards for the rollout of fifth-generation (5G) networks and Internet of Things (IoT) in India.

- The Government of Gujarat has signed 89 MoUs worth Rs 16,000 crore (US\$ 2.3 billion) in the IT sector, during Vibrant Gujarat Global Summit.
- The Government of Telangana has signed an agreement with network solutions giant Cisco Systems Incorporation, to cooperate on a host of technology initiatives, including Smart Cities, Internet of Things, cybersecurity, education digitisation of monuments.
- The Railway Ministry plans to give a digital push to the India Railways by introducing bar-coded tickets, Global Positioning System (GPS) based information systems inside coaches, integration of all facilities dealing with ticketing issues, Wi-Fi facilities at the stations, super-fast long-route train service for unreserved passengers among other developments, which will help to increase the passenger traffic.
- The Pune Smart City Development Corporation (PSCDCL) has signed a memorandum of understanding (MOU) with the European Business and Technology Centre (EBTC), which will allow it to gain access to real-time knowledge of technologies, solutions and best practices from Europe.
- The Human Resource Development (HRD) Ministry has entered into a partnership with private companies, including Tata Motors Ltd, Tata Consultancy Services Ltd and real-estate firm Hubtown Ltd, to open three Indian Institutes of Information Technology (IIITs), through public-private partnership (PPP), at Nagpur, Ranchi and Pune.
- Government of India is planning to develop five incubation centres for IoT start-ups, as a part of Prime Minister Mr Narendra Modi's Digital India and Startup India campaign, with at least two centres to be set up in rural areas to develop solutions for smart agriculture.
- The Government of India has launched the Digital India program to provide several government services to the people using IT and to integrate the government departments and the people of India. The adoption of key technologies across sectors spurred by the 'Digital India Initiative' could help boost India's Gross Domestic Product (GDP) by US\$ 550 billion to US\$ 1 trillion by 2025<sup>@@</sup>.
- India and the US have agreed to jointly explore opportunities for collaboration on implementing India's ambitious Rs 1.13 trillion (US\$ 16.58 billion) 'Digital India Initiative'. The two sides also agreed to hold the US-India Information and Communication Technology (ICT) Working Group in India later this year.

#### Future to do

India is the topmost offshoring destination for IT companies across the world. Having proven its capabilities in delivering both on-shore and off-shore services to global clients, emerging technologies now offer an entire new gamut of opportunities for top IT firms in India. Social, Mobility, Analytics and Cloud (SMAC) are collectively expected to offer a US\$ 1 trillion opportunity. Cloud represents the largest opportunity under SMAC, increasing at a CAGR of approximately 30 per cent to around US\$ 650-700 billion by 2020. The social media is the second most lucrative segment for IT firms, offering a US\$ 250 billion market opportunity by 2020. The Indian e-commerce segment is US\$ 12 billion in size and is witnessing strong growth and thereby offers another attractive avenue for IT companies to develop products and services to cater to the high growth consumer segment.

**References:** Media Reports, Press Information Bureau (PIB), Department of Industrial Policy and Promotion (DIPP) statistics, Department of Information and Technology, Union Budget

Notes: # - As per National Association of Software and Services Companies (NASSCOM), ## - as per a report by NASSCOM and Zinnov Management Consulting Pvt Ltd titled "Start-up India - Momentous Rise of the Indian Start-up Ecosystem", ### - According to a report by the Boston Consulting Group (BCG) and Internet and Mobile Association of India (IAMAI), ^^ -

As per IT industry body National Association of Software and Services Companies (NASSCOM), I - as per the report 'Five Ways to Win with Digital Platforms', created by Accenture in collaboration with G20 Young Entrepreneurs' Alliance, ^^ - as per a report by the Confederation of Indian Industry and Deloitte Touche Tohmatsu India LLP, @ - as per a study by Assocham-PricewaterhouseCoopers, @@ - as per research firm McKinsey, ! - As per data from Tracxn, !! - As per Gartner, !!! - As per PayPal report

## Leather Industry in India

#### Introduction

Leather is one of the most widely traded commodities globally. The growth in demand for leather is driven by the fashion industry, especially footwear. Apart from this, furniture and interior design industries, as well as the automotive industry also demand leather. The leather industry has a place of prominence in the Indian economy due to substantial export earnings and growth.

The Indian leather industry accounts for around 12.93 per cent of the world's leather production of hides/skins. The country ranks second in terms of footwear and leather garments production in the world and accounts for 9 per cent of the world's footwear production.

#### Export highlights

India's leather industry has grown drastically, transforming from a mere raw material supplier to a value-added product exporter.

- Total leather and leather good exports from India stood at US\$ 4.72 billion during April 2016-January 2017.
- During April 2016-January 2017, the major markets for Indian leather products were US (15.69 per cent), Germany (11.82 per cent), UK (10.85 per cent), Italy (6.61 per cent), Spain (5.27 per cent), France (5.02 per cent), Hong Kong (4.71 per cent), UAE (3.69 per cent), China (3.16 per cent), Netherlands (3.01 per cent), Belgium (1.78 per cent) and Australia (1.44 per cent).

- At 48.82 per cent, footwear (leather and non-leather) and footwear components accounted for the lion's share of leather exports in April 2016-January 2017, followed by leather goods and accessories with 23.37 per cent share, finished leather with 15.60 per cent share, leather garments with 9.71 per cent share and saddlery & harness with 2.50 per cent share.
- Per capita footwear consumption in India is expected to increase up to four pairs, while domestic footwear consumption is expected to reach up to five billion pairs by 2020.

### **COUNCIL FOR LEATHER EXPORTS**

The Council for Leather Exports (CLE) is an autonomous non-profit organisation, which is entrusted with export promotion activities and the development of the Indian leather industry. About 3,172 companies manufacturing/exporting leather and leather products are members of the Council.

**Total leather and leather good exports from India stood at US\$ 4.72 billion.**

Website: [www.leatherindia.org](http://www.leatherindia.org)

## **Manufacturing Sector in India**

### **Introduction**

Manufacturing has emerged as one of the high growth sectors in India. Prime Minister of India, Mr Narendra Modi, had launched the 'Make in India' program to place India on the world map as a manufacturing hub and give global recognition to the Indian economy. India is expected to become the fifth largest manufacturing country in the world by the end of year 2020\*.

### **Market Size**

The Gross Value Added (GVA) at basic constant (2011-12) prices from the manufacturing sector in India grew 7.9 per cent year-on-year in 2016-17, as per the 2nd provisional estimate of annual national income published by the Government of India. Under the Make in India initiative, the Government of India aims to increase the share of the manufacturing sector to the gross domestic product (GDP) to 25 per cent by 2022, from 16 per cent, and to create 100 million new jobs by 2022. Business conditions in the Indian manufacturing sector continue to remain positive.

### **Investments**

With the help of Make in India drive, India is on the path of becoming the hub for hi-tech manufacturing as global giants such as GE, Siemens, HTC, Toshiba, and Boeing have either set up or are in process of setting up manufacturing plants in India, attracted by India's market of more than a billion consumers and increasing purchasing power. Foreign Direct Investment (FDI) inflows in India's manufacturing sector grew by 82 per cent year-on-year to US\$ 16.13 billion during April-November 2016.

India has become one of the most attractive destinations for investments in the manufacturing sector. Some of the major investments and developments in this sector in the recent past are:

- IKEA, a Swedish furniture company, aims to manufacture more than 30 per cent of its products in India in the coming years, stated Mr Patrik Antoni, Deputy Country Manager, IKEA.
- Volvo India Pvt Ltd, Swedish luxury car manufacturer, will start assembly operations near Bengaluru in India by the end of 2017. The company is targeting to double its share in India's luxury car segment to 10 per cent by 2020.
- Berger Paints has entered into a partnership with Chugoku Marine Paints (CMP), thereby marking its entry into the marine paints segment, which has an estimated market size of Rs 250 crore (US\$ 38.82 million) and is expected to grow at 25 per cent annually for the next five years.
- SAIC Motor Corp, China's largest automaker, has signed a deal to buy General Motors (GM) India's Halol plant in Gujarat.
- Dabur India Ltd set up its largest manufacturing plant globally, spread over 30 acres, at a cost of Rs 250 crore (US\$ 38.82 million), in Tezpur, Assam, which will produce Dabur's complete range of ayurvedic medicines, health supplements, and personal care products among others.
- Apple Inc is looking to expand its Taiwanese contract manufacturer, Wistron's, production facility in Bengaluru, India, where it started manufacturing iPhone SE in May, 2017.
- Panasonic Corporation, the Japan-based electronics company, plans to set up a new plant at Jhajjar, Haryana, to manufacture refrigerators for the Indian market, and a Research and Development (R&D) center for appliances consisting of two technical divisions to strengthen its product development in the country.
- BSH Home Appliances Group, the leading home appliances manufacturer in Europe, inaugurated its first technology centre in India at Adugodi, Bengaluru, which will enable the company to further develop localised technologies for the Indian market.
- China based LCD and touchscreen panel manufacturer, Holitech Technology, has announced plans to investing up to US\$ 1 billion in India by the end of 2017.
- Ashok Leyland Ltd has launched its circuit series electric bus, the first ever electric bus designed and engineered entirely in India specifically for Indian road conditions, with a capacity to travel over 150 km on a single charge.
- Tristone Flowtech Group, the Germany-based flow technology systems specialist, has set up a new facility in Pune, which will manufacture surge tank as well as engine cooling and aircharge hose for the Indian market. The company plans to start the production at the plant in the fourth quarter of 2017.
- Honda Motorcycle & Scooter India plans to invest around Rs 600 crore (US\$ 90 million) to add a new line to produce additional 600,000 units at its Narsapura facility in Karnataka.

- Hindustan Coca-Cola Beverages plans to set up a bottling plant with an investment of Rs 750 crore (US\$ 112.5 million) in phases at the first industrial area being developed by Government of Madhya Pradesh under the public private partnership in Babai village of Hoshangabad, Bhopal.

### Government Initiatives

In a bid to push the 'Make in India' initiative to the global level, Mr Narendra Modi, Prime Minister of India, pitched India as a manufacturing destination at the World International Fair in Germany's Hannover in 2015. Mr Modi showcased India as a business friendly destination to attract foreign businesses to invest and manufacture in the country.

The Government of India has taken several initiatives to promote a healthy environment for the growth of manufacturing sector in the country. Some of the notable initiatives and developments are:

- The Government of India has introduced several policy measures in the Union Budget 2017-18 to provide impetus to the manufacturing sector. Some of which include reduction of income tax rate to 25 per cent for MSME companies having turnover up to Rs 50 crore (US\$ 7.5 million), MAT credit carry forward extended to 15 years from 10 years and abolishment of Foreign Investment Promotion Board (FIPB).
- The Government of India has launched a phased manufacturing programme (PMP) aimed at adding more smartphone components under the Make in India initiative thereby giving a push to the domestic manufacturing of mobile handsets.
- The Ministry of Heavy Industries and Public Enterprises, Government of India, has approved the setting up of four Centres of Excellence (CoE) in areas of textile machinery, machine tools, welding technology and smart pumps, which will help raise the technology depth of the Indian Capital Goods Industry.
- The Union Cabinet has approved the Modified Special Incentive Package Scheme (M-SIPS) in which, proposals will be accepted till December 2018 or up to an incentive commitment limit of Rs 10,000 crore (US\$ 1.5 billion).
- The Government of India has removed the 12.5 per cent excise duty and 4 per cent special additional duty (SAD) on the manufacturing of point-of-sale (PoS) machines till March 31, 2017, which is expected to give a boost to the cashless economy as more PoS machines will be deployed in the future.
- Ms Nirmala Sitharaman, Minister of State (Independent Charge) for Commerce and Industry, has launched the Technology Acquisition and Development Fund (TADF) under the National Manufacturing Policy (NMP) to facilitate acquisition of Clean, Green and Energy Efficient Technologies, by Micro, Small & Medium Enterprises (MSMEs).
- The Government of Uttar Pradesh has secured investment deals valued at Rs 5,000 crore (US\$ 741.2 million) for setting up mobile manufacturing units in the state.
- Government of India has planned to invest US\$ 10 billion in two semiconductor plants in order to facilitate electronics manufacturing in the country.

### Future to do

India is an attractive hub for foreign investments in the manufacturing sector. Several mobile phone, luxury and automobile brands, among others, have set up or are looking to establish their manufacturing bases in the country.

The implementation of the Goods and Services Tax (GST) will make India a common market with a GDP of US\$ 2 trillion along with a population of 1.2 billion people, which will be a big draw for investors.

With impetus on developing industrial corridors and smart cities, the government aims to ensure holistic development of the nation. The corridors would further assist in integrating, monitoring and developing a conducive environment for the industrial development and will promote advance practices in manufacturing.

Notes: \* - According to the Global Manufacturing Competitiveness Index published by Deloitte

## Media and Entertainment Sector in India

### Introduction

The Indian Media and Entertainment (M&E) industry is a sunrise sector for the economy and is making high growth strides. Proving its resilience to the world, the Indian M&E industry is on the cusp of a strong phase of growth, backed by rising consumer demand and improving advertising revenues.

The industry has been largely driven by increasing digitisation and higher internet usage over the last decade. Internet has almost become a mainstream media for entertainment for most of the people.

### Market Dynamics

The Indian media & entertainment sector is expected to grow at a Compound Annual Growth Rate (CAGR) of 14.3 per cent to touch Rs 2.26 trillion (US\$ 33.9 billion) by 2020, while revenues from advertising is expected to grow at 15.9 per cent to Rs 99,400 crore (US\$ 14.91 billion).

