



INDIAN INSTITUTE OF MANAGEMENT, AHMEDABAD

## WORKING PAPER

FEASIBILITY STUDY OF SETTING UP INFORMATION  
TECHNOLOGY-ENABLED SERVICES (ITES) & BUSINESS  
PROCESS OUTSOURCING (BPO) HUBS IN THE NORTH  
EASTERN STATES OF INDIA: A REPORT

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## Executive Summary

This report aims at identifying the various state administrative/commercial capital cities in the North East Region where IT-enabled service industry could be set up, and whether the necessary conditions conducive to the industry exist. It is also an attempt to rank the various cities in terms of their investment friendliness when it comes to the ITES industry. This report involves a macro environmental analysis where the focus is mainly on the STEEP sector of the business environment – social, technological, economic, environmental and political aspects that impact competitiveness.

### INTRODUCTION

The Information Technology-Enabled Services – Business Process Outsourcing (ITES-BPO) industry in India in spite of its relatively young and nascent stage, has shown amazing growth and future potential and has created an unparalleled opportunity in India. It started with only a few US companies outsourcing small, relatively low-grade jobs; once technology made it feasible, companies started looking at setting up ITES-BPO centres across the globe due to lower operation costs.

India's unmatched value proposition – significant cost savings, productivity gains and quality improvements have given the country an edge in the global ITES-BPO marketplace. Indian ITES-BPO players are broadly classified into **captive units** and **independent third-party services providers**, with India having over 400 companies, including captive units (of both multinationals and Indian companies) and third-party services providers. The industry in India has undergone tremendous growth and expansion that it is now extending beyond the cities that gave birth to it, largely due to business continuity planning, improvements in key infrastructure in the smaller cities, state governments' initiatives and the need to lower employee costs and attrition. In fact, according to NASSCOM, as much as 40 per cent of the additional employment expected to be generated in the ITES sector in 2005-06 will be in the smaller towns. However, with the cost advantage of outsourcing in India gradually fading out in larger cities, coupled with high attrition rate of the working force, causes us to think about plausible alternatives – one such being the North Eastern states of India.

### NORTH EAST INDIA: CURRENT SCENARIO AND OPPORTUNITIES

The North Eastern Region is blessed with the highest Hydro Power potential in the country on account of the mighty Brahmaputra and its tributaries. The region's technical framework comprises of Industrial Research Institutes, Training Organizations, Consultancy Organization and Testing Centres. All the major towns in the region are connected to the rest of India by National Highways, and

out of the seven cities to be considered in the study, five of them, namely, Agartala, Aizawl, Dimapur, Guwahati and Imphal have their own airports capable of handling wide-bodied aircrafts like Boeing 737 and Airbus A-320.

Although plagued by unemployment, a majority of the unemployed are highly educated, computer-literate, English speaking youths who could not find a suitable job due to the lack of industries in the region. A large chunk of the youths are now working in ITES-BPOs across the country. The fact that the North Eastern States have a legacy of missionary schools, where good English is taught is coming in handy for the industry and offers a huge potential. Moreover, a State such as Nagaland has English as its official language, which offers prime talent for BPO firms.

A thorough analysis of the cities under consideration, namely, Agartala, Aizawl, Dimapur, Gangtok, Guwahati, Imphal and Shillong reveal that Guwahati and Shillong are way ahead of the other cities when it comes to competitiveness in attracting the ITES-BPO sector. Other than Gangtok, all the other cities considered seem to have problems with power supply as well as some level of law and order situation, considering the separatist movement in the region. Most of the states except Sikkim, Manipur and Nagaland have separate ITES policies, while cities like Guwahati, Gangtok and Imphal already has functioning Software Technology Parks under STPI.

With quality manpower no longer an issue for the industry as companies like Ma Foi, Planetworkz and third party BPO firms like the Chennai-based Allsec Technologies Ltd. are already coming to recruit specifically from the North East; the various governments in the region should now have a re-look at their policies and infrastructure scenario.

