

GUJARAT

THE GROWTH ENGINE OF INDIA



*Ahmedabad Export Import
Development Association*



NOVEMBER 2016

For updated information, please visit www.aedia.org

GUJARAT

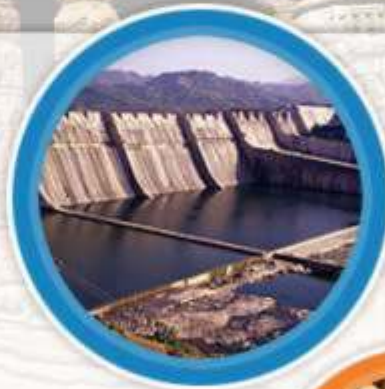
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EXECUTIVE SUMMARY

Second preferred investment destination

- According to the DIPP, FDI inflows in the state of Gujarat totalled US\$ 13.28 billion during April 2000-March 2016. Gujarat accounted for about 4.6% share in the overall FDI inflows in India.

Petro capital of India

- As of December 2015, Gujarat ranked second in the production of crude oil (onshore) in India. Till December 2015, the state produced 3.32 million tonnes of crude oil, which accounted for 24.7% of the total crude oil (onshore) production in the country.

Highest share in India's total dairy output

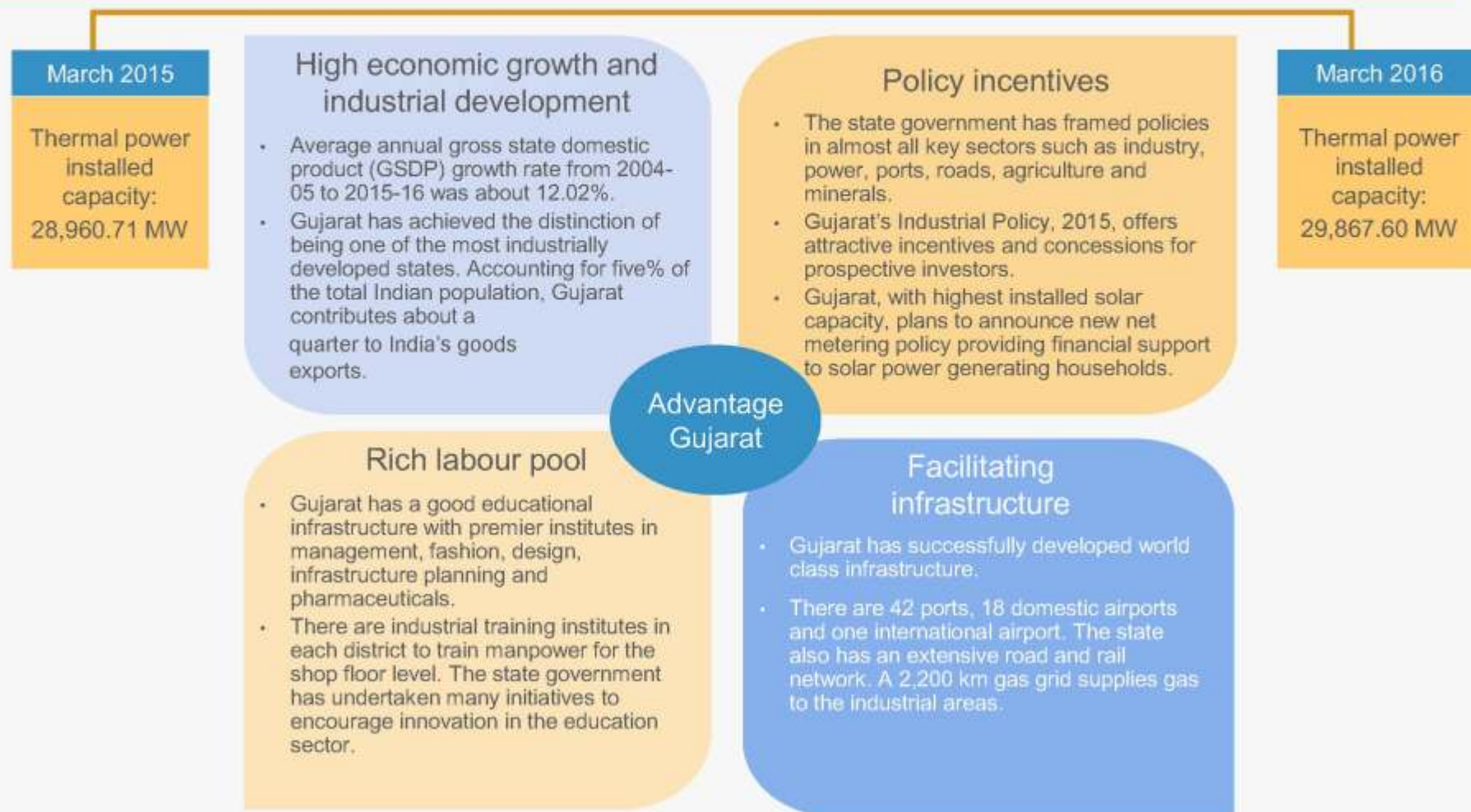
- Gujarat's dairy sector consists of 17 district milk producers' unions, with around 14,598 milk co-operative societies. The state's milk production, which stood at 12.1 million tonnes during 2015-16, was the fourth largest in India.

Strong textile base

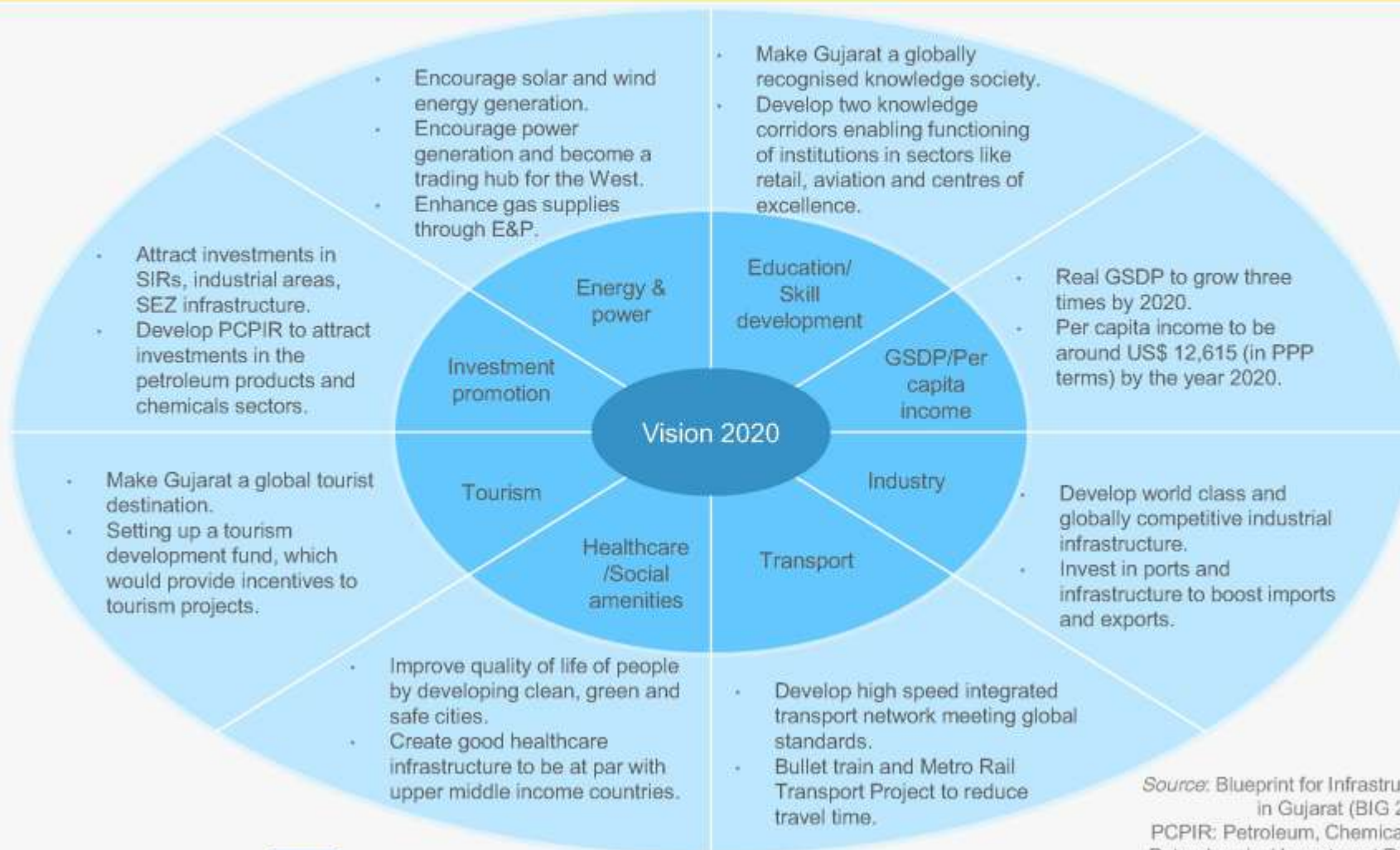
- The state attracted investment commitments worth US\$ 1,407 million under Gujarat's textile policy 2012, for varied units such as processing, spinning, weaving, made-ups, technical textiles etc. By 2017, the government plans to create 2.5 million new jobs and attract investments worth US\$ 3.06 billion.

Source: Socio-Economic Review of Gujarat, 2015-16, Department of Industrial Policy & Promotion, April 2000 to March 2016, Ministry of Textiles, Industrial Extension Bureau
Ministry of Petroleum & Natural Gas

ADVANTAGE GUJARAT



GUJARAT VISION 2020



Source: Blueprint for Infrastructure
in Gujarat (BIG 2020)
PCPIR: Petroleum, Chemical and
Petrochemical Investment Region

GUJARAT FACT FILE



- ★ Gujarat is located on the western coast of India and has the longest coastline of 1,600 km in the country. The state shares its borders with Rajasthan, Madhya Pradesh, Maharashtra and the Union Territories of Daman & Diu and Dadra & Nagar Haveli. The Arabian Sea borders the state both to the west and the south-west.
- ★ Gandhinagar, Ahmedabad, Vadodara, Surat, Rajkot, Bhavnagar and Jamnagar are some of the key cities of the state.

- ★ There are seven agro-climatic zones in the state that support cultivation of a wide range of crops.
- ★ The most commonly spoken language of the state is Gujarati. Hindi and English are the other Indian languages used.

| Parameters | Gujarat |
|--|-------------|
| Capital | Gandhinagar |
| Geographical area (sq km) | 196,063 |
| Administrative districts (No) | 26 |
| Population density (persons per sq km) | 308 |
| Total population (million) | 60.4 |
| Male population (million) | 31.5 |
| Female population (million) | 28.9 |
| Sex ratio (females per 1,000 males) | 919 |
| Literacy rate (%) | 78.03 |

Source: Gujarat Socio Economic Review 2014-15
Census 2011

GUJARAT IN FIGURES ... (1/2)

| Parameter | Gujarat | All states | Source |
|--|----------------|----------------|---|
| Economy | 2015-16 | 2015-16 | |
| GSDP as a percentage of all states' GSDP | 7.63 | 100.0 | TechSci Estimates based on "Advanced Estimates" provided by Directorate of Economics and Statistics Gujarat |
| GSDP growth rate (%) | 15.7 | 8.64 | TechSci Estimates based on "Advanced Estimates" provided by Directorate of Economics and Statistics Gujarat |
| Per capita GSDP (US\$) | 2,619 | 1,546 | TechSci Estimates based on "Advanced Estimates" provided by Directorate of Economics and Statistics Gujarat |
| Physical Infrastructure | | | |
| Installed power capacity (MW) | 30,188.75 | 304,505.75 | Central Electricity Authority, as of June 2016 |
| Wireless subscribers (No) | 61,506,754 | 1,033,157,014 | Telecom Regulatory Authority of India, as of May 2016 |
| Internet subscribers (No) | 20,660,000 | 334,340,000 | Telecom Regulatory Authority of India, as of January 2016 |
| National highway length (km) | 4,970.90 | 10,0087.08 | Andhra Pradesh Roads and Building Department |
| Major and minor ports (No) | 1+41 | 13+187 | India Ports Association 2016 |
| Airports (No) | 18 | 125 | Airports Authority of India |

GUJARAT IN FIGURES ... (2/2)

| Parameter | Gujarat | All states | Source |
|---|---------|------------|---|
| Social Indicators | | | |
| Literacy rate (%) | 78.03 | 73.0 | Census 2011 |
| Birth rate (per 1,000 population) | 21.1 | 21.6 | SRS Bulletin |
| Investments | | | |
| FDI equity inflows (US\$ billion) | 13.28 | 288.51 | Department of Industrial Policy & Promotion, April 2000 to March 2016 |
| Industrial Infrastructure | | | |
| PPP projects Completed & Operational (No) | 94 | 1,246 | Ministry of Finance, Government of India, July 2016 |
| Operational SEZs (No) | 18 | 186 | Ministry of Commerce & Industry, Department of Commerce, July 2016 |

PPP: Public Private Partnership, SEZ: Special Economic Zone, SRS: Sample Registration System

ECONOMIC SNAPSHOT – GSDP

- ★ At current prices, Gujarat's GSDP* was about US\$ 158.2 billion during 2015-16.
- ★ The state's GSDP grew at a CAGR of 12.02%, during 2004-05 to 2015-16.

GSDP of Gujarat at current prices (in US\$ billion)



Source: TechSci Estimates based on "Advanced Estimates" provided by Directorate of Economics and Statistics Gujarat, Government of Gujarat
GSDP*-Geometric mean of YoY calculation from 2004-05 to 2014-15

ECONOMIC SNAPSHOT – NSDP

- ★ Gujarat's NSDP[#] was about US\$ 130.91 billion during 2015-16.
- ★ The state's NSDP expanded at a CAGR of 11.78% from 2004-05 to 2015-16.

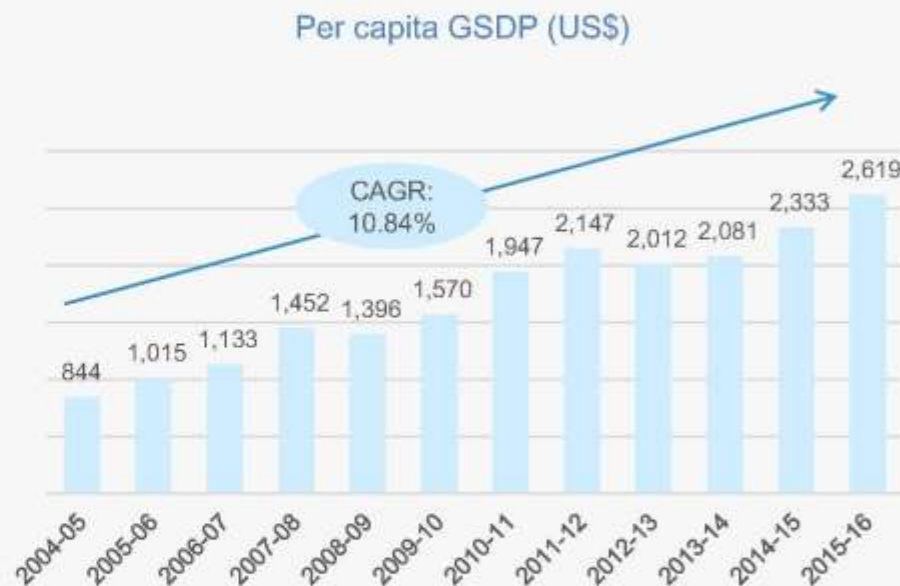
NSDP of Gujarat at current prices (in US\$ billion)



Source: TechSci Estimates based on "Advanced Estimates" provided by Directorate of Economics and Statistics Gujarat, Government of Gujarat
NSDP[#] -Geometric mean of YoY calculation from 2004-05 to 2014-15

ECONOMIC SNAPSHOT – PER CAPITA GSDP

- * The state's per capita GSDP[^] stood at US\$ 2,619 during 2015-16 in comparison with US\$ 844 during 2004-05.
- * Gujarat's per capita GSDP increased at a CAGR of 10.84% between 2004-05 and 2015-16.



Source: TechSci Estimates based on "Advanced Estimates" provided by Directorate of Economics and Statistics Gujarat, Government of Gujarat
Per Capita GSDP[^] - calculated using GSDP million USD / Population in million

ECONOMIC SNAPSHOT – PER CAPITA NSDP

- ★ Gujarat's per capita NSDP[&] was US\$ 2,167 over 2015-16 vis-à-vis US\$ 715 during 2004-05.
- ★ The state's per capita NSDP increased at an average rate of 10.61% between 2004-05 and 2015-16.



Source: TechSci Estimates based on "Advanced Estimates" provided by Directorate of Economics and Statistics Gujarat, Government of Gujarat
per capita NSDP[&] -calculated using NSDP million USD / Population in million

ECONOMIC SNAPSHOT – PERCENTAGE DISTRIBUTION OF GSDP

- ★ During 2015-16, the tertiary^u sector contributed 43.2% to the state's GSDP (at current prices), followed shares of secondary^u (38.8%) and primary^u (18%) sectors.
- ★ At a CAGR of 12.8%, the primary sector has been the fastest growing sector, during 2004-05 and 2015-16.
- ★ The secondary sector expanded at a CAGR of 12.3% between 2004-05 and 2015-16. Growth in the sector was driven by expansion of manufacturing, construction and electricity, and gas & water supply industries.
- ★ The tertiary sector increased at a CAGR of 11.5% between 2004-05 and 2015-16. Growth was driven by trade, hotels, real estate, finance, insurance, transport, communications and other services sectors.



Source: TechSci Estimates based on "Advanced Estimates" provided by Directorate of Economics and Statistics Gujarat, Government of Gujarat
Sector-wise %share of GSDP^u -Geometric mean of YoY calculation from 2004-05 to 2014-15

ECONOMIC SNAPSHOT – AGRICULTURAL PRODUCTION

| Agricultural production (thousand tonnes) | | |
|---|---------|---------|
| Crop | 2014-15 | 2015-16 |
| Rice | 2,287 | 1,564 |
| Wheat | 3,059 | 2,595 |
| Jowar | 242 | 101 |
| Bajra | 987 | 940 |
| Total Foodgrains | 7,795 | 6,192 |
| Cotton ¹ | 9,624 | 8,801 |
| Groundnut | 3,018 | 3,892 |
| Total Oilseeds | 4,882 | 4,605 |

| Agricultural area (thousand hectares) | | |
|---------------------------------------|---------|---------|
| Crop | 2014-15 | 2015-16 |
| Rice | 786 | 755 |
| Wheat | 1,112 | 889 |
| Jowar | 178 | 91 |
| Bajra | 460 | 431 |
| Total Foodgrains | 3,515 | 3,084 |
| Cotton ¹ | 2,773 | 2,625 |
| Groundnut | 1,401 | 1,394 |
| Total Oilseeds | 2,540 | 2,567 |

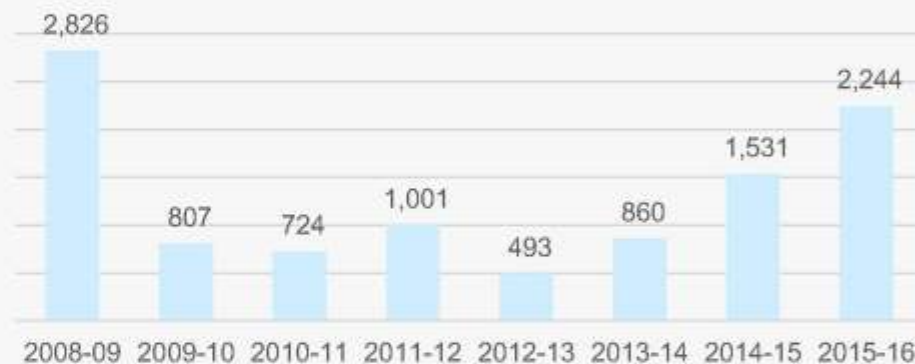
- * As per the budget 2016-17, provisions of US\$ 1.52 million, US\$ 37.64 million and US\$ 45.82 million have been made by the state government for the Organic Policy, Agricultural and Water Conservation as well as Rashtriya Krushi Vikas Yojna, respectively during 2016-17.