Over FY 2015-20, radio will likely grow at a CAGR of 16.9 per cent, while digital advertising will grow at 33.5 per cent. The largest segment, India's television industry, is expected to grow at a CAGR of 15 per cent, while print media is expected to grow at a CAGR of 8.6 per cent.!

India is one of the highest spending and fastest growing advertising market globally. The country's expenditure on advertising is estimated at 15.5 per cent in 2016, and is expected to grow by 11.2 per cent in 2017, based on various media events like T20 Cricket World Cup, the Indian Premier League (IPL) and State elections. Television segment, which continues to hold highest share of spending, is expected to grow by 12.3 per cent in 2016 and 11 per cent in 2017, led by increased spending by packaged consumer goods brands and e-commerce companies.\$

The Foreign Direct Investment (FDI) inflows in the Information and Broadcasting (I&B) sector (including Print Media) stood at US\$ 6.3 billion, as per data released by Department of Industrial Policy and Promotion (DIPP).

### Recent development/Investments

Hotstar, a digital streaming platform owned by Star India Ltd, has entered into a partnership with Zapr Media Labs, a media tech company based in Bengaluru, to perform analysis on mobile audience that can be leveraged by brands to create personalised communication.

- Bigtree Entertainment Pvt. Ltd, which owns Bookmyshow, has acquired a 75 per cent stake in Townscript, an online event registration and ticketing platform based in Pune.
- PE major Warburg Pincus has purchased 14 per cent stake in India's largest multiplex chain PVR Ltd for Rs 820 crore (US\$ 123 million).
- ITW Consulting, a global sports consulting and management company, has forayed into the Indian market by launching its entertainment, media and communication arm, ITW Playworx, which will be based in Mumbai with offices across Delhi, Bengaluru, Chennai and Kolkata.
- Carnival Cinemas, the third largest cinema multiplex chain in India, has partnered with Odisha government to build 30 entertainment centres or recreation zones over 1-1.5 acres of land in tier-II or tier-III locations of each district.
- Dekkho, an online video streaming platform, has raised US\$ 1.2 million in a seed round from seven angel investors, which will be used for scaling its technology infrastructure and invest in content licensing.
- Amazon has launched its Prime Video service in India at a competitive annual subscription price of Rs 499 (US\$ 7.48), with a one-month free trial, including range of Hollywood as well as international movies, TV Shows and nine Indian original shows, in its content library.
- Reliance Capital, part of Anil Ambani-led Reliance Group, has announced the sale of its radio and television broadcasting businesses under Reliance Broadcast Network to the Zee group for Rs 1,900 crore (US\$ 285 million).
- The Ministry of Information & Broadcasting has outlined plans to set up a Film Promotion Fund, to provide financial assistance to Indian films which would be selected in any competition section of an International Film Festival, or being India's official nomination to the Academy Awards under Foreign Film Category, for promotional activities.
- Dentsu Aegis Network Ltd, the UK-based media and digital marketing communications company, has acquired Perfect Relations Group, an independent public relations firm, enabling the company to further strengthen its overall communications offering in the Indian market.
- KidZania, a Mexican chain of family entertainment centers, plans to expand its footprint to southern India by investing Rs 100 crore (US\$ 15 million) for setting up a theme park, which will be spread over 75,000 sq ft, by the end of 2017, or early 2018.
- LeEco, the China-based technology company, plans to invest about Rs 1,330 crore (US\$ 199.5 million) into developing content for India, including its own produced content, in the next two to three years.
- Vice Media LLC, a US-based digital media and broadcasting company, has entered into a Joint Venture (JV) agreement with the Times Group to open a new bureau and production hub in Mumbai, and launch digital, television, mobile and branded content in India.
- Cinepolis, a Mexico-based multiplex chain, plans to add 160 more screens by investing around Rs 400 crore (US\$ 60 million) in India in the next two years, thereby taking its total count to 400 screens in the country.
- Dalian Wanda Group Co Ltd, world's largest cinema chain operator, has initiated talks with leading multiplex owners in India such as PVR Ltd and Carnival Cinemas Ltd, to acquire assets and enter the Indian market.
- US based investment firm Tiger Global Management LLC has acquired a 25 per cent stake in 'The Viral Fever' (TVF), an online video content creator, for US\$ 10 million.
- Balaji Telefilms Limited (Balaji Telefilms) has raised Rs 150.08 crore (US\$ 22.51 million) through allotment of equity shares on preferential basis to catapult the launch and growth of ALT Digital Media, a Business-to-Consumer(B2C) digital content business segment of Balaji Group.
- Global video-streaming service Netflix has entered India as high-speed Internet connectivity is becoming rapidly available to Indians and nearly one-fifth of India's 1.3 billion population is now online.
- Reliance Entertainment (owned by Mr Anil Ambani) and DreamWorks (led by Mr Steven Spielberg), along with Participant Media (led by Mr Jeff Skoll) and Entertainment One (eOne) have formed a new film, television and digital content creation company called 'Amblin Partners', and have raised US\$ 500 million in debt to develop and produce films.
- ScoopWhoop, an Indian digital media and content start-up, has raised US\$ 4 million from Kalaari Capital and plans to use the funds for expansion of its video production unit called ScoopWhoop Talkies.
- Mobvista International Technology Ltd, a global mobile advertising and game publishing company, plans to increase its investment in India by US\$ 100 million over 2015-18, with a view to capture a bigger share of the booming e-commerce and ad-tech space.

- The digital arm of New Delhi Television Limited (NDTV) namely NDTV Convergence, that owns and operates the NDTV group's digital properties, has signed a deal worth US\$ 13-15 million with content discovery platform Taboola.
- Turner International India has announced the expansion of its television bouquet for children with the launch of Toonami, a channel dedicated to animated action. This is the American company's third children's channel in India after Cartoon Network and POGO. Toonami joins an assortment of over 15 channels in the kids' genre, which attracts close to Rs 500 crore (US\$ 75 million) in advertising.

### Government Initiatives

The Government of India has supported Media and Entertainment industry's growth by taking various initiatives such as digitising the cable distribution sector to attract greater institutional funding, increasing FDI limit from 74 per cent to 100 per cent in cable and DTH satellite platforms, and granting industry status to the film industry for easy access to institutional finance.

Mr Venkaiah Naidu, Union Minister for Housing and Urban Poverty Alleviation and Information & Broadcasting, outlined the Ministry's plans of introducing a National Communication Policy and stated that the government has allocated Rs 100 crore (US\$ 15 million) to revive community radios stations across the country.

The Union Cabinet has approved the model Shops and Establishment Act, aimed at generating employment prospects by allowing cinema halls, restaurants, shops, banks and other such workplaces to remain open round the clock.

The Ministry of Information and Broadcasting (I&B) is working towards promoting ease of doing business, which will ensure less regulation and facilitate India to become the hub of media and entertainment industry.

The Government is planning to set up a National *Centre of Excellence* for media, which will provide training to the industry professionals, and has also decided to fund movies, including Bollywood and regional films, for participating in foreign film festivals.

The Union Budget 2016-17 has proposed basic custom duty exemption on newsprint. The customs duty on wood in chips or particles for manufacture of paper, paperboard and newsprint has been reduced to 0 per cent from 5 per cent.

Recently, the Indian and Canadian governments have signed an audio-visual co-production deal that would help producers from both countries to explore their technical, creative, artistic, financial and marketing resources for co-productions and, subsequently, lead to exchange of culture and art amongst them.

Furthermore, the Centre has given the go-ahead for licences to 45 new news and entertainment channels in India. Among those who have secured the licenses include established names such as Star, Sony, Viacom and Zee. Presently, there are 350 broadcasters which cater to 780 channels. "We want more competition and we wanted to open it up for the public. So far, we have approved the licences of 45 new channels. It's a mix of both news and non-news channels," said Mr Bimal Julka, Secretary, Ministry of I&B, Government of India.

The Union Cabinet chaired by the Prime Minister, Mr Narendra Modi, has given its approval for entering into an Audio-Visual Co-Production Agreement between India and the Republic of Korea (RoK) and to complete internal ratification procedure, to enable the agreement to come into force. Cooperation between the film industries of the two countries will not only promote export of Indian films but would also act as a catalyst towards creating awareness about India and its culture.

### Future to do

The Indian Media and Entertainment industry is on an impressive growth path. The revenue from advertising is expected to grow at a CAGR of 13 per cent and will exceed Rs 81,600 crore (US\$ 12.24 billion) in 2019 from Rs 41,400 crore (US\$ 6.21 billion) in 2014. Internet access has surpassed the print segment as the second-largest segment contributing to the overall pie of M&E industry revenues.

Television and print are expected to remain the largest contributors to the advertising pie in 2018 as well. Internet advertising will emerge as the third-largest segment, with a share of about 16 per cent in the total M&E advertising pie. The film segment which contributed Rs 12,640 crore (US\$ 1.89 billion) in 2014 is projected to grow steadily at a CAGR of 10 per cent on the back of higher domestic and overseas box-office collections as well as cable and satellite rights.

Exchange Rate Used: INR 1 = US\$ 0.015 as on February 09, 2017

**References:** *Media Reports, Press Releases, Press Information Bureau, Department of Industrial Policy and promotion (DIPP), Union Budget 2016-17*

Note: ! - KPMG-FICCI Media and Entertainment industry report 2016; @ - as per the 'Shaping the Industry at a Time of Disruption' report by Boston Consulting Group (BCG) and Confederation of Indian Industry (CII); # - as per a report by Morgan Stanley; \$ - Garat Ad Spend Report, September 2016

## Oil & Gas Industry in India

### Introduction

The oil and gas sector is among the six core industries in India and plays a major role in influencing decision making for all the other important sections of the economy. In 1997-98, the New Exploration Licensing Policy (NELP) was envisaged to fill the ever-increasing gap between India's gas demand and supply. India's economic growth is closely related to energy demand; therefore the need for oil and gas is projected to grow more, thereby making the sector quite conducive for investment.

The Government of India has adopted several policies to fulfil the increasing demand. The government has allowed 100 per cent Foreign Direct Investment (FDI) in many segments of the sector, including natural gas, petroleum products, and refineries, among others. Today, it attracts both domestic and foreign investment, as attested by the presence of Reliance Industries Ltd (RIL) and Cairn India.

### Market Size

India is expected to be one of the largest contributors to non-OECD petroleum consumption growth globally. Total oil imports rose 4.24 per cent year-on-year to US\$ 86.45 billion in April-March 2016-17. India's oil consumption grew 8.3 per cent year-on-year to 212.7 million tonnes in 2016, as against the global growth of 1.5 per cent, thereby making it the third-largest oil consuming nation in the world.

India is the fourth-largest Liquefied Natural Gas (LNG) importer after Japan, South Korea and China, and accounts for 5.8 per cent of the total global trade.<sup>3</sup> Domestic LNG demand is expected to grow at a CAGR of 16.89 per cent to 306.54 MMSCMD by 2021 from 64 MMSCMD in 2015.

The demand of Petroleum Oil and Lubricants grew at a Compound Annual Growth Rate (CAGR) of 5.6 per cent under the 12th Five Year Plan (2012-17)

The country's gas production is expected to touch 90 Billion Cubic Metres (BCM) in 2040 from 23.09 BCM in FY2016-17 (till December 2016). Gas pipeline infrastructure in the country stood at 16,240.4 km in November 2016.

State-owned Oil and Natural Gas Corporation (ONGC) dominates the upstream segment (exploration and production), and produced around 1,847 thousand metric tonnes (TMT) of crude oil, as against the country's 2,939 MT oil output in April 2017. The company also accounted for 57 percent of the country's domestic crude oil production in 2016-17.

### **Investment**

According to data released by the Department of Industrial Policy and Promotion (DIPP), the petroleum and natural gas sector attracted FDI worth US\$ 6.86 billion between April 2000 and March 2017.

Following are some of the major investments and developments in the oil and gas sector:

- Reliance Industries Ltd (RIL), along with its partner BP plc, has decided to invest US\$ 6 billion for the development of new R-series gas fields in the KG-D6 block.
- Indian Oil Corp Ltd (IOC), Bharat Petroleum Corp Ltd (BPCL) and Hindustan Petroleum Corp Ltd (HPCL), have signed an agreement to build integrated refinery-cum-petrochemicals complexes, which would have a capacity of 60 million metric tonnes per annum (MMTPA) and cost approximately US\$ 40 billion. The refinery is expected to commence operation by 2022.
- Oil and Natural Gas Corporation (ONGC) plans to invest US\$ 11 billion in exploration and development of blocks in the Krishna Godavari (KG)basin, which is expected to increase gas production by around 30 per cent over the next three-four years.
- The merger process of Vedanta and Cairn India was completed on April 11, 2017, thereby creating a combined entity with a market capitalisation of US\$ 15.6 billion and a free float of 49.9 per cent.
- Indian Oil Corporation expects to invest Rs 20,000 crore (US\$ 3.1 billion) over the next four years covering 20 projects in order to add a 25 million tonne (MMT) pipeline to its existing pipeline capacity of 93.7 MMT.
- Larsen & Toubro's (L&T) subsidiary, L&T Hydrocarbon Engineering has bagged an order relating to Oil and Natural Gas Corporation's (ONGC) Neelam Re-Development and B173AC projects worth Rs 1,656 crore (US\$ 257 million) which involves building four new platforms, a 32 kilometre pipeline and modification work on existing platforms in the India's western off shore basin, Neelam Field. The project is expected to be completed by 2019 and would result in incremental gain of 2.76 million ton crude oil and 4.786 BCM gas until 2034-35.
- The total investment by oil marketing companies (OMCs) on fuel upgradation programme will reach Rs 90,000 crore (US\$ 13.95 billion) by 2020, according to Mr K D Tripathi, Secretary, Ministry of Petroleum and Natural Gas, Government of India.
- Indian Oil Corporation (IOC) plans to invest around Rs 40,000 crore (US\$ 5.9 billion) to set up a 15 million tonne (MT) refinery at Nagapattinam in Tamil Nadu.
- ONGC has signed an agreement with the Government of Andhra Pradesh to invest around Rs 78,000 crore (US\$ 11.7 billion) in the Krishna Godavari basin for producing hydrocarbons by FY 2021-22.
- Honeywell International Inc, the US-based technology firm, plans to double the headcount at its Indian petroleum and polymer arm, Honeywell UOP, to 700, in order to tap opportunities from India's massive refinery upgradation programme and petrochemical capacity expansion.