#### CREATING AN INVESTMENT-FRIENDLY SCENARIO FOR THE ITES-BPO SECTOR IN THE REGION

- A **single-window clearance system** for new businesses operating in the ITES sector.
- An **integrated and stable set of policies** from the respective state governments.
- **Create awareness of these integrated policies among administrators and bureaucrats** responsible for giving approvals and clearances.
- **Make procedures simpler and more transparent**, backed by an **efficient and comprehensive information system**.
- **ITES-BPO townships where the entire infrastructure requirements – manpower, telecom, connectivity, power, etc. will be made easily available.**

## CONTENTS

|   |    |
|---|----|
| <b>THE ITES-BPO INDUSTRY IN INDIA</b> .....                           | 4  |
| THE INDIA ADVANTAGE.....  | 6  |
| INDUSTRY CHALLENGES FACED BY INDIA .....                              | 7  |
| GROWTH OF THE INDUSTRY: AN OPPORTUNITY FOR SMALL TOWN INDIA.....      | 8  |
| <b>SETTING UP BPO OPERATIONS IN INDIA</b> .....                       | 10 |
| INFRASTRUCTURE REQUIREMENT FOR AN ITES COMPANY .....                  | 11 |
| DRAWING UP THE BPO AGREEMENT .....                                    | 12 |
| CHALLENGES .....  | 12 |
| <b>BUSINESS ENVIRONMENT IN THE NORTH EASTERN REGION</b> .....         | 14 |
| INFRASTRUCTURE.....   | 15 |
| WHY NORTH EAST INDIA? .....   | 17 |
| <b>SCOPE AND METHODOLOGY</b> .....                                    | 19 |
| <b>CITY PROFILES</b> .....  | 22 |
| GANGTOK, SIKKIM.....  | 22 |
| AIZAWL, MIZORAM .....   | 26 |
| AGARTALA, TRIPURA.....  | 29 |
| GUWAHATI, ASSAM .....   | 33 |
| SHILLONG, MEGHALAYA .....   | 38 |
| IMPHAL, MANIPUR.....  | 43 |
| DIMAPUR, NAGALAND .....   | 46 |
| <b>ANALYSIS AND CONCLUSION</b> .....                                  | 49 |
| CREATING INVESTMENT FRIENDLY AND ITES FOCUSED STATE GOVERNMENTS ..... | 51 |
| <b>EXHIBITS</b> .....   | 54 |
| <b>REFERENCES</b> .....   | 58 |

# Section 1

## THE ITES-BPO INDUSTRY IN INDIA

The Information Technology-Enabled Services – Business Process Outsourcing (ITES-BPO) industry in India is a relatively young and nascent sector, less than a decade old in this business segment. Despite its recent arrival on the Indian map to form a part of the export-oriented IT software and services environment, the industry has shown amazing growth and future potential. The boom in this segment has created an unparalleled opportunity in India. What began as an activity confined to multinational companies, is today a broad based business platform backed by leading Indian IT software and services organizations and other third party providers.

To understand the origins of the Indian ITES-BPO revolution and why it represents a huge opportunity for the country today, we need to go back to recent management history. During the 90's, C.K. Prahalad's core competency theory caught the imagination of the corporate world. The basic lesson of this new theory – identify and focus only on your core competencies, and get out of everything else – was simple and striking, and had an enduring effect on the operations of many big organizations. Apart from the fact that firms could focus better on core competencies, outsourcing had other big advantages too especially in the form of big savings with equal or sometimes even better quality of work.

Initially, only a few organizations in the US tested the waters by outsourcing small, relatively low-grade jobs like storage of old records. Later, as their confidence grew, they started entrusting more valuable functions – like payroll accounting or customer care or the entire HRD – to outside firms. Till the end of the 90's, most of the BPO work was handled by companies and centres in the US and Europe. But once technology made it feasible, BPO companies started looking at setting up centres across the globe because of the cheaper costs of operations. And for much the same reasons that make India such a good base for software services – inexpensive but highly qualified English-speaking labour – a good chunk of BPO work is today shifting to the country, and the trend seems likely to accelerate (Exhibit 1).

