ASSAM  THE LAND OF RED RIVERS AND BLUE HILLS

EXECUTIVE SUMMARY … (1/2)

Strong economy
- With its high economic growth rate of over 8 per cent, Assam is the seventh fastest growing state in the country.
- The government estimates that growth will accelerate to 9 per cent by the end of 2017.

World’s single largest tea growing area
- Assam has the single largest tea growing area in the world, constituting around one-seventh of the global tea production. The region produces over 50 per cent of the country’s tea produce.
- The state houses Guwahati Tea Auction Centre (GTAC), one of the largest CTC tea auction centres of the world.

High oil reserves
- The state has over 1.3 billion tonnes of proven crude oil and 156 billion cubic meters of natural gas reserves (accounting for 50 per cent of India’s total onshore gas production).
- The Assam-Arakan basin has more than 15 per cent of the country’s oil reserves.

Attractive tourism industry
- With its pleasant climate and scenic landscape, Assam is a popular tourist destination.
- Assam is the most popular tourist destination among the north-eastern states.

Source: Government of Assam website - www.assam.gov.in, Assam Socio-Economic Survey 2012-13, Aranca research
The state has adopted numerous investor-friendly policies to attract investments and accelerate industrial development.

- North East Industrial Investment Promotion Policy and Industrial Policy of Assam facilitate business through fiscal incentives and multi-year concessions to investors.
- IT Policy and Tourism Policy of Assam have given special attention towards specific sector development.

In the state, 85.9 per cent of the total population was rural in 2014

- Agriculture is the mainstay of the major part of the population. Agricultural workers accounted for 54.4 per cent of the total workers of the state in 2014

Source: Government of Assam website - www.assam.gov.in, Assam Socio-Economic Survey 2012-13, Aranca research
Growing demand

Largest economy in Northeast

- GSDP rose at a Compound Annual Growth Rate (CAGR) of 13.2 per cent between 2004-05 and 2013-14.
- The state is the largest economy in the Northeast region. Owing to its relative proximity to the rest of the country and availability of quality infrastructure, it is the most industrially advanced state in Northeast India.
- It is the largest economy in the North-East and is known for its large industries in the tea and petroleum sectors.
- Assam has one of the largest network of higher education in the entire North East.

Avenues of investments

- The state is rich in water resources and has vast tracts of fertile land. Other potential areas of investment include power and energy, mineral-based industries, tourism and crude oil refining.
- With its five national parks and 15 wildlife sanctuaries, Assam is a popular tourist destination. The state offers visitors a variety of choices from world heritage (leisure) sites to temples and monuments.

Policy and infrastructure support

- Assam is India’s gateway to the Northeast and acts as a vital link for trade with Southeast Asian countries. It is well connected by rail, road, ports and airports.
- Under the 12th Five Year Plan, all remaining gravel roads would be blacktopped and timber bridges would be converted to RCC. Public Private Partnership Policy 2008 aims to stimulate private sector investments in infrastructure.
- Several concessions and incentives have been provided to attract investors and support development across sectors: Tourism Policy 2008, IT Policy 2009 and Industrial Policy 2008–13.

Rich resource pool

- Assam is rich in natural resources such as natural oil and gas, rubber, tea, and minerals such as granite, limestone and kaolin. Assam tea is a well-recognised product globally.
- The state has a large skilled workforce. A substantial portion of the state’s population (which is in the age group of 15-25) is computer literate. As per the 12th Plan, around 2.2 million individuals will be trained under the government’s Skill Development Mission.

Advantage Assam
• Targeting 8 per cent GSDP growth in 12th Five Year Plan (6.86 per cent growth achieved during 11th Five Year Plan)
• Agriculture and industrial development likely to drive growth

• 5 per cent growth targeted in 12th Five Year Plan
• Promoting sustainable development in agriculture
• Use of technology and skill development

• Connectivity by all-weather roads
• Improvement of state highways and major district roads
• Improvement of power infrastructure in the state

• Making the state a preferred tourist destination
• Promote eco-tourism and river cruise tourism; infrastructure development and beautification of historical places

• Growth of 5 per cent in industry and 12 per cent in services projected in the 12th plan
• Emphasis on MSME sector
• Infrastructure development and establishing plastic, banana, bamboo and jute parks
• Skill development of unemployed youth

• Targeting 8 per cent GSDP growth in 12th Five Year Plan (6.86 per cent growth achieved during 11th Five Year Plan)
• Agriculture and industrial development likely to drive growth

• 5 per cent growth targeted in 12th Five Year Plan
• Promoting sustainable development in agriculture
• Use of technology and skill development

• Making the state a preferred tourist destination
• Promote eco-tourism and river cruise tourism; infrastructure development and beautification of historical places

• Health care infrastructure development
• Creation of health service corporations for free supply of medicines
• Establishment of medical institutes

Source: Government of Assam
Assam is known for its tea, petroleum resources, Muga silk and bio-diversity.

The state has conserved the one-horned Indian rhinoceros from near extinction, along with the Pygmy hog, tiger and various species of birds. It provides one of the last wild habitats for the Asian elephant.

Assam is becoming an increasingly popular destination for wildlife tourism. Kaziranga National Park and Manas National Park are registered as world-heritage sites.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Assam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>Dispur</td>
</tr>
<tr>
<td>Geographical area (sq km)</td>
<td>78,438</td>
</tr>
<tr>
<td>Administrative districts (No)</td>
<td>27</td>
</tr>
<tr>
<td>Population density (persons per sq km)</td>
<td>398</td>
</tr>
<tr>
<td>Total population (million)</td>
<td>31.2</td>
</tr>
<tr>
<td>Male population (million)</td>
<td>15.9</td>
</tr>
<tr>
<td>Female population (million)</td>
<td>15.3</td>
</tr>
<tr>
<td>Sex ratio (females per 1,000 males)</td>
<td>958</td>
</tr>
<tr>
<td>Literacy rate (%)</td>
<td>72.2</td>
</tr>
</tbody>
</table>

Source: Government of Assam website - www.assam.gov.in, Census 2011

Assam is located in Northeast India. The state shares its borders with Arunachal Pradesh, Nagaland, Manipur, Mizoram, Meghalaya, Tripura and West Bengal. The state shares international borders with Bangladesh, Burma and the Kingdom of Bhutan.

Assamese and Bodo are the official languages. Bengali holds the official-language status in the three districts of the Barak Valley and is the second most spoken language in the state. Assam also has a number of schools with English as the medium of education.

The state is a gateway to Northeast India. Guwahati is the largest city of the state.
### ASSAM IN FIGURES … (1/2)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Assam</th>
<th>All states</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSDP as a percentage of all states’ GSDP</td>
<td>1.6</td>
<td>100.0</td>
<td>Planning Commission Databook, 2013–14, current prices</td>
</tr>
<tr>
<td>Average GSDP growth rate (%)*</td>
<td>13.2</td>
<td>11.54</td>
<td>Planning Commission Databook, November 2014, current prices</td>
</tr>
<tr>
<td>Per capita GSDP (US$)</td>
<td>855.5</td>
<td>1,833.24</td>
<td>Planning Commission Databook, December 2014, current prices</td>
</tr>
<tr>
<td><strong>Physical Infrastructure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installed power capacity (MW)</td>
<td>1,143.0</td>
<td>258,701.45</td>
<td>Central Electricity Authority, as of January 2015</td>
</tr>
<tr>
<td>Wireless subscribers (No)</td>
<td>3,174,200</td>
<td>930,200,000</td>
<td>Telecom Regulatory Authority of India, as of September 2014</td>
</tr>
<tr>
<td>Broadband subscribers (No)</td>
<td>3,174,330^</td>
<td>75,730,000</td>
<td>Telecom Regulatory Authority of India, as of September 2014</td>
</tr>
<tr>
<td>National Highway length (km)</td>
<td>2,940.0</td>
<td>96,260</td>
<td>National Highway Authority of India</td>
</tr>
<tr>
<td>Airports (No)</td>
<td>6</td>
<td>133</td>
<td>Airports Authority of India</td>
</tr>
</tbody>
</table>

*Calculated in Indian Rupee terms, ^As of December 2012
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Assam</th>
<th>All states</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Indicators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literacy rate (%)</td>
<td>72.2</td>
<td>74.0</td>
<td>Planning Commission Databook, June 2014</td>
</tr>
<tr>
<td>Birth rate (per 1,000 population)</td>
<td>22.5</td>
<td>21.6</td>
<td>SRS Bulletin (<a href="http://www.censusindia.gov.in">www.censusindia.gov.in</a>), October 2013</td>
</tr>
<tr>
<td><strong>Investments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI equity inflows (US$ billion)</td>
<td>0.08*</td>
<td>238.6</td>
<td>Department of Industrial Policy &amp; Promotion, April 2000 to December 2014</td>
</tr>
<tr>
<td>Outstanding investments (US$ billion)</td>
<td>18.5</td>
<td>2,414.2</td>
<td>CMIE (2013-14)</td>
</tr>
<tr>
<td><strong>Industrial Infrastructure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPP projects (No)</td>
<td>7</td>
<td>1,339</td>
<td><a href="http://www.pppindiadatabase.com">www.pppindiadatabase.com</a></td>
</tr>
</tbody>
</table>

*FDI inflows for RBI’s (Reserve Bank of India’s) Guwahati region, which includes Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura, PPP: Public-Private Partnership, SRS: Sample Registration System
At current prices, the gross state domestic product (GSDP) of Assam was US$ 27.0 billion in 2013-14 up by 5.9 per cent in comparison to previous year.