### **Government Initiatives**

Some of the major initiatives taken by the Government of India to promote oil and gas sector are:

- The Government of India plans to build a nine million tonne (MT) refinery in Rajasthan as well as a 60 MT refinery in Maharashtra, auction oil and gas fields, increase use of liquefied natural gas (LNG), and is in discussions with Saudi Arabian Oil Co (Saudi Aramco) regarding investments in India, as per Mr Dharmendra Pradhan, Minister of State for Petroleum and Natural Gas, Government of India.
- The Government of India plans to merge state oil companies to create an integrated oil major that could compete globally, and utilise the synergy between various state entities for achieving efficiency and cost competitiveness in order to create more value for all shareholders.
- The Government of India plans to unveil a new policy for renewing and extending the lease of 28 oil and gas blocks in the country, with a view to attract more investments into these fields.
- The Cabinet Committee on Economic Affairs, Government of India, has approved the awarding of contracts on 23 onshore and 8 offshore contract areas of discovered small oil and gas fields that earlier belonged to Oil and Natural Gas Corporation (ONGC) and Oil India Limited (OIL).
- The Ministry of Mines plans to restart operations in several hundred mines across the country in order to raise the share of mining and quarrying industry in India's Gross Value Addition (GVA) by one percentage point from 2.4 per cent at present, over the next two-to-three years.

### **Future to do**

India's oil demand is expected to grow at a CAGR of 3.6 per cent to 458 Million Tonnes of Oil Equivalent (MTOE) by 2040, while demand for energy will more than double by 2040 as economy will grow to more than five times its current size, as stated by Mr Dharmendra Pradhan, Minister of State for Petroleum and Natural Gas.

Gas production will likely touch 90 Billion Cubic Metres (BCM) by 2040, subject to adjustment to the current formula that determines the price paid to domestic producers, while demand for natural gas will grow at a CAGR of 4.6 per cent to touch 149 MTOE.

The demand for petroleum products is estimated to reach 244,960 MT by 2021-22, up from 186,209 MT in 2016, and the demand for natural gas is expected to reach 606 MMSCMD by 2021-22 as against a demand of 473 MMSCMD in 2016-17.

Exchange Rate Used: INR 1 = US\$ 0.0155 as on June 20, 2017

**References:** Media Reports, Press Releases, Press Information Bureau, Ministry of Petroleum and Natural Gas, Union Budget 2016-17

Note: 1- According to data from the Petroleum Planning & Analysis Cell, Ministry of Petroleum and Natural Gas; 2- According to a report by Fitch; 3- IGU World Gas LNG Report 2016 Edition

## Pharmaceutical Industry in India

### Introduction

The Indian pharmaceuticals market is the third largest in terms of volume and thirteenth largest in terms of value, as per a report by Equity Master. India is the largest provider of generic drugs globally with the Indian generics accounting for 20 per cent of global exports in terms of volume. Of late, consolidation has become an important characteristic of the Indian pharmaceutical market as the industry is highly fragmented.

India enjoys an important position in the global pharmaceuticals sector. The country also has a large pool of scientists and engineers who have the potential to steer the industry ahead to an even higher level. Presently over 80 per cent of the antiretroviral drugs used globally to combat AIDS (Acquired Immuno Deficiency Syndrome) are supplied by Indian pharmaceutical firms.

The UN-backed Medicines Patent Pool has signed six sub-licences with Aurobindo, Cipla, Desano, Emcure, Hetero Labs and Laurus Labs, allowing them to make generic anti-AIDS medicine TenofovirAlafenamide (TAF) for 112 developing countries.

### Market Size

The Indian pharma industry, which is expected to grow over 15 per cent per annum between 2015 and 2020, will outperform the global pharma industry, which is set to grow at an annual rate of 5 per cent between the same period!. The market is expected to grow to US\$ 55 billion by 2020, thereby emerging as the sixth largest pharmaceutical market globally by absolute size, as stated by Mr Arun Singh, Indian Ambassador to the US. Branded generics dominate the pharmaceuticals market, constituting nearly 80 per cent of the market share (in terms of revenues).

India has also maintained its lead over China in pharmaceutical exports with a year-on-year growth of 11.44 per cent to US\$ 12.91 billion, according to data from the Ministry of Commerce and Industry. In addition, Indian pharmaceutical exports are poised to grow between 8-10 per cent. Imports of pharmaceutical products rose marginally by 0.80 per cent year-on-year to US\$ 1,641.15 million.

Overall drug approvals given by the US Food and Drug Administration (USFDA) to Indian companies have nearly doubled. The country accounts for around 30 per cent (by volume) and about 10 per cent (value) in the US\$ 70-80 billion US generics market.

India's biotechnology industry comprising bio-pharmaceuticals, bio-services, bio-agriculture, bio-industry and bioinformatics is expected grow at an average growth rate of around 30 per cent a year and reach US\$ 100 billion. Biopharma, comprising vaccines, therapeutics and diagnostics, is the largest sub-sector contributing nearly 62 per cent of the total revenues at Rs 12,600 crore (US\$ 1.89 billion).

### Investments

The Union Cabinet has given its nod for the amendment of the existing Foreign Direct Investment (FDI) policy in the pharmaceutical sector in order to allow FDI up to 100 per cent under the automatic route for manufacturing of medical devices subject to certain conditions.

The drugs and pharmaceuticals sector attracted cumulative FDI inflows worth US\$ 14.53 billion, according to data released by the Department of Industrial Policy and Promotion (DIPP).

### Future to do

The Indian pharmaceutical market size is expected to grow to US\$ 100 billion by 2025, driven by increasing consumer spending, rapid urbanisation, and raising healthcare insurance among others.

Going forward, better growth in domestic sales would also depend on the ability of companies to align their product portfolio towards chronic therapies for diseases such as such as cardiovascular, anti-diabetes, anti-depressants and anti-cancers that are on the rise.

The Indian government has taken many steps to reduce costs and bring down healthcare expenses. Speedy introduction of generic drugs into the market has remained in focus and is expected to benefit the Indian pharmaceutical companies. In addition, the thrust on rural health programmes, lifesaving drugs and preventive vaccines also augurs well for the pharmaceutical companies.

Exchange Rate Used: INR 1 = US\$ 0.0150 as on February 9, 2017

**References:** Consolidated FDI Policy, Department of Industrial Policy & Promotion (DIPP), Press Information Bureau (PIB), Media Reports, Pharmaceuticals Export Promotion Council

Note: ! - According to a study by UBM India, the Indian arm of London-based media and events company; @ - According to India Ratings (a Fitch company); # - according to Assocham and TechSci Research

### EXPORTS AND ADVANTAGE INDIA

India is the third largest pharmaceuticals market in the world in terms of value and eleventh largest in terms of volume. It has established itself as a global manufacturing and research hub. A large raw material base and the availability of a skilled workforce give the industry a definite competitive advantage. The Indian pharmaceutical industry is expected to grow at a compound annual growth rate (CAGR) of 22.4 per cent to touch US\$ 55 billion by 2020, from US\$ 20 billion in 2015.

India's pharmaceutical space is dominated by generic drugs, which accounts for around 70 per cent of the market. India accounts for around 30 per cent (by volume) and about 10 per cent (value) in the US\$ 70-80 billion US generics market.

- India is the largest supplier of generic medicines globally (20 per cent of global export volume)
- Pharmaceutical export from India stood at US\$ 16.4 billion in 2016-17, and is expected to reach US\$ 20 billion by the year 2020.
- US Food and Drug Administration (USFDA) approvals to Indian companies totalled 201 in FY2015-16, up from 109 approvals received in FY2014-15.
- India has one of the lowest manufacturing costs in the world. Manufacturing cost in India is approximately 35–40 per cent of that in the US as installation and workforce costs are low.
- India is expected to rank amongst the top three pharmaceutical markets in terms of incremental growth by 2020.

The Pharmaceutical Export Promotion Council (PHARMEXCIL) was established in 2004 by the Ministry of Commerce and Industry, Government of India, to promote pharma exports.

**The Indian pharmaceutical industry is expected to touch US\$ 55 billion by 2020.**

## Plastics Industry in India

### Introduction

The Indian plastics industry made a promising beginning in 1957 with the production of polystyrene. Thereafter, significant progress has been made, and the industry has grown and diversified rapidly. The industry spans the country and hosts more than 2,000 exporters. It employs about 4 million people and comprises more than 30,000 processing units, 85-90 percent of which are small and medium-sized enterprises.

- Export of plastic products from India stood at US\$ 7.64 billion.
- During 2015-16, major importers of Indian plastic products were US (US\$ 898.45 million), China (US\$ 489.25 million), UAE (US\$ 422.74 million), Germany (US\$ 290.03 million), UK (US\$ 287.68 million), Italy (US\$ 286.9 million), Turkey (US\$ 285.23 million), Bangladesh (US\$ 184.33 million), Saudi Arabia (US\$ 169.1 million) and Nepal (US\$ 161.09 million)
- Domestic consumption of plastic is expected to touch 20 million Metric Tonnes by 2020.
- The Indian plastics industry produces and exports a wide range of raw materials, plastic-moulded extruded goods, polyester films, moulded / soft luggage items, writing instruments, plastic woven sacks and bags, polyvinyl chloride (PVC), leather cloth and sheeting, packaging, consumer goods, sanitary fittings, electrical accessories, laboratory / medical surgical ware, tarpaulins, laminates, fishnets, travelware, and others.
- The Indian plastics industry offers excellent potential in terms of capacity, infrastructure and skilled manpower. It is supported by a large number of polymer producers, and plastic process machinery and mould manufacturers in the country.
- Among the industry's major strengths is the availability of raw materials in the country. Thus, plastic processors do not have to depend on imports. These raw materials, including polypropylene, high-density polyethylene, low-density polyethylene and PVC, are manufactured domestically.

The Plastics Export Promotion Council (PLEXCONCIL) is the apex government body responsible for the promotion of plastic exports. PLEXCONCIL members comprise large-/medium-/small-scale manufacturers and exporters. The council supports exporters by participating in international trade fairs, exploring new markets, organising buyer- seller meets both in India and overseas, and engaging in various other promotion and need- based activities.

**Total export of plastic products stood at US\$ 7.64 billion and Total export of plastic and plastic products stood at US\$ 449.72 million.**

## Powerloom Industry in India

### Introduction

The powerloom industry has traditionally been a cornerstone of the Indian economy in terms of foreign exchange earnings and employment. Powerlooms contribute around 70 per cent of the total jobs in the textile industry, employing around 6.5 million people. The powerloom industry is equipped with approximately 2.5 million registered looms, which are concentrated in clusters across Erode, Salem, Madurai, Ichalkarnaji, Solapur, Bhiwandi, Bhilwara and Malegaon, among others.

### KEY MARKETS AND EXPORT DESTINATIONS

Apart from the US and the EU, which account for about two-thirds of India's textile exports, China, the UAE, Vietnam, Sri Lanka, Saudi Arabia, the Republic of Korea, Bangladesh, Turkey, Pakistan, and Brazil are some of the major markets for these exports.

Approximately 6.1 million workers are expected to be employed in the industry.

The domestic textile and apparel market is witnessing strong growth due to a rapid increase in organised retail and disposable incomes; the market is estimated to reach US\$ 141 billion by 2021.

### POWERLOOM DEVELOPMENT AND EXPORT PROMOTION COUNCIL

The Powerloom Development and Export Promotion Council (PDEXCIL) is the nodal agency for the development and promotion of exports of powerloom products. The Council undertakes direct promotional activities such as participation in international trade shows, sending and hosting trade delegations, and sustained image-building exercises through advertisements abroad, publications and audiovisuals.

**There are approximately 2.5 million registered power looms in the country**

## Real Estate Industry in India

### Introduction

The real estate sector is one of the most globally recognised sectors. In India, real estate is the second largest employer after agriculture and is slated to grow at 30 per cent over the next decade. The real estate sector comprises four sub sectors - housing, retail, hospitality, and commercial. The growth of this sector is well complemented by the growth of the corporate environment and the demand for office space as well as urban and semi-urban accommodations. The construction industry ranks third among the 14 major sectors in terms of direct, indirect and induced effects in all sectors of the economy.

It is also expected that this sector will incur more non-resident Indian (NRI) investments in both the short term and the long term. Bengaluru is expected to be the most favoured property investment destination for NRIs, followed by Ahmedabad, Pune, Chennai, Goa, Delhi and Dehradun.

### Market Size

The Indian real estate market is expected to touch US\$ 180 billion by 2020. The housing sector alone contributes 5-6 per cent to the country's Gross Domestic Product (GDP).

In the period FY2008-2020, the market size of this sector is expected to increase at a Compound Annual Growth Rate (CAGR) of 11.2 per cent. Retail, hospitality and commercial real estate are also growing significantly, providing the much-needed infrastructure for India's growing needs.