According to NASSCOM, there are currently over 400 companies participating in the ITES-BPO segment and the numbers are growing every year.

In 2003-04, the Indian ITES – BPO industry progressed into the third phase of industry evolution - highlighted by the greater degree of depth, specialization and competition. As the supply-side dynamics matured, so did the demand. Signs of industry maturity, witnessed over the last year, were typified in the type of contracts entered, the proliferation of service offerings, the manner of resolving industry-wide concerns /issues such as managing attrition and building scale, and the pricing and engagement models adopted as the vendor landscape further consolidates.

Players in the Indian ITES-BPO industry are broadly classified into **captive units** and **independent third-party services providers**. Captive units continue to dominate the segment, accounting for over 65 percent of the value of work off-shored to the country. While the independent /third-party ITES-BPO vendors outnumber the captive units, the scale of work undertaken by each unit in the latter category is significantly higher. There were over 400 companies operating within the Indian ITES-BPO space, including captive units (of both MNCs and Indian companies) and third-party services providers.

The ITES-BPO market, which came into existence with the entry of the MNCs, expanded its base once Indian IT software and services companies, especially the ones with a strong base of outsourcing/offshoring experience and customers, stepped into the market. Today, these IT leaders are leveraging their existing strengths such as broad skill sets and global clientele, to create a portfolio of ITES-BPO offerings. The market has gained additional players with the arrival of non-IT companies on ITES-BPO turf. A number of leading industrial groups in the country have set up ITES-BPO facilities with a view to participate in this emerging opportunity.

In the past, when a customer wanted an offshore solution, an IBM or an EDS would partner with an Indian vendor. But things took a turn for the worse, when recession hit the US economy and customers began to squeeze billing rates. Suddenly, offshoring seemed a winning proposition, especially given the cost arbitrage that countries like India offered. For the global players, margins in the US were no longer as lucrative as they used to be. They have dropped to 6-7 per cent over the last three years. So, instead of passing on revenues to Indian companies, it made more sense for the global firms to set up their own offshore operations in India and take advantage of the cost arbitrage.

Even as the global BPO giants begin scaling up in India, the third-party Indian BPO firms have to now figure out how to stay in the race. Their relatively small size is a serious handicap. Barring the bigger players - WiproSpectramind, EXL and WNS - none of the others today are anywhere close to the requisite scale. Without scale, it will not be possible to bring in the blue-chip contracts.

Now, not too many overseas BPO industries have the depth or the maturity that the Indian BPO industry has developed. An exception would be Australia which has enough BPO firms with the maturity to compete in verticals like high-end financial services. However, while a few of the larger Australian firms undertake offshore work from the US, the industry has not been able to market Australia as a viable offshore location as aggressively as India. That's why most of the major M&A deals so far have been bagged by Indian BPO firms (Exhibit 2).

The ITES-BPO market today is characterized by the presence of companies such as Dell, HP, EXL, WNS, Sitel, HSBC, the Standard Chartered Bank, Convergys, Wipro Spectramind, AOL, Daksh, MsourceE, among others.

#### THE INDIA ADVANTAGE

The country's unmatched value proposition for customers—based on the factors such as cost savings, productivity gains and quality improvements have given India an edge in the global ITES-BPO marketplace. India is taking the lead in this environment on account of the following factors:

- Abundant, skilled, English-speaking manpower, which is being harnessed even by ITES hubs such as Singapore and Ireland
- Improving telecom and other infrastructure which is matching global standards
- Strong quality orientation among players and their focus on measuring and monitoring quality targets
- Fast turnaround times and the ability to offer 24x7 services based on the country's unique geographic location that allows for leveraging time zone differences
- Proactive and positive policy environment which encourages ITES-BPO investments and simplifies rules and procedures
- A friendly income tax structure, which places the ITES-BPO industry on par with IT services companies

The industry in India continues to grow from strength to strength, witnessing high levels of activity – both onshore as well as offshore due to the following growth drivers:

- Competitive pressures on client organizations
- Ability of vendors to ramp-up operations rapidly
- Widening breadth of services, enabling customers to deepen their offshore engagements
- Shift towards high-value services

- Sustained cost advantage
- Delivery process enhancement and improvement
- Resource flexibility for clients
- Access to an abundant skill pool

Moreover, the Indian ITES-BPO sector's focused attention on quality has enabled it to offer the following advantages to outsourcing customer organizations:

- Access to highly skilled personnel, who are even more qualified than personnel working for shared services centers in the existing parent location
- Access to service facilities by all divisions of a company (in the case of in-house providers) and across different companies (in the case of third party providers), facilitating the transfer of best practices across all of them
- Dramatic improvements in process quality and productivity compared to those in the parent location
- Continuous quality and productivity improvements—a year-on-year improvement in the process metrics

#### INDUSTRY CHALLENGES FACED BY INDIA

While India, with its vast base of English-speaking, Graduate-level people, is geared up in terms of manpower for the ITES-BPO industry, much more needs to be done. With outsourcing/ offshoring of processes becoming the name of the game, a very large pool of skilled professionals are going to be needed to cater to the immense requirements of this sector. The challenges that this industry faces in terms of talent include the following:

- Scarcity of “industry-ready,” “industry-relevant” manpower, which goes beyond an English speaking workforce
- Scarcity of professionals who are equipped with the necessary “domain” knowledge to cater to specific verticals such as banking, insurance, telecom, retail, manufacturing, etc.
- Scarcity of personnel equipped with foreign language skills such as fluency in French, Spanish, Mandarin, Japanese, Italian, etc.—which offer huge outsourcing potential
- High rates of attrition
- Skill set requirements: A variety of talent is needed for filling the job requirements of the ITES-BPO market. Professionals with both core and soft skills will find a fit within this industry.



The current system of education does not provide some of the necessary skills for ITES/IT, even at the graduate/post-graduate level. Resources produced may have a strong conceptual/theoretical background but often lack communication and vocation-specific skills and the creative drive or specific regulatory certifications required by clients in foreign countries.

#### GROWTH OF THE INDUSTRY: AN OPPORTUNITY FOR SMALL TOWN INDIA

The ITES/BPO industry in India is experiencing its third wave of growth. In the first phase, the industry was dominated by captive centers of large multinationals such as GE, American Express and Swiss Air, who set up operations in India. In the second phase, the growth attracted numerous entrepreneurs (in many cases, employees of multinationals who quit their jobs to set up their own ITES ventures). The third phase is geographically dispersed with new locations emerging on the horizon.

The outsourcing industry is expanding beyond the cities that gave birth to it to encapsulate a much larger pool of talented professionals. According to an article in the September 27, 2004 issue of Newsweek, "India's Mini Bangalores", experts believe that, "As the outsourcing pie continues to grow, mega cities will get the big deals while smaller cities snatch more modest but still lucrative contracts. There are several other cities that are being explored. Nagpur, Lucknow, Allahabad, Varanasi, larger cities in Kerala, Punjab, Tamil Nadu, Karnataka, and **the North East** are all bustling centers which have a large stream of educated English speaking people.

The trend has been largely driven by four factors:

- The need for Business Continuity planning, to preempt the exposure to a particular city, which has forced most companies to diversify to alternate locations.
- Improvement in key infrastructure areas like power, telecom bandwidth and real estate in newer locations
- The desire by state governments to attract investments, which has resulted in attractive policy environments and incentives being offered
- The need for ITES companies to lower operating costs especially employee costs and attrition.

In fact, according to NASSCOM, as much as 40 per cent of the additional employment expected to be generated in the ITES sector in 2005-06 will be in the smaller towns. On the flip side, however,

companies may find it all the more difficult to send middle and senior management officials to these locations to take charge of the new centres. There is a general hesitation on the part of officials to relocate themselves in smaller cities. But once this hurdle is crossed, companies realize that establishing a facility in smaller towns has its own benefits. For instance, there are not too many competing BPO players and hence the fight for talent is not as intense. Also, as employment opportunities are quite limited in these cities, companies do not need to look at high salaries to retain employees.