The average annual GSDP growth rate was 13.2 per cent from 2004-05 to 2013-14.

The state’s per capita GSDP in 2013-14 was US$ 855.5 compared with US$ 423.8 in 2004-05.

The per capita GSDP increased at a CAGR of 11.7 per cent between 2004-05 and 2013-14.

Source: Planning Commission Databook, June 2014, Business Standard news article

*In Indian rupee terms
The Net State Domestic Product (NSDP) of Assam was US$ 24.3 billion in 2013-14.

The average annual NSDP growth rate was 13.4 per cent from 2004-05 to 2013-14.

The state’s per capita NSDP in 2013-14 was US$ 769.0 compared with US$ 374.5 in 2004-05.

The per capita NSDP increased at a CAGR of 12.0 per cent between 2004-05 and 2013-14.

Source: Planning Commission Databook, June 2014,
*In Indian Rupee terms
Over the years, there has been a shift in the sectoral contribution from primary to the tertiary sector while the secondary sector indicates a fluctuating contribution to the SDP. The overall performance of the economy of the state during the 2014 was encouraging.

In 2013-14, the tertiary sector contributed 50.6 per cent to the state’s GSDP at current prices, followed by the primary (31.5 per cent) and secondary (17.9 per cent) sectors.

At a CAGR of 14.1 per cent, the tertiary sector has recorded the fastest growth among the three sectors from 2004-05 to 2013-14. The growth has been driven by trade, hotels, real estate, finance, insurance, transport, communications and other services.

Between 2004-05 and 2013-14, the secondary and primary sectors expanded at CAGRs of 12.6 per cent and 12.1 per cent, respectively.
Rice, mustard seed, jute, potato, sweet potato, banana, papaya, areca nut, sugarcane and turmeric are some of the major crops in the state.

In 2012-13, total food grain production of the state was around 56.2 lakh MT.

Assam accounts for more than 50.0 per cent of the tea produced in India. During January-September 2013, the state’s total tea production was 447.1 million kg.

Total pulses production of the state was 1.1 lakh MT in 2012-13.

Assam’s proximity to SAARC countries like Bangladesh, Nepal and Bhutan gives it the investment potential considering the advantage of border trade with these countries.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Annual production – 2012-13 (lakh MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>52.0</td>
</tr>
<tr>
<td>Banana</td>
<td>8.4</td>
</tr>
<tr>
<td>Potato</td>
<td>9.8</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>10.4</td>
</tr>
<tr>
<td>Cabbage</td>
<td>6.5</td>
</tr>
<tr>
<td>Tea</td>
<td>623.3^</td>
</tr>
<tr>
<td>Coconut</td>
<td>185*</td>
</tr>
<tr>
<td>Rape seed and Mustard seed</td>
<td>1.6</td>
</tr>
<tr>
<td>Wheat</td>
<td>0.6</td>
</tr>
<tr>
<td>Onion</td>
<td>0.3</td>
</tr>
<tr>
<td>Natural rubber</td>
<td>10.2^^(</td>
</tr>
</tbody>
</table>

Source: Department of Agriculture, Assam Economic Survey of Assam, 2011-12, Tea Board of India, *As of 2010-11 in '000 nuts, MT - Metric Ton, ^2013-14 in million kg, ^^As of 2010-11 in ’000 MT
According to the Department of Industrial Policy & Promotion (DIPP), cumulative FDI inflows during April December 2014 totalled US$ 80 million*.

In 2013-14, the state had US$ 18.5 billion of outstanding investments.

Services and manufacturing together accounted for more than three-fourth of the total outstanding investments.

Of the total outstanding investments, the services sector accounted for around 47.7 per cent, followed by the manufacturing (27.9 per cent) and electricity (16.2 per cent) sectors.

*FDI inflows for RBI’s (Reserve Bank of India’s) Guwahati-region, which includes Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura.

Source: CMIE

Breakdown of outstanding investments by sector (2013-14)

- Services: 47.7%
- Manufacturing: 27.9%
- Electricity: 16.2%
- Mining: 5.7%
- Irrigation: 2.0%
- Real Estate: 0.5%
Agriculture
- Establishing rural haats at district and sub-divisional level to eliminate middlemen and give farmers direct access to market.
- Distribution of power tillers, shallow tubewells and diesel pumps.
- Development of composite paddy procurement centres, market yards, godowns, composite training centres and modern rice mills.
- Development of Agricultural Research Information System.

Expenditure
- New tax proposals not included.

Education & skill development
- Establishing Education Directorate for educational advancement of Bodo and other tribal communities.
- New sainik school proposed in upper Assam.
- Entrepreneur training centres proposed for unemployed youth.
- IT skill development centres for students and unemployed youth announced.
- Youth training centres for recruitment in banks, military and navy.

Social & infrastructure
- Improvement of district roads and state highways.
- Development of road connectivity at inter-state borders.
- Construction of all-weather roads.
- Introduction of Lokayukta Bill 2014.
- Introduction of rural administrative service.
- Establishing rural haats at district and sub-divisional level to eliminate middlemen and give farmers direct access to market.
- Distribution of power tillers, shallow tubewells and diesel pumps.
- Development of composite paddy procurement centres, market yards, godowns, composite training centres and modern rice mills.
- Development of Agricultural Research Information System.

Budget

Source: State finance commission cell,
*Assumed exchange rate of US$ 1 = INR 60.00 for 2014-15
The road network in Assam in terms of road density (road length per thousand sq km of all roads) is extensive.

Assam has a total road length of about 45,500 km (covering both metalled and non-metalled surfaces). The major towns in the state are connected by national highways that cover 2,947.2 km*.

The Assam State Transport Corporation (ASTC) has been providing state road transport services since its establishment in 1970.

The central government approved three highway projects for Assam at a cost of US$ 353.4 million under the Special Accelerated Road Development Programme (SARDP).

The density of national highways is higher in Assam and more highways have been added in recent years.

The construction of a 678-km-long road connecting Silchar to Srimangal via Lumding-Daboka-Nagaon-Guwahati in Assam has been entrusted to National Highway Authority of India (NHAI) as part of the East-West corridor under the National Highways Development Project (NHDP) Phase-II.

The Cabinet Committee on Economic Affairs has approved an investment of US$ 356 million for widening three stretches of NH-37. This would be implemented through the BOT model.

<table>
<thead>
<tr>
<th>Road type</th>
<th>Road length (km) as of March 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total road length</td>
<td>45,500</td>
</tr>
<tr>
<td>National Highways</td>
<td>2,947*</td>
</tr>
<tr>
<td>State Highways</td>
<td>3,134</td>
</tr>
<tr>
<td>Major district roads</td>
<td>4,413</td>
</tr>
<tr>
<td>Rural roads</td>
<td>36,544</td>
</tr>
</tbody>
</table>

*As of April 2014

Sources: Planning Commission, Ministry of Road Transport & Highways, Economic Survey of Assam, 2012-13
As of March 2013, Assam had a total railway route length of approximately 2,434 km, comprising 1,470.1 km under broad gauge and 963.9 km under metre gauge.

The headquarters of the North-East Frontier Railways is located at Maligaon, on the outskirts of Guwahati.

Within the state, all major towns such as Dibrugarh, Tinsukia, Jorhat, Nagaon, Guwahati, Tezpur, Barpeta and Bongaigaon are well connected by the railway network.

In the Railway Budget, the railway minister announced the commissioning of the Harmuti-Niharlagun line connecting Assam with Arunachal Pradesh during financial year 2013–14. To boost connectivity, he assured the Parasuram Kund-Rupai railway link would be treated as a project of national importance.