The private equity investments in real estate increased 26 per cent to a nine-year high of nearly Rs 40,000 crore (US\$ 6.01 billion)

Sectors such as IT and ITeS, retail, consulting and e-commerce have registered high demand for office space in recent times. The office space absorption across the top eight cities amounted to 34 million square feet (msf) with Bengaluru recording the highest net absorption during the year. Information Technology and Business Process Management sector led the total leasing table with 52 per cent of total space uptake in 2016. Mumbai is the best city in India for commercial real estate investment, with returns of 12-19 per cent likely in the next five years, followed by Bengaluru and Delhi-National Capital Region (NCR).

### Investments

The Indian real estate sector has witnessed high growth in recent times with the rise in demand for office as well as residential spaces. According to data released by Department of Industrial Policy and Promotion (DIPP), the construction development sector in India has received Foreign Direct Investment (FDI) equity inflows to the tune of US\$ 24.28 billion.

Some of the major investments in this sector are as follows:

### Future to do

Responding to an increasingly well-informed consumer base and, bearing in mind the aspect of globalisation, Indian real estate developers have shifted gears and accepted fresh challenges. The most marked change has been the shift from family owned businesses to that of professionally managed ones. Real estate developers, in meeting the growing need for managing multiple projects across cities, are also investing in centralised processes to source material and organise manpower and hiring qualified professionals in areas like project management, architecture and engineering.

The growing flow of FDI into Indian real estate is encouraging increased transparency. Developers, in order to attract funding, have revamped their accounting and management systems to meet due diligence standards.

## Research & Development in India

### Introduction

The research ecosystem in India presents a significant opportunity for multinational corporations across the world due to its intellectual capital available in the country. Legions of Indian engineers working across the globe highlight the highly trained manpower available at competitive costs. Consequently, several MNCs have shifted or are shifting their research and development (R&D) base to India. These R&D bases either develop products to serve the local market or help the parent company overseas deliver new innovative generation of products faster to the markets across the world.

### Market Size

India's Engineering R&D (ER&D) Globalization and Services market reached US\$ 22.3 billion and is set to rise to US\$ 38 billion by 2020. India accounted for 40 per cent (US\$ 13.4 billion) of the total US\$ 34 billion of globalised engineering and R&D.

India will likely get into the list of the top 25 nations in the Global Innovation Index, in the next 10 years.

India-based R&D services companies, which account for almost 22 per cent of the global addressed market, grew much faster at 12.67 per cent.

The market for Engineering R&D (ER&D) companies in India is mainly structured across pure play PES companies such as Cyient, QuEST, eInfochips and the larger IT companies with a PES play such as Wipro, TCS, HCL. India's ER&D services market is expected to reach US\$ 15-17 billion by 2020 and North America continues to be the largest market contributing to 55 per cent of revenues.

### Recent Investments and developments

- Tata Motors has tied up with Microsoft for using its connected vehicle technology along with artificial intelligence (AI) capabilities to improve the in-car connected experience.
- Robert Bosch Engineering and Business Solutions (RBEI) has inaugurated its new reliability testing laboratory in Naganathapura in Bengaluru, build for US\$ 3.5 million, and capable of testing Electronic Component Units (ECU) used in automobiles, aircrafts, home appliances and similar other systems.
- Uber Technologies plans to make its Bengaluru technology centre a hub of product innovation for India as well as for global markets with a target of introducing new products on payments, vehicle intelligence and mapping.
- Britannia Industries Limited, India's largest biscuit maker, has set up an ultra-modern research and development facility in Bidadi, on the outskirts of Bengaluru, by making an investment of Rs 200 crore (US\$ 29.3 million).
- Abbott Laboratories, a global drug maker based in US, plans to set up an innovation and development center (IGD) in Mumbai, which will help in developing new drug formulations, new indications, dosing, packaging and other differentiated offerings for Abbott's global branded generics business.
- Everstone Group, an India-focused private equity firm, has acquired a controlling 70 per cent equity stake in Mumbai-based drug delivery technology firm Rubicon Research Private Limited for Rs 220 crore (about US\$ 33 million).
- US-based Mondelez International, a multinational confectionery, food, and beverage company which makes Cadbury chocolates and Bournvita, plans to invest US\$ 15 million to set up a global research, development and quality hub in Thane, Maharashtra.
- The Tata Group has entered into collaborations with world's leading academic institutions, which include Harvard University, Yale University, the Indian Institute of Technology, Madras, and the Royal Society, United Kingdom, in order to fund research and development opportunities in those institutions.
- The United States and India have signed a US\$ 30 million agreement for a public-private five-year research initiative on smart grid and energy storage technology.
- The Government of India and the Government of the United Kingdom have signed an agreement to work together in the fields of Solar Energy and Nano Material Research, which is expected to yield high quality and high impact research outputs having industrial relevance, targeted towards addressing societal needs.
- The Indian Space Research Organisation (ISRO) has successfully launched 20 satellites and injected them into the required orbit, launching the maximum number of satellites in a single mission ever. The launch took place aboard the Polar Satellite Launch Vehicle (PSLV-C32) at the Satish Dhawan Space Centre in Sriharikota.
- Boston Scientific Corporation plans to develop devices such as stents, catheters and pacemakers at its Gurgaon facility in India for the Asia Pacific, Middle East and African markets, which will make India its biggest R&D hub outside the US.
- India is becoming a new innovation destination of choice, with Bengaluru been ranked fifth among the top ten destinations in the world to open innovation centres.
- Ford Motor Company plans to set up a new global technology and business centre in Chennai, which will host operations of Ford Global Business Services in areas of Information Technology (IT), product engineering, finance and accounting and data analytics.
- India's largest two wheeler manufacturer, Hero Motocorp has set up an integrated R&D facility with an investment of Rs 850 crore (US\$ 126.74 million) on the outskirts of Jaipur.
- Informatica, a US-based cloud and data management company, plans to make huge investment in next four years to expand its Bengaluru R&D facility.
- QuEST Global, a pure-play engineering and research and development (R&D) services provider, has raised investment of around Rs 2,396 crore (US\$ 357.27 million) from leading global investors Bain Capital, GIC and Advent International for a minority stake in the company.
- The National Research Development Corporation (NRDC) has signed a Memorandum of Understanding (MOU) with Indian Institute of Chemical Biology (IICB) which will give an impetus to the "Startup India" and "Make in India" missions of the Government of India by promoting entrepreneurship, incubation, Intellectual Property Rights (IPRs) and technology transfer.
- German automotive firm Bosch GmbH has signed a memorandum of understanding (MoU) with Indian Institute of Science (IISc), Bangalore with a view to strengthen Bosch's research and development in areas including mobility and healthcare thereby driving innovation for India-centric requirements.
- Chinese telecom gear maker Huawei has launched a Research and Development (R&D) campus in Bengaluru with an investment of US\$ 170 million. The campus, the first by any Chinese company, has a capacity to accommodate 5,000 engineers and is the largest R&D centre of Huawei outside China. At present 2,700 people are working here, with 98 per cent being local workers.
- American chipmaker Broadcom is betting big on developing solutions tailored to India and other emerging nations from its Bengaluru R&D unit. The key opportunities focused on are in the areas of Internet of Things and wearables market in India. Out of Broadcom's global headcount of about 11,000 people, the India R&D centre has about 1,500 people.
- Twitter Inc is planning to set up its first facility outside the US in the form of an R&D centre in Bengaluru to grow faster and accelerate user adoption in emerging markets. Twitter plans to use Bengaluru-based mobile marketing and analytics company Zip Dial Mobile Solutions Pvt. Ltd's team to build this new R&D facility.

- California based Cohesity, a start-up involved in secondary storage space, has recently launched operations in India and is expected to invest US\$ 10 million in the country over the next two years in research and development.

### Government Initiatives

Some of the major initiatives taken by the Government of India to promote R&D sector are:

- The Union Cabinet has approved the MoU between United States Geological Survey (USGS) and Indian Space Research Organisation (ISRO) enabling ISRO to receive USGS's Landsat-7 & 8 in India and USGS to receive ISRO's Resourcesat-2 (AWiFS and LISS III) data of US region.
- India and Israel have agreed to enhance the bilateral cooperation in science and technology in the next two years by providing US\$ 1 million from each side to support new research and development (R&D) projects in the areas of big data analytics in healthcare and cyber security.
- The Ministry of Environment, Forest and Climate Change (MoEFCC) has announced a R&D initiative to develop next generation sustainable refrigerant technologies as alternatives to the currently used refrigerant gases like hydrofluorocarbons (HFCs), in order to mitigate its impact on the ozone layer and climate.
- The Government of India plans to set up an Indian Council for Fertilizers Research, which would encourage development of new fertilisers and nutrients and thereby boost the growth of agriculture sector in the country.
- India and Japan are exploring ways to strengthen their collaboration in various fields of science and technology, such as artificial intelligence, energy, ocean sciences, marine instrumentation, high skill development and analysis of Big Data, research & development and bio information, while many projects are in the planning process.
- The Department of Industrial Policy and Promotion (DIPP) aims to lower the time taken to clear pending Intellectual Property Rights (IPR), which is expected to encourage innovation and entrepreneurship in the country.
- The Union Cabinet has given an "in principle" clearance for the location of a Laser Interferometer Gravitational-Wave Observatory (LIGO) facility in India which will be the third in the world and will be set up and managed by the IndIGO Consortium (Indian Initiative in Gravitational-wave Observations).
- India's steel minister Mr Narendra Singh Tomar has announced creating a fund of Rs 100 crore (US\$ 14.91 million) to help setting up R&D units with the participation from industries and the government to overcome the technological gaps. Mr Tomar said "It is under the active consideration of the government to infuse more funds in this initiative to utilise locally available cheap raw material, to remain competitive in the world market.
- A team of scientists from India and Bangladesh will conduct for the first time, joint marine research within Bangladesh's Exclusive Economic Zone (EEZ), which is expected to help in understanding climate change and monsoon patterns in India.

### Future to do

With the government's support, the R&D sector in India is all set to witness some robust growth in the coming years. According to a study by management consulting firm Zinnov, engineering R&D market in India is estimated to grow at a CAGR of 14 per cent to reach US\$ 42 billion by 2020.

India is also expected to witness strong growth in its agriculture and pharmaceutical sectors as the government is investing large sums to set up dedicated research centres for R&D in these sectors. The Indian IT industry is also expected to add to the development of the R&D sector.

*References: Media Reports, Press Information Bureau (PIB), Innovation Council of India, Union Budget . Department of Industrial Policy and Promotion (DIPP)*

*Notes – @according to report released by Zinnov Management Consulting, #-according to a study by consulting firm Zinnov, \$- Capgemini report titled Digital Dynasties: The Rise of Innovation Empires Worldwide, %- as said by Mr Francis Gurry, Director-General at the World Intellectual Property Organization*

## Retail Industry in India

### Introduction

The Indian retail industry has emerged as one of the most dynamic and fast-paced industries due to the entry of several new players. It accounts for over 10 per cent of the country's Gross Domestic Product (GDP) and around 8 per cent of the employment. India is the world's fifth-largest global destination in the retail space.

### Market Size

India's retail market is expected to nearly double to US\$ 1 trillion by 2020 from US\$ 600 billion in 2015#, driven by income growth, urbanisation and attitudinal shifts. While the overall retail market is expected to grow at 12 per cent per annum, modern trade would expand twice as fast at 20 per cent per annum and traditional trade at 10 per cent#.

India's Business to Business (B2B) e-commerce market is expected to reach US\$ 700 billion by 2020.## Online retail is expected to be at par with the physical stores in the next five years.

India is expected to become the world's fastest growing e-commerce market, driven by robust investment in the sector and rapid increase in the number of internet users. Various agencies have high expectations about growth of Indian e-commerce markets. Indian e-commerce sales are expected to reach US\$ 120 billion! by 2020 from US\$ 30 billion. Further, India's e-commerce market is expected to reach US\$ 220 billion in terms of gross merchandise value (GMV) and 530 million shoppers by 2025, led by faster speeds on reliable telecom networks, faster adoption of online services and better variety as well as convenience@.

India's direct selling industry is expected to reach a size of Rs 23,654 crore (US\$ 3.54 billion), as per a joint report by India Direct Selling Association (IDSA) and PHD.

Indian exports of locally made retail and lifestyle products grew at a compound annual growth rate (CAGR) of 10 per cent.\*

The size of modern retail in India is expected to double to Rs 171,800 crore (US\$ 25.7 billion) from Rs 87,100 crore (US\$ 13 billion) in three years driven by omni-channel retail. \*\*

### ***Investment Scenario***

The Indian retail trading has received Foreign Direct Investment (FDI) equity inflows totalling US\$ 935.74 million, according to the Department of Industrial Policies and Promotion (DIPP).

With the rising need for consumer goods in different sectors including consumer electronics and home appliances, many companies have invested in the Indian retail space in the past few months.