Source: Ministry of Agriculture, National Horticulture Board, Gujarat Economic Survey, 2015-16, State Budget 2016-17, ¹000 bales (170 kgs each)

ECONOMIC SNAPSHOT – FDI INFLOWS & INVESTMENTS

- * According to the DIPP, FDI inflows totalled US\$ 13.28 billion from April 2000 to March 2016.
- * The Vibrant Saurashtra Expo and Summit, was held in Rajkot in January 2016. MoUs worth US\$ 341.88 million were realised for the development of various sectors of the state during the event.
- * Domestic companies which have disclosed their investment commitments include Reliance Industries, Suzlon, Aditya Birla Group, and Videocon. Foreign companies who have committed investments include Rio Tinto, Suzuki and CLP Holdings.

FDI equity inflows, 2008-09 to 2015-16¹ (US\$ million)



Source: Department of Industrial Policy & Promotion, April 2000 to March 2016,

ECONOMIC SNAPSHOT – AGRICULTURAL EXPORT TRENDS

- * In 2015-16, agricultural exports from Gujarat were valued at US\$ 3.77 billion. Gujarat accounted for 23.3% share in the overall agricultural exports of India during 2015-16. Exports of floriculture products from the state were valued at US\$ 713.41 thousand during 2015-16.
- * Exports of fruits and vegetable seeds were valued at US\$ 779.10 thousand during 2015-15 whereas onion exports from the state stood at US\$ 423 million during 2014-15.
- * Moreover, exports of pulses from the state were recorded to be US\$ 77.86 million and exports of dairy products stood at US\$ 22.56 million during 2015-16.
- * Walnut exports along with wheat, maize and other cereal exports from the state stood at US\$ 91.65 thousand, US\$ 36.80 million, US\$ 5.87 million and US\$ 36.77 million during 2015-16.

Source: Socio-Economic Review of Gujarat 2015-16,
APEDA

ANNUAL BUDGET 2016-17

- ★ The Government of Gujarat proposed an annual state budget of US\$ 13.07 billion during 2016-17.

| Annual Budget (estimates in US\$ million) | | |
|---|----------|----------|
| Sector | 2015-16 | 2016-17 |
| Agriculture and allied services | 773.08 | 907.44 |
| Rural development | 371.39 | 422.38 |
| Irrigation and flood control | 2,312.08 | 2,183.65 |
| Energy | 1,099.87 | 1,042.44 |
| Industry and minerals | 458.97 | 451.46 |
| Transport | 1,089.63 | 1,217.38 |
| Communication | 165.96 | 152.36 |
| Science, technology and environment | 92.49 | 110.29 |
| General economic services | 351.22 | 404.18 |
| Social services | 6,384.23 | 6,154.22 |
| General services | 19.57 | 16.79 |
| Special area programme | 35.97 | 7.64 |

Source: Department of Finance, Government of Gujarat

PHYSICAL INFRASTRUCTURE – ROADS... (1/2)



- ★ As of October 2015, Gujarat had a road network of around 77,030 km comprising around 19,761 km of state highways, 5,016 km of national highways and 20,641 km of major district roads.
- ★ As of October 2015, Gujarat had 1,348 major bridges, 4,277 minor bridges and 88,141 causeways.
- ★ Under Kisanpath Yojana, state government has announced plans to invest US\$ 8.40 million for the improvement of rural roads in the state as per the Budget 2016-17.

- ★ The Government of Gujarat, through GIDB, has prepared a vision document – Blueprint for Infrastructure in Gujarat (BIG)-2020. Under this document, the state has identified a series of projects and investments required across the road sector to be implemented on priority basis for Gujarat's inclusive growth.
- ★ For the growth of road and building department, the state government has proposed an investment of US\$ 1,283.56 million in Budget 2016-17.
- ★ As per Budget 2016-17, in order to boost the development of the road network in the state, the state government is introducing a new "Mukhyamantri Gram Sadak Yojna", which aims at providing road connectivity across 16,245 hamlets and 18,000 villages of the state.

| Type of road | Length (km) |
|----------------------|-------------|
| National highways | 4,971 |
| State highways | 19,761 |
| Major district roads | 20,641 |
| Other district roads | 10,493 |
| Village roads | 21,119 |

Source: Road & Building Department, Government of Gujarat, NHAI

PHYSICAL INFRASTRUCTURE – ROADS... (2/2)

- ★ As per Budget 2016-17, few of the major planned road projects in the state are mentioned below:
 - ★ Allocation of US\$ 32.38 million and US\$ 36.81 million for the conversion of state highways of 677 km into two-lane roads and widening of main and other district roads by up to 7 metres respectively.
 - ★ For the construction of Taluka Seva Sadan at Waghodia, Shahera, Gariyadhar, Kheda and Shinor, a provision of US\$ 2.29 million has been done. Further, an allocation of US\$ 27.49 million has been made for ROB (rail over bridges) and annuity works of the roads.
 - ★ Allocation of US\$ 72.86 million for re-surfacing of the roads which require the same and have not been resurfaced from past 7 years.
- ★ Along with road infrastructure, the Government of Gujarat is focusing on the growth of transportation sector in the state. The Gujarat State Road Transport Corporation delivers transportation facility to about 24 lakh people every day. Under the plan and non-plan head for Ports and Transport Department, the state government has allocated US\$ 201.2 million during 2016-17.
- ★ As per Budget 2016-17, 1,600 new buses and 1,100 daily new trips will be provided by Gujarat State Road Transport Corporation at a total cost of US\$ 55.14 million during 2016-17.

Source: State Budget 2016-17

PHYSICAL INFRASTRUCTURE – RAILWAYS

- ★ The rail traffic in Gujarat mainly falls under the following divisions of Western Railway: Vadodara, Rajkot, Bhavnagar, Ratlam, Mumbai and Ahmedabad.
- ★ Ahmedabad, Anand, Bhavnagar, Bhuj, Godhra, Porbandar, Rajkot, Vadodara (Baroda) and Valsad are some of the important railway stations in the state.
- ★ The government is developing a High Speed Rail passenger corridor from Ahmedabad to Mumbai with the cooperation of the Government of Japan. The length of the corridor is 508 km and total journey time for the train is estimated at 2.07 hrs. The total estimated cost of the project is US\$ 14.92 billion. About 81 % of the funding for the project will come by way of a loan from Japan. The joint feasibility report co-financed by Indian Railways and Japan International Cooperation Agency (JICA) has been completed in July 2015. To implement the project a new special purpose vehicle (SPV) named National High Speed Rail Corporation Limited has been formed early this year.
- ★ As per Budget 2016-17, the state government, in coordination with the Railways, has decided to take up re-development and construction work of railway stations at Gandhinagar and Surat.
- ★ Additionally, the modernisation of 20 railway stations based on PPP in Gujarat is expected to be undertaken during 2016-17.

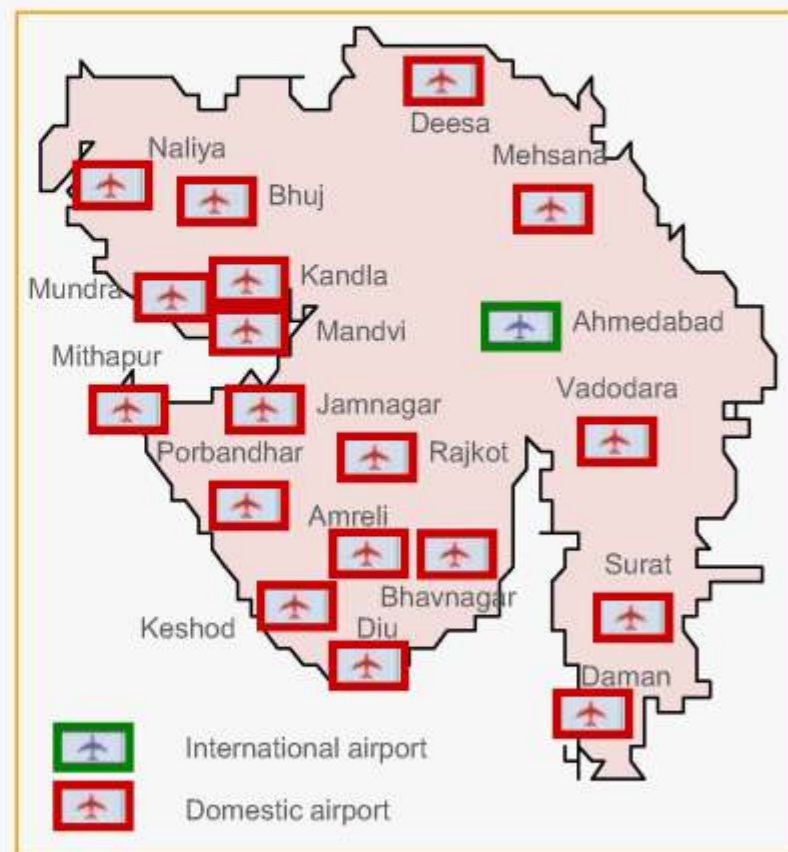


Source: Maps of India

Source: Socio-Economic Review of Gujarat, 2015-16
MEGA-Metrolink Express for Gandhinagar and Ahmedabad, News articles

PHYSICAL INFRASTRUCTURE – AIRPORTS... (1/2)

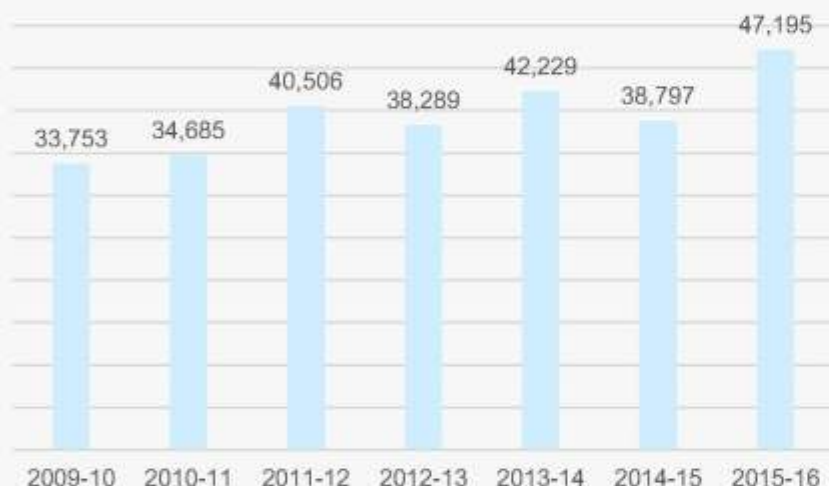
- ★ The state has 18 domestic airports (the highest in any state) and one international airport. Out of these, 9 are under Airports Authority of India (AAI), 2 in Daman & Diu, 3 under state government, 3 under Indian Air Force (IAF), while 2 are private airports. There are domestic airports at Bhavnagar, Bhuj, Jamnagar, Kandla, Keshod, Deesa, Porbandar, Rajkot, Surat, Vadodara, Mundra, Mandvi and Palanpur.
- ★ The passenger traffic at Ahmedabad airport increased from 5.05 million in 2014-15 to 6.48 million in 2015-16. Passenger traffic at Vadodara airport increased from 0.71 million in 2014-15 to 0.93 million in 2015-16. Similarly, passenger traffic at Rajkot airport increased from 0.35 million in 2014-15 to 0.41 million in 2015-16.
- ★ Aircraft movement from Ahmedabad airport increased from 38,797 in 2014-15 to 47,195 in 2015-16. Similarly, the airport movement from Vadodara airport also witnessed an increase from 5,634 in 2014-15 to 7,339 in 2015-16.
- ★ Rajkot airport witnessed aircraft movement of 4,674 in 2015-16 as compared to 3,344 in 2014-15.



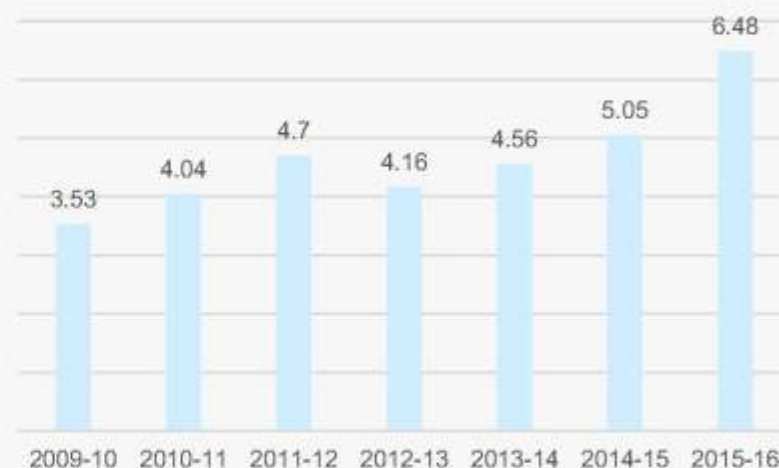
Source: Director Civil Aviation, Government of Gujarat, News articles

PHYSICAL INFRASTRUCTURE – AIRPORTS... (2/2)

Aircraft movement in Ahmedabad (nos.)



Passenger traffic in Ahmedabad (million)

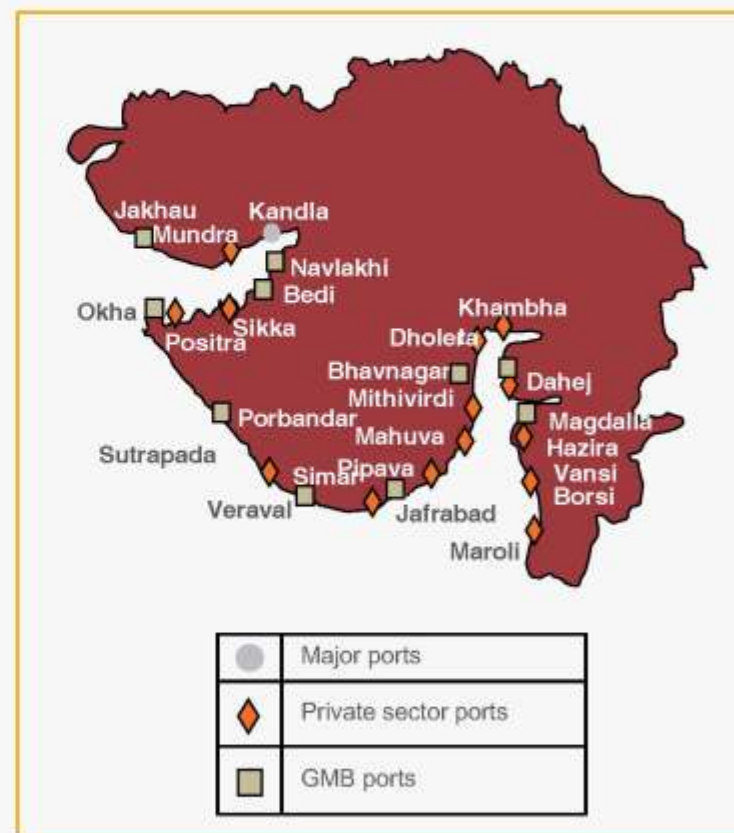


Source: Airport's Authority of India
*April-September 2015

- * The total freight handled by Ahmedabad in 2015-16 was 67,774 thousand tonnes as compared to 59,313 thousand tonnes in 2014-15. Freight handled in Vadodara and Rajkot was recorded to be 2,144 thousand tonnes and 170 thousand tonnes in 2015-16.

PHYSICAL INFRASTRUCTURE – PORTS ... (1/3)

- ★ The state has one of the strongest port infrastructures in India. It is the first state in India to take up port privatisation.
- ★ Gujarat has 42 ports, including one major port at Kandla and 41 minor ports, along a 1,600 km coastline.
- ★ GMB, which manages 41 non-major ports, has developed port privatisation models such as private/joint sector ports, private jetties, captive jetties and GMB jetties.
- ★ The share of Kandla port in India's total cargo traffic has increased from 15.91% during 2014-15 to 16.52% during 2015-16 (till December 2015). Cargo handled by Kandla port till December 2015 was 73.87 million tonnes.
- ★ POL (petroleum, oil & lubricants), coal, fertilisers and iron ore are recognised as major commodities in terms of port traffic at the Kandla port. During April 2014 to March 2015, POL accounted for 60.1% share in overall traffic handled by Kandla port. With a share of 10.78%, coal accounted for the second largest share, followed by 4.87% share accounted for by fertilisers and 1.25% share from iron ore in the overall traffic handled at the Kandla port.



Source: Indian Port Association

PHYSICAL INFRASTRUCTURE – PORTS ... (2/3)

Traffic handled by Kandla port (million tonnes)

| | |
|-------------------|-------|
| 2009 | 72.22 |
| 2010 | 79.52 |
| 2011 | 81.88 |
| 2012 | 82.50 |
| 2013 | 93.62 |
| 2014 | 87.00 |
| 2015 | 92.49 |
| 2016 ¹ | 73.87 |

Source: Indian Port Association
¹Up to December 2015

- * Gujarat has two LNG terminals that offer transportation facilities for natural gas, crude oil and petroleum products from the Middle East and Europe.
- * The state has a vast hinterland surrounded by the northwest markets of Rajasthan, Delhi/NCR and Punjab. Together, these areas generate approximately 60% of India's cargo, of which a majority is currently handled by the ports of Gujarat.
- * The state has a large external trade potential, given its vast coastline.
- * During 2015-16 (till December 2015), private jetties in the state handled a total of 4.51 million tonnes of cargo traffic.

PHYSICAL INFRASTRUCTURE – PORTS ... (3/3)

- ★ Many upcoming ports are being developed as captive ports to cater to specific company and industry requirements.
- ★ The state undertakes fast-track clearance in establishment of ports through private participation.
- ★ There is an increase in connectivity to non-major ports due to development of the Delhi-Mumbai Dedicated Freight Corridor.
- ★ More than 4,800 ships and 1,000 sailing vessels visit the ports of Gujarat every year.
- ★ As per Budget 2016-17, the state government has proposed a provision of US\$ 9.92 million for the enhancement of facilities across various ports of the state.
- ★ Government has released amount of US\$ 8.74 million as the first installment to Gujarat Maritime Board for development of dredging project for ferry services between Gogha and Dahej in Gulf of Cambey in Gujarat, under the Sagarmala programme.

Key private sector stakeholders in Gujarat's ports sector

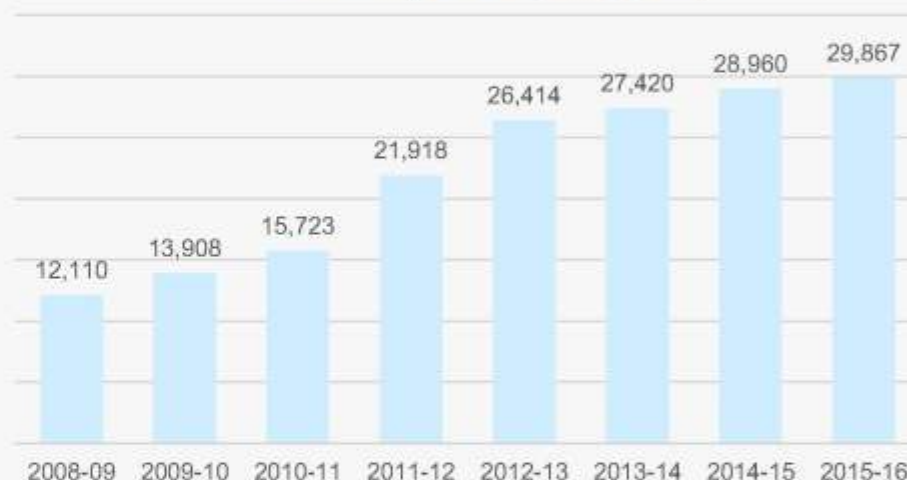
| |
|--|
| Adani Ports and Special Economic Zone Ltd |
| Peninsular & Oriental Steam Navigation Company |
| Gujarat Pipavav Port Limited |
| Reliance Industries Limited |
| Maersk |
| Welspun |
| Petronet LNG |
| Shell |

Source: Socio-Economic Review of Gujarat, 2015-16

PHYSICAL INFRASTRUCTURE – POWER AND GAS ... (1/2)

- ★ As of June 2016, Gujarat had an installed power generation capacity of 30,188.75 MW (comprising 8,321.82 MW under state utilities, 17,994.72 MW under private utilities and 3,872.21 MW under central utilities).
- ★ Thermal power contributed 23,556.71 MW to the state's total installed power generation capacity, followed by a contribution of 772 MW by hydropower, 559.32 MW by nuclear power and 5,300.72 MW by renewable power.
- ★ All villages in Gujarat receive 24-hour electricity supply through the Jyotigram Yojana.
- ★ GSPC Gas Company Ltd, a distribution arm of Gujarat State Petroleum Corporation Ltd, supplies 4.33 MMSCMD of gas to more than 1,047,665 domestic households, 11,559 commercial & non-commercial customers, 255 CNG stations and 2,931 industrial customers in the state.
- ★ In the state budget for 2016-17, US\$ 1.04 billion was allocated to the Energy and Petrochemical Department. In order to provide subsidies for lightening the burden on farmers, an allocation of US\$ 612.7 million will be made by the state government during 2016-17.