In the Railway Budget for 2014-15, the railway minister announced the Kamakhya-Bengaluru Premium Express train besides proposing three new trains.

The main rail track on Barauni-Katihar-Guwahati will be electrified for faster movement.

For improving the freight movement through railways and for faster & reliable goods movement rolling stock examination facilities have been created.

At present, there are 2 road-cum-rail bridges and one road bridge over the river Brahmaputra. The fourth bridge over the river near Dibrugarh is under construction and a fifth bridge in Guwahati is also coming up. The Government is also taking action for three more bridges over the Brahmaputra at Dhola, Jorhat, Nematighat and Dhubri Phulbari.

Work on the metro rail project in Guwahati costing US$ 2.3 billion is likely to start by 2015.
Assam has an international airport, Lokpriya Gopinath Bordoloi International Airport, at Guwahati.

Guwahati Airport received 2,196,545 passengers and 5,502 tonnes of freight during 2013-14.

The Airports Authority of India plans to make Guwahati Airport as one of the major international airports of India, connecting Southeast Asia with India. The airport has undergone an overhaul, which includes cosmetic and operational changes, such as an A380 ready runway and jet ways in the terminal.

The state also has a domestic airport each at Guwahati, Tezpur, Jorhat, Dibrugarh, Silchar and North Lakhimpur.

Some of the tea gardens have their own air-strips and aircraft. Flights to and from the South East Asian cities are in the offering through the LGB International Airport at Guwahati.

Government has proposed one Greenfield project at Kokrajhar and major investments are planned for upgradation of existing airports anticipating the future increase in demand.

Source: Airports Authority of India
Assam’s major river routes are along the Brahmaputra and Barak rivers, with a navigable length of 891 km and 94 km respectively. Seven port locations are operational in the state for import and export to the Kolkata and Haldia ports.

The Brahmaputra river is known as the National Waterway (NW) No 2 (the Ganges is known as the National Waterway No 1). A proposal has been made in the Parliament to declare the 121 km stretch between Lakhipur and Bhanga, Barak in Assam an NW.

The Directorate of Inland Water Transport (IWT) and Central Inland Waterways Corporation of Assam operate water transport services along the Brahmaputra and Barak rivers on a commercial basis. These services are used to transport passengers and goods across the state and to West Bengal. The chief goods that are transported include jute, coal, fertilisers, cement, machinery, and forest and agricultural products. The present cargo handling capacity of the fleet is nearly 10,000 metric tonnes.

Container Corporation of India Limited (CONCOR) operates an Inland Container Depot (ICD) at Amingaon, 10 km from Guwahati. Two bonded warehouses of CONCOR along with a private warehouse (total area of 6,400 sq m) operate from the ICD.

Container Corporation of India Ltd (CONCOR) operates an ICD at Amingaon, 10 km from Guwahati having one Reach Stacker with 50MT capacity and Two Sling cranes with 35MT capacity. Two bonded warehouses of CONCOR along with a private warehouse adding up a total area of 6400 sq m operate from the ICD.

Source: Directorate of Inland Water Transport of Assam
ICD - Inland Container Depot

Put the original text here
As of May 2014, Assam had a total installed power generation capacity of 1,143.0 MW, which comprised 627.5 MW under central utilities, 491.0 MW under state utilities and 24.5 MW under the private sector.

The private sector controlled capacity comprised gas-based power plants.

Of the total installed power generation capacity, thermal power contributed 679.2 MW, hydropower contributed 429.7 MW and renewable power contributed 31.1 MW.

The Asian Development Bank (ADB) has sanctioned US$ 250 million under the Assam Power Sector Enhancement Investment Programme. Besides, ADB has provided a grant of US$ 1 million for capacity development of power-sector utilities in the state.

Welspun Energy is planning to set up a 25 MW solar power project at a cost of around US$ 33.2 million.

Assam State Power Generation Company Limited (APGCL) will fund the 70 MW Lakwa Replacement Power Project (LRPP) which will replace obsolete 60 MW Gas turbines with 70 MW Gas Engines at the gas based generation Lakwa Thermal Power Station (LTPS).
Assam’s power is generated, transmitted and distributed by Assam State Electricity Board (ASEB) and its successor companies.

Successor companies of ASEB

- Assam Power Generation Corporation Limited
- Assam Electricity Grid Corporation Limited
- Upper Assam Electricity Distribution Co Limited
- Lower Assam Electricity Distribution Co Limited
- Central Assam Electricity Distribution Co Limited

Ongoing power projects to be commissioned by Assam Power Generation Corporation Limited.

<table>
<thead>
<tr>
<th>Name of project</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Namrup Replacement Power Project</td>
<td>1 x 100 MW</td>
</tr>
<tr>
<td>Lungnit Small Hydro Electric Project</td>
<td>2 x 2 x 1.5 MW</td>
</tr>
<tr>
<td>Myntriang Small Hydro Electric Project</td>
<td>2 x 3 MW + 2 x 1.5 MW</td>
</tr>
</tbody>
</table>
The Telecommunication network is one of the fastest growing sectors in the state. Individuals and industries alike face no problems in procuring telephone and other telecommunications facilities. The penetration of landlines as well as cell phone telephony is high and is steadily increasing.

According to the Telecom Regulatory Authority of India (TRAI), Assam had nearly 15.5 million wireless subscribers and 182,831 wireline subscribers, as of May 2014.

The tele-density in the state was 49.3 per cent, as of May 2014.

The state had 92,392 broadband subscribers as of December 2012.

As of December 2012, the state had 585 telephone exchanges.

As of June 2014, the state had 4,025 post offices.

---

**Telecom infrastructure (May 2014)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless subscribers</td>
<td>15,497,687</td>
</tr>
<tr>
<td>Wireline subscribers</td>
<td>182,831</td>
</tr>
<tr>
<td>Broadband subscribers*</td>
<td>92,392</td>
</tr>
<tr>
<td>Post offices**</td>
<td>4,025</td>
</tr>
<tr>
<td>Telephone exchanges*</td>
<td>585</td>
</tr>
<tr>
<td>Teledensity (in per cent)</td>
<td>49.3</td>
</tr>
</tbody>
</table>

*Source: Telecom Regulatory Authority of India, Department of Telecommunications, May 2014, Ministry of Communications and Information Technology, India Post

**Some major telecom operators in Assam**

- Reliance Communications
- Bharat Sanchar Nigam Limited (BSNL)
- Bharti Airtel
- Aircel Limited
- Vodafone
- Essar
- IDEA Cellular
- Tata Teleservices

*Source: Telecom Regulatory Authority of India*
Under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), two projects costing US$ 77.5 million have been sanctioned for Guwahati.

The projects have been sanctioned between 2006–07 and 2007–08. The target areas of development are solid waste management and water supply.

Under the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT), US$ 45.6 million has been allocated for development of storm drainage and water supply.

The state has launched Assam Urban Infrastructure Investment Program (AUIIP) to improve water supply, sewerage and urban transport systems in Guwahati. The program also includes storm water drainage and solid waste management system in Dibrugarh. The Project-I of AUIIP is being implemented at an estimated cost of US$ 115.5 million.

The state has entered into a US$ 81 million tripartite loan agreement with Asian Development Bank (ADB) and the central government. The agreement seeks to upgrade wastewater treatment and urban transportation in Guwahati.

Under JNNURM-UIDSSMT programme, a total of thirty-six projects costing US$ 58.2 million have been approved of which eleven have been completed and under the UIG programme, a total of US$ 45.3 million is allocated as of March 2014.