- US apparel retail major Gap Inc, has tied up with Arvind Group's fashion portal NNNow.com to sell its products online, which will help the retailer expand its presence beyond metros and tier-I cities.
- Hamleys, has stated that India is one of the most important markets for Hamleys globally, and outlined plans of opening six more stores, taking its total store count in the country to 32 .
- Roche Bobois Group, outlined plans of opening new stores in cities like Hyderabad, Chennai, Pune, Kolkata and Ahmedabad, in order to make India one of its top five markets by 2022.
- A joint venture between Dutch asset manager APG Asset Management and real estate asset platform Virtuous Retail, has acquired a portfolio of three shopping malls for US\$ 300 million, and has committed an additional US\$ 150 million as equity capital to expand the portfolio.
- Future Consumer Ltd has formed a joint venture (JV) with UK's largest wholesaler, Booker Group, with an investment of Rs 50 crore (US\$ 7.5 million), to set up 60-70 cash-and-carry stores in India in the next 3-4 years.
- Adidas India Private Limited, outlined plans of opening around 30-40 big flagship stores across Delhi, Mumbai and Bengaluru, by 2020.
- Mad Over Donuts (MoD), outlined plans of expanding its operations in India by opening nine new MoD stores in Hyderabad and Chennai.
- Switzerland's luxury retail brand Bally, plans to re-enter the Indian market in a joint venture with Reliance Brands Ltd, by opening its first store in New Delhi and thereafter aiming to expand to four stores in Delhi, Mumbai, Kolkata and Chennai over the next 3 to 4 years.
- Urban Ladder, an online furniture store, is in advanced talks to raise around US\$ 25-30 million from existing investors Kalaari Capital, SAIF Partners and Sequoia Capital, along with one new investor, which will be used to fund its expansion plans.
- Hennes & Mauritz (H&M), the Sweden-based clothing retailer, is in advanced talks with Mumbai-based Prakhhyat Infraprojects Pvt Ltd to lease around 275,000 square feet of space at Bhiwandi, Maharashtra, to set up its first warehousing hub in India.
- Future Group has partnered with UK clothing and hardware retailer Laura Ashley to make and sell merchandise as well as wholesale distribution in India.
- Parle Agro Pvt Ltd is launching Frooti Fizz, a succession of the original Mango Frooti, which will be retailed across 1.2 million outlets in the country as it targets increasing its annual revenue from Rs 2800 crore (US\$ 0.42 billion) to Rs 5000 crore (US\$ 0.75 billion).
- Amazon, has stated that India continues to be viewed as a long-term opportunity and the company would continue to invest aggressively in Indian operations.
- International Finance Corporation (IFC), the investment arm of The World Bank, plans to invest up to Rs 134 crore (US\$ 19.86 million) in Kishore Biyani's Future Consumer Enterprises Ltd, which is expected to aid the company in driving its growth plans.
- Amazon India has opened six new fulfillment centres across Chennai, Coimbatore, Delhi, Jaipur and Mumbai, which will open up 5.5 million square feet of storage space for sellers on the market place who use the 'Fulfilled by Amazon' service.
- IKEA, the world's largest furniture retailer, plans to invest Rs 10,500 crore (US\$ 1.56 billion) to set up 25 stores across India and hire over 15,000 permanent employees and 37,500 temporary employees to assist in running its stores.
- Aditya Birla Fashion and Retail Limited (ABFRL) has announced that it will acquire exclusive online and offline rights of Forever 21, an American fast fashion brand, in the Indian market.
- Massimo Dutti, a premium fashion brand from Spain offering sophisticated womens wear, menswear, footwear and accessories, has entered India by opening its first store at the Select Citywalk mall in New Delhi.

- Lenskart, India's largest online eyewear retailer, has raised Rs 400 crore (US\$ 59.3 million) in series D round of funding led by World Bank's investment arm International Finance Corporation (IFC), which will be used to enhance its technology, supply chain, lens manufacturing, and expand the reach of its high-quality eyewear products across Tier-3 and Tier-4 cities of India.
- Neil Barrett, one of the leading Italian fashion brands, has forayed into the Indian market by establishing its retail presence through an exclusive partnership with Fervour, a multi-brand boutique that stocks international designer brands.
- New York-based designer brand Kate Spade will be launched in India later this year and will set up a network of stand-alone stores across major cities, thus becoming one more global brand entering the Indian retail space after the Government of India relaxed single brand retail norms recently.
- Kart Rocket, a Delhi based e-commerce enabler has completed its US\$ 8 million funding round by raising US\$ 2 million from a Japanese investor, which will be used to enhance Kraftly, a mobile-first online-to-offline marketplace targeting small sellers, individuals and home-based entrepreneurs in India in product categories such as apparel and accessories.
- Purple TalkInc, a US based mobile solutions company, has invested US\$ 1 million in Nukkad Shops, a Hyderabad based uber-local commerce platform that helps neighbourhood retail stores take their businesses online through a mobile app.
- Mumbai-based baby care and kids products e-tailer, Hopscotch.in, has raised US\$ 13 million in a Series C round of funding from Facebook co-founder Mr Eduardo Saverin, which will help the firm in growth and expansion of its technology platform.
- Gurgaon-based e-commerce firm Shopclues has raised US\$ 150 million from Singapore government's GIC and its existing investors Tiger Global and Nexus Venture Partners, at a valuation of US\$ 1.1 billion, thereby becoming the latest among several e-commerce companies from India reaching a billion dollar valuation.
- Adidas AG, renowned for its Adidas and Reebok sports brands, has become the first foreign sports company to get government approval to open 100 per cent foreign-owned stores in India.
- Walmart India plans to add 50 more cash-and-carry stores in India over the next four to five years.
- Aeropostale, an American teen fashion retailer, has chosen to enter India over China, and expects India to be among its top three markets over the next four years with revenue target of Rs 500 crore (US\$ 74.12 million).
- Opinio, a hyperlocal delivery start-up, has raised US\$ 7 million in a Series-A funding from Gurgaon-based e-commerce fulfilment service firm Delhi very along with investment from Sands Capital and Accel Partners.
- Textile major Arvind Limited has announced a partnership with Sephora, owned by LVMH Moet Hennessy Louis Vuitton, a French luxury conglomerate, in order to enter into the beauty and cosmetics segment.
- Abu Dhabi-based Lulu Group plans to invest Rs 2,500 crore (US\$ 370.6 million) in a fruit and vegetable processing unit, an integrated meat processing unit, and a modern shopping mall in Hyderabad, Telangana.
- Aditya Birla Retail, a part of the US\$ 40 billion Aditya Birla Group and the fourth-largest supermarket retailer in the country, acquired Total hypermarkets owned by Jubilant Retail.
- US-based Pizza chain Sbarro plans an almost threefold increase in its store count from the current 17 to 50 over the next two years through multiple business models.

### ***Government Initiatives***

The Government of India has taken various initiatives to improve the retail industry in India.

- Government of India has allowed 100 per cent Foreign Direct Investment (FDI) in online retail of goods and services through the automatic route, thereby providing clarity on the existing businesses of e-commerce companies operating in India.
- The Government of Andhra Pradesh signed pacts worth Rs 1,500 crore (US\$ 222.36 million) in a wide range of sectors including retail and steel and gas with Walmart India, Future Group, Arvind Lifestyle Brands Ltd and Spencer's Retail, during the Partnership Summit in Visakhapatnam, while also unveiling a retail policy aimed to attract retail businesses to invest in the state.
- The Ministry of Urban Development has come out with a Smart National Common Mobility Card (NCMC) model to enable seamless travel by metros and other transport systems across the country, as well as retail purchases.
- IKEA, the world's largest furniture retailer, bought its first piece of land in India in Hyderabad, the joint capital of Telangana and Andhra Pradesh, for building a retail store. IKEA's retail outlets have a standard design and each location entails an investment of around Rs 500-600 crore (US\$ 74-89 million).
- The Government has approved a proposal to scrap the distinctions among different types of overseas investments by shifting to a single composite limit, which means portfolio investment up to 49 per cent will not require government approval nor will it have to comply with sectorial conditions as long as it does not

result in a transfer of ownership and/or control of Indian entities to foreigners. As a result, foreign investments are expected to increase, especially in the attractive retail sector.

### ***Future to do***

E-commerce is expanding steadily in the country. Customers have the ever increasing choice of products at the lowest rates. E-commerce is probably creating the biggest revolution in the retail industry, and this trend would continue in the years to come. Retailers should leverage the digital retail channels (e-commerce), which would enable them to spend less money on real estate while reaching out to more customers in tier-2 and tier-3 cities.

Both organised and unorganised retail companies have to work together to ensure better prospects for the overall retail industry, while generating new benefits for their customers.

Nevertheless, the long-term outlook for the industry is positive, supported by rising incomes, favourable demographics, entry of foreign players, and increasing urbanisation.

**References:** Media Reports, Press Releases, Deloitte report, Department of Industrial Policy and Promotion website,

Note: ! - according to a joint ASSOCHAM-Forrester study paper, @ - as per Bank of America Merrill Lynch (BoFA-ML) report., # - as per a report titled 'Retail 2020: Retrospect, Reinvent, Rewrite' by The Boston Consulting Group and Retailers Association of India,

## **Science & Technology Development in India**

### ***Introduction***

India ranks third among the most attractive investment destinations for technology transactions in the world. Modern India has had a strong focus on science and technology, realising that it is a key element of economic growth. India is among the topmost countries in the world in the field of scientific research, positioned as one of the top five nations in the field of space exploration. The country has regularly undertaken space missions, including missions to the moon and the famed Polar Satellite Launch Vehicle (PSLV).

Currently@, 27 satellites including 11 that facilitate the communication network to the country are operational, establishing India's progress in the space technology domain. India is likely to take a leading role in launching satellites for the SAARC nations, generating revenue by offering its space facilities for use to other countries.

### ***Market size***

India is among the world's top 10 nations in the number of scientific publications. Position-wise, it is ranked 17th in the number of citations received and 34th in the number of citations per paper across the field of science and technology (among nations publishing 50,000 or more papers). The country is ranked ninth globally in the number of scientific publications and 12th in the number of patents filed.

India's analytics industry is expected to touch US\$ 16 billion by 2025 from the current US\$ 2 billion, as per the National Association of Software and Services Companies (Nasscom).

With support from the government, considerable investment and development has incurred in different sectors such as agriculture, healthcare, space research, and nuclear power through scientific research. For instance, India is gradually becoming self-reliant in nuclear technology. Recently, the Kudankulam Nuclear Power Project Unit-1 (KKNPP-1) with 1,000 MW capacity was commissioned, while the Kudankulam Nuclear Power Project Unit-2 (KKNPP-2) with 1,000 MW capacity is under commissioning.

### ***Recent developments***

Some of the recent developments in the field of science and technology in India are as follows:

- The Indian Space Research Organisation (ISRO) plans to launch 2 satellites in March and April 2017, which includes the satellite meant for the benefit of the South Asian Association for Regional Cooperation (SAARC) nations. ISRO also targets launch of second lunar mission Chandrayaan-2.
- ISRO has launched a record high of 104 satellites in one go on a single rocket from Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh.
- ISRO has successfully placed remote sensing satellite RESOURCE SAT-2A in orbit, to provide continuity to ISRO's three tier imaging data, which will be extremely useful for agricultural applications.
- Magicbricks has launched India's first real estate Experience Centre in Mumbai, which uses technologies such as virtual reality, augmented reality, and on-demand video-call to provide an intuitive experience in property purchase.
- The Defense Research and Development Organisation (DRDO) has tied up with French engine maker Snecma to guide the Gas Turbine and Research Establishment (GTRE) to improve the performance of Kaveri engines being used in India's indigenously developed Light Combat Aircraft (LCA) Tejas.
- The Indian Space Research Organisation's (ISRO) Polar Satellite Launch Vehicle-C35 (PSLV-C35) has successfully placed eight different satellites in a single rocket mission, including SCATSAT-1 for weather related studies, five foreign satellites and two satellites from Indian academic institutes into orbit.

- The Ministry of Environment, Forest and Climate Change (MoEFCC) has announced a research and development (R&D) initiative to develop next generation sustainable refrigerant technologies as alternatives to the currently used refrigerant gases like hydrofluorocarbons (HFCs), in order to mitigate its impact on the ozone layer and climate.
- The Indian Space Research Organisation's (ISRO) geosynchronous satellite launch vehicle-F05 (GSLV) successfully launched India's weather satellite INSAT-3DR into space, which will provide meteorological services and assist search and rescue operations of security agencies including all defence forces, the coast guard, and in shipping industry.
- The Indian Space Research Organisation (ISRO) plans to partner with private firms to jointly build a navigation satellite that it would launch shortly, which would allow the space agency to free its resources to focus on research and deep space missions.
- Indian Institute of Technology, Kharagpur (IIT-Kharagpur) and National Highways Authority of India (NHAI) have signed a memorandum of understanding (MoU) for research project to develop technology to construct maintenance free highways in India.
- Intertek Group, a UK-based total quality assurance provider, has launched an Agricultural Technology (Agritech) laboratory in Hyderabad, which will perform high-tech Deoxyribonucleic Acid (DNA) analyses for the agri-biotech, plant seeds breeding, and plant seeds production industries.
- The Indian Institute of Science (IISc) has discovered a breed of natural cures for cancer in Quercetin, a compound found in fruits and leaves, and plant VernoniaCondensata, which can significantly reduce the tumour size and increase the longevity of life.
- The Indian Space Research Organisation (ISRO) has completed its mission of developing India's independent navigation system by launching Indian Regional Navigation Satellite System (IRNSS - IG), the seventh and final navigation satellite, which will reduce the country's dependency on US Global Positioning System.
- The Indian Space Research Organisation (ISRO) has signed a memorandum of understanding (MoU) with the Airports Authority of India (AAI), aimed at providing space technology for construction of airports, which will help make flight operations safer and provide optimum utilisation of land.
- Indian and American delegations have discussed an arrangement for Space Situational Awareness (SSA), a programme for monitoring space environment and track potential hazards and security threats, and have set up a bilateral mechanism for sharing information for tracking movements of satellites, avoiding collisions and identifying potential threats to space and ground assets.
- The Department of Space/ Indian Space Research Organisation (DOS/ISRO) and Kuwait Institute of Scientific Research (KISR) have signed a Memorandum of Understanding (MoU) on cooperation in the field of exploration and use of outer space.
- The Indian Institute of Science (IISc), Bangalore has become the first Indian institution to enter the Top 100 universities ranking in engineering and technology\*.