Installed power capacity (MW)



Source: Central Electricity Authority, ¹As of November, 2015

- ★ Wind power generation in the state of Gujarat was 4,755 MU (million units) as of November 2015.
- ★ As of November 2015, solar power projects with a total capacity of 1,750 MW were commissioned in the state of Gujarat.

PHYSICAL INFRASTRUCTURE – POWER AND GAS ... (2/2)

- * Provision of US\$ 29.13 million was channelled towards installation of 15,000 solar domestic energy systems and providing around 3,210 solar pumps for agriculture purpose across the scattered areas of the state, during 2016-17.
- * Further, as per Budget 2016-17, Gujarat State Petronet Limited is planning to install a new 174 km-long gas pipeline at a cost of US\$ 100.82 million.
- * For the provision of free power supply to the water works of each voluntary organization and gram panchayat of the state, the state government has proposed an allocation of US\$ 70.25 million during 2016-17.
- * Gujarat has the most developed gas pipeline network in the country, which is operated by GSPL, GGCL and GAIL.
- * GAIL primarily serves consumers who have been allocated natural gas by the Ministry of Petroleum and Natural Gas. Its pipeline network can be divided into three sections: South Gujarat Network, North Gujarat Network and ex-Hazira.
- * GSPL is the nodal agency responsible for setting up a gas grid in Gujarat, operating on common carriage basis. In 2015-16, the company carried out the construction of a 366-km long pipeline and gas compressor station at Gana, Gujarat, with a pipeline capacity of 14 mmscmd.
- * GGCL currently operates a 1,550 km and 350 km under construction/development pipeline network. It is planning to set up a pipeline network of about 3,000 km in Gujarat.
- * GGCL has a total gas pipeline length of about 2,700 km and services 230,000 customers.
- * As of November 2016, Sany Group (China) signed an MoU with Government of Gujarat to invest US\$ 2 billion into energy and infrastructure projects in the state, by 2021

GSPL's integrated gas-grid

| | |
|-----------------------------|-----------|
| Current transmission | 22 mmscmd |
| Commissioned pipeline | 2,192 km |
| Under construction pipeline | 2,618 km |

Source: Socio-Economic Review of Gujarat, 2015-16, State Budget 2016-17
 GSPL-Gujarat State Petronet Ltd
 GGCL-Gujarat Gas Company Ltd
 GAIL-Gas Authority of India Ltd
 MMSCMD: Million metric standard cubic metres per day

PHYSICAL INFRASTRUCTURE – TELECOM AND IT

- ★ As of January 2016, the state had 20.66 million internet subscribers.
- ★ According to Telecom Regulatory Authority of India (TRAI), as of May 2016, Gujarat had 61.5 million wireless connections and 1.37 million wire-line subscribers.
- ★ As of April 2016, the state recorded 17,568 new telephone wireless connections of Tata, 58,772 connections of Vodafone and 148,630 new wireless connections of Reliance.
- ★ By the end of May 2016, 16,547,932 subscribers had submitted request for mobile number portability in Gujarat.

Telecom infrastructure (as of May 2016)

| | |
|-----------------------------------|------------|
| Wireless subscribers | 61,506,754 |
| Wire-line subscribers | 1,370,133 |
| Internet subscribers ¹ | 20,660,000 |
| Post offices ² | 8,926 |
| Tele-density (in%) | 98.61 |

Performance status of NOFN (National Optical Fibre Network) Project (as of April 2016)

| | |
|--------------------------|-------|
| No. of GPs in Phase-I | 5,735 |
| Pipe laid (kms) | 6,370 |
| Cable laid (kms) | 4,567 |
| GPs for which cable laid | 2,203 |
| No. of GPs lit | 116 |

Source: Telecom Regulatory Authority of India, Ministry of Communications & Information Technology

¹As of January 2016, ²As of December 2015
GP-Gram Panchayats

DEVELOPMENT PROJECTS: URBAN INFRASTRUCTURE-WATER

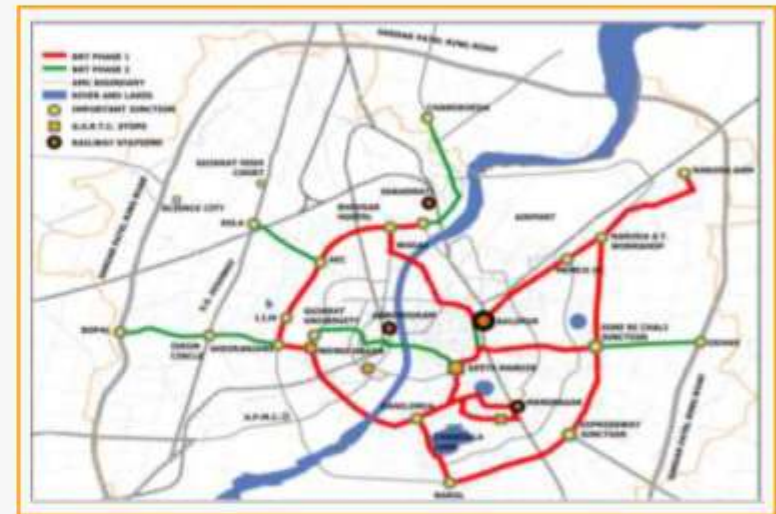
- * In 2015-16, 8,049 villages and 157 towns of Gujarat were connected with Narmada-based Water Supply Grid through Bulk Pipeline and Distribution Group network.
- * By the end of October 2015, a total of 165,940 big and small check dams have been constructed in the state. During 2015-16 (up to October 2015), a total of 223 check dams have been constructed in the state.
- * Under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), 19,892 check dams were constructed in Gujarat as of August, 2015. As per the state budget for 2016-17, US\$ 76.07 million was allocated by the state government for improving and reinforcing the network of existing canals in the state.
- * The Government of Gujarat allocated US\$ 1.38 billion in the budget for 2016-17 under Sardar Sarovar Yojna. Further, a provision of US\$ 801.09 million has also been made for the water resources and Kalpsar division out of which US\$ 15.27 million has been allocated for the tubewell/canal based lift irrigation schemes.
- * During 2016-17, the state government is also planning to deepen a total of 270 big check dams, 470 small check dams as well as 850 ponds and repair check dams for increasing the capacity of water storage in the state. For this purpose, a total amount of US\$ 50.25 million has been allocated by the state government.
- * Construction work on 2,513 km long bulk pipeline packages under Mahi/Narmada bulk water transmission pipeline was completed and commissioned by the end of October 2015 in the state.
- * In the state budget for 2016-17, US\$ 305.53 million was allocated for Saurashtra Narmada Avtaran Sinchai Yojana (SAUNI Yojana) to promote the green revolution in the region. In addition, US\$ 22.91 million has also been allocated for installing the new pipeline from the main Narmada canal of Kalol taluka to Mansa taluka.
- * An allocation of US\$ 3.4 million has been made by the state government, during 2016-17, for the completion work of four pipelines, namely, Vatrak-Maram-Meshvo, Karannagar Dhandhusan, Dantivada-Sipu and Patan-Deendrol, that are in progress under the Sujalam Sufalam scheme.
- * Moreover, for the feasibility report on the project of Kalpsar, a total allocation of US\$ 3.4 million has been made by the state government as per the state budget 2016-17.

Source: Economic Survey of Gujarat 2015-16
State Budget 2016-17

DEVELOPMENT PROJECTS: CLEAN TRANSPORT INITIATIVE-CNG & BRTS

- * As of October 2015, in Ahmedabad, 88 km of BRTS Corridor was planned. As of November, 2015, corridor length of 45 km is operational and supports a daily ridership of 125,000 people. The BRTS is being implemented in Ahmedabad jointly by the state government, GIDB, AMC and AUDA. In Rajkot, out of the planned length of 29 km, the BRTS Corridor of 11 km has been completed. As of November, 2015, the feasibility report on the BRTS Corridor in Vadodara is under study.
- * During April to October 2015, the state sold 1.1 million kg of CNG through 280 CNG stations.

Ahmedabad BRTS map



Source: Economic Survey of Gujarat 2014-15
Urban Development & Urban Housing Department, Government of Gujarat

DEVELOPMENT PROJECTS: OTHER INITIATIVES IN URBAN INFRASTRUCTURE

- ★ Out of the total population of Gujarat, rural population comprises of the major share. Hence, the Government of Gujarat is continuously focusing towards urban development.
- ★ In order to develop and improve urban areas of Gujarat, the state government has announced plans to invest US\$ 1,719.65 million as per the budget 2016-17. For construction of individual, community and public toilets, waste management, water and drainage facilities and building awareness, the Government of Gujarat has announced plans to invest US\$ 156.58 million during 2016-17.
- ★ Under Urban Housing Scheme for poor and middle class, an allocation of US\$ 114.57 million has been allocated by the state government during 2016-17.
- ★ In the budget scheme 2016-17, state has announced plans to invest US\$ 76.38 million for the construction of public roads in Municipal Corporations and Municipalities, under Mukhyamantri Sheheri Sadak Yojna. Moreover, an allocation of US\$ 3.05 million and US\$ 1.52 million has been made by the state government for the construction of multi-level parking across various municipalities and development of Chandola lake in Ahmedabad, respectively.
- ★ Under the Urban Development Mission, the Government of Gujarat has announced plans to invest US\$ 38.8 million during 2016-17-
 - ★ Out of the planned investment, US\$ 15.27 million has been allocated for 1,000 buses for transportation in municipality – Municipal Corporations areas.
 - ★ The Government of Gujarat has planned to invest US\$ 12.83 million for works related to ring roads in the following cities, Rajkot, Bhavnagar, Jamnagar and Vadodara.
 - ★ For work on development of outgrowth areas of Municipal Corporations–municipalities, US\$ 7.63 million has been proposed by the state government.
 - ★ For fulfilling the R.O.B-R.U.B works across the Municipalities and Municipal Corporation areas and for speeding up the work on Surat's Dream City project, allocations of US\$ 2.29 million and US\$ 0.76 million have been proposed by the state government during 2016-17.

Source: State Budget 2016-17
Economic Survey 2015-16

DEVELOPMENT PROJECTS: KEY PUBLIC-PRIVATE PARTNERSHIP (PPP) PROJECTS (1/7)

| Project name | Sector | PPP type | Project cost (US\$ million) | Stage |
|--|-----------|----------|-----------------------------|--------------------|
| Viramgam Mehsana Gauge (Railway Truck) Conversion Project | Transport | BOT | 15.49 | Operation |
| Surendranagar-Pipapav Rail Project | Transport | BOT | 56.52 | Operation |
| Vadodara-Halol Toll Road | Transport | BOT | 26.52 | Operation |
| Dahej LNG Terminal | Transport | BOOT | 346.52 | Operation |
| Ahmedabad-Mehsana Road | Transport | BOT | 46.36 | Operation |
| Gandhidham-Palanpur Railway Project | Transport | BOT | 75.76 | Operation |
| Mundra Port (Development of a direct berthing deep-water port) | Transport | BOOT | 325.91 | Operation |
| Hazira LNG Terminal | Transport | BOOT | 562.12 | Operation |
| Oil Jetty & Related Facilities at Vadinar | Transport | BOT | 113.64 | Operation |
| Oil Jetty | Transport | Others | 3.18 | Operation |
| Himmatnagar Bypass Road | Transport | BOT | 106.06 | Operation |
| Dholera Port Road | Transport | BOOT | 83.48 | Under construction |
| Maroli Port Road | Transport | BOOT | 90.91 | Under construction |
| Dahej Solid Cargo Terminal | Transport | BOOT | 75.76 | Operation |
| Chhayapuri ROB | Transport | BOT | 4.10 | Operation |
| Deesa Panthavada-Gundari Road | Transport | BOT | 3.79 | Under construction |

Source: Department of Economic Affairs, Government of India
BOOT – Build-Own-Operate-Transfer; BOT – Build-Operate-Transfer

DEVELOPMENT PROJECTS: KEY PUBLIC-PRIVATE PARTNERSHIP (PPP) PROJECTS (2/7)

| Project name | Sector | PPP type | Project cost (US\$ million) | Stage |
|---|-----------|----------|-----------------------------|--------------------|
| Kim Mandvi Road | Transport | BOT | 3.18 | Under construction |
| Bhuj-Nakhtrana Road | Transport | BOT | 5.45 | Under construction |
| Four laning of Ahmedabad Viramgam-Maliya Road | Transport | BOT | 119.00 | Operation |
| Halol-Godhara-Shamlaji Road | Transport | BOT | 75.58 | Others |
| Pipavav Port | Transport | BOOT | 105.61 | Operation |
| Development of Dakha-Raikot-Barnala Phase 2 Tranche III Project | Transport | BOT | 17.70 | Under construction |
| Roadways between 4 laning of Ahmedabad-Godhra section | Transport | Others | 152.80 | Under construction |
| 4 laning of Godhra to Gujarat & Madhya Pradesh border section | Transport | BOT | 119.02 | Under construction |
| 4 to 6 laning of Gandhidham-Mundra Port section Road | Transport | BOT | 144.53 | Under construction |
| Six laning of Samakhiali-Gandhidham Section Road | Transport | BOT | 122.03 | Under construction |
| Four lane ROB at Chalthan, Gujarat | Transport | BOT | 1.82 | Operation |
| Roadways between Ichchhapore-Hazira, Gujarat | Transport | BOT | 2.42 | Operation |
| ESSAR Hazira, Surat, Gujarat | Energy | BOT | 242.42 | Operation |

Source: Department of Economic Affairs, Government of India
BOOT – Build-Own-Operate-Transfer; BOT – Build-Operate-Transfer

DEVELOPMENT PROJECTS: KEY PUBLIC-PRIVATE PARTNERSHIP (PPP) PROJECTS (3/7)

| Project name | Sector | PPP type | Project cost (US\$ million) | Stage |
|--|-----------|----------|-----------------------------|--------------------|
| Mahi bridge at Vadodara, Gujarat | Transport | BOT | 6.52 | Operation |
| Roadways between Pipavav-Bherai | Transport | BOT | 1.82 | Operation |
| Hazira Single Point Mooring, Gujarat | Transport | Others | 18.48 | Operation |
| Paguthan Expansion Project, Bharuch, Gujarat | Energy | BOT | 303.03 | Operation |
| ROB Near GNFC Bharuch, Gujarat | Transport | BOT | 1.21 | Operation |
| Watrak Bridge | Transport | BOT | 6.36 | Operation |
| Zadeshwar Bridge | Transport | BOT | 17.12 | Operation |
| GIPCL Vadodara & Surat | Energy | BOT | 303.03 | Operation |
| GPEG Paguthan | Energy | Others | 303.03 | Operation |
| Liquid Chemical Project | Energy | BOOT | 227.27 | Operation |
| Magdalla Jetty | Transport | Others | 28.64 | Operation |
| Muldwarka Jetty | Transport | Others | 37.88 | Operation |
| Dedicated Container Terminal at Pipavav Port | Transport | Others | 303.03 | Operation |
| Roadways connects Bagodara-Tarapur-Wataman-Vasad | Transport | BOT | 133.94 | Under construction |
| Roadways connects Bhavnagar-Dholera-Wataman Sarkhe | Transport | BOT | 134.09 | Others |

Source: Department of Economic Affairs, Government of India
BOOT – Build-Own-Operate-Transfer; BOT – Build-Operate-Transfer

DEVELOPMENT PROJECTS: KEY PUBLIC-PRIVATE PARTNERSHIP (PPP) PROJECTS (4/7)

| Project name | Sector | PPP type | Project cost (US\$ million) | Stage |
|---|--------------------------------------|----------|-----------------------------|--------------------|
| Roadways between Bhuj-Bhachau Road | Transport | Others | 5.45 | Under construction |
| Roadways between Nakhatrana-Pandhro Road | Transport | Others | 29.55 | Others |
| Bagodara-Dhandhuka-Vallabhipur-Bhavnagar Road | Transport | Others | 154.55 | Under construction |
| Privatisation of GSRTC Bus terminals at 7 locations | Transport | BOT | 37.88 | Under construction |
| Privatisation of GSRTC Bus terminals at 10 locations | Transport | BOT | 37.88 | Under construction |
| Transport nagar at Ahmedabad for 600 trucks | Transport | BOT | 22.73 | Under construction |
| Municipal Energy Efficiency Project in 159 ULB, Gujarat | Social and commercial infrastructure | Others | 120.45 | Under construction |
| Sewerage treatment plant (45 MLD) | Water Sanitation | Others | 15.15 | Operation |
| Development of M P Shah Town hall | Social and commercial infrastructure | BOOT | 17.73 | Others |
| Developement of Triangle portion of the Lakota lake | Social and commercial infrastructure | BOT | 49.24 | Others |
| Bagodara Wataman Tarapur Vasad Road, Ahmedabad | Transport | BOT | 133.92 | Others |
| Roadways connects Ahmedabad-Viramgam-Maliya | Transport | BOT | 153.84 | Operation |
| Roadways connects Rajkot-Jamnagar-Vadinar Road | Transport | BOT | 117.39 | Operation |

Source: Department of Economic Affairs, Government of India
BOOT – Build-Own-Operate-Transfer; BOT – Build-Operate-Transfer

DEVELOPMENT PROJECTS: KEY PUBLIC-PRIVATE PARTNERSHIP (PPP) PROJECTS (5/7)

| Project name | Sector | PPP type | Project cost (US\$ million) | Stage |
|--|-----------|----------|-----------------------------|--------------------|
| Roadways connects Chirai-Anjar road | Transport | BOT | 36.02 | Others |
| Sarkhej-Dholera express Way | Transport | BOT | 454.55 | Under construction |
| Roadways between Surat-Bardoli | Transport | BOT | 18.03 | Under construction |
| Roadways between Surat-Olpad-Kim | Transport | BOT | 34.58 | Under construction |
| Roadways between Dakor-Sevaii | Transport | BOT | 23.49 | Others |
| Roadways between Vadodara Dabhoi | Transport | BOT | 22.38 | Under construction |
| Jetpur-Somnath NH-8D Road Project | Transport | BOT | 125.45 | Under construction |
| Berths (Kandla) Project | Transport | Others | 114.39 | Under construction |
| Kandla-Mundra Port NH-8A Road Project | Transport | BOT | 156.21 | Under construction |
| Road Upgradation (Ahmedabad-Vadodara) Project | Transport | DBFOT | 739.39 | Under construction |
| Samakhiali-Gandhidham Road Project | Transport | DBFO | 212.12 | Under construction |
| Road Upgradation (Godhra-Gujarat/Madhya Pradesh NH-59) Project | Transport | DBFOT | 119.02 | Under construction |
| Bharuch-Surat NH-8 Road Project | Transport | BOT | 74.55 | Completed |
| Container Terminal (Kandla) Project | Transport | BOT | 30.30 | Completed |
| Jetpur-Gondal NH-8B Road Project | Transport | BOT | 58.79 | Completed |

Source: Department of Economic Affairs, Government of India
BOOT – Build-Own-Operate-Transfer; BOT – Build-Operate-Transfer