The setting up of BPOs in smaller towns bring with it employment opportunities in transportation and maintenance. Moreover, small towns like tier II and tier III towns often have reasonably good infrastructure in terms of academic institutions. There is ready-made supply of human resources and the assumption is that many of these students would look at staying back in such cities if quality jobs were available.

For companies, this translates into lower attrition levels. According to a study by Nasscom-KPMG, even as tier- I cities are attracting IT-ITES investments and creating thousands of jobs, escalating real estate costs, paucity of skilled IT professionals and overstressed infrastructure are creating challenges for these organisations. Increasingly, it is being felt that the other Indian satellite towns and tier II and III cities need to be developed for the sector so that some of the pressure can be taken off the country's silicon cities as these centres already offer advantages in terms of cheaper real estate, access to relevant skilled manpower and gradually improving telecom and physical infrastructure for drawing global and Indian IT majors.

## Section 2

### SETTING UP BPO OPERATIONS IN INDIA

Setting up a successful ITES-BPO business in India is based on a range of factors, which become the key building blocks for the operation. A company, for instance planning to set up a ITES-BPO facility in India, will need to select a suitable location within the country that offers a conducive environment for the growth of the industry. Typically, the criteria that companies consider when they evaluate ITES-BPO investment destinations include the following:

- Manpower availability/cost
- Physical infrastructure
- Ease-of-starting operations
- Government policies
- Real estate (cost and availability)
- Origin of promoters

Overseas organizations as well as their India-based counterparts looking at setting up operations in India need to consider the following factors:

- **Incorporating a company:** There are mainly two types of companies in India: public and private companies. A private company has more flexibility and is easier to operate than a public company. It takes around 30-40 days to incorporate a company in India.
- **Registering with the STPI:** The STPI grants approval to establish a unit and specifies the amount of capital goods that can be imported, the minimum export performance and the net foreign exchange earnings as a percentage of exports. The units in the STPI are also granted certain indirect tax benefits, such as exemption from the payment of custom duties.
- **DoT approval:** The DoT has to give its approval for the setting up of a call center in India. The DoT guidelines on call centers classify them within the ambit of other service providers.
- **Exit options:** Exit options take the following forms:
  - Shareholders of Indian BPO companies can exit the company either through a transfer of shares or other routes
  - Under Indian exchange control laws, the transfer of shares from a resident to a non-resident will require the prior approval of the Foreign Investment Promotion Board (FIPB) and the Reserve Bank of India (RBI)
  - The transfer of shares from a non-resident to a resident requires the prior approval of the RBI. The RBI ensures that the price of the transfer is not above a maximum

price, which is based on the NAV (net asset value) of a private company and the price on the stock exchange for a listed company

- Under the provisions of the IT Act, gains realized on sale/transfer of shares on the Indian company by the foreign company would attract capital gains tax in India.
- Long term capital gains realized on sale of shares of Indian companies not listed on a recognized stock exchange in India will be taxed at the rate of 20 percent and a surcharge of five percent
- Long term capital gains realized on sale of shares of Indian companies listed on a recognized stock exchange in India will be taxed at the rate of 10.5 20 percent
- Short term capital gains realized by a domestic company will be subject to tax at the rate of 36.75 percent
- It may be possible to reduce the capital gains tax to zero, if the investments are routed through Mauritius and the operations are structured so as to avoid a PE in India
- The shareholders of the BPO company can exit at an IPO. However, if the shareholders are treated as promoters of the company, there are certain lock in requirements on the shares held by such promoters. The shareholders can exit from the BPO company through a merger of the BPO company with another company or after a winding up of the Indian company

#### INFRASTRUCTURE REQUIREMENT FOR AN ITES COMPANY

A fully-functional ITES-BPO set up requires the following basic infrastructure in order to perform its activities effectively<sup>1</sup>:

- A centrally located and well-networked facility
- Fully air-conditioned
- At least 150% power back-up facility
- Workstations on UPS
- State-of-the-art servers
- Next generation internal cabling
- Desktop PCs
- 150% redundancy
- Facility operational 24hrs X 365 days

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<sup>1</sup> *SBP Handbook of Computer and IT Related Projects*, SBP Infotech, SBP Consultants and Engineers Pvt. Ltd., Delhi, 2002. pg 282

## DRAWING UP THE BPO AGREEMENT

The BPO agreement, which defines the relationship between the concerned parties and the nature of the transaction can take myriad forms including the following:

- A third party agreement, where the customer and the vendor are not related
- A captive agreement, where the customer and vendor are related parties
- Build-Operate-Transfer agreements where the vendor builds and develops the BPO operation for the customer and at a future date transfers it to the customer.

## CHALLENGES

There are various challenges involved in setting up and running an ITES-BPO set up successfully. These constraints and challenges can be broadly grouped into three major groups<sup>2</sup>.

**Infrastructure Constraints:** These include constraints related to power, bandwidth limitations, last mile reliability and an ITES standard building among others.

**Manpower Constraints:** The manpower pool need to be created, trained, managed, motivated and retained. Manpower will be required across all levels in BPO companies, but estimates based on current staffing patterns suggest that there could be a significant requirement of experienced people at the manager/team leader level. The need for action is urgent, because the availability of people with relevant skills has to be generated at least 2-4 years ahead of actual demand. There may also be need for a rethink on the specific skills provided by the education system, with the more complex tasks requiring post-graduate qualifications. Specific 'delivery-related' skills having to do with language, analytical ability, computer proficiency, customer service orientation and behavior would also be needed. In order to meet the skill requirements of the ITeS industry, the Nasscom- KPMG report recommends remedial action to plug gaps in each aspect of the education lifecycle<sup>3</sup>.

- People are not attracted to ITeS because they are not aware of employment options
- ITeS is perceived as largely requiring IT skills
- Jobs in the ITeS industry lack esteem

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<sup>2</sup> *SBP Handbook of Computer and IT Related Projects*, SBP Infotech, SBP Consultants and Engineers Pvt. Ltd., Delhi, 2002. pg 314

<sup>3</sup> *BPO: Two Steps Forward, One Step Back*, Dataquest India, 2005. Retrieved on November 23, 2005 from [http://www.dqindia.com/content/DQTop20\\_05/BestEmployers2005/2005/105090226.asp](http://www.dqindia.com/content/DQTop20_05/BestEmployers2005/2005/105090226.asp)

- Employment is not seen as a long-term career option
- Key skills required by the industry are not developed through the current educational system
- A standardized modular curriculum for ITeS is lacking
- There is no national-level mechanism for certifying skilled manpower, nor is there an understanding of specific parameters to test and certify.
- There is a lack of direct placement links between institutions and ITeS industry, especially in the smaller cities.

**Operational Constraints:** Some of the operational constraints involve managing a 24hour operation, transportation and logistics, administration, security concerns, activity scheduling, etc.

## Section 3

### BUSINESS ENVIRONMENT IN THE NORTH EASTERN REGION

The North East India or simply the North East as usually referred to in India is a region as interesting and varied as India itself. It comprises of Sikkim and the seven states of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura (Exhibit 3). It is hilly, it has plains on both sides of the mighty Brahmaputra with the mighty Himalayan range around it.

The pace of development in the hilly areas and plains differ considerably since historical days. The valleys are economically active areas of the region, the Brahmaputra valley being the most active. Tribal population forms only one fourth of the population of the North East, despite the fact that in four states i.e., Mizoram, Meghalaya, Nagaland and Arunachal Pradesh, tribals are in majority and in Mizoram, they constitute as high as 95% of the population. Though the region is diverse and heterogeneous, it is also homogeneous in the sense that the social stratification found in other parts of the country is not present in the North East. Looking at the slow paced growth in North Eastern states of India, in 1997 the Planning Commission of India had studied all the dimensions related to the growth of this region and had presented its findings in a high level commission report to the then Prime Minister of India<sup>4</sup>.