## Investment Scenario

- Infosys Ltd has invested Rs 14.5 crore (Danish Krone 15.22 million) in a Danish artificial intelligence start-up called UNSILO, which specialises in advanced text analysis and has built a semantic search engine with best-in-class text intelligence.
- NIDHI (National Initiative for Development and Harnessing Innovations), an umbrella program pioneered by the Department of Science & Technology (DST), has committed Rs 500 crore (US\$ 75 million) to implement Prime Minister Startup India initiative, by providing technological solutions and nurturing ideas and innovations into successful startups.
- Inno Nano Research, a clean water technology company, has raised US\$ 18 million from NanoHoldings, a US-based energy and water investment firm, which will be used to set up manufacturing facility, modern research laboratory and technology delivery offices across North America, Asia and Africa to make India an exporter of water technologies.
- Ecoppia, an Israel-based developer of robotic cleaning technology for solar sites, has signed a deal with Sanmina Corporation, a US-based Original Equipment Manufacturer (OEM), to begin mass production of their E4 robots at a new facility near Chennai.
- Saama Technologies Incorporation, the Big Data analytics solutions and services company, headquartered in the Silicon Valley, plans to invest US\$ 2 million to create the largest pure play data science and analytics hub in India.
- The Government aims to invest 2 per cent of the country's GDP on research and development (R&D) in its 12th Five-Year Plan. Accordingly, the Government has undertaken various measures for promoting growth of scientific research, such as:
  - Sustained increase in plan allocations for scientific departments
  - Setting up of new institutions for science education and research.
  - Launch of new Science, Technology and Innovation Policy .
  - Creation of centres of excellence for research and facilities in emerging and frontline science and technology areas in academic and national institutes.
  - Establishment of new and attractive fellowships.
  - Strengthening infrastructure for R&D in universities.

- Encouraging public-private R&D partnerships.
- Recognition of R&D units.
- Fiscal incentives and support measures for enhancing industry participation in R&D.

### ***Government Initiatives***

India and Israel have agreed to enhance the bilateral cooperation in science and technology in the next two years, under the aegis of the SGT agreement, by providing US\$ 1 million from each side to support new research and development (R&D) projects in the areas of big data analytics in healthcare and cyber security.

India has become an Associate Member State of the European Organisation for Nuclear Research (CERN), which will increase the collaboration between India and CERN's scientific and technological endeavours, and will increase participation of Indian physicists, software engineers and electronics hardware in global experiments.

Minister of State with Independent Charge for the Ministry of Commerce & Industry, outlined plans of setting up a committee to examine and expeditiously implement measures to improve India's innovation landscape.

Dr Harsh Vardhan, Minister for Science and Technology and Earth Sciences, outlined Government of India's plans to pursue a green path to growth by doubling investment in clean energy research to US\$ 145 million in the next five years from current investment of US\$ 72 million.

The Department of Health Research (DHR), Ministry of Health and Family Welfare plans to set up a three-tier national network of Viral Research and Diagnostic Laboratories (VRDLs) under which 160 VRDLs will be set up with capability to handle around 30-35 viruses of public health importance.

The central government plans to soon institute a nation-wide consultation process with a view to develop the first publicly accessible Science and Technology policy. The policy 'Vision SGT 2020' would articulate the country's future towards self-reliance and technological independence in the 21st century.

The Union Cabinet gave "in principle" clearance for the location of a Laser Interferometer Gravitational-Wave Observatory (LIGO) facility in India which will be the third in the world and will be set up and managed by the IndIGO Consortium (Indian Initiative in Gravitational-wave Observations).

The Department of Biotechnology, Ministry of Science and Technology of the Government of India has become only the second country outside of Europe to join the European Molecular Biology Organisation (EMBO), which consists of 1,700 eminent scientists and 84 Nobel laureates, and aims to encourage research in the field of life sciences.

The National Highways Authority of India (NHAI) has signed a Memorandum of Understanding (MoU) with the National Remote Sensing Centre (NRSC) under Indian Space Research Organisation (ISRO) and North East Centre for Technology Application and Research (NECTAR) to use spatial technology such as satellite data to monitor and manage national highways.

National Council of Science Museums (NCSM), an autonomous organisation under the Union Ministry of Culture, is engaged in the establishment of Science Centres across the country. NCSM is developing a Science City at Guwahati, Assam, which would be handed over to the Government of Assam for future operations and maintenance. The organisation has received proposals from various state governments for setting up of such Science Cities. NCSM has undertaken the Science Centres/Cities projects in a phased manner depending on the availability of resources, project handling capacity of NCSM, and existing level of science centre activities in a particular state.

### ***The Future to do***

India is aggressively working towards establishing itself as a leader in industrialisation and technological development. Significant developments in the nuclear energy sector are likely as India looks to expand its nuclear capacity. Moreover, nanotechnology is expected to transform the Indian pharmaceutical industry. The agriculture sector is also likely to undergo a major revamp, with the government investing heavily for the technology-driven Green Revolution. Also, several automobile manufacturers, from global majors such as Audi to Indian companies such as Maruti Suzuki and Mahindra & Mahindra, are exploring the possibilities of introducing driverless self-driven cars for India. The Government of India, through the Science, Technology and Innovation (STI) Policy-2013, among other things, aspires to position India among the world's top five scientific powers.

**References** – Media reports, Press Releases, Press Information Bureau (PIB), Union Budget.

Notes - @ - As per information provided in Lok Sabha, \$ - as per Ernst & Young's (EYs) Global Capital Confidence Barometer (CCB) - Technology report, \* - as per The Times Higher Education of London

## **Semiconductor Industry in India**

### ***Introduction***

The Indian semiconductor industry offers high growth potential areas as the industries which source semiconductors as inputs are themselves witnessing high demand. The end-use industries such as mobile devices, telecommunication equipment, information technology, office automation (IT & OA), industrial machinery, automobiles and several other industries have applications for computing in some form or other and thereby necessarily have growing demand for semiconductors. Now with the concept of Internet of Things (IoT) picking up momentum, the next generation of interconnected devices would further increase the demand for intelligent computing, thereby creating sustainable demand for semiconductors.

India has a very fast growing electronics system design manufacturing (ESDM) industry. India also has a strong design base with more than 120 units. According to the Department of Electronics and Information Technology (DeitY), nearly 2,000 chips are being designed every year in India and more than 20,000 engineers are working on

various aspects of chip design and verification. The government has a strong focus in developing the ESDM ecosystem in India. Several subsidies and other incentives are on offer for setting up electronics manufacturing units in India.

### ***Market size***

According to a study by The Associated Chambers of Commerce of India (ASSOCHAM) and EY, the Indian electronics and hardware industry is expected to reach US\$ 112-130 billion as electronics and hardware manufacturers are looking to increase their manufacturing base in India to cater to the domestic market as well as the Middle East, Africa and SAARC countries.

According to the India Electronics & Semiconductor Association, the Indian Electronic System Design and Manufacturing (ESDM) market will grow from US\$ 76 billion to US\$ 400 billion by 2020. Consumption of semiconductors, in the meantime, has also steadily climbed. According to a report by NOVONOUS, the semiconductor industry is estimated to grow from US\$ 10.02 billion to US\$ 52.58 billion in 2020 at a Compound Annual Growth Rate (CAGR) of 26.72 per cent.

The research report expects that mobile devices are expected to grow at a high CAGR of 33.4 per cent between 2013 and 2020. Consequently the share of mobile devices in semiconductor revenue is expected to grow from 35.4 per cent in 2013 to 50.7 per cent in 2020. Further, the telecommunication segment is also expected to grow at a high CAGR of 26.8 per cent between 2013 and 2020. The IT&OA segment is estimated to grow at a CAGR of 18.2 per cent over the next seven years. Although consumer electronics segment is expected to grow at a CAGR of 18.8 per cent, its contribution to the total semiconductor revenue is expected to lower to 3.5 per cent in 2020 from 5.6 per cent in 2013. Automotive electronics segment is expected to grow at a fast clip of 30.5 per cent CAGR from 2013 to 2020. Consequently, its revenue contribution is set to rise to 3.9 per cent in 2020.

### ***Investments***

Union Minister of Information Technology, announced that the Foreign Direct Investment (FDI) in electronic manufacturing has reached an all-time high of Rs 123,000 crore (US\$ 18.34 billion) in 2016 from around Rs 11,000 crore (US\$ 1.64 billion), primarily due to government reforms and its Make in India initiative.

The Government of India has allowed 100 per cent Foreign Direct Investment (FDI) under the automatic route in Electronics Systems Design & Manufacturing sector. According to the data released by the Department of Industrial Policy and Promotion (DIPP), the electronics sector attracted foreign direct investment (FDI) worth US\$ 1.70 billion.

### ***Some of the notable developments in this sector are as follows:***

- Panasonic Corporation, the Japan-based electronics company, plans to set up a new plant at Jhajjar in Haryana, which will manufacture refrigerators for the Indian market, along with setting up a research and development (R&D) center for appliances consisting of two technical divisions to strengthen the product development in the country.
- Samsung India Electronics Ltd has signed a deal to lease 100,000 square feet (sqft) of space at Oberoi Realty Ltd's commercial property Commerz II in Goregaon suburb of Mumbai, for setting up its new corporate office.
- Next Orbit Ventures, a growth-stage investor, plans to invest US\$ 100 million in Gujarat-based semiconductor fabrication project, through its fund focused on Electronic System Design and Manufacturing (ESDM) sector.
- India's first Centre of Excellence for Internet of Things (CoE-IoT) has been launched in Bengaluru with five start-ups, which will provide demonstration and concept labs for building IoT solutions for applications like agriculture, automobile, telecommunications, healthcare and consumer goods.
- Dow Corning, one of the leading global players in silicones, silicon-based technology and innovation, opened its Sahayog Building Solutions Centre in New Delhi, which will provide project support, technical training and skill-building workshop to construction industry professionals.
- The Department of Electronics and Information Technology (DeitY) has approved proposals worth Rs 6,155 crore (US\$ 917.8 million) under the Modified Special Incentive Package Scheme (M-SIPS), which aims to provide financial incentives to private companies for setting up electronics manufacturing units.
- Department of Electronics & Information Technology and M/s Canbank Venture Capital Fund Ltd plan to launch an Electronics Development Fund (EDF), which will be a 'Fund of Funds' to invest in 'Daughter Funds' which would provide risk capital to companies developing new technologies in the area of electronics, nano-electronics and Information Technology (IT).
- Infineon Technologies, a German semiconductor firm has partnered with National Skill Development Corporation (NSDC) to impart training to youth on semiconductor or chip technology, aimed at boosting the electronic manufacturing ecosystem in India.
- US-based semiconductor company Free scale which has R&D facility in India, said that it is enabling its partners to bring smart products to facilitate the government's Rs 1.13 trillion (US\$ 16.85 billion) Digital India initiative.
- Aricent, a US-based product engineering firm has acquired Bengaluru-based chip design services company Smart Play for Rs 1,100 crore (US\$ 163.06 million), making it one of the biggest acquisitions in the semiconductor space in India
- Invecas Technologies Pvt. Ltd, a startup working on outsourced chip design plans to invest US\$15-20 million over the next couple of years in setting up design centers in Hyderabad and Bengaluru.

- IESA has signed a MoU with Singapore Semiconductor Industry Association (SSIA) to establish and develop trade and technical cooperation between the electronics and semiconductor industries of both the countries.
- Gujarat is expected to have its first semiconductor wafer fabrication manufacturing facility in Prantij of Sabarkantha district. The facility, which will be set up by Hindustan Semiconductor Manufacturing Corporation (HSMC), will employ over 25,000 people including 4,000 direct employees. HSMC along with ST Microelectronics (France/Italy) and Silterra (Malaysia) will set up two manufacturing units each with capacity of producing 20,000 wafers per month.

### ***Government Initiatives***

- In the Union Budget, the Government of India increased the allocation for incentive schemes like the Modified Special Incentive Package Scheme (M-SIPS) and the Electronic Development Fund (EDF) to Rs 745 crore (US\$ 111 million) for providing a boost to the semiconductor as well as the electronics manufacturing industry.
- The Union Cabinet has approved incentives up to Rs 10,000 crore (US\$ 1.47 billion) for investors by amending the M-SIPS scheme, in order to further incentivise investments in electronics sector, create employment opportunities and reduce dependence on imports by 2020.
- The Ministry of Electronics and Information Technology plans to revise its policy framework, which would involve the government taking a more active role in developing the sector by providing initial capital, with the aim to attract more private players and make India a global semiconductor hub.
- Union Minister of Electronics and Information Technology, inaugurated an Electropreneur Park at University of Delhi's South Campus, which would incubate 50 early stage start-ups and create at least five global companies over a period of five years.
- The ESDM industry will benefit from the government's "Make in India" campaign and is projected to see investment proposals worth Rs 10,000 crore (US\$ 1.5 billion) over the next two years, according to the India Electronics and Semiconductor Association (IESA), an industry body.
- The Government of Telangana plans to launch T-Works in Hyderabad, which will act as a prototyping centre for electronics, semiconductors and hardware start-ups on the lines of California State's Innovation Hub or iHub.
- The Government of India has taken several steps to boost domestic production of electronic items and reduce dependence on imports. Some of these steps include imposition of basic customs duty on certain items falling outside the purview of IT Agreement, exemption from SAD on inputs/components for PC manufacturing, imposition of education cess on imported electronic products for parity, etc.
- Gujarat government is planning to set up an electronics products manufacturing hub in the state, through its newly announced Electronics Policy, which will generate about 500,000 jobs in the electronics sector in the next five years.
- The government also plans to invest US\$10 billion in two computer chip manufacturing facilities with a view to create an ecosystem that lays the focus on high-end innovation.
- The Union Cabinet has reconstituted an empowered committee on setting up semiconductor wafer fabrication manufacturing facilities in the country.