DEVELOPMENT PROJECTS: KEY PUBLIC-PRIVATE PARTNERSHIP (PPP) PROJECTS (6/7)

| Project name | Sector | PPP type | Project cost (US\$ million) | Stage |
|--|--------------------------------------|----------|-----------------------------|--------------------|
| Road Upgradation (Vadodara-Bharuch NH-8) Project | Transport | BOT | 100.00 | Completed |
| Road Upgradation (Ahmedabad-Vadodara NH-8) Project | Transport | BOT | 360.76 | Under construction |
| Bus Rapid Transport System (Ahmedabad) | Transport | Others | 13.27 | Completed |
| Secured Engineered Landfill Facility (Vadodara) | Water sanitation | BOOT | 4.69 | Under construction |
| Solid Waste Management (Surat) | Water sanitation | BOOT | 7.95 | Completed |
| Solid Waste Management (Ahmedabad) | Water sanitation | BOT | 17.68 | Under construction |
| Bus Rapid Transport System (Rajkot) | Transport | BOO | 16.67 | Completed |
| Bus Rapid Transport System (Surat) | Transport | BOOT | 71.06 | Under construction |
| Bus Rapid Transport System-Phase II (Ahmedabad) | Transport | BOT | 71.11 | Under construction |
| Water Treatment Plant (Ahmedabad) | Water sanitation | Others | 8.16 | Completed |
| Cold chain project for fruits, vegetables and dairy products | Social and commercial infrastructure | Others | 1.52 | Completed |
| Solid Waste Management (Rajkot) | Water sanitation | Others | 1.31 | Under construction |
| Sewage Treatment Plant-Upgradation (Anjana) | Water sanitation | Others | 1.66 | Completed |
| Bhesan Sewage Treatment Plant | Water sanitation | Others | 2.29 | Completed |
| Bamroli Sewage Treatment Plant | Water sanitation | Others | 2.00 | Completed |

Source: Department of Economic Affairs, Government of India
BOOT – Build-Own-Operate-Transfer; BOT – Build-Operate-Transfer

DEVELOPMENT PROJECTS: KEY PUBLIC-PRIVATE PARTNERSHIP (PPP) PROJECTS (7/7)

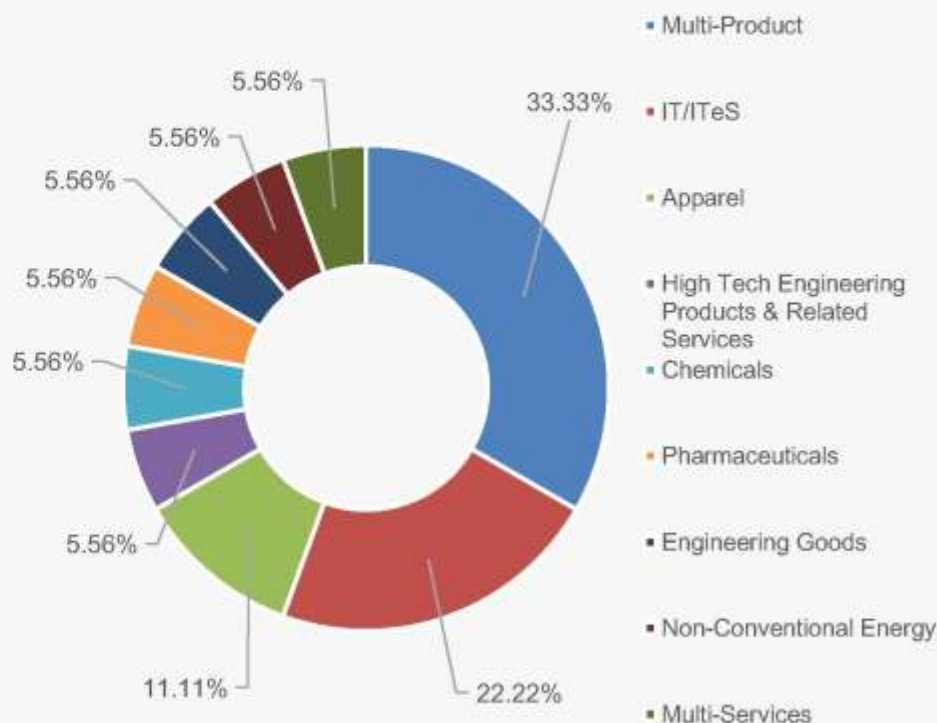
| Project name | Sector | PPP type | Project cost (US\$ million) | Stage |
|---|------------------|----------|-----------------------------|--------------------|
| Pal-palanpur Sewerage Disposal & STP | Water sanitation | Others | 3.22 | Completed |
| Sewerage Disposal & STP (Vesu) | Water sanitation | Others | 5.21 | Completed |
| Sewerage and Sewage Treatment system (Surat) | Water sanitation | Others | 16.77 | Operation |
| Sewerage System (SMC) | Water sanitation | Others | 27.88 | Operation |
| Pirana Sewerage System | Water sanitation | Others | 10.49 | Completed |
| Vasna Sewerage System | Water sanitation | Others | 1.72 | Completed |
| Solid Waste Management (Rajkot)-Upgradation | Water sanitation | Others | 6.32 | Operation |
| BRTS (Ahmedabad)-O&M | Transport | Others | 61.47 | Completed |
| Container Terminal (Kutch) | Transport | DBFOT | 1377.29 | Others |
| Single Point Mooring (SPM) | Transport | BOT | 269.39 | Others |
| Dry Bulk Terminal (Tekra near Tuna) | Transport | BOT | 164.84 | Others |
| Road Upgradation (Bagodara-Tarapur-Vasad) Project | Transport | BOT | 168.85 | Under construction |
| Road Upgradation (Bhuj-Bhachau) Project | Transport | BOT | 70.44 | Under construction |
| Road Upgradation (Deesa-Panthawada-Gudari) Project | Transport | BOT | 13.48 | Completed |
| Road Upgradation (Ahmedabad-Viramagam-Maliya) Project | Transport | BOT | 252.73 | Completed |
| Road Upgradation (Halol-Godhara-Shamlaji) Project | Transport | BOT | 215.45 | Completed |
| Road Upgradation (Rajkot-Jamnagar-Vadinar) Project | Transport | BOT | 184.39 | Completed |

Source: Department of Economic Affairs, Government of India
BOOT – Build-Own-Operate-Transfer; BOT – Build-Operate-Transfer

DEVELOPMENT PROJECTS: SPECIAL ECONOMIC ZONES (SEZS) ... (1/3)

- ★ As of September 2016, Gujarat had a total of 74 SEZs, comprising eighteen operational SEZs, 28 SEZs having formal approvals, 4 with in-principle approvals and 24 notified SEZs.
- ★ Gujarat ranks first in terms of total area covered under SEZs in India. It is also a leading SEZ state with the highest geographical area of 29,423.9 hectares under SEZ development. As of March 10, 2015, the total utilised area of notified SEZs in Gujarat stood at 6,818.58 hectares.
- ★ Has 18 operational SEZs namely, Kandla SEZ, Surat SEZ, Surat Apparel Park, Adani Port and Special Economic Zone, Dahej SEZ Ltd., Jubilant Infrastructure Ltd., E Complex Pvt. Ltd., Zydus Infrastructure Pvt. Ltd., Euro Multivision Pvt. Ltd., Reliance Jamnagar Infrastructure Ltd., GIDC Apparel Park Ahmedabad, Sterling SEZ Pvt. Ltd., Aqualine Properties Pvt. Ltd. Gandhinagar, L&T Ltd., Vadodra, Tata Consultancy Services Ltd., Gandhinagar, GIFT Multi-Service SEZ, Electronic Park SEZ and Synefra Engineering. & Construction Ltd.
- ★ First state to formulate an SEZ policy, which includes flexible labour laws and exit options for investors. SEZs in Gujarat receive a 10-year corporate tax holiday on export profits (100.0% for the initial five years and 50.0% for the next five years).

Sector-wise operational SEZs in Gujarat (As of September 2016)



Source: Ministry of Commerce & Industry, Government of India

DEVELOPMENT PROJECTS: SPECIAL ECONOMIC ZONES (SEZS) ... (2/3)

- ★ Surat accounts for more than 120 units of SEZs and supplies products to various locations around the world. Some of the key clients of the Surat SEZ include Adorn Gioielli, Flexit Laboratories Pvt Ltd., Priyank Cord & Tassels Ind. Ltd., Flair Impex Corporation and Pidilite Industries.
- ★ As of September, 2014, 185 units operate in Kandla and export products across the globe. The employee strength in Kandla SEZ is around 25,800.
- ★ Other large SEZs in Gujarat include M/s. Adani Port & Special Economic Zone Limited., M/s. Reliance Industries Ltd. and Sterling SEZ & Infrastructuring Ltd.

Surat SEZ exports (US\$ million)



Kandla SEZ exports (US\$ million)



Source: Ministry of Commerce & Industry, Government of India
⁽¹⁾As of December, 2014; ⁽²⁾As of September, 2014

DEVELOPMENT PROJECTS: SPECIAL ECONOMIC ZONES (SEZs) ... (3/3)

Sector-wise formally approved SEZs in Gujarat

| Industry | Name of SEZs | No of SEZs |
|------------------|---|------------|
| IT/ITeS | Gujarat Industrial Development Corp., Aqualine Properties Pvt. Ltd., Calica Construction and Impex Pvt. Ltd., Ganesh Infrastructure Pvt. Ltd., Shivganga Real Estates, Tata Consultancy Services Ltd., Gujarat Industrial Development Corp., Larsen & Toubro Limited, Myron Realtors Private Limited, Mexus Corp. Pvt. Ltd. | 10 |
| Multi-product | Reliance Jamnagar Infrastructure Limited, Dahej SEZ Limited, Mundra Port and Special Economic Zone, Sterling SEZ and Infrastructure Limited, Adani Ports and Special Economic Ltd. etc., Gift SEZ Limited | 5 |
| Pharmaceutical | Zydus Infrastructure Private Limited, CPL Infrastructure Pvt. Ltd., Dishman Infrastructure Limited, J.B. SEZ Pvt. | 4 |
| Chemicals | Jubilant Infrastructure Limited | 1 |
| Port-based | Kandla Port Trust | 1 |
| Apparel | Gujarat Industrial Development Corporation | 1 |
| Non-conventional | Euro Multivision Ltd. | 1 |
| Biotechnology | Gujarat Industrial Development Corporation, | 1 |
| Engineering | Aspen Infrastructures Limited (formerly Synefra Engineering construction Ltd. (Suzlon Infrastructure Ltd.) , E. Complex Pvt. Ltd. | 2 |
| Oils & gas | Gujarat Hydrocarbons and Power SEZ Limited | 1 |
| Food processing | Akshaypatra Infrastructure Pvt. Ltd. | 1 |

SOCIAL INFRASTRUCTURE – EDUCATION

- ★ Gujarat has a literacy rate of 78.03%; the male literacy rate is 85.80% and the female literacy rate is 69.70%.
- ★ In October 2015, the central government approved the Gujarat government's proposal to set up a Indian Institute of Information Technology college near Vadodara. The institution would be set up based on a public-private partnership model.
- ★ In order to improve the education infrastructure in the state, the Government of Gujarat announced plans to invest US\$ 3,638.21 million under planned and non-planned expenditure for the Education sector.
- ★ Further, allocations of US\$ 159.19 million, US\$ 110.80 million and US\$ 100.65 million have been made by the state government for secondary & higher education, higher education and technical education, respectively, during 2016-17.
- ★ Moreover, for Sarva Shiksha Abhiyaan and implementation of mid-day meal scheme in the state, amounts of US\$ 238.31 million and US\$ 158.93 million respectively have been allocated by the state government, as per the state budget 2016-17. For Kasturba Gandhi Balika Vidyalaya, an allocation of US\$ 5.52 million has been made during 2016-17.

| Literacy rates (per cent) | |
|---------------------------|-------|
| Literacy rate | 78.00 |
| Male literacy | 85.80 |
| Female literacy | 69.70 |

| No. of seats in technical education – June 2015 | |
|---|--------|
| Engineering | 71,289 |
| MBA | 11,365 |
| Pharmacy | 4,825 |
| MCA | 7,090 |
| Architecture | 1,140 |
| No. of seats in diploma courses – June 2015 | |
| Engineering | 69,735 |
| Pharmacy | 530 |

Source: Census 2011
Socio-Economic Review of Gujarat 2015-16, State Budget 2016-17

SOCIAL INFRASTRUCTURE – HEALTH ... (1/2)

- * Gujarat is at the forefront of establishing and maintaining a good health infrastructure.
- * In the state budget for 2016-17, US\$ 1.25 billion has been allocated by the state government for Health & Family Welfare department under Plan and Non-Plan expenditure.
- * The state government, as per state budget 2016-17 has decided to provide free medicines for a lifetime, to the poor and middle class families, through government hospitals. For providing 575 free medicines in the state, a provision of US\$ 41.55 million has been proposed by the state government during 2016-17.
- * In order to complete the construction of 50 sub-centres, 63 primary health centres and 15 community health centres across the rural areas of the state, a provision of US\$ 15.48 million has been made by the state government during 2016-17.
- * Under Dudh Sanjivani scheme (initiated to improve and enrich the level of nutrition of primary school going tribal students), a total amount of US\$ 47.65 million has been allocated by the state government as per the state budget 2016-17.

| Health infrastructure (as of August 2015) | |
|---|-------|
| Primary health centres | 1,300 |
| Sub-centres | 8,121 |
| Community health centres | 321 |

- * Under medical services, the following provisions have been made for 2016-17:
 - * Provision of US\$ 15.69 million for providing '108' emergency services to patients in the state
 - * Provision of US\$ 2.29 million for the establishment of haemodialysis centres across 10 hospitals,
 - * For upgrading the existing community health centres to sub-district level hospitals and increasing the number of beds at Bardoli, Jambusar, Keshod, Jhalod, Kadi and Singarava, a provision of US\$ 870 thousand has been made.

Source: Socio-Economic Review of Gujarat, 2015-16
State Budget 2016-17

SOCIAL INFRASTRUCTURE – HEALTH ... (2/2)

Key health schemes of Gujarat government

Chiranjeevi Scheme

- Introduced to reduce maternity-related deaths and infant mortality; involves collaborations between government and private sector specialists to facilitate safe deliveries for the economically weaker sections.

Bal Sakha Yojna

- An initiative under the Chiranjeevi Scheme.
- Provides facilities for proper check up of newborns and infants by paediatricians. The main aim of the scheme is to bring down the Infant Mortality Rate (IMR) and the Maternal Mortality Rate (MMR).

Mukhyamantri Amrutam Yojana (MA Yojana)

- The *yojana* caters to the medical needs of Below Poverty Line (BPL) people.
- Government provides medical cover of up to US\$ 0.003 million including expenditure on hospitalisation and surgical procedures.

Centre-aided Health Insurance Scheme

- The scheme has been launched in Gujarat to cover the families under the BPL category.
- Total insured amount is about US\$ 650 per family.

Rogi Kalyan Samiti

- The scheme has been launched in Gujarat so that BPL patients can easily avail medical care.

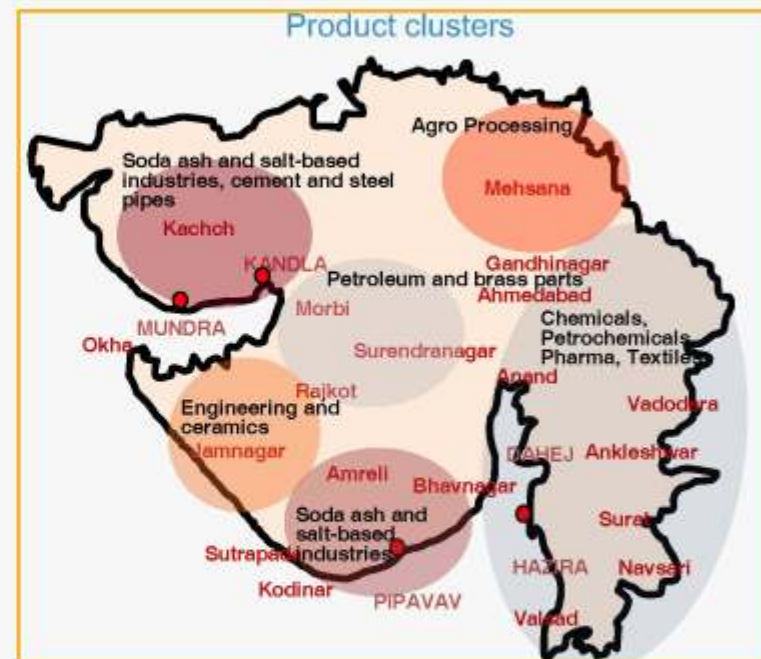
CULTURAL INFRASTRUCTURE

- * Various dance forms of the state include dandiya raas, garba, garbi, rasaka, tippani and padhar. Champaner-Pavagadh Archaeological Park, located in the Panchmahal district of Gujarat, was declared as a World Heritage Site by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2004.
- * Many fairs and festivals are celebrated in the state such as Bhavnath Mahadev Mela, Dangs Darbar, Vichitra Mela, Dhrang Fair, Trinetrishwar Mahadev Fair, Vautha Mela, Shamlaji Mela, Kutch Mahotsav, Bhadra Purnima, Kavant Mela, Modhera (dance festival), Makar Sankranti, International Kite Festival (Uttarayan) and Navratri Festival.
- * Prominent stadiums in the state include the Sardar Patel Cricket Stadium (Ahmedabad), Moti Bagh Stadium (Vadodara), Indian Petrochemicals Corporation Ltd (IPCL) Sports Complex (Vadodara) and the Surat Indoor Stadium. Golf courses in the state include Gaekwad Baroda Golf Club (Vadodara), Gulmohar Greens Golf & Country Club (Ahmedabad), Aaloo Hills Golf Resort (Ahmedabad), Kensville Golf and Country Club (Ahmedabad), Cambay Golf Club (Gandhinagar), and an integrated Golf Course in Ganesh Housing Corporation (Ahmedabad).
- * Museums in the state include The Gandhi Smarak Sangrahalaya (Ahmedabad), Calico Museum of Textiles (Ahmedabad), Vadodara Museum (Vadodara), Maharaja Fatehsingh Museum (Vadodara), Gandhi Museum (Bhavnagar), Kite Museum (Ahmedabad), Watson Museum (Rajkot) and the Lady Wilson Museum (Valsad). An investment of US\$ 3.48 million has been proposed by the government for the development and adornment of the 6 Pavitra Yatra Dham and 356 Devasthan which is managed by the state government.
- * In Budget 2016-17, the allocation proposed by the state government under the plan and non-plan expenditure for Sports, Youth Services and Cultural Activities Department is US\$ 87.08 million. Out of announced investments, for arranging the Kheh Mahakumbh and for the renovation of various sports complexes across the state, allocations of US\$ 11.28 million and US\$ 1.37 million, respectively, have been made by the state government.
- * Further, US\$ 4.58 million and US\$ 3.05 million have been allocated by the state government, as per the Budget 2016-17, for the establishment of international art & culture centre at Vadodara & Bhavnagar as well as for the construction of Swarnim Gujarat Sports University building at Vadodara, respectively.

Source: Ministry of Tourism, State Budget 2016-17

INDUSTRIAL INFRASTRUCTURE

- ★ During October 2006 to October 2015, the state registered 375.13 thousand MSME Enterprises at a total investment of US\$27.32 billion and generating 2.83 million employment opportunities.
- ★ In budget 2015-16, state government has announced plans to invest US\$ 458.97 million for the growth of industrial sector of Gujarat. For the development of industrial park, logistic park and a park for defence manufacturing units state government has announced to invest US\$ 5.30 million in budget 2015-16.
- ★ As of May 2016, a total of 6,251 industrial projects with investment of US\$42.12 billion have been commissioned in the state, while 3,906 projects, with investment totaling to US\$ 141.25 billion are under implementation.
- ★ Gujarat has 106 product clusters. The Cluster Development Scheme has been launched for furthering the growth of product clusters.
- ★ Some of the successful clusters include ceramics cluster at Morbi, brass-parts cluster at Jamnagar, fish-processing cluster at Veraval and power-looms cluster at Ahmedabad.
- ★ The state government has taken initiatives to set up industrial estates on non-agricultural land after the assessment of industrial viability. It has also introduced a modified scheme to provide financial assistance to promote and encourage industrial parks by private institutions.