There are differences among the states in the North Eastern region with respect to their resource endowments, level of industrialization as well as infrastructural facilities. The industrial sector has mainly grown around tea, timber in Assam and mining, saw mills and plywood factories in other parts of the region. The economy of the region is still primarily agrarian but its full potential is yet to be exploited. Since agriculture and industry has not really taken off in spite of the potential in the form of vast unexploited resource base available in the region. The pressure for employment is on the service sector.

The contribution of agriculture to state domestic income is much higher in this region, except for Meghalaya and Nagaland. Mining in case of Meghalaya and forestry and logging in case of Arunachal Pradesh and Nagaland are important contributors to NSDP. The contribution of construction is also high in this region.

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<sup>4</sup> Planning Commission of India 1997, *Transforming the North East*, High Level Commission Report to the Prime Minister. Retrieved on January 16, 2006 from <http://planningcommission.nic.in/reports/genrep>

Growth in per capita income is almost stagnated in Assam in the 90's, was better than the national average in Meghalaya, an increasing trend in case of Arunachal Pradesh and practically no progress in case of Manipur, Nagaland and Tripura.

The North East Industrial Policy has attracted number of investors including multi-national corporations (MNCs) in the last few years. Prior to 1998, the scenario of industrial sector in the Northeast was limited to some small-scale sector except the oil, tea, plywood and some state owned public sector units. But in present days, a number of multinational companies have come set up industries either themselves or through franchise. The New Industrial Policy of North East offers competitive advantages to foreign investors in settings up industries. Northeast offers certain unique opportunities for investment and the region has a favorable investment environment. There is a perceptible air of optimism, which was missing till few years back.

North East Pure Drinks, a franchise of the Pepsi, with an investment of Rs.450 million was the first MNC in the Northeast region. Cosmo, a franchise of the Joolen International from America has also set up a unit for the production of toothpaste, hair dye, and shampoo. M/s Glaxo SmithKline Consumer Health Care has also set up a Horlicks Processing & Packaging Plant at Mongaldoi with an investment of Rs 60 million. and an employment of 100 persons in franchisee with M/s SRD Nutrients<sup>5</sup>.

#### INFRASTRUCTURE

- **Power:** The North Eastern Region is blessed with the highest **Hydro Power** potential in the country on account of the mighty Brahmaputra and its tributaries which is estimated to be about 48000 MW. Although this constitutes 30% of total reserves of India, less than 3% of this has so far been harnessed.
- **Infrastructure:** The region's current **industrial framework** consists of altogether 64 numbers of Industrial Estates, one Industrial Infrastructure Development Centre, one Export Promotion International Park (under processing), 5 numbers of Industrial Area and 23 numbers of Growth Centres at present. Sheds are provided with various facilities like water supply, power etc. These cover huge amount of areas in various places of NE States.

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<sup>5</sup> Bharti, Nalin. Opportunities for MNCs in India's North East, Samaw.com. Retrieved on November 23, 2006 from <http://www.samaw.com/neindia/articles/MNCs.htm>



Adequate communication facilities have also been provided. Quite a lot of industries are being set up in these places throughout the North Eastern Region.

The situation at present shows that, there is an adequate industrial framework for setting up of industries in the region. What is called for is the formulation of increasing number of technically feasible and economically viable project proposals for financial support of banks and financial institutions.

- **Financial Institutions** are playing a vital role in the region's financial system. These are gaining importance in the growing economy as these institutions are providing long term capital requirements of the industry. All the states in the North Eastern Region now have state level financial institutions. IDBI, IIBI, IFCI, NSIC, NCDC, NABARD and SIDBI (since April 1990) have also set up their Regional Offices in all the other six states of the region. While Assam has a separate State Financial Corporation and State Industrial Development Corporation, the other states of the Region have twin function SIDCs. AFC (covering Assam, Manipur and Meghalaya), AIDC and the twin function SIDCs are all eligible for refinance facilities from IDBI and SIDBI by way refinance also through the network of Commercial Banks, Regional Rural Banks and Corporation Banks.