### ***Future to do***

The government, in consultation with semiconductor industry, has increased focus on the ESDM sector in last few years. Some of the initiatives outlined in the National Electronics policy and the National Telecom policy are already in the process of implementation, such as Preferential Market Access (PMS), Electronics Manufacturing Clusters (EMC) and Modified Special Incentive Package Scheme (M-SIPS). With the implementation of fabrication capabilities in India, the country could achieve a degree of self-sufficiency in electronics.

***References:*** Ministry of Finance, Press Information Bureau (PIB), Media Reports and Press Releases, Department of Industrial Policy & Promotion (DIPP), India Semiconductor Association, Ministry of Information Technology and Department of Electronics and Information Technology, Union Budget.

## **Shellac & Forest Products Industry In India**

India produces a variety of non-timber forest/agricultural products (NTFPs), and has a global foot print in the export of such produce. Some of India's noteworthy produces are:

### ***Some of India's noteworthy produce includes:***

- **Sesame seeds:** Food applications, Ayurvedic health treatments
- **Guar gum:** Emulsifier, thickener, stabilizer for a wide range of foods, cosmetics and pharmaceuticals
- **Shellac:** Wood polish, food and drug coatings, cosmetics
- **Tendu leaf:** Bidi wrapping
- **Tree-borne oil seeds:** Biodiesel, medicines, dyes, tanning, fertilizers, pest control, varnish

- **Medicinal plants:** Cosmetics and medicines
- **Bamboo, rattans and canes:** Furniture, handicraft, housing, food, paper
- **Isabgol:** Purgative

### ***Key Markets and Export Destinations***

India has been recording consistent growth in the export of NTFP over the last five years. It is the largest exporter of guar gum, sesame seeds and shellac, and the second largest exporter of medicinal plants in the world. India produces large volumes of NTFPs that are globally acknowledged for their quality. Moreover, NTFPs play a large role in contributing to the lives of millions of rural and forest-dependent poor people. Guar gum, vegetable saps and sesame seeds are some of the major export items. The main export destinations for guar gum are the US, China and Germany.

SHEFEXIL was formerly known as Shellac Export Promotion Council, which had been working in partnership with the industry since 1957 as the catalysing agency for the long-term development and export promotion of shellac and lac-based products.

***India is the largest exporter of guar gum, sesame seeds and shellac, and the second-largest exporter of medicinal plants in the world.***

Source: Shellac and Forest Products Export Promotion Council (SHEFEXIL)

Website: [www.shellacepc.com](http://www.shellacepc.com)

## **Silk Industry In India**

### **Introduction**

With sericulture activities spread across 52,360 villages, the Indian silk industry is one of the largest generators of employment and foreign exchange for the country. India enjoys a unique global position in terms of production of all commercially useful varieties of silk. India is the second largest producer of silk. The industry provides employment to over 7.9 million people in the country.

### **KEY MARKETS AND EXPORT DESTINATIONS**

- Export of silk and silk products from India stood at US\$ 248.59 million.
- The silk products exported include natural silk yarns, fabrics, made-ups, readymade garments, silk carpets and silk waste.
- Readymade silk garments formed the largest segment generating around 68 per cent of silk export earnings, while natural silk yarn, fabrics and made-ups comprised 22.3 per cent of silk export earnings. Silk waste, silk carpet and silk yarn comprised 5.3 per cent, 3.8 per cent and 0.5 per cent, respectively.
- Top ten importers of Indian silk and silk products were US (US\$ 21.59 million), UK (US\$ 13.47 million), China (US\$ 13.27 million), UAE (US\$ 8.28 million), Germany (US\$ 5.3 million), Italy (US\$ 5.23 million), Canada (US\$ 3.66 million), France (US\$ 3.14 million), Singapore (US\$ 3.11 million), and Hong Kong (US\$ 2.25 million).

The Indian Silk Promotion Council (ISEPC) has initiated programmes for growth and development of the silk industry. ISEPC organises trade shows and fairs across the world to promote trade with different countries. The Council also facilitates meetings between exporters and potential customers.

**The total export of silk and silk products stood at US\$ 248.59 million.**

**Website:** <http://www.theindiansilkexportpromotioncouncil.com/>

## **Spices Industry In India**

India, known as the home of spices, boasts a long history of trading with the ancient civilisations of Rome and China. Today, Indian spices are the most sought-after globally, given their exquisite aroma, texture, taste and medicinal value. India has the largest domestic market for spices in the world. Traditionally, spices in India have been grown in small land holdings, with organic farming gaining prominence in recent times. India is the world's largest producer, consumer and exporter of spices; the country produces about 75 of the 109 varieties listed by the International Organization for Standardization (ISO) and accounts for half of the global trading in spices.

### ***Export highlights and key markets***

- Total spices export from India stood at 226,225 tonnes valued at US\$ 621.78, registering a year-on-year growth of 3 per cent.
- Major importers of Indian spices were US, China, Vietnam, UAE, Indonesia, Malaysia, UK, Sri Lanka, Saudi Arabia, and Germany.
- Top spices produced in the country include pepper, cardamom, chilli, ginger, turmeric, coriander, cumin, celery, fennel, fenugreek, ajwain, dill seed, garlic, tamarind, clove, and nutmeg among others.
- India commands a formidable position in the world spice trade with the spice exports expected to touch US\$ 3 billion.

The Spices Board of India works towards the development and worldwide promotion of Indian spices. It provides quality control and certification, registers exporters, documents trade information and provides inputs to the central government on policy matters. The board participates in major international fairs and food exhibitions to promote Indian spices, apart from organising various domestic events.

*The total export of spices increased 3 per cent to reach US\$ 621.78 billion.*

**Website:** [www.indianspices.com](http://www.indianspices.com)

## Sports Industry in India

India's sports goods industry is nearly a century old and has flourished, driven by a skilled workforce. Being labour-intensive in nature, the industry provides employment to more than 500,000 people. India's sporting goods are popular around the world and have made a mark in the global sports goods market. The domestic industry exports nearly 60 per cent of its total output.

### HIGHLIGHTS

The UK, the US, the UAE, Australia, South Africa and Germany were the major export markets for Indian sports goods. France, Poland, the Netherlands, Canada, Belgium, New Zealand and Italy, were among other export destinations.

Inflatable balls, cricket bats & leg pads, rugby balls, sports nets and gymnasium & athletics equipment accounted for about 35 per cent share of the total sports goods exports.

Indian sports products have been exported for global events. For the 2014 FIFA World Cup in Brazil, Jalandhar supplied 80,000 soccer balls, whereas Meerut supplied training and practice kits such as free-kick dummies, corner flags, cone markers and linesmen flags.

India has emerged as the leading international sourcing destination for inflatable balls and other sports goods for international brands such as Mitre, Lotto, Umbro and Wilson.

### SPORTS GOODS EXPORT PROMOTION COUNCIL

The Sports Goods Export Promotion Council (SGEPC) promotes the export of sports goods and toys from India. SGEPC represents the leading 200 manufacturers and exporters of sports goods and toys in India.

**Total export for sports equipments stood at US\$ 183.25 million,, growing by 17.2 per cent Y-o-Y**

**Website:** [www.sportsgoodsindia.org](http://www.sportsgoodsindia.org)

## Synthetic And Rayon Textiles

### Introduction

India has a diverse and rich textile tradition. Contemporary Indian textiles not only reflect the country's rich and splendid past but also cater to the demands of the modern day.

Today, India is one of the world's leading manufacturers of man-made textiles. Indian fabrics are known for their excellent workmanship, colors and durability. Due to heavy investments in world-class manufacturing plants, continuous innovation, new product mix and strategic market expansion, Indian man-made fibres (MMF) are set to take centre stage in the global arena. The textile and apparel sector contributes 14 per cent to industrial production, 4 per cent to India's gross domestic product (GDP) and constitutes 15 per cent of the country's export earnings. The sector provides employment to nearly 51 million people directly and 68 million people indirectly.

### HIGHLIGHTS

- Export of manmade fibre textiles stood at US\$ 5250.79 million, as against exports worth US\$ 5286.65 million during the same period a year ago.
- The total yarn exports rose 6.55 per cent to US\$ 1612.05 million as against exports worth US\$ 1512.89 million during the same period a year ago.
- Total fibre exports rose 9.5 per cent to US\$ 542.34 million as against exports worth US\$ 495.35 million during the same period a year ago.
- India is the largest cotton and jute producer and second largest textile fibre producer in the world, and accounts for around 5 per cent share in the global textile and apparel trade.
- Polyester is the largest segment of the Indian MMF and rayon textile industry.
- Indian exports MMF textiles to more than 146 countries.
- Turkey, Egypt, Indonesia, Brazil, and Germany are major importers of Indian man-made fibre yarns.

The Synthetic and Rayon Textiles Export Promotion Council (SRTEPC) was set up in 1954 to extend all possible assistance to Indian exporters of synthetic and rayon textiles and to overseas buyers with business in India.

*Total fabric production in India is expected to reach 69 billion sq mts*

**Website:** [www.sртеpc.org](http://www.sртеpc.org)

# Tea Industry in India

Indian tea is among the finest in the world owing to strong geographical indications, heavy investments in tea processing units, continuous innovation, augmented product mix and strategic market expansion. The main tea-growing regions are in Northeast India (including Assam) and in north Bengal (Darjeeling district and the Dooars region). Tea is also grown on a large scale in the Nilgiris in south India. India is one of the world's largest consumers of tea, with about three-fourths of the country's total produce consumed locally.

## ***KEY MARKETS AND EXPORT DESTINATIONS***

- Tea exports from India stood at 101.04 kg, valued at US\$ 306.9 million.
- major importers of Indian tea were Egypt, Pakistan, UK, Iraq, Iran and Russia.
- The country is home to a wide variety of teas, including CTC tea, orthodox tea, green tea and organic tea. Unlike many other tea producing and exporting nations, India has a manufacturing base for both CTC and orthodox tea, in addition to green tea.
- India offers high-quality specialty teas, such as Darjeeling, Assam Orthodox and the high-range Nilgiri, which have a distinctive aroma, strength, colour and flavour.

***Tea exports from India stood at 101.04 kg, valued at US\$ 306.9 million.***

***India has a significant share in the international tea market with a 12 per cent share of world tea exports.***

**Website: [www.teaboard.gov.in](http://www.teaboard.gov.in)**

# Tobacco Industry In India

## ***Introduction***

Indian tobacco, introduced by the Portuguese in the 17th century, is appreciated worldwide for its rich, full-bodied flavour and smoothness. It is now an increasingly well-known as well as respected commodity in global tobacco markets and has found its way into cigarettes manufactured in several countries. India has an impressive and progressive profile in the global tobacco industry. India is the third-largest tobacco producer in the world, with annual production of about 800 million kgs.

Tobacco and tobacco products generate around US\$ 2.9 billion in revenues to the national exchequer by way of excise duty, and around US\$ 728.9 million by way of foreign exchange every year.

## ***EXPORTS AND KEY MARKETS***

- Export of tobacco products from India stood at 20,280 tons, valued at US\$ 15.6 million, in July 2016. During the period, export of Flue Cured Virginia (FCV) tobacco stood at 7,997 tons valued at US\$ 26.4 million, while unmanufactured tobacco exports stood at 12,541 tons valued at US\$ 36.8 million.
- Indian tobacco is exported to about 100 countries.
- India exports unmanufactured tobacco primarily to Western Europe, South and Southeast Asia, East Europe and Africa. Western Europe is the key market for Indian tobacco exports.

## ***Tobacco Board***

The Tobacco Board of India is a facilitator for tobacco growers, traders and exporters. By creating synergies between these stakeholders, the Board fosters a vibrant enterprise, with a deep social conscience and strong national commitment. The Board estimates demand and regulates the production of FCV tobacco to match demand to ensure a fair price for the produce. The Tobacco Board assists tobacco farmers in securing crop loans, quality seeds, fertilisers and other critical inputs; it also counsels farmers on GAP to produce quality tobaccos to meet the evolving international demand. In addition, the Board conducts auctions for the sale of tobacco in a competitive and transparent environment. On the export front, the Board strives to improve the existing markets and develop new markets for Indian tobacco and tobacco products by undertaking brand building exercises and participation in international tobacco exhibitions. The Board sponsors trade delegations to potential importing countries and also invites delegations from other countries.

***Total exports of manufactured and unmanufactured tobacco and tobacco products stood at 240,448 tons, valued at US\$ 918.36 million.***

**Website: [www.indiantobacco.com](http://www.indiantobacco.com)**

# Wool and Woollen Textile Industry In India

India is the seventh-largest producer of wool in the world with a global production share of nearly 1.8 per cent. India's wool consumption was estimated at 135 million kg. This is expected to increase to 260 million kg by 2019-20. Wool consumption is expected to grow at a CAGR of 7.8 per cent over 2010-2015; the same growth is expected to continue over 2016-2020. The wool industry is concentrated in Punjab, Haryana, Rajasthan, Uttar Pradesh, Maharashtra and Gujarat. Punjab accounts for about 40 per cent of wool production units, followed by Haryana (27 per cent), Rajasthan (10 per cent) and the rest of the states (23 per cent). A few larger units are located in Maharashtra, Punjab, Gujarat and West Bengal.

India's wool and woollen textile industry is the seventh-largest in the world. India's wool and woollen industry can broadly be divided into 10 major product categories: worsted yarn, woollen yarn, wool tops, fabric (woollen/worsted), shoddy yarn, shoddy fabrics, blankets, knitwear, hand-made carpets and machine-made carpets.

## ***KEY MARKETS AND EXPORT DESTINATIONS***

The US and the EU are key export destinations for Indian wool and wool-blended products. Indian exporters are geographically diversifying their exports to other regions such as the Middle East, Latin America, South East Asia, and East Asia to increase their footprint globally.