- ★ The state has announced an Incentive program for the Industries (General) from 2016-2021 in accordance with the New Industrial Policy of 2015. The scheme aims to attract increased investments to the state in the manufacturing sector to create more employment opportunities.

Source: Industries Commissionerate, Government of Gujarat
Socio-Economic Review of Gujarat, 2015-16, State Budget 2016-17, MSME: Micro,
Small & Medium Enterprises, GIDC: Gujarat Industrial Development Corporation.

For updated information, please visit www.aedia.org 46

AMRUT AND SMART CITIES

- As of May 2015, seven cities namely Ahmedabad, Surat, Vadodara, Rajkot, Bhavnagar, Junagadh and Gandhinagar are shortlisted to be transformed into smart cities under the central government's Smart City Mission.
- The state will receive an amount of around US\$ 0.49 billion for the development of smart cities. A large number of projects are anticipated to be established under the mission.
- In October, 2015, the Government of Gujarat proposed an action plan worth US\$ 2.55 billion under AMRUT for the next five years, to facilitate infrastructure development in 31 cities in the state. The state government asked the central government to approve projects worth nearly US\$ 122.21 million for 2016-17.
- As per the state budget 2016-17, the two major cities of Gujarat i.e., Surat and Ahmedabad have been selected by the Government of India in the first phase of Smart City Mission, during 2015-16.

| Smart cities in Gujarat | | | |
|-------------------------|------------|--------------|---------------|
| Cities | Population | Area (sq km) | Literacy rate |
| Ahmedabad | 7,214,225 | 8,107 | 85.31% |
| Bhavnagar | 2,880,365 | 10,034 | 75.52% |
| Gandhinagar | 1,391,753 | 2,140 | 84.16% |
| Junagadh | 2,743,082 | 8,831 | 75.80% |
| Rajkot | 3,804,558 | 11,198 | 80.96% |
| Surat | 6,081,322 | 4,549 | 85.53% |
| Vadodara | 1,602,424 | 148.95 | 78.92 |

Source: TechSci Research

KEY INDUSTRIES

- ★ There are 13 major industry groups that together account for around 82.05% of total factories, 95.85% of total fixed capital investment, 90.09% of the value of output and 93.21% of value addition to Gujarat's industrial economy.
- ★ Gujarat is a leader in industrial sectors such as chemicals, petrochemicals, dairy, drugs and pharmaceuticals, cement and ceramics, gems and jewellery, textiles, and engineering.
- ★ The industrial sector of the state comprises of around 603,000 micro, small and medium industries which provide employment to about 3,851,000 people.
- ★ Siemens PLM Software India Pvt Ltd has signed an agreement with the state government to set up five centres of excellence. These centres will address industry segments like automotive, industrial machinery, industrial automation, aerospace, and defence and shipbuilding.
- ★ During FY'15, the company (Siemens PLM Software) spent US\$ 250 thousand for upgradation of Government Industrial Training Institutes in the states of Maharashtra, Gujarat and Delhi.

Key industries in Gujarat

- Agro and food processing
- Dairy
- Chemicals and petrochemicals
- Textiles and apparels
- Engineering and auto
- Gems and jewellery
- Oil and gas
- Pharmaceuticals and biotechnology
- IT
- Minerals
- Ports
- Power
- Tourism

Source: Government of Gujarat website
Industries Commissionerate, Government of Gujarat

KEY INDUSTRIES – AGRO AND FOOD PROCESSING ... (1/5)

- ★ The agro sector, including animal husbandry, contributed 18% to Gujarat's GSDP over 2015-16.
- ★ Gujarat accounts for the largest share in the total investments in the food processing sector of India.
- ★ Cotton, groundnut, bajra, paddy, maize, jowar, sesamum, castor, and tur (pigeon pea), along with fodder and vegetables, are the major kharif crops in the state. Normal area under kharif cultivation is 8.6 million hectares.
- ★ During 2015-16 (up to December 2015), the state held 213 agriculture produce market committees (APMCs) and there were 213 main yards and 187 sub-market yards operational in the state.
- ★ GAIC promotes agricultural activities at the ground level and aids the development of agro industries in the state.
- ★ During 2015-16, the construction of hi-tech cold storage facility for potato at Deesa was under process.

| Crop | Gujarat's position in world production | Share of world production (%) |
|--------------|--|-------------------------------|
| Castor seeds | 1 | 41% |
| Fennel | 1 | 67 |
| Isabgul | 2 | 35 |
| Cotton | 8 | 3.5 |

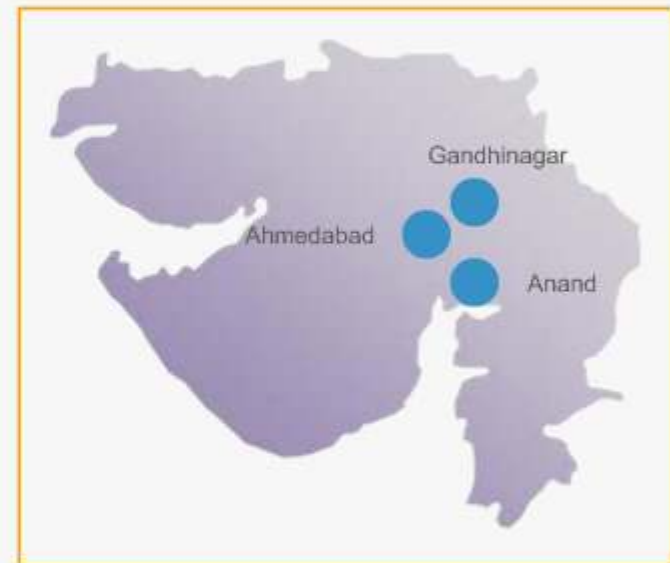
| Agri Export Zones Projects in Gujarat |
|---------------------------------------|
| Mango and vegetables |
| Value added onions |
| Sesame seeds |

Source: Vibrant Gujarat,
APMC-Agriculture Produce Market Committees,
GAIC-Gujarat Agro Industries Corporation

KEY INDUSTRIES – AGRO AND FOOD PROCESSING ... (2/5)

- ★ Gujarat's dairy sector consists of 17 district milk producers' unions, with around 14,598 milk co-operative societies. The state's milk production, which stood at 12.1 million tonnes during 2015-16, is the fourth largest in India.
- ★ Under Dairy Development Schemes and National Programme for Dairy Development (NPDD), the central government released US\$ 0.2 million for the growth of dairy processing industries in Gujarat.
- ★ Under the plan and non-plan expenditure for the Food, Civil Supply and Consumer Affairs department, an allocation of US\$ 157.31 million has been proposed by the state government during 2016-17.
- ★ In budget 2016-17, for increasing the storage capacity of food grains the state government has planned to construct 124 godowns at taluka and district levels, for which an allocation of US\$ 14.81 million has been made.

Key districts in the dairy sector



Source: National Dairy Development Board
State Budget 2016-17, Economic Survey 2015-16

KEY INDUSTRIES – AGRO AND FOOD PROCESSING ... (3/5)

- ★ Gujarat is keen to promote the agro-processing industry. It is actively encouraging the production of derivatives based on castor seeds and psyllium husk.
- ★ The state government has undertaken the following steps to promote agri-industrial development in Gujarat:
 - ★ Diversifying crops and cropping patterns.
 - ★ Enabling agricultural research capabilities and setting up agricultural universities.
 - ★ Introduced Micro Irrigation Scheme (MIS) and drip & sprinkler irrigation system.
 - ★ Regulating contract farming opportunities.
 - ★ Building a strong agriculture marketing infrastructure: APMCs, market yard, cold storages, processing units, services and business centres, agro export zones, food parks and agro-processing zones.
 - ★ Increasing adoption of hi-tech agriculture technologies, such as tissue culture, green houses and shed-net houses, leading to higher yield and production.
 - ★ Setting up a VSAT-based real-time multi-commodity exchange in Ahmedabad.
- ★ In the 2016-17 state budget, under the National Mission on Sustainable Agriculture Scheme (NMSA), the Gujarat Government allocated US\$ 9.16 million for increasing the productivity of various agricultural crops in the rain-fed areas of the state. Additionally, a provision of US\$ 18.33 million was made to provide assistance to the farmers for purchasing tractors and mini-tractors in order to endorse the agricultural mechanisation in the state.
- ★ Moreover, US\$ 37.64 million has also been allocated by the state government for agricultural land and water conservation.

Source: Vibrant Gujarat, State Budget 2016-17, Economic Survey 2015-16

KEY INDUSTRIES – AGRO AND FOOD PROCESSING ... (4/5)

- * In the budget 2016-17 for the state of Gujarat, an outlay of US\$ 907.43 million was allocated for the Agriculture and Co-operation Department. Initiatives for the agro and food processing sectors include:
 - * Provision of US\$ 45.82 million for the Rashtriya Krushi Vikas Yojana.
 - * Allocation of US\$ 93.87 million for the development of animal husbandry and dairy sectors.
 - * Allocation of US\$ 100.44 million and US\$ 54.31 million for the development of fisheries as well as for various horticulture schemes, respectively.
 - * For the empowerment of farmers under Krushi Mahotsav-2016, an allocation of US\$ 7.63 million has been made.

KEY INDUSTRIES – AGRO AND FOOD PROCESSING ... (5/5)

Key players in agro and food processing industry

Amul



- Anand Milk Union Limited (AMUL) was established in 1946 in Anand, Gujarat. Amul is a market leader in butter, whole milk, cheese, ice cream, dairy whitener, condensed milk, saturated fats and long-life milk. In August 2015, dairy major Amul announced plans to invest US\$ 124 million for increasing its cheese manufacturing capacity from 40 tonnes to 120 tonnes.
- The company registered a turnover of US\$ 3.51 billion during 2015-16.

Parle Products Pvt Ltd



- Parle Products Pvt Ltd has been India's largest manufacturer of biscuits and confectionery for almost 80 years.
- Brands include Parle-G, Krackjack, Monaco, Hide and Seek, Poppins, Melody and Mango Bite.
- The company has a factory at Bhuj, Gujarat.

Vadilal



- Vadilal was established in 1907 at Ahmedabad. The company manufactures ice-creams and frozen desserts. In October 2013, Vadilal was rated as India's second most attractive food & beverage brand by TRA.
- Exports processed products. One manufacturing plant at Pundhra in Gandhinagar, second in Bareilly, Uttar Pradesh, and third in Dharampur, Surat.
- During 2014-15, the company recorded revenues of US\$ 4.03 billion through the sales of ice creams and processed food items.

Rasna



- Rasna was formed in 1984, and has around 93.0% market share in the powdered Indian soft drink concentrate market.
- The company has a wide range of products in the processed-foods category such as fruit jams, energy sports drink powder, fruit cordial, rose syrup and iced tea.
- Rasna has the largest capacity in Asia to make powder concentrates, with seven facilities spread across India. The company is based in Ahmedabad.

KEY INDUSTRIES – TEXTILES AND APPAREL ... (1/4)

- ★ As per the Government of Gujarat's survey report, technical textiles is a key emerging area, with over 860 units in Gujarat.
- ★ In 2014, state Government of Gujarat introduced textile policy. In order to promote the textile policy in the state, Gujarat state government has allocated US\$ 76.38 million for the development of the textile sector as per the state budget 2016-17.
- ★ The textile industry contributes around 6% to the total industrial production in the state (organised sector). Gujarat is the largest producer of denim in India (65-70%) and the third-largest producer in the world.
- ★ Surat is the largest manufacturing centre of silk fabric and produces over 40% of silk in the country. About 24-28% of fixed investment, production value and employment of SSI is from the textiles sector. Gujarat has extended full support to entrepreneurs who want to invest in the technical textile market in the state.

| Area | Textile clusters |
|-----------|---|
| Ahmedabad | Cotton and blended fabric, denim, made-ups, ladies dresses, textile machinery and spare parts |
| Surat | Art-silk fabric, synthetic textiles, <i>jari</i> manufacturing, embroidery, textile machinery and spare parts |
| Umargam | Modern power looms, synthetic suiting and shirting |
| Jetpur | Hand printing and processing units |
| Manavadar | Cotton ginning |
| Kutch | Textile handicrafts |

Cotton production (thousand tonnes)
(production in bales of 170 kg each)



SSI – Small Scale Industries, News articles

Source – Ministry of Textiles

KEY INDUSTRIES – TEXTILES AND APPAREL ... (2/4)

- ★ On the basis of capital investments worth US\$ 2.3 billion, the textile policy of Gujarat has been successful in providing large scale employment opportunities in the state.
- ★ The Government of Gujarat has introduced various schemes to provide assistance in the form of:
 - ★ Interest subsidy, power tariff and VAT exemption.
 - ★ Support to technical textiles.
 - ★ Assistance for energy conservation, water conservation and environmental compliance to the existing unit.
 - ★ Assistance for technology.
 - ★ Acquisition and upgradation.
 - ★ Assistance for apparel training institutions and trainees.
- ★ The state government has announced plans for the setting up of brown and green field projects to facilitate environment friendly processing standards in the textile units of the state.

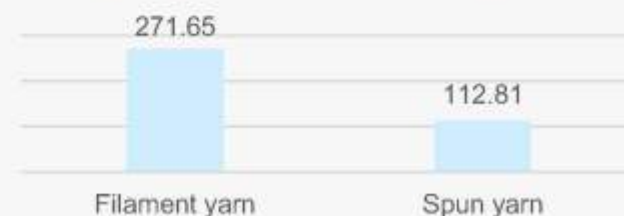
| Investment opportunities |
|--|
| Conventional textiles |
| Ginning and pressing |
| Cotton & synthetic based spinning, weaving & processing units, cotton knitwear |
| Terry towel/home furnishing |
| High valued garment manufacturing |
| Technical textiles |
| Protective textiles |
| Agro textiles |
| Geo textiles |
| Automotive textiles |
| Home textiles |
| Infrastructure development |
| Cotton Integrated Textile and Apparel Park |

Source: Industrial Extension Bureau
(A Government of Gujarat organisation)

KEY INDUSTRIES – TEXTILES AND APPAREL ... (3/4)

| Proposed textile parks in Gujarat (as of October 2015) | Location |
|--|-----------------------|
| Gujarat Eco Textile Park Limited | Pandesara GIDC, Surat |
| Mundra SEZ Textile & Apparel Park Limited | Kutch |
| Fairdeal Textile Park Pvt Ltd | Mahuvej, Surat |
| Vraj Integrated Textile Park Limited | Kheda |
| Sayana Textile Park Ltd | Ichhapur, Surat |
| Surat Super Yarn Limited | Hathuran, Surat |
| RJD Integrated Textile Park | Ichhapore, Surat |
| Kejriwal Integrated Textile Park Pvt Ltd. | Palsana, Surat |
| Shanti Integrated Textile parks Park Pvt Ltd | Surat |
| Palsana ITP Park , Gujarat | Surat |
| Amitara Green High Tech Textile Park Pvt Ltd | Kheda |
| Madhav ITP, Gujarat | Sundernagar |
| NSP Infrastructure Pvt. Ltd. | Surat |

Fiber and yarn production, 2015-16¹ (in million kg)



* During 2015-16 (up to September 2015), the state recorded production of 271.65 million kg of filament yarn.

Source: Department of Textile Industry, Government of India
¹up to September 2015

KEY INDUSTRIES – TEXTILES AND APPAREL ... (4/4)

Key players in textiles and apparel industry

Arvind Ltd



- One of the largest producers of denim in the world and largest producer in Asia. Product line includes fabrics (denims, shirtings, khakis and knitwear) and garments. Asia's first fabric-manufacturing unit to receive an ISO-14001 certification.
- The company generated revenues of US\$ 314.26 million during first quarter of 2016-17.

Ashima Group



- 100% cotton-fabric manufacturers and a vertically integrated group. During the first quarter of 2016-17, the company generated revenues of US\$ 8.19 million. It has its registered office at Ahmedabad. Exports fabric to over 45 countries, markets to over 150 Indian garment exporters.

Digjam Ltd



- Part of the S.K. Birla Group, the company was established in Jamnagar, Gujarat in 1948. The company manufactures fabrics for suiting and casual wear. It has restructured its business portfolios to focus on textile manufacturing and marketing of fabrics and ready-to-wear clothing under its own brands. During the first quarter of 2016-17, company's revenues stood at US\$ 3.21 million.

Raymond Ltd



- With over 60.0% market share in India, Raymond is one of the largest integrated manufacturers of worsted fabric in the world. The group is into textiles, engineering and aviation.
- Raymond Apparel Limited is a 100% subsidiary of Raymond Limited. The plant at Vapi in Gujarat has a production capacity of 14 million metres per annum.
- Raymond Ltd generated revenues of US\$ 162.6 million during the first quarter of 2016-17.

KEY INDUSTRIES – CHEMICALS AND PETROCHEMICALS ... (1/2)

- ★ Gujarat accounted for about 36.4% of the national production of chemicals over 2014-15.
- ★ It is the highest contributor to the total national production of petrochemical products.
- ★ Gujarat's contribution to the national production is huge in the following segments:
 - ★ Soda ash: About 91%.
 - ★ Salt: 66%.
 - ★ Petrochemicals: 62%.
 - ★ Onshore crude oil: 27.11%.
- ★ Some of the key initiatives taken by the state government for the development of the industry are:
 - ★ Developing PCPIR at Dahej.
 - ★ Identifying specialised industrial regions under the PCPIR policy.
 - ★ Introducing the SEZ scheme to provide hassle-free environment and state-of-the-art infrastructure.
 - ★ Launching a liberal labour policy that provides complete flexibility in SEZs.

- ★ As per the state budget 2016-17, an allocation of US\$ 1.2 billion was proposed by the Government of Gujarat for the Energy and Petrochemical Department.

| Investment opportunities |
|-------------------------------|
| High performance chemicals |
| Pigments and coating products |
| Geo textiles |
| Engineering polymers |
| Feedstock linkages |
| Bio refineries |
| PP filament yarn |
| Acrylic fibres |

Source: Industrial Extension Bureau, News articles
(A Government of Gujarat organisation)

FDA: Food & Drug Administration

PCPIR: Petroleum Chemical & Petrochemical Investment Region

KEY INDUSTRIES – CHEMICALS AND PETROCHEMICALS ... (2/2)

Key players in chemicals and petrochemicals industry

Reliance Industries Ltd



- The Reliance Group is India's largest private sector enterprise, with businesses in the energy and materials value chain. The group's activities span exploration and production of oil and gas, petroleum refining and marketing, petrochemicals, textiles, retail, infotel and SEZs. The group's revenue was US\$ 45.23 billion during 2015-16. During the first quarter of 2016-17, the company generated revenues of US\$ 10.67 billion.

Asian Paints Ltd



- Asian Paints is India's largest paint company and ranks among the top 10 decorative coatings companies in the world. The company, along with its subsidiaries, has operations in 17 countries across the world and 24 paint manufacturing facilities. The company has a manufacturing facility at Ankleshwar, Gujarat.

Tata Chemicals Ltd (TCL)



- TCL is a global company with interests in chemicals, crop nutrition and consumer products. It is the world's second largest producer of soda-ash. Established in 1939 at Mithapur in Gujarat, TCL is a part of the Tata group. The plant has an installed capacity of 875,000 tonnes per annum; about 34.0% of the country's capacity. The plant is one of the largest producers of synthetic soda ash in the world and has a five-star rating from the British Safety Council.

Gujarat State Fertilisers and Chemicals Ltd



- Established in 1962. The company has set up a fertiliser plant at Fertilizer Nagar (Vadodara), fibre unit at Kosamba, Di-Ammonia Phosphate (DAP), fertiliser unit at Sikka and polymer unit at Nandesari. The company generated revenues of US\$ 951.35 million during 2015-16.

Excel Industries Ltd



- Established in 1941, the company manufactures agro-chemicals, water treatment chemicals, polymer additives and few other specialty chemicals.
- Plants in Gujarat are at Piplaj and Ahmedabad. It recorded a turnover of US\$ 68.46 million in 2015-16.