Source: JNNURM, Ministry of Urban Development, Government of India,
UIDSSMT: Urban Infrastructure Development Scheme for Small & Medium Towns
UIG: Urban Infrastructure and Governance
## DEVELOPMENT PROJECTS: KEY PUBLIC PRIVATE PARTNERSHIP PROJECTS … (1/2)

<table>
<thead>
<tr>
<th>Project name</th>
<th>Sector</th>
<th>PPP type</th>
<th>Project cost (US$ million)</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 MW Thermal Power, Chandrapur</td>
<td>Energy</td>
<td>BOT</td>
<td>39.0</td>
<td>Awarded</td>
</tr>
<tr>
<td>Games Village, Guwahati</td>
<td>Urban development</td>
<td>Lease</td>
<td>33.2</td>
<td>Under implementation</td>
</tr>
<tr>
<td>Integrated Solid Waste Management, Guwahati</td>
<td>Urban development</td>
<td>BOT</td>
<td>16.9</td>
<td>Completed</td>
</tr>
<tr>
<td>Five-star Hotel, Guwahati</td>
<td>Tourism</td>
<td>Lease</td>
<td>15.8</td>
<td>Under implementation</td>
</tr>
<tr>
<td>Desang Hydro Electric Power, Desang</td>
<td>Energy</td>
<td>BOOT</td>
<td>14.4</td>
<td>Under implementation</td>
</tr>
<tr>
<td>Amrit Bio Power, Jagi Road</td>
<td>Energy</td>
<td>BOOT</td>
<td>7.7</td>
<td>Under implementation</td>
</tr>
<tr>
<td>Bordikrio Power, Bordikrio</td>
<td>Energy</td>
<td>BOOT</td>
<td>7.8</td>
<td>Under implementation</td>
</tr>
</tbody>
</table>

Source: pppindiadatabase.com

BOT: Build-Own-Transfer, BOOT: Build-Own-Operate-Transfer
## ASSAM
THE LAND OF RED RIVERS AND BLUE HILLS

### DEVELOPMENT PROJECTS: KEY PUBLIC PRIVATE PARTNERSHIP PROJECTS … (2/2)

<table>
<thead>
<tr>
<th>Project name</th>
<th>Sector</th>
<th>PPP type</th>
<th>Project cost (US$ million)</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automated Multilevel Car Parking, Guwahati</td>
<td>Urban development</td>
<td>BOOT</td>
<td>7.1</td>
<td>Awarded</td>
</tr>
<tr>
<td>Banana Park, Gopalpara</td>
<td>Industries and parks</td>
<td>BOOT</td>
<td>3.2</td>
<td>Pipeline</td>
</tr>
<tr>
<td>Pahumara Power, Pahumara</td>
<td>Energy</td>
<td>BOOT</td>
<td>2.3</td>
<td>Under implementation</td>
</tr>
<tr>
<td>Development of Municipal Plots, Guwahati</td>
<td>Urban development</td>
<td>BOT</td>
<td>2.5</td>
<td>Awarded</td>
</tr>
<tr>
<td>GNC Engineering College, Tezpur</td>
<td>Education</td>
<td>Lease</td>
<td>6.6</td>
<td>Completed</td>
</tr>
<tr>
<td>Beautification of Guwahati City, Guwahati</td>
<td>Urban development</td>
<td>BOT</td>
<td>4.1</td>
<td>Completed</td>
</tr>
<tr>
<td>Rupai Power, Rupai</td>
<td>Energy</td>
<td>BOOT</td>
<td>0.6</td>
<td>Under implementation</td>
</tr>
</tbody>
</table>

Source: pppindiadatabase.com

BOT: Build-Own-Transfer, BOOT: Build-Own-Operate-Transfer
Assam has a literacy rate of 73.2 per cent, according to the final data of Census 2011; the male literacy rate is 78.1 per cent and the female literacy rate is 67.3 per cent.

As of March 2013, the state had 61,689 total schools, 45,959 primary schools and 10,971 upper primary schools. The pupil-teacher ratio was 21:1 for primary schools.

The state government is taking several steps to encourage setting up of various educational complexes for skill development. It has formed a steering committee and 27 institute management committees to facilitate close coordination between industry and academia.

### Assam’s school education statistics as of 2012-13

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of schools</td>
<td>Total: 61,689</td>
</tr>
<tr>
<td></td>
<td>Primary: 45,959</td>
</tr>
<tr>
<td></td>
<td>Upper primary: 10,971</td>
</tr>
<tr>
<td>Pupil-teacher ratio</td>
<td>Primary schools: 21:1</td>
</tr>
<tr>
<td>Number of teachers</td>
<td>Primary schools: 235,072*</td>
</tr>
</tbody>
</table>

### Literacy rates (%)

<table>
<thead>
<tr>
<th>Category</th>
<th>Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy rate</td>
<td>72.2</td>
</tr>
<tr>
<td>Male literacy</td>
<td>77.9</td>
</tr>
<tr>
<td>Female literacy</td>
<td>66.3</td>
</tr>
</tbody>
</table>

### Premier institutions in Assam

- Gauhati University, Guwahati
- Assam University, Silchar
- Assam Agricultural University, Jorhat
- Dibrugarh University, Dibrugarh
- Tezpur University, Tezpur
- K.K. Handique State Open University
- Assam Engineering College, Guwahati
- Indian Institute of Technology, Guwahati
- Jorhat Engineering College, Jorhat
- National Institute of Technology, Silchar
- Assam Medical College, Dibrugarh
- Gauhati Medical College and Hospital, Guwahati
- Silchar Medical College and Hospital, Silchar

*Source: National University of Education Planning and Administration *2011-12
Assam has one state-level hospital, 22 district hospitals, 13 sub-divisional civil hospitals, 938 Primary Health Centres (PHCs), 261 dispensaries, 4,604 sub-centres and 108 Community Health Centres (CHCs).

The government announced a series of packages, including a US$ 39.4 million scheme, to do away with the traditional gender-bias by offering financial assistance to the girl child and radical measures to improve the health of would-be mothers. It launched a ‘104’ helpline in 2010 for assistance to patients and their families.

The Assam health ministry recently announced 50 riverine public health centres in the districts of Barpeta, Dhubri, Goalpara and Darrang. Moreover, it plans to set up floating hospitals, along with fifteen boats equipped with facilities such as ambulances and operation theatres.

The ‘Infant and Young Child Nutrition Initiatives’ program by the National Rural Health Mission aims to reduce the infant mortality rate. Of the planned 712 newborn care corners, 545 have been set up to provide immediate care to all newborns at birth, and 13 special new born care corners have been established to provide special care to sick newborns.

The government plans to set up a cancer institute at Chabua in collaboration with Tata group and Hindustan Unilever under the Public-private Partnership (PPP) model. The proposed centre would be set up along with the state’s second cleft care unit at the same location.

### Health infrastructure

- State-level hospital: 1
- District hospitals: 22
- Sub-divisional civil hospitals: 13
- Primary health centres: 938
- Sub-centres: 4,604
- Community health centres: 108

### Health indicators of Assam (2012)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth rate (per 1,000 persons)</td>
<td>22.5</td>
</tr>
<tr>
<td>Death rate (per 1,000 persons)</td>
<td>7.9</td>
</tr>
<tr>
<td>Infant mortality rate (per 1,000 live births)</td>
<td>55</td>
</tr>
</tbody>
</table>


Source: Sample Registration System (SRS) Bulletin September 2013, (www.censusindia.gov.in)
In June 2014, the Assam government launched the rural water supply and sanitation project at a cost of US$ 244.5 million, the project would provide clean water to 1.3 million people in seven districts in the state over a period of six years. The World Bank will provide US$ 122.3 million (around 50 per cent) while the balance will be borne by the central government and the state government.

<table>
<thead>
<tr>
<th>Key health schemes launched by Assam government</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Maram’ (Assamese for financial help to patients)</td>
</tr>
<tr>
<td>‘Mamata’ (Assamese for new born and mothers)</td>
</tr>
<tr>
<td>‘Majoni’ (Assamese for little girls)</td>
</tr>
<tr>
<td>• A newborn girl child gets a fixed deposit instrument worth US$ 109.</td>
</tr>
<tr>
<td>• A would-be mother gets US$ 10.4 for each of the first two check-ups.</td>
</tr>
<tr>
<td>‘Morom’ (Assamese for compassion)</td>
</tr>
<tr>
<td>• Patients in medical college hospitals receive US$ 1.6 per day for seven days.</td>
</tr>
<tr>
<td>• Patients in civil hospitals get US$ 1.04 per day for five days.</td>
</tr>
<tr>
<td>‘Mamoni’</td>
</tr>
<tr>
<td>• Pregnant women are encouraged to undergo three ante-natal checkups to detect any danger signs during pregnancy.</td>
</tr>
<tr>
<td>• During the second and third ante-natal checkups, pregnant women receive US$ 18.4 for expenses related to nutritional food and supplements.</td>
</tr>
</tbody>
</table>
Assam is home to many ethnic groups and different cultures. The state is rich in folk music; different styles include regional folk music, ethnic folk music and bihu songs, among others.

There are diversified important traditional festivals in Assam. Bihu is the most important and common and celebrated all over Assam. It is the Assamese new year celebrated in April of the Gregorian calendar.

Assam has a rich tradition of performing arts. Ankiya Nat (Onkeeya Naat) is a traditional dance-drama (bhaona) form, popular since the 15th century AD. The Bihu dance, Kushan Nritya, Sattriya and Banjar Kekan are some of the popular dance forms of Assam.

The culture has a variety of traditional musical instruments including several types of drums, string instruments, flutes, cymbals, and pipes.