Exports of wool and wool-blended products (including ready-made woollen garments, woollen yarn, fabrics, made-ups and woollen hand-made carpets) totalled US\$ 1,869.8 million.

## ***CENTRAL WOOL DEVELOPMENT BOARD***

Jodhpur-based Central Wool Development Board was formed by the Ministry of Textiles, Government of India, with the primary objective of developing the domestic wool textiles industry by undertaking support programmes. The Board has undertaken the following schemes to provide support to the entire value chain, from shepherds to end users.

*The exports of wool and wool blended products witnessed an increase of 11 per cent.*

## ***ORGANISED SECTOR***

- Composite mills
- Combing units
- Worsted and non-worsted spinning units
- Knitwear and woven garment units
- Machine-made carpet manufacturing units

## ***DECENTRALISED SECTOR***

- Hosiery and knitting units
- Powerloom units
- Hand-made carpets, drugget and namadah units
- Independent dyeing and process houses

## ***KEY MARKETS AND EXPORT DESTINATIONS***

Wool exports (including wool yarn, fabrics, made-ups, readymade garments of wool and woollen hand-made carpets) stood at US\$ 1,869.8 million. Woollen hand-made carpets contributed 72.7 per cent to total woollen exports. The US and EU are the key importers of Indian wool and wool-blended products.

The Wool & Woollens Export Promotion Council (WWEPC) participates in various international trade fairs and exhibitions, and facilitates member visits and trade delegations.

**The export of wool and wool-blended products from India (readymade garment wool, woollen yarn, fabrics and made-ups) was US\$ 2,326 million.**

# Consumer Market In India

Indian consumer segment is broadly segregated into urban and rural markets, and is attracting marketers from across the world. The sector comprises of a huge middle class, relatively large affluent class and a small economically disadvantaged class, with spending anticipated to more than double by 2025.

India hit ten-year high and stood first among the 63 nations surveyed in the global consumer confidence index with a score of 136 points for the quarter ending in fiscal year. Further, in the discretionary spending category, 70 per cent respondents from India indicated the next 12 months as being good to buy, thus ensuring once again that India leads the global top 10 countries for this parameter during the quarter.

Global corporations view India as one of the key markets from where future growth is likely to emerge. The growth in India's consumer market would be primarily driven by a favourable population composition and increasing disposable incomes.

India's robust economic growth and rising household incomes are expected to increase consumer spending to US\$ 4 trillion by 2025<sup>#</sup>. The maximum consumer spending is likely to occur in food, housing, consumer durables, and transport and communication sectors.

### Market size

The growing purchasing power and rising influence of the social media have enabled Indian consumers to splurge on good things. The Indian consumer sector has grown at an annual rate of 5.7 per cent between fiscal year. India's nominal year-on-year expenditure growth of 12 per cent, which is more than double the global anticipated rate of 5 per cent, will lead to India becoming the third largest consumer market by 2025.<sup>#</sup>

The Indian fast-moving consumer goods (FMCG) companies have performed better than their multinational peers as the combined revenue of country's seven leading FMCG companies stood at US\$ 11.1 billion, as compared with US\$ 9.4 billion revenue generated by select seven Multinational Companies (MNCs)<sup>†</sup>.

Smartphone shipments rose to 109.1 million in calendar year, maintaining its healthy traction with 5.2 per cent Year to Year growth. It is estimated that smartphone sales in India will grow about 15 per cent to 125 million in 2017<sup>††</sup>.

The number of online fashion shoppers in India is expected to double to 130-135 million by 2020, to be driven by growth of fashion industry in India and growing use of mobile for online shopping.

### Future to do

Another major factor propelling the demand for food services in India is the growing youth population, primarily in the country's urban regions. India has a large base of young consumers who form the majority of the workforce and, due to time constraints, barely get time for cooking.

Online portals are expected to play a key role for companies trying to enter the hinterlands. The Internet has contributed in a big way, facilitating a cheaper and more convenient means to increase a company's reach.

Mr Mark Mobius, Executive Chairman, Templeton EM, opined that the Goods and Services Tax (GST) will lead to mergers and rise of world class consumer companies in India.

References: Media reports, press releases, Press Information Bureau (PIB), Union Budget, Boston Consulting Group.

Notes: <sup>#</sup> - According to a report by Boston Consulting Group (BCG), <sup>‡</sup> - According to a recent report by the Confederation of Indian Industry (CII) and Deloitte, <sup>##</sup> - According to a Tech Sci Research report, "India Food Services Market Forecast & Opportunities, 2020", <sup>\*\*</sup> - as per a report by Bank of America

Merrill Lynch (BoFA-ML), <sup>@@</sup> - According to the report titled "India Machine-to-Machine (M2M) Modules Market Opportunities & Forecast, 2020", <sup>!</sup> - as per a study by Assocham, July 2016, <sup>†</sup> -

According to a report by The Associated Chambers of Commerce of India (ASSOCHAM) and TechSci Research, <sup>††</sup> - According to JP Morgan, <sup>‡</sup> - According to CISCO's Visual Networking Index (VNI) Global Mobile Data Traffic Forecast Update for 2014-2019

## Foreign Direct Investment in India

According to UNCTAD's World Investment Report, India ranks third among most prospective host economy for (after China and the US) in the world, as per a survey among Multi National Enterprises.

India's rank also improved to ninth among the top countries ranked by FDI inflows.

Export growth slowed to 4.39 per cent against 8 per cent in the previous month, even as the country managed to see 10 straight months of rise in outbound trade.

Import growth also fell in June, with inbound shipments totalling \$36.52 billion, a rise of 19 per cent over the same month last year. Imports had grown over 33 per cent in May year-on-year. Trade deficit was marginally lower at \$12.9 billion from \$13.8 billion.

Exports were \$23.56 billion in June compared to \$22.57 billion in the year-ago period, according to the data issued by the commerce and industry ministry. Export growth has been down, when it hit a high of 27 per cent, steepest in a little over five years. Cumulative export in the first quarter of the current financial year was about \$72 billion.

Among major foreign exchange earners, engineering export grew 14.8 per cent and petroleum products by 3.6 per cent. However, half of 30 items monitored witnessed contraction. These include pharma, leather, gems and jewellery.

Expressing concern at fall in these exports, Federation of Indian Export Organisations president Ganesh Kumar Gupta called upon the government to look into this, as these industries are major job providers.

Implementation problems on the goods and services tax (GST) at the ground should be addressed on war footing or else, this will affect exports in the current and next few months, he said.

Much of the push to import came from gold, which more than doubled to \$2.5 billion in June year-on-year; import of precious and semi-precious stones increased by 86 per cent to \$3.3 billion. "A strong rupee has definitely come in the way of growth in export and also encouraged the import of gold," said Madan Sabnavis, chief economist at CARE Ratings. The share of crude oil in import was marginally down to 20.6 per cent, from 22.2 per cent, owing to lower prices.

With exports recording continuous growth, exporters body FIED expects that the country's merchandise shipments would reach USD 325 billion this fiscal.

Federation of Indian Export Organisations (FIED) President also said while India is showing a positive trend on exports since the last nine months, there is a bit of anxiety in the business with regard to the Goods and Services Tax (GST).

"Indian exports have been on an upward trend in last few months with export of USD 275 billion in last fiscal and a target of USD 325 billion to achieve in 2017-18," FIED said in a statement.

Further, it has organised an interactive session with Commerce Secretary Rita Teotia in Kolkata.

Quoting the secretary, FIED said, "GST is a well needed reform and the transition will require some time, and calibrated process of foreign trade policy will be continuous".

With regard to shipping lines overcharging, she stated that the Director General Shipping has been informed and they are waiting for a response from them.

## Financial Services in India

### *Introduction*

India has a diversified financial sector undergoing rapid expansion, both in terms of strong growth of existing financial services firms and new entities entering the market. The sector comprises commercial banks, insurance companies, non-banking financial companies, co-operatives, pension funds, mutual funds and other smaller financial entities. The banking regulator has allowed new entities such as payments banks to be created recently thereby adding to the types of entities operating in the sector. However, the financial sector in India is predominantly a banking sector with commercial banks accounting for more than 64 per cent of the total assets held by the financial system.

The Government of India has introduced several reforms to liberalise, regulate and enhance this industry. The Government and Reserve Bank of India (RBI) have taken various measures to facilitate easy access to finance for Micro, Small and Medium Enterprises (MSMEs). These measures include launching Credit Guarantee Fund Scheme for Micro and Small Enterprises, issuing guideline to banks regarding collateral requirements and setting up a Micro Units Development and Refinance Agency (MUDRA). With a combined push by both government and private sector, India is undoubtedly one of the world's most vibrant capital markets.

### *Market Size*

Mergers and acquisition (M&A) activity in India rose 125 per cent year-on-year to US\$ 32.5 billion across 445 deals, Domestic M&A deal value stood at US\$ 7.3 billion across 137 deals, which is around 65 per cent of the total M&A deal value of US\$ 11.3 billion during the quarter. ^

Private equity (PE) investments in real estate sector in India have increased 22 per cent in the first nine months to reach Rs 283 billion (US\$ 4.24 billion).

### *Future to do*

India is today one of the most vibrant global economies, on the back of robust banking and insurance sectors. The country is projected to become the fifth largest banking sector globally by 2020<sup>##</sup>. The report also expects bank credit to grow at a Compound Annual Growth Rate (CAGR) of 17 per cent in the medium term leading to better credit penetration. Life Insurance Council, the industry body of life insurers in the country also projects a CAGR of 12-15 per cent over the next few years for the financial services segment.

Also, the relaxation of foreign investment rules has received a positive response from the insurance sector, with many companies announcing plans to increase their stakes in joint ventures with Indian companies. Over the coming quarters there could be a series of joint venture deals between global insurance giants and local players.

References: Media Reports, Press Releases, IRDAI, General Insurance Council, Reserve Bank of India, Union Budget in Export and Import Sector

Note: \*\* - As per a report by KPMG, ^ - As per data from Ernst and Young, I - , As per the report Private Equity investments in Real Estate (PERE) by Cushman & Wakefield, 2 - As per the data from Association of Mutual Funds in India (AMFI), ! - As per a paper by ICRA, # - As of April 27, 2016, ## - , as per a joint report by KPMG-Confederation of Indian Industry (CII), \* - \$ - As per a study by Google (Alphabet Inc.) and Boston Consulting Group, @ - According to data from SEBI, @@ - according to the Association of Mutual Funds in India (AMFI).

# FOREIGN TRADE POLICY OF INDIA

## *Introduction*

The integration of the domestic economy through the twin channels of trade and capital flows has accelerated in the past two decades which in turn led to the Indian economy growing from Rs 32 trillion (US\$ 474.37 billion) to about Rs 153 trillion (US\$ 2.3 trillion). Simultaneously, the per capita income also nearly trebled during these years. India's trade and external sector had a significant impact on the GDP growth as well as expansion in per capita income.

Total merchandise exports from India grew by 17.48 per cent year-on-year to US\$ 24.49 billion, while overall trade deficit declined by 24 per cent year-on-year to US\$ 41.8 billion, according to data from the Ministry of Commerce & Industry.

According to Minister of State (Independent Charge) for Commerce and Industry, the Government of India is keen to grow exports and provide more jobs for the young, talented, well-educated and even semi-skilled and unskilled workforce of India.

## *Capital Inflows*

According to data released by the Reserve Bank of India (RBI), India's foreign exchange reserves were US\$ 364.109 billion.

## *Foreign Direct Investments (FDI)*

India received total foreign investment (including equity inflows, re-invested earnings and other capital) worth US\$ 472.199 billion. The country was one of the top destinations for FDI inflows from Asian countries, with Mauritius contributing 34 per cent, Singapore 16 per cent and Japan and UK contributing 8 per cent each of the total foreign inflows.

## *Foreign Institutional Investors (FIIs)*

FIIs net investments in Indian equities and debt stood at US\$ 3.78 billion.

## **Foreign Trade Policy**

All export and import-related activities are governed by the Foreign Trade Policy (FTP), which is aimed at enhancing the country's exports and use trade expansion as an effective instrument of economic growth and employment generation.

The Department of Commerce has announced increased support for export of various products and included some additional items under the Merchandise Exports from India Scheme (MEIS) in order to help exporters to overcome the challenges faced by them.

The Central Board of Excise and Customs (CBEC) has developed an 'integrated declaration' process leading to the creation of a single window which will provide the importers and exporters a single point interface for customs clearance of import and export goods.

As part of the FTP strategy of market expansion, India has signed a Comprehensive Economic Partnership Agreement with South Korea which will provide enhanced market access to Indian exports. These trade agreements are in line with India's Look East Policy. To upgrade export sector infrastructure, 'Towns of Export Excellence' and units located therein will be granted additional focused support and incentives.

RBI has simplified the rules for credit to exporters, through which they can now get long-term advance from banks for up to 10 years to service their contracts. This measure will help exporters get into long-term contracts while aiding the overall export performance.

The Government of India is expected to announce an interest subsidy scheme for exporters in order to boost exports and explore new markets.

## **Future to do**

India is presently known as one of the most important players in the global economic landscape. Its trade policies, government reforms and inherent economic strengths have attributed to its standing as one of the most sought after destinations for foreign investments in the world. Also, technological and infrastructural developments being carried out throughout the country augur well for the trade and economic sector in the years to come.

Boosted by the forthcoming FTP, India's exports are expected reach US\$ 750 billion in fiscal year according to Federation of India Export Organisation (FIED). Also, with the Government of India striking important deals with the governments of Japan, Australia and China, the external sector is increasing its contribution to the economic development of the country and growth in the global markets. Moreover, by implementing the FTP, India's share in world trade is expected to double from the present level of three per cent.

*Disclaimer: This information has been collected through secondary research and "JC Groups" is not responsible for any errors in the same.*