KEY INDUSTRIES – ENGINEERING AND AUTOMOTIVE ... (1/4)

- ★ The state's engineering sectors contribute around 18.0% to state's total industrial production and around 9.0% to the national engineering output. Gujarat accounted for 6% share in country's electronics production, 10.4% in basic metals and 16.20% in fabrication of metal products.
- ★ The sector comprises more than 300 units in the large enterprises sector and over 75,000 units in small and medium enterprises (SMEs) sector (excluding repair and services) operating in the state. Gujarat houses 83 product clusters; out of which 30 are engineering product clusters.
- ★ The state government has set up an international level Automotive Skill Development Institute on PPP mode with PSA Peugeot, to generate skilled manpower for the automotive sector.
- ★ By 2020, the state aims to achieve 10% of engineering output from auto and auto components from the existing level of 3.7%.
- ★ Maruti Suzuki India Ltd (MSIL) will set up first of its kind industrial training institute, Japan-India Institute of Manufacturing (JIM) in Mehsana, Gujarat. The institute is likely to commence operations by August 2017 and will impart technical training to 300 youth every year.

Key enablers of Gujarat's engineering sector

- Strong local demand
- Foreign investments and technology transfer
- Sound base of engineering SME clusters
- Availability of skilled manpower
- Integrated industrial infrastructure
- Presence across the value chain

- ★ In March 2015, Ford Motor commenced commercial operations at its facility in Sanand, Gujarat. The facility has production capacity of 240 thousand vehicles and 270 thousand engines. The cumulative, vehicle and engine manufacturing, capacity of the Ford Motor plants at Gujarat and Tamil Nadu stand at 440 thousand vehicles and 610 thousand engines, respectively.
- ★ As of November 2016, Suzuki Motor Corp – Japan, announced plans to invest US\$ 970.97 million in setting up a second vehicle production line at its new plant in Gujarat. The production line is expected to be operational by early 2019.

Source: Vibrant Gujarat 2015-Manufacturing Sector Profile,
PPP: Public-Private Partnership

KEY INDUSTRIES – ENGINEERING AND AUTOMOTIVE ... (2/4)

- ★ The small scale industry is a significant contributor to the national production of brass parts, foundry, forging and machine tools, oil engines and electric motors, submersible pumps, and industrial valves and bearings.
- ★ The brass parts cluster at Jamnagar has over 5,000 small units and meets almost 70% of the entire requirement for brass parts in India.
- ★ General Motors has set up its automotive manufacturing facilities in Gujarat, providing a boost to its auto ancillary industry.

Key engineering clusters



- Foundry and forgings
- Steel pipes and tubes
- Steel re-rolled products
- Brass parts
- Fabricated metal products
- Steel and aluminium furniture
- Electric motors
- Power driven pumps
- Textile machinery parts
- Chemical machinery parts
- Food processing machinery
- Machine tools
- Diesel engine and parts
- Ball and roller bearings
- Automobile and auto parts

KEY INDUSTRIES – ENGINEERING AND AUTOMOTIVE ... (3/4)

- Some of the key initiatives taken by the state government to support growth of the sector are:

- Development of state-of-the-art industrial clusters, townships and industry-focused investment regions.
- Introduction of reforms and flexible labour laws.
- Promotion and development of small and medium enterprises through various innovative initiatives.
- Introduction of cluster development measures to support and strengthen growth of the sector.
- Promotion of institutions, such as Space Application Centre, Indo-German Tool Room and Electronics & Quality Development Centre, which provide support to the engineering sector.

- The Gujarat government has undertaken the Delhi Mumbai Industrial Corridor (DMIC) project to boost rail connectivity. Delhi-Mumbai Industrial Corridor (DMIC) is a mega infrastructure project of US\$ 90 billion with financial & technical aid from Japan, covering an overall distance of 1,483 km between Delhi and Mumbai. The corridor will pass through six states – UP, NCR of Delhi, Haryana, Rajasthan, Gujarat and Maharashtra. About 37% alignment of the corridor is passing through the state of Gujarat. DMIC is intended to be the manufacturing hub serviced with world class infrastructure. Total 24 industrial nodes are identified across the DMIC out of which 6 nodes fall within the State of Gujarat.

Investment opportunities

Turbines, transformers, generators
Power equipment manufacturing
Auto components and ancillaries
Infrastructure equipment
Assembling and manufacture of automobiles
Modern cement and textile machinery

| Description of Node | Development Strategy |
|---|---|
| Dholera-Ahmedabad Investment Region | To be developed as part of DMIC Phase I |
| Vadodara-Anleshwar Industrial Area | To be developed as part of DMIC Phase I |
| Palanpur-Mehsana Industrial Area | To be developed by State Government coinciding with Phase I of DMIC |
| Bharuch-Dahej PCPIR and Investment Region | To be developed by State Government coinciding with Phase I of DMIC |
| Surat-Hazira, Industrial Area | To be developed as part of DMIC Phase II |
| Valsad-Umergaon Industrial Area | To be developed as part of DMIC Phase II |

KEY INDUSTRIES – ENGINEERING AND AUTOMOTIVE ... (4/4)

Key players in engineering and automotive industry

ABB



- Incorporated in 1949. The company manufactures cables and cable accessories, control systems, power products, semiconductors, reactors, drives, generator circuit breakers and insulation components. Manufacturing facility, training and operations centre located in Gujarat at Vadodara. It had revenue of US\$ 1.28 billion in the year 2014.

Larsen & Toubro (L&T)



- L&T is a technology, IT, engineering, construction and manufacturing company.
- The Engineering Construction and Contracts (ECC) division of L&T is India's largest construction organisation in the country. Has a regional office at Ahmedabad. The company has two manufacturing facilities at Hazira and Vadodara in Gujarat. L&T's Hazira works is recognised as one of the most advanced heavy fabrication facilities matching global standards. The group's revenue in 2014-15 stood at US\$ 15.39 billion.

General Motors



- Founded in 1908, GM is among the world's largest automobile makers. Headquartered in Detroit (USA), GM manufactures cars and trucks in 158 facilities and offer a comprehensive range of vehicles in more than 120 countries. GM has been the global automotive sales leader since 1931 and employs about 202,000 people globally. General Motors India, incorporated in 1996, became a fully-owned subsidiary of GM in 1999. It has a manufacturing plant at Halol (Panchmahal) in Gujarat and produces cars such as Spark, Beat, Sail U-VA, Captiva, Cruze and Tavera under the brand of Chevrolet.

Panasonic



- Panasonic (formerly known as Matsushita) is the largest Japanese electronics producer. Products include audio-visual and information/communication equipment and home appliances.
- Established a business unit in Gujarat in 1972 through a joint venture with the Indian company, Lakhanpal. Manufacturing unit located at Vadodara, where it manufactures dry cell batteries.

KEY INDUSTRIES – GEMS AND JEWELLERY... (1/2)

- * Gujarat accounts for around 72% of the world's share of processed diamonds and more than 80% of diamonds processed in India.
- * About 90% of diamonds in Gujarat are processed by about 10,000 diamond units located in and around Surat.
- * Eight out of 10 diamonds in the world are polished in Surat.
- * The state has the highest labour productivity in the jewellery sector, with major jewellery clusters at Ahmedabad, Surat and Rajkot.
- * It is also internationally renowned for the production of unique hand-made silver ornaments (85% of total silver jewellery production of India).
- * Renowned institutions such as the Indian Diamond Institute, Gujarat Hira Bourse, and the Gems and Jewellery Export Promotion Council provide skilled manpower for the industry.

| Investment opportunities |
|---|
| Jewellery fabrication |
| White gold |
| Platinum jewellery |
| Paved diamond jewellery |
| Studded jewellery |
| Infrastructure development |
| Jewellery manufacturing units |
| Assaying and hallmarking centres |
| Gold refinery |
| Diamond park |
| Jewellery retail |
| Luxury Products such as watches, brooches, clocks |

Source: Industrial Extension Bureau
(A Government of Gujarat organisation)

KEY INDUSTRIES – GEMS AND JEWELLERY... (2/2)

Key players in gems and jewellery industry

Sanghavi Exports



- Sanghavi Export's core business is exporting polished diamonds and diamond studded jewellery, and manufacturing diamonds and jewellery.
- It boasts of a large network of marketing offices worldwide, from the US to Hong Kong, Belgium to Japan, Australia to Canada, and Singapore to the European nations.
- The company's well-equipped hi-tech diamond manufacturing factory, Sanghavi Diamond Mfg Pvt Ltd at Surat, is one of the largest units in Asia.

Venus Jewel



- Venus Jewel is a partnership firm established in 1969, specialising in manufacturing large-sized premium diamonds.
- The company deals in sizes from 0.50 to 15.00 carats in an expensive array of shaped diamonds of exceptional symmetry and polish.

Forever Diamonds



- Forever Diamonds is a manufacturer and exporter of diamond jewellery.
- The company deals in loose diamonds, diamond jewellery and gold jewellery.

KEY INDUSTRIES – KNOWLEDGE SECTOR

- ★ The state government has taken the following initiatives to promote the sector:
 - ★ Budget 2016–17 initiatives:
 - ★ Allocation of US\$ 1.52 million for the establishment of Organic Farming University in the state.
 - ★ An allocation of US\$ 54.07 million for various education, research and extension programmes across the agriculture universities of the state.
 - ★ Under Rashtriya Uchchatar Shikshan Abhiyan (RUSA), an investment of US\$ 15.27 million for the enhancement of infrastructure and quality of the colleges and universities.
 - ★ For the construction of two universities, Govind Guru University and Narsinh Mehta University, US\$ 8.4 million has been allocated.
 - ★ Allocation of US\$ 16.8 million for the repairing and renovation of various colleges and universities existing in the state.

Opportunities for PPP

Education

Skill development institutions

Degree and diploma engineering

School education

Creation of a knowledge city

Private universities under Private Universities Act 2009

Source: State Budget 2016-17, Vibrant Gujarat, Report on Knowledge Sector

KEY INDUSTRIES – OIL AND GAS ... (1/3)

- ★ As of December 2015, Gujarat ranked second in the production of crude oil (onshore) in India. Till December 2015, the state produced 3.32 million tonnes of crude oil, which accounted for 24.7% of the total crude oil (onshore) production in the country.
- ★ As of December 2015, the natural gas production in the state stood at 1490.04 MMSCMD, which accounted for 16.13% of the total natural gas (onshore) production in the country.
- ★ Gujarat accounts for nearly 44.5% of India's installed refining capacity in 2014-15.
- ★ The state is a preferred destination for MNCs like BASF, Bayer, DuPont, GE Plastics, Solvay, Cairn Energy, Shell, British Gas, etc.
- ★ Oil and gas reserves are located at Ankleshwar, Mehsana, Tapti High, Hazira, Bharuch, Gandhar, Dahej, Jambusar, Palej and Kalol. Isolated gas fields are located around Ahmedabad.

- ★ Gujarat is known as India's chemicals and petrochemicals hub. The state has eight chemical clusters, 14 industrial estates and three SEZs, which are primarily dedicated to the chemicals and petrochemicals industry.

| Key locations | Oil and gas companies |
|---------------|--|
| Jamnagar | Reliance Industries refinery: Largest grassroots refinery in the world; Essar Refinery |
| Dahej | Petronet LNG's re-gasification terminal |
| Hazira | Shell and Total's LNG terminal |
| Vadodara | Indian Oil Corporation's refinery |
| Gandhar | ONGC's gas processing complex |

Source: Industrial Extension Bureau
Ministry of Petroleum & Natural Gases

KEY INDUSTRIES – OIL AND GAS ... (2/3)

- ★ Gujarat consists of 47% of total domestic gas connections in the country. As per Budget 2016-17, the state government is planning to add 40 CNG stations as well as 2.5 new domestic gas connections during the next year.
- ★ Further, at a cost of US\$ 100.82 million, the Gujarat State Petroleum Limited has also decided to add new gas pipelines of about 174 km length in the state, during 2016-17.

Investment opportunities

Oil & gas refining

Gas distribution

Investments in PCPIR are incentivised

City gas distribution network

Total number of
connections¹
(as of June 2015)

PNG Domestic Connections

1,295,727

PNG Commercial Connections

15,310

PNG Industrial Connections

3,938

Source: Industrial Extension Bureau
Ministry of Petroleum and Natural Gas

PCPIR: Petroleum Chemical & Petrochemical Investment Region

¹ As on June, 2015

KEY INDUSTRIES – OIL AND GAS ... (3/3)

Key players in oil and gas industry

Indian Oil Corp Ltd (IOCL)



- IOCL is India's largest integrated oil refining and marketing company by sales, with a turnover of US\$ 54.37 billion in 2015-16. It is the 18th largest petroleum company in the world. It owns and operates 10 of India's 22 refineries; the company had a refining capacity of 65.7 million metric tonnes per annum (MMTPA) (1.3 million barrels per day). The refinery at Koyali is IOCL's largest with a capacity of 18 MMTPA.

Cairn India



- The company operates the largest oil producing fields in the Indian private sector. Cairn India holds material exploration and production positions in 11 blocks in west and east along with new exploration rights elsewhere in India and one in Sri Lanka. Cairn has a 40.0% share in the Cambay oil field; ONGC holds 50.0% and Tata Petrodyne 10.0%.
- CIL plans to invest \$3 billion over three years, with 80% of capex in the Barmer oil block. During 2015-16, the company generated revenues of US\$ 1,317.69 million.

ONGC



- ONGC is India's leading exploration and production company for oil and gas with a turnover of US\$ 12 billion in 2015-16. It has 240 onshore production installations, 77 drilling rigs and a 26,598 km pipeline network. ONGC has a plant at Hazira; assets in Mehsana, Ahmedabad and Ankleshwar.
- The company has the Institute of Reservoir Studies (IRS) in Ahmedabad and a regional office in Baroda.

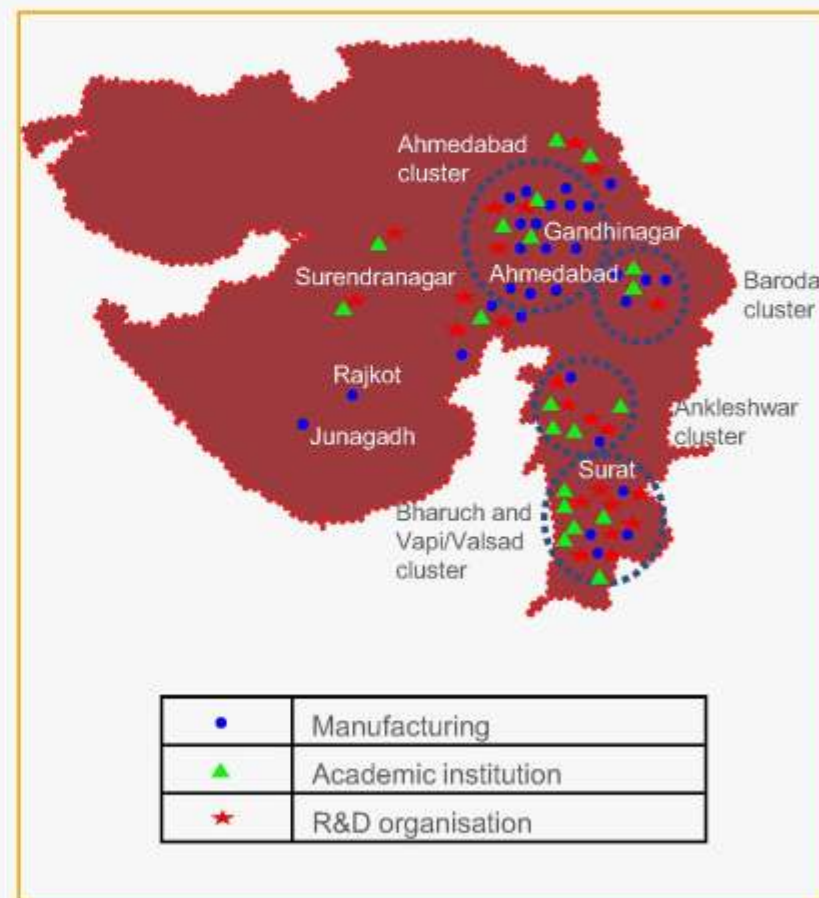
Shell



- Shell is among the global leaders in the oil, gas and petrochemicals sector, with interests in bio-fuels, wind, solar power and hydrogen. The company operates in over 90 countries, employing around 93,000 people worldwide. It is one of the largest and most diversified international investor in India's energy sector. The company is the only global major to operate petro-fuel retail outlets in India. The Hazira LNG Terminal and port project is Shell's largest venture in India.

KEY INDUSTRIES – PHARMACEUTICALS AND BIOTECHNOLOGY ... (1/4)

- ★ Gujarat contributed 30-35% to India's pharma sector's turnover and around 28% to India's pharma exports during 2014-15. The turnover and exports from the state during 2013-14 amounted to US\$ 7.8 billion and US\$ 2.8 billion, respectively.
- ★ The state accounts for 80% of intravenous sets manufactured in the country. About 75,000 people are employed in the pharmaceutical sector in Gujarat. It has the largest number of clinical research organisations in India and over 100 companies with WHO-compliant manufacturing units. The state accounts for 40% of the pharma machinery production of India.
- ★ The landscape of the Gujarat biotechnology industry consists of more than 50 biotechnology companies and 66 support organisations. Gujarat holds the maximum number of patents among all Indian states, with 3,637 licensed units engaged in drug manufacturing. The state is home to 40% of Contract Research and Manufacturing (CRAM) companies in India.
- ★ Key initiatives taken by the government for the industry are as follows:
 - ★ Gujarat is the only state in the country to issue sales license through IT application with the help of National Informatics Centre. Setting up SEZs dedicated to the pharmaceutical sector to boost investments.
 - ★ Establishment of National Institute for Pharmaceutical Education and Research for human resource development.



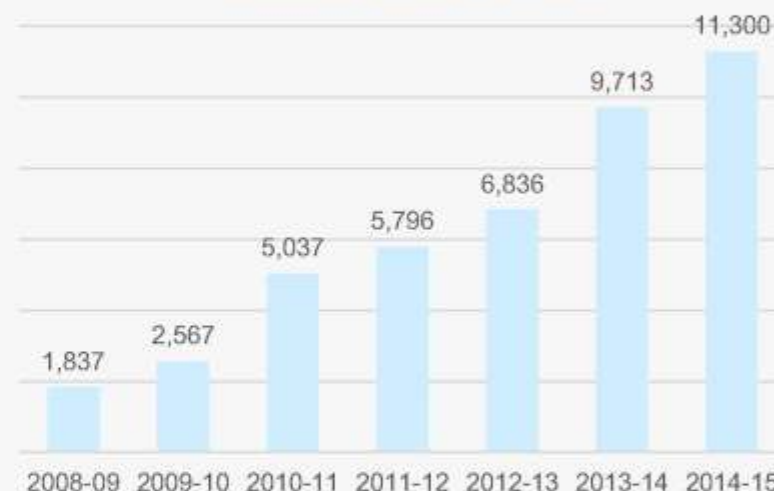
KEY INDUSTRIES – PHARMACEUTICALS AND BIOTECHNOLOGY ... (2/4)

- As per the budget 2016-17, the state government has allocated US\$ 5.49 million for promoting the bio-technology, electronics and IT sector of the country. Further, under the Bio-Technology Mission, a provision of US\$ 0.76 million has been made for the promotion of Gir cows and enhancement of indigenous medicines in the state.

- Key features of the Gujarat pharmaceutical industry:

- Gujarat is the only state in India, that manufactures Dapsone and Vitamin C. Additionally, the state is the sole manufacturer of the Doxorubicin HCL Liposome injection, globally.
- Gujarat accounts for around 80% of the global production of Isoniazid, which is used for treating tuberculosis.
- Gujarat accounts for nearly 70% of the cardiac stents production in India. Moreover, the state accounts for 58% of orthopaedic implants and about 50% of intraocular lenses produced in the country. In the state of Gujarat, 3,324 pharmaceutical manufacturing units have been licenced.
- The state of Gujarat houses 40% of the contract research and manufacturing services (CRAMS) in India, which pertain to outsourcing research services and manufacturing pharmaceutical and biotechnology products.
- As of February 2015, 135 medical device manufacturers are based in Gujarat, which represents more than 53% of the total medical device manufacturers in the country.