Guwahati is the major centre for sporting facilities. The sports infrastructure in the city includes the Nehru Stadium and the Kanaklata Indoor Stadium.

Additional sports infrastructure has been constructed in the city, especially for the 33rd National Games. This includes a large stadium at Sarusajai (Indira Gandhi Athletic Stadium), the Dr Zakir Hussain Aquatic Complex and the Karmabir Nabin Chandra Bordoloi AC Indoor Hall.

Other new sports structures in the city include the Maulana Md. Tayabullah Hockey Stadium, the Deshbhakta Tarun Ram Phookan Indoor Stadium, the Rajiv Gandhi Indoor Stadium in Amingaon and the Chchal Tennis Complex in Guwahati.

The Assam State Museum is one of the biggest multi-purpose museums in the country. Instituted in 1940, the museum has some of the most authentic prehistoric sculptures, metal, ivory paintings, woodwork and costumes. The museum has organised several cultural events and reflects the legacy of the entire Northeast region.
Assam has 16 industrial estates, four industrial growth centres, 11 integrated infrastructure development projects, 17 industrial areas, 11 growth centres, six mini industrial estates, one export promotion park and two food processing industrial parks.

To facilitate infrastructure support, the State Industries and Commerce Department has sponsored three projects as industrial growth centres at Chariduar, Matia and Chaygaon-Patgaon.

- Chariduar Growth Centre: Cost of US$ 4.7 million shared by central and state government.
- Matia Growth Centre: Cost of US$ 4.0 million shared by central and state government.
- Chaygaon-Patgaon Growth Centre: Cost of US$ 3.0 million shared by central and state government.

With its rich flora and fauna, natural beauty, age-old temples and monuments, Assam offers a unique potential for tourism industries for domestic and foreign markets.
## INDUSTRIAL INFRASTRUCTURE … (2/3)

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Technology Park</td>
<td>A software technology park has been set up at Guwahati, near the Lokpriya Gopinath Bordoloi International Airport, by the Software Technology Parks of India Limited (STPI).</td>
</tr>
<tr>
<td>Food Processing Park</td>
<td>India’s government has sanctioned a food processing park with a total project cost of US$ 1.2 million. The park is being set up near Chaygaon in the district of Kamrup (rural). The implementing agency is Assam Small Industries Development Corporation Limited.</td>
</tr>
<tr>
<td>Agri-Export Zone for Ginger</td>
<td>India's government has sanctioned an agri-export zone for the state for fresh and processed ginger. The nodal agency for implementing this project is Assam Industrial Development Corporation Limited. The zone is located in eight districts: Kamrup, Nalbari, Barpeta, Darrang, Morigaon, Nagaon, Karbi Anglong and North Cachar (NC) hills of Assam.</td>
</tr>
<tr>
<td>Biotech Park</td>
<td>Considering the importance of biotechnology, an integrated park to provide all infrastructural and other related services has been developed in Guwahati. The Guwahati Biotech Park undertakes research activities in biotechnology. The park was inaugurated on 25 February 2011.</td>
</tr>
<tr>
<td>Tea Park</td>
<td>A tea park is being set up at Chaygaon by AIDC in Kamrup District in an area of approximately 100 acres of land. The park would provide facilities for blending, storage and transshipment of Assam tea for the world market.</td>
</tr>
</tbody>
</table>

Assam’s proximity to SAARC countries like Bangladesh, Nepal and Bhutan gives it the investment potential considering the advantage of border trade with these countries.

Assam’s has 11 integrated infrastructure development centres across the state of which two are under construction. The Government of India has approved two more projects under MSE-CDP at Pathsala (Barpeta) and Moran (Dibrugarh).

Under the current Five Year Plan, a new Institute of Information Technology (IIT) has been set up in Guwahati through the Public Private Partnership model. It would help promote research and industrial partnership in technical education.

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Promotion Industrial Park</td>
<td>Assam Industrial Development Corporation (AIDC) has implemented an Export Promotion Industrial Park (EPIP) at Amingaon, near Guwahati, in the district of Kamrup, at an estimated cost of US$ 3.0 million. The total area of the park is 68.1 acres. AIDC has constructed three industrial sheds and allotted them to three industrial units. There are 38 companies in the park, offering direct employment opportunities to 4,000 people and indirect employment opportunities to about 12,000 people.</td>
</tr>
<tr>
<td>Industrial growth centres</td>
<td>Industrial growth centres with supporting infrastructure have been set up at Balipara in the Sonitpur district and Matia in Goalpara. The Matia industrial growth centre has been set up with a total project cost of US$ 4.5 million and spans 700 acres. The Balipara industrial growth centre has been set up with a total project cost of US$ 5.3 million and is spread across 400 acres.</td>
</tr>
<tr>
<td>Integrated Infrastructure Development (IID) Centres</td>
<td>IID centres have been planned at Parbatpur, Serphangguri, Dalgaon, Demow, Bhomoraguri, Malinibeel, Dahudi, Silapathar, Rangia, Banderdewa and Titabar. The projects at Bhomoraguri, Dalgaon, Malinibeel, Titabar, Demow, Dahudi, Banderdewa, Silapathar and Rangia are already completed and the other projects are also on the verge of completion.</td>
</tr>
<tr>
<td>Border Trade Centres (BTC)</td>
<td>BTCs are located at Mankachar (Dhubri), Sutarkandi (Karimganj) and Darranga (Kamrup).</td>
</tr>
</tbody>
</table>

Assam accounts for over 50.0 per cent of the tea produced in India.

As of March 2012, there were 35,717 registered Small Scale Industrial (SSI)/ Micro, Small and Medium Enterprises (MSMEs) in the state.

Assam is traditionally famous for its cottage industry, especially spinning, weaving and sericulture. The state contributes 99.0 per cent and 65.0 per cent to the country’s total Muga and Eri raw silk production, respectively. An estimated 250,000 families are engaged in sericulture.

Bell-metal work is another traditional cottage industry of Assam. Brass-work is also an important traditional handicraft. The total annual production of marketable finished goods is about 300 tonnes.

In 2012-13 (until December 2012), Khadi and Village Industries (KVI) production in the state was US$ 75.4 million and generated employment for 289,000 people.

The state has a variety of tourist attractions, such as wildlife sanctuaries, adventure tourism, eco-tourism, hill stations, lakes and places of historical significance. There are five national parks and 18 wildlife sanctuaries in Assam.

During 2006-14, the state economy witnessed a change in sectoral composition of GSDP. Over the period, contribution of both industry and agriculture & allied sectors declined, while that of services progressed steadily.

Assam is one of the largest producer of crude oil and accounted for about 15 per cent of India’s crude in FY14.

**Source:** Economic Survey of Assam, 2013-14
*Estimates*
Assam has huge reserves of crude petroleum, natural gas, coal, limestone and minor minerals.

Coal mined from Assam has high sulphur content and is mainly utilised by local railways, hydro power stations and steamers.

The state is the third-largest producer of petroleum and natural gas in the country. Major state refineries are located at Digboi, Guwahati, Bongaigaon and Numaligarh.

Ample availability of limestone has attracted several cement and chemical industries within the state.

### Key industries in Assam

- Tea
- Coal, oil and gas
- Limestone and cement
- Agriculture and horticulture
- Food processing
- Tourism
- Traditional cottage industry
- Sericulture

### Key industries in major districts

<table>
<thead>
<tr>
<th>District</th>
<th>Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barpeta</td>
<td>Metal, mustard oil mill</td>
</tr>
<tr>
<td>Bongaigaon</td>
<td>Textiles, dairy, aluminium, oil and natural gas</td>
</tr>
<tr>
<td>Dibrugarh</td>
<td>Fertilizer, petroleum and natural gas</td>
</tr>
<tr>
<td>Jorhat</td>
<td>Tea, cement, pharmaceuticals, aluminium and food products</td>
</tr>
<tr>
<td>Karimganj</td>
<td>Cement</td>
</tr>
<tr>
<td>North Cachar Hills</td>
<td>Cement</td>
</tr>
<tr>
<td>Sivasagar</td>
<td>Tea, oil and natural gas</td>
</tr>
<tr>
<td>Tinsukia</td>
<td>Tea, coal, oil and natural gas</td>
</tr>
<tr>
<td>Kamrup Metropolitan</td>
<td>Cement, tea and textiles</td>
</tr>
</tbody>
</table>

Source: Economic Survey of Assam, 2012-13
Tea occupies an important place among the agriculture-based industries in Assam. About 17.0 per cent of the workers of Assam are engaged in the tea industry. With over 322,210 hectares of area under tea gardens as of December 2011, Assam accounts for over 50.0 per cent of the tea produced in India and about one-seventh of global production. In 2013-14, the state’s tea production totalled 623,260 tonnes. Tea is grown in the Brahmaputra and Barak plains. Tea gardens are mostly found in the districts of Tinsukia, Dibrugarh, Sibsagar, Jorhat, Golaghat, Nagaon and Sonitpur. The government has secured a Geographical Indication (GI) for the tea produced in the state. As a result ‘Assam Tea’ is known as ‘Assam Orthodox Tea’. The Guwahati Tea Auction Centre was established in 1970 for better marketing of the tea produced in the region. This is among the world’s largest CTC tea auction centres and the world’s second-largest, after Colombo, in terms of total tea handled. Every year, the centre auctions over 150 million kg of tea, valued at more than US$ 114 million. The Government of India has created a Special Purpose Tea Fund (SPTF) for rejuvenation of the tea bushes. This would benefit 700-800 tea gardens of the state. For betterment of R&D in tea industry, Tocklai Experimental Station at Jorhat – the oldest and largest tea R&D Centre of its kind is managed and operated under the guidance of Tea Research Association (TRA). Research on all aspects of tea cultivation and processing is carried out at this Station which is the oldest and the largest research station of its kind in the world.