Tested sample drugs (Nos.)



- The central government plans to setup a medical device park in the state of Gujarat. Government also plans to start building the park, before the start of Vibrant Gujarat Global summit 2017, for which a high level committee has also been constituted. The committee has identified land near Sanand, for building a state of the art park with primary focus on research and development.

Source: Health and Family Welfare Department, Government of Gujarat

KEY INDUSTRIES – PHARMACEUTICALS AND BIOTECHNOLOGY ... (3/4)

| Investment opportunities |
|---------------------------------------|
| Manufacturing |
| API & formulations |
| Medical equipment |
| Pharmaceutical machinery |
| Healthcare products |
| Vaccines, bio-pharma and therapeutics |
| BT seeds and crops |
| Services |
| Contract research |
| Contract manufacturing |
| Diagnostics |
| Pharmaceutical retail |
| Stem cell banking |
| Infrastructure |
| R&D |
| Clinical research |
| Genetic engineering |
| Drug research and development |

| Location | Biotech zones (proposed) |
|--|--|
| Ahmedabad-Surendranagar | Biopharma Zone |
| Jamnagar-Dwarka-Porbandhar | Marine Biotech Zone |
| Vadodara-Anand-Nadiad | Food and Food Processing for Animal Biotechnology |
| Vapi-Surat-Bharuch-Ankleshwar | Biochemical Engineering for Industrial Biotechnology |
| Junagadh-Bhavnagar-Banaskantha-Mehsana | Agri Biotechnology |

| Location | Biotech parks (proposed) |
|---------------------|---------------------------|
| Vadodara | Industrial Park |
| Anand | Food Biotechnology Park |
| Jamnagar/Bhavnagar | Marine Biotechnology Park |
| Gandhinagar/Mehsana | Agri Biotechnology Park |
| Vadodara, Gujarat | Savli Biotech Park |

Source: Health and Family Welfare Department, Government of Gujarat

KEY INDUSTRIES – PHARMACEUTICALS AND BIOTECHNOLOGY ... (4/4)

Key players in pharmaceuticals and biotechnology industry

Sun Pharma



- Sun Pharma was established in 1983. It manufactures Active Pharmaceutical Ingredients (APIs) and specialty pharmaceuticals. The company has 50 manufacturing plants across the world and reported revenues of US\$ 4.31 billion during 2015-16. Sun Pharmaceutical Advanced Research Centre (SPARC) is situated in Vadodara (Baroda). Manufacturing plants in Gujarat are located at Vapi, Halol, Ankleshwar, Ahmednagar and Vadodara.

Bayer Cropscience



- Bayer is a global enterprise with core competencies in the fields of healthcare, agriculture and high-tech materials. In India, Bayer operates six companies including Bayer Cropscience, which offers a range of products and it has service back-up for modern agriculture and non-agricultural applications. The company has three business groups: crop protection, environmental science and bio-science. It has two factories in Gujarat, at Ankleshwar and Himatnagar. During 2015-16, the company generated revenues of US\$ 571.78 million.

Quintiles



- Quintiles is a fully integrated biotech and pharmaceutical services provider offering clinical, commercial, consulting and capital solutions. Key services in India include biostatistics, data management, clinical monitoring, central laboratory services, electrocardiogram monitoring services, project management and regulatory services. Quintiles India, the Indian subsidiary, has five offices in India. The research laboratory of the company is located at Ahmedabad.

Zydus Cadila

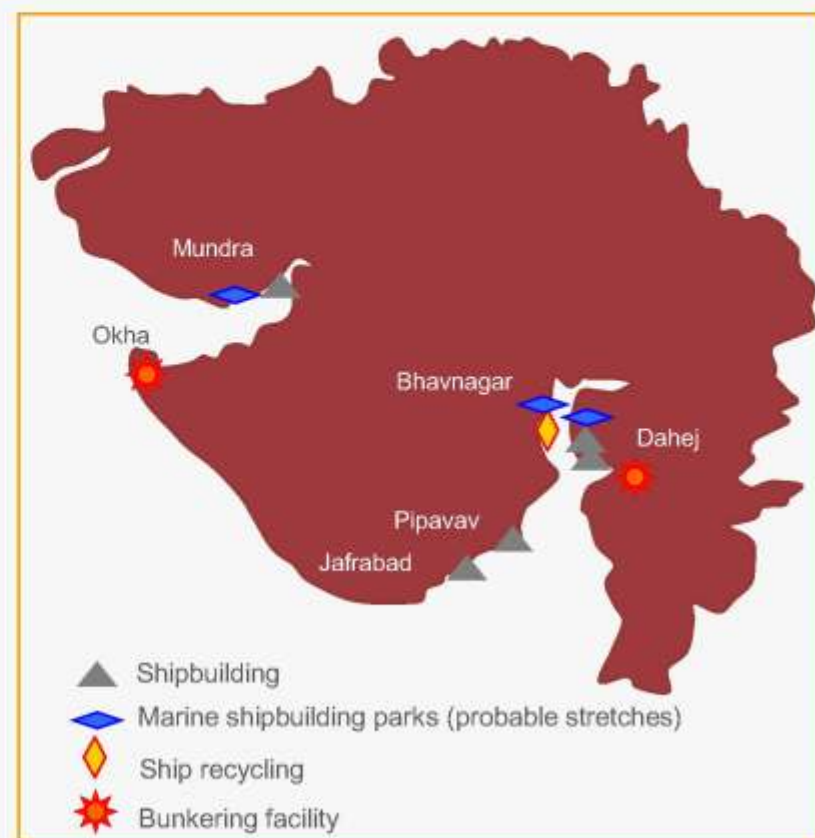


- Zydus Cadila is one of the leading pharmaceuticals companies with sales of US\$ 1.44 billion in 2014-15. Product line includes formulations, APIs, diagnostics, health-foods and diet-foods, skin care and animal healthcare products. The company maintained a strong position in the market segments of cardiovasculars, gastrointestinal, women's healthcare and respiratory. Production units are located in Ahmedabad, Vadodara and Ankleshwar for manufacturing tablets, injectibles, capsules, liquids and APIs.

KEY INDUSTRIES – SHIPBUILDING INDUSTRY ... (1/2)

- ★ There are several shipyards present in Gujarat such as ABG Shipyard, Alcock Ashdown, Pipavav Shipyard and the L&T Shipyard.
- ★ The infrastructure available for development of the shipbuilding industry includes:
 - ★ Availability of raw materials such as ship building plates and engines.
 - ★ Stillness of water and deep draft.
 - ★ Proximity to ancillary industries.
 - ★ Sufficient anchorage space.
- ★ The Government of Gujarat expects to reap maximum benefit from the emerging shipbuilding industry. In line with this, the Shipbuilding Policy 2010 was introduced.
- ★ Gujarat is home to the world's largest ship recycling yard at Alang, having a ship breaking capacity of about 4.0 million MT per annum.

Shipping industry



Source: Gujarat Maritime Board

KEY INDUSTRIES – SHIPBUILDING INDUSTRY ... (2/2)

- ★ During 2015-16, Gujarat had 9 shipbuilding yards in operation. In addition to this, 8 shipbuilding yards are under the execution phase while 5 more are under the approval process. The state accounted for around 60% share of the shipbuilding order book of India.
- ★ Further, through Gujarat Maritime Board, the Government of Gujarat came up with an ambitious project of undertaking the coastal movement of cars, loaded commercial vehicles, etc. in a Roll On-Roll Off Ferry Vessel through water transportation. As a result of this, the implementation of the project is at its first phase and during 2015-16, around 55% of construction work of the terminal has been completed. The state government is planning to finish the entire construction work of the terminal during 2016-17 in order to initiate ferry services in the state.
- ★ During 2015-16, the captive jetties of the state handled around 73.83 million tonnes of cargo traffic, whereas the private jetties handled 4.51 million tonnes of cargo. The cargo handled at the port of Kandla was recorded to be 57.31 million tonnes. Gujarat Maritime Board (GMB) has accorded approval to nine shipyard projects, with a capacity for building ships of 0.94 DWT per annum at an investment of US\$397.5 million.
- ★ The Ports & Transport policy under the state budget 2016-17, has announced Alang Ship Breaking Policy suited to the current global situation. The policy includes modernization of Ship Recycling Yard, environmental facilities for disposal of waste, infrastructure to enhance the facilities and welfare of workers and labourers.

Source: Socio Economic review Gujarat 2015-16,
DWT – Deadweight Tonnage,

KEY INDUSTRIES – TOURISM ... (1/4)

- ★ The state has a rich architectural and cultural heritage due to its historical parentage of the Indus Valley Civilisation sites such as Lothal, Dholavira and Harappa. There are many heritage monuments as well as archaeological and architectural sites in Gujarat.
- ★ Eight tourism hubs have been created for the convenience of tourists visiting Gujarat. These are in Ahmedabad metro, Ahmedabad (north Gujarat); Surat (south Gujarat), Vadodara (central Gujarat), Rajkot, Junagadh and Jamnagar (Saurashtra) and Bhuj (Kutch).
- ★ Gujarat has the longest shoreline of 1,600 km, which supports many forests and natural ecosystems, beaches & coastal sites, gardens, lakes, etc, which attract large crowds from across the world.
- ★ Gujarat has four national parks and 21 sanctuaries including Nal Sarovar, Anjal, Balaram-Ambaji, Barda, Jambughoda, Jessore, Kachchh Desert, Khavda, Narayan Sarovar, Paniya, Purna, Rampura, Ratanmahal and Surpaneshwar.
- ★ Dwarka city on the tip of the Arabian Sea is famous for being the legendary home of Lord Krishna, the eighth avatar of Lord Vishnu.
- ★ Gujarat Infrastructure Development Board has prepared model concession agreement model under PPP model for the development of tourism sector projects in Gujarat.
- ★ The number of domestic tourists arrivals in Gujarat, increased from 27.4 million in 2013-14 to 30.9 million in 2014-15. Additionally, growing at a rate of 18.5%, the number of foreign tourist arrivals in Gujarat increased from 0.20 million in 2013 to around 0.23 million by 2014.
- ★ Gujarat Tourism organised the Paragliding Festival (from November, 2015 to January, 2016) and the Rann Utsav (from November, 2015 to February, 2016) at Saputara and Kutch to attract both domestic as well as international tourists.
- ★ During 2015 the state witnessed a growth of 17.3% and 21% in the domestic and foreign tourist visits respectively.

Source: Ministry of Tourism, Government of India

KEY INDUSTRIES – TOURISM ... (2/4)

- * In September, 2015, the Government of Gujarat introduced a Tourism Policy, with the target of being ranked amongst the top five tourist destination in India by 2025.
- * According to the new policy, for investments worth more than US\$ 8.29 million on tourist units in Gujarat, the government would provide a subsidy of 15%. The maximum limit set for providing subsidy is US\$ 16.59 million. The scheme has also announced 30% subsidy for women driven tourism units.

Entities considered as tourist units

Hotels (Ranging from One-Star to Five-Star Deluxe)

Motels

Resorts

Tourism & Hospitality Training Institutes

Amusement Parks/ Water Parks /Theme Parks

Heritage Hotels

Apartment Hotels

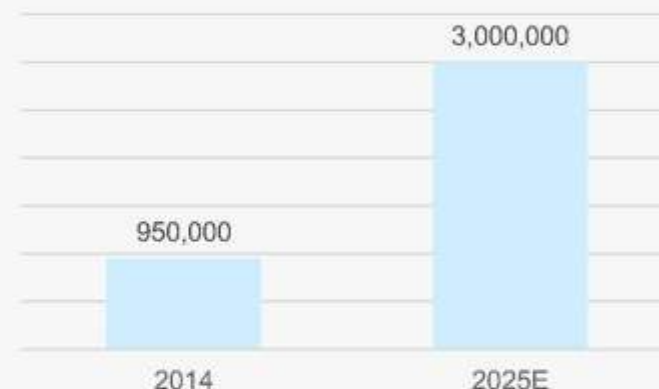
Convention Centres

Tented Accommodation

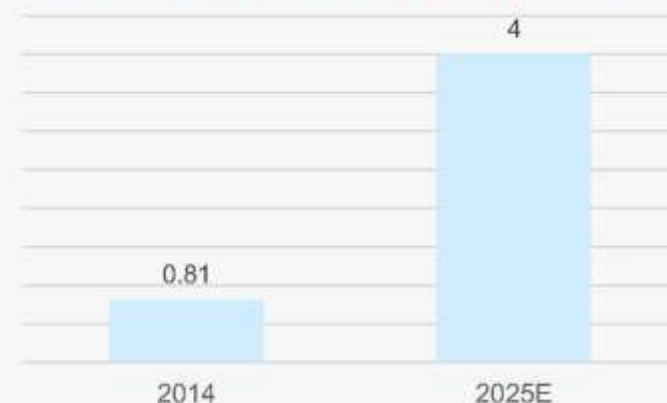
Adventure Sports

Wayside Amenities

Employment in tourism industry



Total investment in tourism industry (US\$ billion)

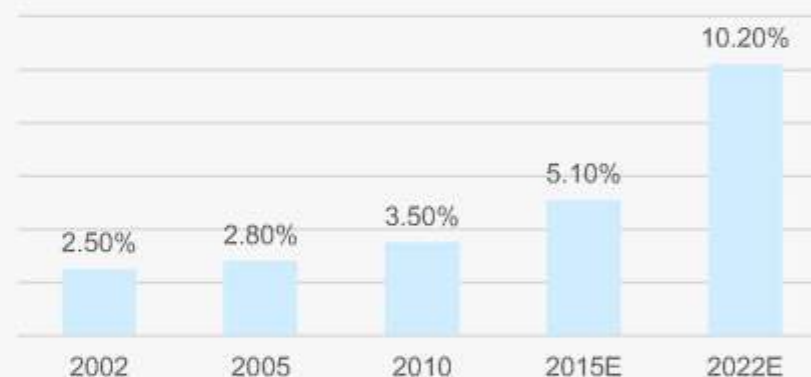


Source: Ministry of Tourism, Government of India, State Budget 2016-17

KEY INDUSTRIES – TOURISM ... (3/4)

- ★ As per the budget 2016-17, the state government has proposed the provision of US\$ 127.40 million for tourism, Yatradham and Civil Aviation industry. Under the Yatradham scheme a provision of US\$ 2.75 million has been made for the development of International Buddhist Circuit.
- ★ Further, a provision of US\$ 69.04 million has been made by the state government for providing incentives to the tourism industry. Additionally, the state government has also proposed an allocation of US\$ 37.27 million for the development of green eco-tourism, water sports, medical tourism, etc. in the state.
- ★ The government further plans to focus on the state's 1,600 km coastline to promote maritime, coastal and eco-tourism.
- ★ Gujarat's tourism department has designed a Film Shooting and Promotion Policy, to use the Indian film industry as a medium to promote state tourism. The policy aims at a single window clearance for multiple permissions required to shoot at various locations in the state. The policy also offers discounts to filmmakers.
- ★ As per the state's budget 2016-17, the Government of Gujarat has allocated US\$ 1.52 million for encouraging film shooting at various tourist places of the Gujarat.

Contribution of tourism to Gujarat's GDP



Source: Ministry of Tourism, Government of Gujarat
TechSci Research, State Budget 2016-17

- ★ In order to increase the potential of tourism of islands on coastal line of the state, the Government of Gujarat announced plans to establish Island Development Authority with the help of an investment of US\$ 1.6 million in 2015-16.

KEY INDUSTRIES – TOURISM ... (4/4)

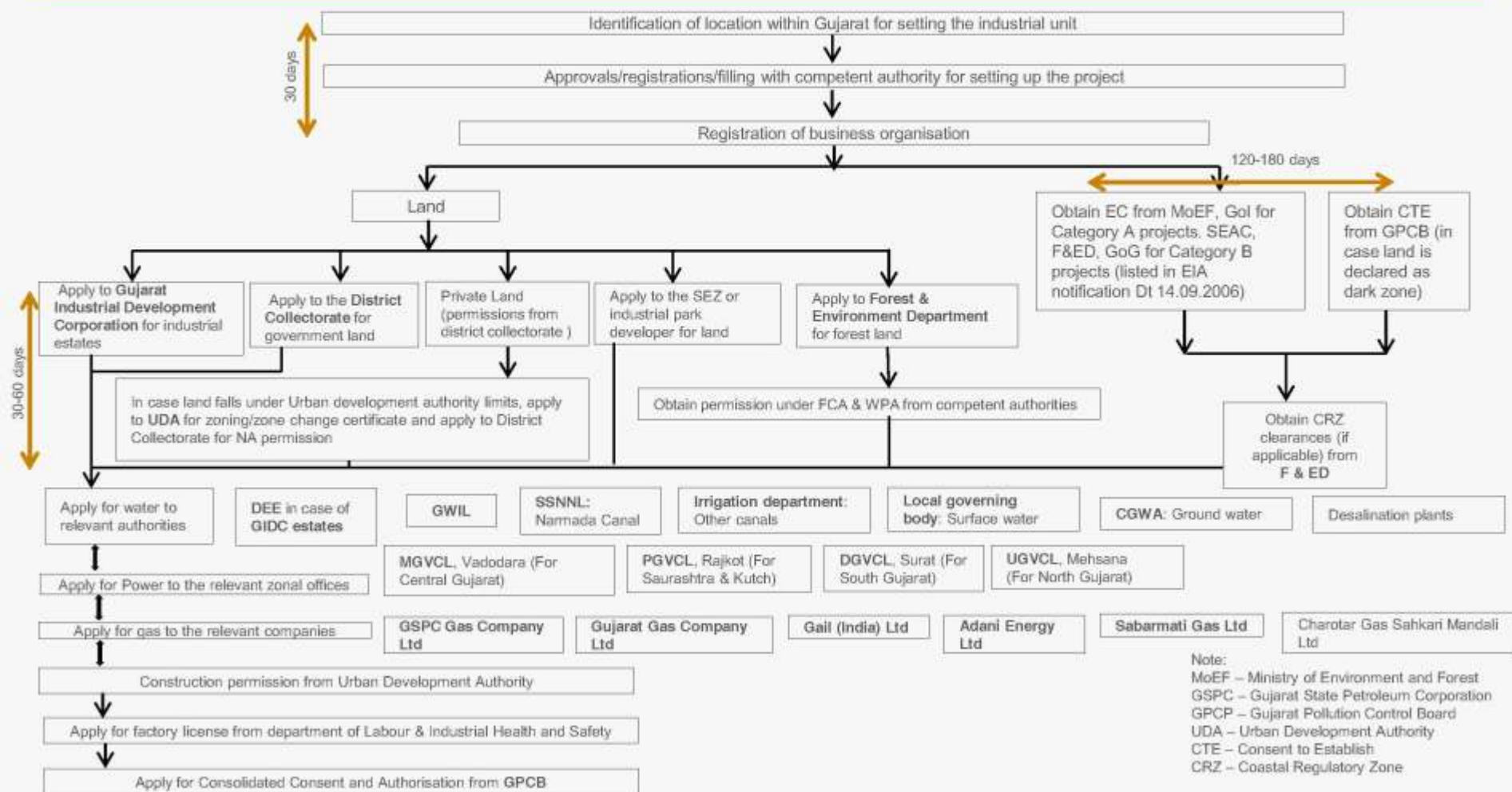
- * The State Transport Authority, Gujarat state issued all India tourist permits to tourist buses and taxis. In 2014, Gujarat attracted 2.4% of all domestic tourists and 1% of foreign tourists.
- * The state government has implemented Panchavati Yojana, with the objective of providing facilities for recreation in villages and encouraging environment friendly activities to develop natural sites with tourism potential.
- * The Tourism Corporation of Gujarat Limited (TCGL) and Infrastructure Leasing & Finance Services Limited (IL&FS) formed a joint venture company named Gujarat Tourism Opportunity Limited (GUJTOP) to promote the state's tourism industry.
- * Increase in the number of business tourists to Gujarat is expected to significantly boost the hospitality sector. Rapidly growing business centres and industries are boosting business tourism in the state. Emerging areas in Gujarat's tourism industry are spiritual tourism, heritage tourism, cultural tourism, event based tourism, water and adventure sports, nature tourism, cruises, theme parks, convention centres for meetings and conferences.
- * The Government of Gujarat is promoting coastal tourism in the state. Narora Beach and Pirotan Islands of Porbandar, Chorvad Beach of Junagadh, Veraval Beach of Gir Somnath and Mandvi Beach of Kachchh are the prominent coastal tourism areas in the state.
- * For the creation of lodging facilities across various eco-tourism sites of the state including Chorwad, Saputara, Tithal, Mandavi, Kadana Dam, etc., a provision of US\$ 4.58 million has been made by the state government during 2016-17.
- * According to the state budget 2016-17, the Government of Gujarat has allocated US\$ 0.38 million for the initiation of city tours across major cities of the state.