Source: Tea Board of India
**Some key players**

- Assam Tea Corporation Ltd
- Assam Company India Ltd
- Apeejay Tea Ltd
- Williamson Magor Group

**Tea production (’000 tonnes)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>443</td>
<td>655</td>
<td>531</td>
<td>486</td>
<td>484</td>
<td>498</td>
<td>525</td>
<td>501</td>
<td>588</td>
<td>623</td>
</tr>
</tbody>
</table>

*Source: Tea Board of India*
### Assam Tea Corp Ltd
- Established in 1972, the company is a wholly owned undertaking of the Government of Assam.
- The company has 15 tea estates spread over 13,000 hectares of prime land in over six districts of Assam.
- Based in Dispur, the firm provides direct employment to more than 16,000 workers.

### Assam Company India Ltd
- Formed in 1839, the company operates 16 factories and 18 tea estates and gardens spread over 15,000 hectares. It was the first to have an organic tea estate (Rembeng Estate) in Assam.
- The firm has over 32,000 employees and produces around 15 million kg of tea annually. The company generated revenues of US$ 45.7 million in 2012-13.

### Apeejay Tea Ltd
- The company was established as Assam Frontier Tea Limited in 1889.
- It has 17 estates spread over 50,000 acres in Assam, which together produce around 25 million kg of tea.
- Besides domestic auction, the company sells directly to international customers such as Unilever, Tetley, Tazo and Starbucks.
- The known brands are Typhoo, Mantra and Maha Mantra.

### Williamson Magor Group
- The company was established in 1949 and produces over 65 million kg of tea every year, of which around 30 million kg is from its 23 tea estates in Assam.
- Tez, Premium Gold and Jaago are the packet tea brands.
The Assam-Arakan Basin in Northeast India is an important oil-producing region and contains more than 15 per cent of the country’s reserves. Assam has over 1.3 billion tonnes of crude oil and 156 billion cubic metric tonnes of natural gas reserves.

Assam is the second place in the world where petroleum was discovered.

The state also has a substantial reserve of Coal Bed Methane (CBM) and about 1.2 billion metric tonnes (MT) of coal reserves. The wells at Digboi, Duliajan and Sivasagar, among others, also produce natural gas, accounting for about 50.0 per cent of India’s total onshore production.

Coal occurs mainly in the upper Assam districts of Tinsukia and Dibrugarh in the Makum and Dilli – Jeypore coalfields. Small coal deposits occur sporadically in the central Assam districts of Karbi Anglong and North Cachar Hills. The proven reserve of coal in this belt is about 340 million tonnes.

Margherita town in Tinsukia district is known as the ‘Coal Queen of Assam’.

The state has a refining capacity of 150,000 barrels per day at Numaligarh, Bongaigaon, Guwahati and Digboi.

ONGC plans to invest US$ 400 million under the Assam Renewal Project to upgrade and set up modern facilities. It will also replace the 467.8 km-long old pipelines with new ones.

Assam Petrochemicals Limited plans to invest US$ 173.12 million in the state to set up methanol and acetic acid plants with capacities of 500 tonnes per day (TPD) and 200 TPD, respectively.

Assam Gas Cracker Project (Brahmaputra Cracker and Polymer Ltd), under implementation, for production of HDPE/LLDPE and Polypropylene, is based on resources available in Assam. The project will supply huge intermediate feedstock for further processing in a host of downstream polymer units in Assam.

<table>
<thead>
<tr>
<th>Region</th>
<th>Capacity (Million metric tonnes per annum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numaligarh</td>
<td>3.00</td>
</tr>
<tr>
<td>Bongaigaon</td>
<td>2.35</td>
</tr>
<tr>
<td>Guwahati</td>
<td>1.00</td>
</tr>
<tr>
<td>Digboi</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Source: assamgovt.nic.in, US Energy Information Administration

For updated information, please visit www.ibef.org
Numaligarh Refinery Limited (NRL), a subsidiary of Bharat Petroleum (BPCL), commissioned its US$ 14.7 million Naphtha Splitter Unit to supply petrochemical grade naphtha to the Assam Gas Cracker Project. The gas cracker project is close to completion and expected to be commissioned in 2014.

National Hydroelectric Power Corporation (NHPC) would supply 300 MW of unallocated power to Assam from the Subansiri (lower) Hydroelectric Power Project and 233 MW from the sub-lower Hydroelectric Project.

Bharat Petroleum (BPCL) is planning to invest US$ 2.8 billion to increase production capacity at two refineries in Assam and Madhya Pradesh.

Some key players

- Indian Oil Corporation Ltd
- Oil and Natural Gas Corporation Ltd
- Oil India Ltd
- Coal India Ltd (CIL)

Source: Economic Survey of Assam, 2012-13
### IOCL
- IOCL is India's largest company in terms of sales with a turnover of US$ 81.0 billion in 2013-14. The company has over 100 years of experience in oil refining and marketing for the nation.
- It is the world’s 20th largest petroleum company and features among Fortune 500 companies. IOCL controls 10 of India’s 22 refineries and has a refining capacity of 65.7 million metric tonnes per annum (MMTPA), representing 31 per cent of the country’s refining capacity.
- The company has refineries at Digboi, Guwahati and Bongaigaon. The Digboi Refinery is India's oldest and was commissioned in 1901. It has a capacity of 0.65 mmtpa.

### ONGC
- ONGC is India’s leading oil and gas, exploration and production company.
- The company has 240 onshore production installations, 77 drilling rigs and a 26,598 km pipeline network. The oil major has 42 oil wells in Jorhat and Golaghat districts. The company was recently crowned the most admired company of the Northeast region.

### OIL
- OIL, a wholly owned Government of India enterprise, is a fully integrated upstream petroleum company. It was established in 1959 to expand and develop the newly discovered oil fields of Naharkatiya and Moran in Assam.
- Almost 90 per cent of OIL’s crude oil and gas production comes from Northeast India, while Rajasthan and onshore areas of Ganga and Mahanadi constitute the rest of the exploration sites.
- OIL owns and operates 13 drilling rigs and 14 work-over rigs. The company’s registered office is located in Duliajan, and the pipeline headquarter is in Guwahati. The company had a turnover of US$ 1.6 billion in 2013-14.
CIL

- CIL is a Government of India undertaking and the single-largest coal-producing company in the world.
- CIL operates through 81 mining areas and 470 mines, of which 275 are underground. It commands nearly 81.0 per cent of the Indian coal market.
- North Eastern Coalfields, a unit of CIL, is located at Margherita, Assam. CIL had a turnover of US$ 11.4 billion in 2013-14.
Limestone is an important mineral, which is used in the manufacturing of cement.

Several cement factories have come up in the Dima Hasao district in Assam due to the availability of high-quality limestone in the region.

Medium and Large industries have significant potential in the State because of availability of Raw materials like Hydrocarbon, Coal, Limestone, etc. Government will provide all possible support for setting up of medium and Large Industries in the State.

Good quality cement-grade limestone is found in central Assam districts of North Cachar Hills and Karbi Anglong, where a total reserve of about 670 million tonnes is available. The China clay of Karbi- Anglong district is a vital input for the Ceramic industries.

In 2012-13, total limestone production in the state was 292,000 tonnes.

In November 2014, State Level Single Window Clearance Authority (SLSWCA) of Odisha approved three new cement grinding units with investment totalling to US$ 200.5 million.

**Key players**
- Cement Corporation of India Ltd
- Barak Valley Cements Ltd
- Jaypee Cements Ltd

**Limestone and cement production**

**Key players**

- Cement Corporation of India Ltd
- Barak Valley Cements Ltd
- Jaypee Cements Ltd

Source: Economic Survey of Assam, 2013-14
Cement Corp of India Ltd (CCI)  
- CCI was incorporated in 1965 as a wholly-owned Government of India company.  
- It has 10 units spread over eight states with a total annual installed capacity of 3,848,000 metric tonnes.  
- In Assam, the corporation has a plant at Bokajan, which has a capacity of 198,000 MT, and a regional office at Guwahati. In 2012-13, the corporation had sales of US$ 47.7 million.

Barak Valley Cements Ltd  
- BVCL was incorporated as a public limited company in 1999.  
- The company is located in Assam and all its operations are concentrated in Northeast India.  
- The manufacturing unit of the company is located at Badarpurghat, Assam. Its subsidiary, Badarpur Energy Private Limited, has set up a 6 MW biomass captive power plant at Badarpurghat in Assam.

Jaypee Cements Ltd  
- The group is engaged in the businesses of engineering and construction, expressways, sports, agri-business, power, real estate, hospitality and cement.  
- It has announced an investment of US$ 228 million to set up a greenfield cement plant in the North Cachar Hills district with an annual capacity of 2 million tonnes. This is a joint venture with Assam Mineral Development Corporation Limited. The group had a turnover of US$ 3.3 billion in 2013-14 with cement and cement products contributing US$ 1.5 billion.
Assam, with its vast hills and forests, is home to a variety of medicinal herbs and plants. About 300 types of medicinal herbs and plants are found in abundance in the state with the Brahmaputra valley alone having 150 varieties of herbs and plants of commercial value.

An estimated 5.0-10.0 per cent of the plants and herbs have been commercially exploited, offering vast potential for further investments.

Major medicinal herbs and plants in the state include Sarpagandha (Rauvolfia serpentine Benth.ex.Kur), Pippali (Piper longam Linn), Amlaki (Emblica officinalis Gaertn), Hilikha (Terinalia chebula Retz.), Bhomora (Terminalia belerica) and Arjuna (Terminalia arjuna Wight & Arn.).

Source: Economic Survey of Assam, 2011-12
KEY INDUSTRIES – AGRICULTURE AND HORTICULTURE

* An agrarian economy since time immemorial, agriculture is the major contributor to the state economy. It also provides livelihood to a significant proportion of the population of the state.
* The agriculture sector supports more than 75.0 per cent population of the state and directly or indirectly provides employment to more than 53.0 per cent of the total workforce.
* The agro-climatic conditions support cultivation of a wide range of horticultural crops, including plantation crops and various fruits and vegetables, flowers, spices, medicinal and aromatic plants, nut crops and tuber crops.
* During 2012-13, Assam’s total food-grain production stood at 47.57 lakh MT. Production of potatoes stood at 9.75 lakh MT, while that of sugarcane and oil seeds was estimated at 10.36 and 1.74 lakh MT, respectively.
* Assam has over 600 varieties of orchids growing naturally.
* Horticultural crops occupy about 15.0 per cent of the gross cultivated area of the state.
* Rice is the main food crop in Assam. Other food crops cultivated in the state include jute, sugarcane, fruits, tea, pulses, coconut, potatoes, cotton and areca nuts. Vegetable cultivation is also a major agricultural activity in the state.
* Pineapple, banana, cauliflower, Broccoli, rose and Bougainvillea are among high Yielding varieties of horticulture crops in Assam.
* In 2013-14, the agriculture sector contributed around 17.8 per cent at constant (2004-05) prices to the state’s GSDP (US$ 26.98 billion).
* Assam organised the state’s first International Agri-Horti show 2014 from January 8 to 12, 2014. The key objectives of the event included promotion of Assam’s agriculture and horticulture products; to attract national and international investors to the agribusiness; and bring together farmers and government and various policy agencies on a common platform.

Source: Department of Agriculture, Assam, Economic Survey of Assam, 2012-13
Assam is a tourist destination for nature lovers, wildlife enthusiasts, leisure tourists, ornithologists and photographers from all over the world.

According to the Ministry of Tourism, around 4.35 million tourists visited Assam during 2011, the highest among the north-eastern states.

The key tourist destinations in the state are:

- **Wildlife sanctuaries:** Bhejan-Borajan-Padumoni, Panidehing, Nambor-Doigurung, Nambor, Sonai-Rupai, Laokhowa, Pobitora, Marat Longri, etc.
- **National parks:** Kaziranga, Manas, Orang, Nameri and Dibru-Saikhowa.
- **Leisure/scenic beauty spots:** Chandubi, Bhairabkunda, Daranga, Bhalukpung and Haflong.
- **Pilgrimage sites:** Guwahati, Hajo, Majuli and Batadrawa.
- **Golf courses with air strips:** Narengi, Borsola and East Boraoi.
- **Historical places:** Rang Ghar, Talatal Ghar, Kareng Ghar, Agnigarh and Madan Kamdev archeological site.
To develop the sector, the state government has encouraged private investments for providing financial and logistic support.

Besides the existing national tourism circuit within Assam, the state plans to add several thematic and eco-tourism circuits. The subsidiary and regional circuits would boost domestic tourism.

Number of domestic tourists visiting national parks in Assam

<table>
<thead>
<tr>
<th>Year</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>67,582</td>
<td>110,829</td>
<td>121,877</td>
<td>131,748</td>
<td>149,262</td>
<td>118,510</td>
</tr>
</tbody>
</table>

Number of foreign tourists visiting national parks in Assam

<table>
<thead>
<tr>
<th>Year</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7,522</td>
<td>6,827</td>
<td>8,452</td>
<td>8,522</td>
<td>8,416</td>
<td>8,253</td>
</tr>
</tbody>
</table>

Source: Economic Survey of Assam, 2013-14
Assam is one of the richest biodiversity zones in the world and consists of tropical rainforests, deciduous forests, riverine grasslands, bamboo orchards and numerous wetland ecosystems; Many are now protected as national parks and reserved forests.

Since this region has the highest concentration of bamboo, which accounts for around 60.0 per cent of the total bamboo of the country, Assam has ample scope for bamboo-based industries such as paper manufacturing. The objective of the Government of Assam is to promote bamboo as a substitute for wood and make it the timber of the 21st century.

Assam has rich forests covering nearly a third of its land area. The forests are a reserve of commercially useful products such as timber, bamboo, stone, and cane.

In 2012-13, the state earned US$ 6.2 million of revenue from forest products.

A project on forest and biodiversity conservation is proposed to be taken up with assistance from the French Development Agency at an estimated cost of US$ 76.93 million.

Source: Economic Survey of Assam, 2013-14
The climate and general environment of Assam is well suited for sericulture. Traditional varieties of silk cultured in the state include Eri, Muga and mulberry. Muga silk, known for its fine sheen and golden colour, is used by the local silk-weaving industry, which has contributed to the development of Muga in the state.

In 1982, the Central Silk Board established a regional office at Guwahati for extending guidance and technical assistance in sericulture practices in the state.

Assam is the 4th largest silk producing state in India. The state contributes about 8.3 per cent of total natural silks of India.

Assam enjoys global monopoly in terms of Muga silk (also known as golden silk) production. The state accounts for around 95 per cent of global Muga production. Moreover, Assam is the country’s major Eri silk producer (accounts for 65 per cent of the country’s Eri silk production).

The state government has announced that it will create a special fund to boost production of Muga, Eri and Pat yarn. Furthermore, the creation of exclusive branded products for Eri and Muga silk of Assam as part of the project has been proposed.

In 2012-13, total raw silk produced in the state was 2,068 metric tonnes (MT) up by 74 per cent from previous year. Of the total production, Eri accounted for 1,934 MT, followed by Muga (109 MT) and mulberry (25 MT).

During 2012-13, total area under silk worm food plants was 26,826.5 hectares.

The state had 10,746 sericulture villages, which provided employment to more than 260,000 families in 2012-13.