Source: Ministry of Tourism, Government of Gujarat, State Budget 2016-17

SINGLE-WINDOW CLEARANCE MECHANISM

- ★ Industrial Extension Bureau (iNDEXTb) is the single access window in Gujarat. iNDEXTb was established as early as 1978 as a single point of contact for entrepreneurs desiring to set-up an industrial venture in the state. It has three major roles:
 - ★ Identifying investment opportunities and information provision.
 - ★ Marketing and investment.
 - ★ Counselling assistance to entrepreneurs for undertaking investment decisions.
- ★ iNDEXTb has about 60 employees and operates through the following four divisions:
 - ★ International Business: Deals with activities related to projects involving NRI investments and FDI, the promotion of exports, and handling foreign delegations and publicity campaigns. It also processes statistical information on industrial approvals by the Government of India for location in Gujarat.
 - ★ Investment Promotion: For domestic projects from within the country and other than Gujarat, and promotional campaigns within India.
 - ★ Project and Technology: For project inquiries from within Gujarat, preparing industry status reports and area potentiality surveys, monitoring the industrial situation and operating an industrial data bank.
 - ★ Computer Centre: Provides turnkey solutions from identification of customer needs to feasibility studies, design and development, and the development and implementation of customised software packages as well as corporate training.

A ROADMAP FOR DOING BUSINESS IN GUJARAT



KEY INVESTMENT PROMOTION OFFICES ... (1/4)

| Agency | Description |
|---|---|
| Industrial Extension Bureau (iNDEXTb) | <ul style="list-style-type: none"> • Promotes investment in industrial and infrastructure projects, acts as a single-point contact. • Identifies new investment opportunities and prepares project profiles. • Prepares and publishes status reports and status papers on different industry groups. • Coordinates with various government departments, chambers of commerce and industry associations at the state and central levels. |
| Gujarat Industrial Development Corporation (GIDC) | <ul style="list-style-type: none"> • Premier promotional agency, for providing all basic infrastructure to the industries in Gujarat. • Develops industrial estates at strategic locations all over the state. • Offers basic amenities in industrial estates. • Develops functional estates to fulfill specific needs of certain industries. • Checks environmental degradation by resorting to specific measures. |
| Gujarat Agro Industries Corporation (GAIC) | <ul style="list-style-type: none"> • Promotes agricultural activities at the ground level and helps in development of agro industries. • Accelerates demand-based production of agro products to develop agro industries in the new global agricultural environment. |

KEY INVESTMENT PROMOTION OFFICES ... (2/4)

| Agency | Description |
|---|---|
| Gujarat Small Industries Corporation (GSIC) | <ul style="list-style-type: none"> • Encourages the growth of industries in the SSI sector. • Acts as an authorised distributor and stockist of steel producers. • Assists SSI units by providing imported/indigenous raw materials. |
| Gujarat Infrastructure Development Board (GIDB) | <ul style="list-style-type: none"> • Attracts private sector investment in infrastructure development projects. • Frames policies for involvement of other public sector infrastructure development agencies. • Liaison with banks and other financial institutions interested in financing infrastructure projects. |
| Gujarat State Financial Corporation (GSFC) | <ul style="list-style-type: none"> • Finances industrial units in Gujarat and the Union Territories of Dadra and Nagar Haveli. • Provides financial assistance to new and existing SSI units. • Offers finance to SSI units for obtaining ISO-9000 certification, marketing and sales promotion activities. |

KEY INVESTMENT PROMOTION OFFICES ... (3/4)

| Agency | Description |
|--|---|
| Industries Commissionerate | <ul style="list-style-type: none"> • The commissionerate functions under the Industries, Mines and Tourism Department of the Government of Gujarat, and implements industrial policies of the state and central governments. • Promotes development, monitors and controls functions for planned industrial developments in tiny, small, medium and large sectors through a network of district industry centres, attached offices and industrial promotion corporations. |
| Gujarat Power Corporation Limited (GPCL) | <ul style="list-style-type: none"> • Acts as a nodal agency for augmenting power generating capacity through private sector participation. • Identifies power projects based on different fuels and prepares techno-economic feasibility reports. • Obtains approvals from relevant authorities to prepare power system master plan for the state. |
| Gujarat Maritime Board (GMB) | <ul style="list-style-type: none"> • Contributes to the development of vital port infrastructure. • Synchronises with hinterland development. • Identifies green field ports for development. • Specifies missing links in roads and railways and suggests upgradation of existing links to facilitate easier approach to port locations. |

KEY INVESTMENT PROMOTION OFFICES ... (4/4)

| Agency | Description |
|---|---|
| Gujarat Industrial Investment Corporation Limited (GIIC) | <ul style="list-style-type: none"> Finances medium and large scale industries. Arranges finance for large projects available in consortium with other central and state-level financial institutions and banks. Provides infrastructure financing and offers a variety of financial packages. |
| Tourism Corporation of Gujarat Limited (TCGL) | <ul style="list-style-type: none"> Identifies tourism potential in the state. Undertakes the task of developing tourism and related commercial activities. Maintains and upgrades tourism infrastructure and hotel projects with the help of privatised professional services. Encourages investment for development of tourism-related infrastructure. |
| Gujarat Electronics and Software Industries Association (GESIA) | <ul style="list-style-type: none"> Premier trade body and the chamber of commerce of the Gujarat IT-ITeS industry. 300+ member companies from various parts of Gujarat. Promotes software, BPO/KPO, telecom/ISP and the electronics industry in Gujarat. |
| Gujarat State Biotechnology Mission (GSBTM) | <ul style="list-style-type: none"> Facilitates development of Gujarat's biotechnology sector. Promotes research & development, provides quality human resources and supports development of the biotechnology industry through various measures and policies. |

CONTACT LIST... (1/2)

| Agency | Contact information |
|---|--|
| Industrial Extension Bureau | Block No 18, 2 nd Floor Udyog Bhavan, Sector-11, Gandhinagar-382 017 Phone: 91-79-23250492/93 Fax: 91-79-23250490 E-mail: indextb@indextb.com |
| Gujarat Industrial Development Corporation (GIDC) | Block No 4, 2 nd Floor Udyog Bhavan, Sector-11 Gandhinagar-382 017 Phone: 91-79-2325 0636, 2325 0637 Fax: 91-79-2325 0705 E-mail: gidc@gidcgujarat.org |
| Gujarat Agro Industries Corporation (GAIC) | Khet Udyog Bhavan, Opp. Old Gujarat High Court, Navrangpura, Ahmedabad-380 014 Phone: 91-79-2754 4741/42/43 Fax: 91-79-2754 2518 Website: www.gujagro.org |

CONTACT LIST... (2/2)

| Agency | Contact information |
|---|--|
| Gujarat Industrial Investment Corporation Limited (GIIC) | Block No 11 & 12, 6 th Floor, Udyog Bhawan, Sector-11, Gandhinagar-382 011 Phone: 91-79-2324 9641-53, Fax: 91-79-2323 6230 |
| Gujarat State Financial Corporation (GSFC) | Block No 10, Udyog Bhavan, Sector-11, Gandhinagar-382 011 Phone: 91-79-23256793, Fax: 91-79-2325 2204 E-mail: webmaster-gsfc@gujarat.gov.in |
| Gujarat Infrastructure Development Board (GIDB) | Block No 18, 8 th Floor, Sector-11, Udyog Bhavan, Gandhinagar-382 017 Phone: 91-79-23232701/ 4, Fax: 91-79-23222481, E-mail: gidb@gidb.org |
| Industries Commissionerate | Block No 1, 2 nd Floor, Udyog Bhavan Gandhinagar-382 010 Phone: 91-79-23252683, 23252617, E-mail: iccord@gujarat.gov.in |
| Gujarat Electronics and Software Industries Association (GESIA) | 300, 3rd Floor, Parshwanath Business Park, Nr. Prahaladnagar Garden, S. G. Highway, Satellite, Ahmedabad – 380 015 Tel. +91-79-66172117 Email: secretariat@gesia.org |
| Gujarat State Biotechnology Mission (GSBTM) | Udyog Bhavan, 11 th Block, 9 th Floor, Sector-11, Gandhinagar-382017 Phone: 91-79-23252197,14,E-mail: info-btm@gujarat.gov.in |

KEY APPROVALS REQUIRED ... (1/4)

| Approvals and clearances required | Departments |
|--|--|
| Approvals/registration/filing information for setting up project | <ul style="list-style-type: none"> • SSI Registration – District Industries Centre (DIC) of the district, where the unit is to be located. • Industrial Entrepreneur's Memorandum (IEM) – DIC/ Industries Commissionerate, Government of Gujarat. • Filing Industrial Entrepreneur's Memorandum (IEM) and Letter of Intent (LoI) – Secretariat for Industrial Assistance, Ministry of Commerce and Industry, Government of India. • Letter of Permission (LoP)-The Development Commissioner, Kandla Special Economic Zone, Ministry of Commerce and Industry, Government of India, Kandla (Dist. Kutch), Gujarat. • For automatic approvals-The Development Commissioner, Kandla Special Economic Zone, Ministry of Commerce and Industry, Government of India, Kandla (district Kutch), Gujarat. • For other industries-Secretariat for Industrial Assistance, Ministry of Commerce and Industry, Government of India, New Delhi. |
| Registration of business organisation | <ul style="list-style-type: none"> • Registrar of Partnership Firms, Government of Gujarat for partnership firms and Registrar of Companies, Government of India (office located in Ahmedabad) for corporations. |

KEY APPROVALS REQUIRED ... (2/4)

| Approvals and clearances required | Departments |
|--|---|
| Acquisition of land | <p>Authority for lands:</p> <ul style="list-style-type: none"> • In GIDC estate-Concerned office of GIDC. • Government land-Concerned district collector or collector/district development officer. • Private land (purchase of agricultural land for non-agricultural use) – Private land owner. • Forest land-Ministry of Forest & Environment, State Wild Life Board, National Wild Life Board and Supreme Court (for land reserved for wildlife sanctuaries or national parks). |
| Clearance from Pollution Control Board | <p>No Objection Certificate (NOC) to be obtained from Gujarat Pollution Control Board (GPCB).</p> <p>Environmental clearance:-Ministry of Environment and Forest and Government of Gujarat (State Impact Assessment Committee).</p> |
| Consent to establish | <ul style="list-style-type: none"> • Gujarat Pollution Control Board (GPCB). |
| Arrangement of power | <ul style="list-style-type: none"> • GIDC estates-Zonal office. • Locations other than GIDC estates-Zonal distribution company. • Captive power-Gujarat Energy Transmission Corporation Limited (GETCO). |
| Arrangement of gas | <p>Gujarat State Petroleum Corporation (GSPC) or private distributor.</p> |

KEY APPROVALS REQUIRED ... (3/4)

| Approvals and clearances required | Departments |
|---|--|
| Arrangement of water | <p>Authority depends on the location of unit:</p> <p>Proximity to Narmada Canal – Sardar Sarovar Narmada Nigam Limited (SSNNL).</p> <p>For drawing canal/underground water other than Narmada Canal – Irrigation department.</p> <p>For drawing water from the pipeline of Gujarat Water Infrastructure Limited (GWIL) – GWIL.</p> <p>Surface water – Local governing bodies (municipal corporations).</p> <p>For the usage of ground water for industrial purposes from the area falling under dark zone, over-exploited area or saline area – The Superintendent, from Gujarat, Gujarat Water Resources Development Corporation (GWRDC).</p> <p>Water supply for industrial purposes within GIDC estate–Deputy Executive Engineer of the concerned estate.</p> |
| Approval of building plans | <p>Authority depends on location of the unit, if the unit is located:</p> <ul style="list-style-type: none"> • In GIDC estates – GIDC executive engineer in the region. • Inside and outside GIDC estates – Director, Industrial Safety and Health, is authorised to give approval to plans of the premises, equipment layout and process layout, registration of factory and grant of licenses. |
| Approval from Labour Department | Labour Commissioner. |
| Approval from Commercial Tax Department | Value-Added Tax (VAT) registration and Central Sales Tax (CST) registration: Respective area officer in whose jurisdiction the chief place of business falls. |

KEY APPROVALS REQUIRED ... (4/4)

| Approvals and clearances required | Departments |
|---|---|
| Mining Lease approval | Department of Geology and Mining |
| Boiler registration | Chief Inspectorate, Steam and Boiler, Government of Gujarat |
| Handling of hazardous items | Director of Industrial Safety and Health, Government of Gujarat |
| Storage of explosive materials | Directorate of Explosives, Government of India |
| Customs bonding for 100% export oriented units located outside special economic zones | Collector of Customs & Central Excise, Government of India |
| Quality certification | Bureau of Indian Standards (office located in Gujarat) |

| Sector-specific approvals | |
|--|--|
| Sector | Authority |
| Food and drug manufacturing units | Commissionerate of Food & Drug Administration, Government of Gujarat |
| Registration for milk products | Milk and Milk Products Board, New Delhi |
| Projects located within 500 m of the coastline | Gujarat Maritime Board |

Source: Doing Business in Gujarat 2013, Vibrant Gujarat

COST OF SETTING UP BUSINESS IN GUJARAT

| Cost parameter | Cost estimates | Source |
|--|----------------|-------------------------------|
| Manufacturing | | |
| Land (US\$/hectare) ¹ | 95,312 | Government of Gujarat website |
| Labour cost (US\$/man year) | 15,92.4 | www.indiastat.com |
| Employee cost (US\$ / man year) | | |
| Software developers | 6,383 | KPMG analysis |
| Team leads | 14,893 | KPMG analysis |
| Architects | 21,276 | KPMG analysis |
| Project managers | 31,915 | KPMG analysis |
| Common heads ² | | |
| Cost of capital (Prime lending rate,%) | 10.57 | Government of Gujarat website |
| Electricity (US cents / kWh) | | |
| Commercial | 9.49 | KPMG analysis |
| Industrial | 9.29 | KPMG analysis |

* As per the World Bank and Department of Industrial Policy and Promotion (DIPP) report - Assessment of State Implementation of Business Reforms 2016, the state ranked 3rd in the Ease of Doing Business Index.

¹Calculated as the average cost of land at various industrial parks in Gujarat. Land is allotted on a 99 year lease, which can be renewed later

²Estimated by computing the average prime lending rates of prominent public sector, private sector and foreign banks in India

Source: <http://www.pppinindia.com/business-gujarat.php>

STATE ACTS & POLICIES ... (1/5)

Tourism Policy 2015

Objectives

- To attract domestic and international tourists so that Gujarat ranks amongst the top five tourist destination states in India by 2025.
- To promote various kinds of tourism including medical and adventure tourism

[Read more](#)

Solar Power Policy 2015

Objectives

- To promote power generation of green and clean power in the state using solar energy.
- To lower the cost of generation of renewable energy.

[Read more](#)

Gujarat New Industrial Policy 2015

Objectives

- To develop Gujarat as a global manufacturing global hub.
- To induct more entrepreneurial and skill development processes in order to support the "Make in India" initiative.

[Read more](#)

Electronics Policy, 2014-19

Objectives

- To promote semiconductor manufacturing sector in Gujarat.
- To establish an electronic manufacturing cluster in the state.

[Read more](#)

STATE ACTS & POLICIES ... (2/5)

IT Policy, 2014-19

Objectives

- To attract IT companies to Gujarat..
- To accumulate US\$ 15 billion from IT sector in Gujarat by 2020.

[Read more](#)

E-Governance Policy, 2014-19

Objectives

- To provide cost efficient services in Gujarat through information and communication technologies.
- To broaden the scope of e-governance.

[Read more](#)

Wind Power Policy 2013

Objectives

- To promote green energy in the state and accelerate investments in the renewable sector.
- To set the tariff of wind power in the state.

[Read more](#)

Gujarat Textile Policy-2012

Objective

- To transform the state cotton industry as a leader in manufacturing of yarn, fabric and garments with a policy to work on five F's – Farm, Fibre, Fabric, Fashion (Garment) & Foreign (Export).

[Read more](#)

STATE ACTS & POLICIES ... (3/5)

Shipbuilding Policy 2010

Objectives

- To explore potential as well as resources available on the Gujarat coast for shipbuilding.
- To enhance industrial growth in the state by encouraging establishment of downstream ancillary industries.

[Read more](#)

Power Generation Policy 2009

Objectives

- To develop the state of Gujarat as a power-generation hub.
- To have adequate availability of power in the state for agriculture, households, industry etc.

[Read more](#)

Gujarat State Biotechnology Policy 2007

Objective

- To accelerate activities in Gujarat's biotech sector.

[Read more](#)

Integrated Township Policy 2007

Objectives

- To promote economic development, and facilitate the creation of efficient, equitable and sustainable urban settlements.
- To facilitate public private partnerships for urban development.

[Read more](#)

STATE ACTS & POLICIES ... (4/5)

Gujarat State Mineral Policy 2003

Objectives

- To explore opportunities in the sector of mineral resources of the state.
- To enhance efficiency by adopting e-governance.

[Read more](#)

SEZ Policy of Gujarat, 2002

Objective

- To encourage investment and export oriented units in the state through specified facilities and concessions.

[Read more](#)

Agro Industrial Policy, 2000

Objective

- To make Gujarat the destination of choice for investors and processors, both global and domestic.

[Read more](#)

Gujarat Port Policy

Objectives

- To promote Gujarat's share in ports.
- To attract private sector investment in the existing minor and intermediate ports.

[Read more](#)

STATE ACTS & POLICIES ... (5/5)

Gujarat Road Policy 1996

Objectives

- To facilitate investments in the road sector.
- To induct more scientific principles of resource allocation for maintenance and new construction programmes.

[Read more](#)

CONFERENCES/SUMMITS FOR 2016-17

| Summit / Conference | Venue of Summit / Conference | Date |
|--|------------------------------|----------------------------------|
| International Conference on Computer Science , Electronics and Communication Engineering (ICCSECE-16) | Vadodara | 21 st August, 2016 |
| International Conference on Research in Mechanical, Robotics and Civil Engineering(ICRMRCE-16) | Ahmedabad | 28 th August, 2016 |
| International Conference on Computer Science, Electronics and Communication Engineering(ICCECE-16) | Ahmedabad | 4 th September, 2016 |
| International Symposium on Current Research in Mechanical, Mechatronics, Robotics and Civil Engineering (ISMMRCE-16) | Vadodara | 18 th September, 2016 |
| International Symposium on Current Research in Mechanical, Mechatronics, Robotics and Civil Engineering (ISMMRCE-16) | Rajkot | 2 nd October, 2016 |
| International Conference on Computer Science , Electronics and Communication Engineering (ICCSECE-16) | Rajkot | 6 th November, 2016 |

Source: India conference alerts

ANNEXURE

Average exchange rates

| Year | INR equivalent of one US\$ |
|---------|----------------------------|
| 2004-05 | 44.81 |
| 2005-06 | 44.14 |
| 2006-07 | 45.14 |
| 2007-08 | 40.27 |
| 2008-09 | 46.14 |
| 2009-10 | 47.42 |
| 2010-11 | 45.62 |
| 2011-12 | 46.88 |
| 2012-13 | 54.31 |
| 2013-14 | 60.28 |
| 2014-15 | 60.28 |
| 2015-16 | 65.46 |

Source: Reserve Bank of India



Ahmedabad Export Import Development Association