## Key Approvals Required … (1/2)

<table>
<thead>
<tr>
<th>List of approvals and clearances required</th>
<th>Departments to be consulted</th>
<th>Estimated time taken (days)</th>
</tr>
</thead>
</table>
| Incorporation of the company              | Registrar of Companies     | • Micro and small-scale enterprises: Same day  
• Other applications: Within 90 days  
• Registration of new units under VAT Act: Within 15 days of the receipt of application |
| Allotment of land/shed                    | • A committee headed by Managing Director, Assam Industrial Infrastructure Development Corporation (AIIDC)/Assam Industrial Development Corporation (AIDC)/Assam Small Industries Development Corporation (ASIDC), would allot land/shed of up to one acre under their respective control within the prescribed time period.  
• A nodal officer from the Directorate of Industries and Commerce would be a member in the land allotment committee.  
• Land requirement beyond the limits mentioned above would be allotted by a state-level committee chaired by the Principal Secretary/Commissioner and Secretary, Industries and Commerce Department, with representatives from the Finance Department, Government of Assam, and Revenue Department, Government of Assam.  
• Allotment of land up to one acre and shed up to 500 sq m in the industrial estates/industrial areas/IIDC/growth centres, etc: Within 30 days  
• Others: Within 60 days |
### List of Approvals and Clearances Required

<table>
<thead>
<tr>
<th>List of approvals and clearances required</th>
<th>Departments to be consulted</th>
<th>Estimated time taken (days)</th>
</tr>
</thead>
</table>
| Power                                    | Assam Electricity Regulatory Commission | • Low-tension connection: 30 to 107 days  
• High-tension connection: 34 to 114 days  
• Extra-high-tension connection: 197 days |
| Pollution                                | Pollution Control Board      | Non-polluting industries classified as green category: No approvals required |
| Sanction of incentives/concessions       | • District-level committee (for micro enterprises)  
• State-level committee (for small-scale undertakings)  
• AIDC committee (for medium- and large-scale undertakings) | Within 90 days |

The State Investment Promotion Board (SIPB), headed by the Chief Minister, has been constituted to act as the final authority in matters of policy concerning industrial development of the state.

The board meets once in a quarter to review the industrial and related policies of the state, and to oversee the process of simplification of government rules and regulations for rapid industrial development.
### Cost of Doing Business in Assam

<table>
<thead>
<tr>
<th>Cost parameter</th>
<th>Cost estimate</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel costs (per room per night)</td>
<td>US$ 40–100</td>
<td>Leading hotels in the state</td>
</tr>
<tr>
<td>Residential space rent (per sq ft per month)</td>
<td>US$ 0.14–0.29</td>
<td>Industry sources</td>
</tr>
<tr>
<td>Power cost (per kWh)</td>
<td>Commercial: US$ 0.10</td>
<td>Assam Electricity Regulatory Commission</td>
</tr>
<tr>
<td></td>
<td>Industrial: US$ 0.06–0.08</td>
<td></td>
</tr>
<tr>
<td>Labour cost (minimum wages per day)</td>
<td>Unskilled: US$ 3.0</td>
<td>Ministry of Labour and Employment, Government of India</td>
</tr>
<tr>
<td></td>
<td>Skilled: US$ 4.7</td>
<td></td>
</tr>
</tbody>
</table>

kWh: kilo-Watt hour
<table>
<thead>
<tr>
<th>Agency</th>
<th>Contact information</th>
</tr>
</thead>
</table>
| Assam Industrial Development Corporation Ltd                 | R.G Baruah Road, Guwahati-781024  
Phone: 91-361- 2201215/2202216  
Fax: +91 361 2200060  
E-mail: aidcltd@gmail.com  
Website: www.aidcltd.com                                        |
| Assam Small Industries Development Corporation Ltd           | Bamunimaidan, Guwahati-781021  
Phone: 91- 361- 2550 264/2550 265                                               |
| Assam Hills Small Industries Development Corporation Ltd     | Dilajee, District Karbi Anglong  
Diphu - 782460  
Phone: 91- 3671- 272 648                                                        |
| Assam Agro Industries Development Corporation Ltd            | RK Road, Ulubari  
Guwahati - 781007  
Phone: 91- 361- 2470 997/2470 993                                               |
| Assam Financial Corporation                                  | Vittiya Bhavan, M.S Road  
Paltanbazaar  
Guwahati - 781008  
Phone: 91-361-2739839/2633658  
E-mail: afcghy@gmail.com  
Website: www.afconline.gov.in                                      |
### IT Policy of Assam 2009

**Objectives**
- To facilitate the growth of the IT sector in the state.
- To accelerate the use of information technology in the government at all possible levels to improve efficiency, transparency, accountability and increased productivity.

[Read more](#)

### Industrial and Investment Policy of Assam 2014

**Objectives**
- To generate economic development by accelerating industrialisation including the manufacturing and service sectors in the state.
- To make agro and rural area linked investment a focused program.

[Read more](#)

### Tourism Policy of Assam 2008

**Objective**
- To make tourism an important tool for socio-economic development of the state and place the tourism sector on a high priority in the economic development of the state.

[Read more](#)
<table>
<thead>
<tr>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Hydropower Policy 2007</td>
</tr>
<tr>
<td>- To promote the development of the hydropower sector in the state, which serves as an engine to achieve the objective of promoting all-round development of the region by inducting private participation.</td>
</tr>
<tr>
<td>North East Industrial and Investment Promotion Policy (NEIIPP) 2007</td>
</tr>
<tr>
<td>- To promote the Northeast region as an attractive investment destination through concessions and incentives.</td>
</tr>
<tr>
<td>Bamboo and Cane Policy 2005</td>
</tr>
<tr>
<td>- To promote and support the development of the bamboo sector in a comprehensive manner through a multi-disciplinary, multi-departmental and multi-dimensional integrated approach to provide economic benefits to the people of the state.</td>
</tr>
</tbody>
</table>
Public Private Partnership Policy 2008

Objective

- To attract private sector investment in infrastructure projects in the state with the best possible terms.
Exchange rates (Fiscal Year)

<table>
<thead>
<tr>
<th>Year</th>
<th>INR equivalent of one US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>44.81</td>
</tr>
<tr>
<td>2005–06</td>
<td>44.14</td>
</tr>
<tr>
<td>2006–07</td>
<td>45.14</td>
</tr>
<tr>
<td>2007–08</td>
<td>40.27</td>
</tr>
<tr>
<td>2008–09</td>
<td>46.14</td>
</tr>
<tr>
<td>2009–10</td>
<td>47.42</td>
</tr>
<tr>
<td>2010–11</td>
<td>45.62</td>
</tr>
<tr>
<td>2011–12</td>
<td>46.88</td>
</tr>
<tr>
<td>2012–13</td>
<td>54.31</td>
</tr>
<tr>
<td>2013–14</td>
<td>60.28</td>
</tr>
<tr>
<td>2014-15*</td>
<td>60.6</td>
</tr>
</tbody>
</table>

Exchange rates (Calendar Year)

<table>
<thead>
<tr>
<th>Year</th>
<th>INR equivalent of one US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>43.98</td>
</tr>
<tr>
<td>2006</td>
<td>45.18</td>
</tr>
<tr>
<td>2007</td>
<td>41.34</td>
</tr>
<tr>
<td>2008</td>
<td>43.62</td>
</tr>
<tr>
<td>2009</td>
<td>48.42</td>
</tr>
<tr>
<td>2010</td>
<td>45.72</td>
</tr>
<tr>
<td>2011</td>
<td>46.85</td>
</tr>
<tr>
<td>2012</td>
<td>53.46</td>
</tr>
<tr>
<td>2013</td>
<td>58.44</td>
</tr>
<tr>
<td>Q1, 2014</td>
<td>61.58</td>
</tr>
<tr>
<td>Q2, 2014</td>
<td>59.74</td>
</tr>
<tr>
<td>Q3, 2014</td>
<td>60.53</td>
</tr>
</tbody>
</table>

Average for the year, *Average for first three quarters
India Brand Equity Foundation (IBEF) engaged Aranca to prepare this presentation and the same has been prepared by Aranca in consultation with IBEF.

All rights reserved. All copyright in this presentation and related works is solely and exclusively owned by IBEF. The same may not be reproduced, wholly or in part in any material form (including photocopying or storing it in any medium by electronic means and whether or not transiently or incidentally to some other use of this presentation), modified or in any manner communicated to any third party except with the written approval of IBEF.

This presentation is for information purposes only. While due care has been taken during the compilation of this presentation to ensure that the information is accurate to the best of Aranca and IBEF’s knowledge and belief, the content is not to be construed in any manner whatsoever as a substitute for professional advice.

Aranca and IBEF neither recommend nor endorse any specific products or services that may have been mentioned in this presentation and nor do they assume any liability or responsibility for the outcome of decisions taken as a result of any reliance placed on this presentation.

Neither Aranca nor IBEF shall be liable for any direct or indirect damages that may arise due to any act or omission on the part of the user due to any reliance placed or guidance taken from any portion of this presentation.