To obtain industrial development on a scale achieved by many states in the rest of the country, a special financial institution North Eastern Development Finance Corporation (NEDFi) was incorporated in August 1995 and was inaugurated on 23rd February, 1996. Its headquarter is situated in Guwahati. On a consortium basis, the state level institutions and banks can finance projects costing up to Rs. 3 Crores. For projects costing more than Rs. 3 Crores, direct finance is available from IDBI, IFCI, ICICI and NEDFi.

Besides the financial institutions the three major investment institutes of the country, Life Insurance Corporation of India (LIC), General Insurance Corporation of India (GIC) and the Unit Trust of India have also played a dominant role in providing funds by subscribing to the securities issued by the companies to the region's corporate sector.

In North East economy there are some people, called savers, whose current income exceeds current expenditure, while there are others, called investors whose current income is less than the current expenditure. To establish a bridge between the savers and the investors and to facilitate the transformation of savings into investment and consumption, a secondary

market, Gauhati Stock Exchange was set up in 1981. It is providing liquidity to the securities issued in the primary market. It also regulates the trading activities in the market and ensures a measure of safety and fair dealing to the investors.

- The region's **technical framework** comprises of Industrial Research Institutes, Training Organizations, Consultancy Organization and Testing Centres. Amongst the research institutes, 1) Indian Council of Agricultural Research for north eastern hill region at Borapani 2) Regional Research Laboratory, Jorhat 3) Tocklai Experimental Station, Jorhat and 4) Assam Agricultural University, Jorhat are the main ones. These Organisations have been trying to develop technologies with the utilization of indigenous resources. Over the years their laboratories have generated new knowledge and new products, processes and technologies. Their mission is to provide scientific & industrial research & development that maximises the economic, environmental and societal benefit for the people of the North East. At this juncture, mention may also be made of the Indian Institute of Technology at Guwahati and the Regional Engineering College at Silchar, and their potential to contribute to the overall economic growth of the region.
- **Connectivity:** All the major towns in the region are connected to the rest of India by National Highways, and out of the eight towns to be considered in the study, six of them, viz., Agartala, Aizawl, Dimapur, Guwahati, Imphal and Silchar have their own airports capable of handling wide-bodied aircrafts like Boeing 737 and Airbus A-320. The Guwahati airport is being upgraded to international standards with its runway extended to 12000 feet to accept Boeing 747s. With the gradual lifting of the restricted area permit regime in the N.E. and the opening of new trade and tourist opportunities, international flights should operate out of the region to destinations like Dhaka, Chittagong, Mandalay and Yangon. The remaining two towns, viz., Gangtok and Shillong are just a few hours drive from the nearest airport and railhead.

#### WHY NORTH EAST INDIA?

The North Eastern Region, like most undeveloped areas across the country, has been plagued by unemployment for a long time now. A majority of the unemployed, especially in states like Assam, Sikkim, Manipur, Nagaland and Meghalaya are highly educated, computer-literate, English speaking youths who could not find a suitable job due to the lack of industries in the region. As such, reasonably priced and easily available and good quality labour is found in abundance especially in the

major towns of the North East. A large chunk of the youths from the region are now currently working in BPOs all over the country, and are interested to work from home had there been an opportunity. Moreover, the youths of the region, despite its economic backwardness, are very much in tune with Western culture – music, lifestyle, etc. which can be included as an added advantage in an industry like ITES-BPO.

The North Eastern States have a legacy of missionary schools, where good English is taught, and this comes in handy for the call centre industry and offers a huge potential. Moreover, a State such as Nagaland has English as its official language, which offers prime talent for BPO outsourcing companies. Moreover, there are reports that the industry has started accepting people from North East as apart from possessing good language skill sets they have better service orientation, which is essential for the industry<sup>6</sup>. In fact, companies like NIIT Planetworkz, has set up close to 30 Time Machines, an online recruitment kiosk, at different places in North Eastern States to source the talent with right language skills. Moreover, companies like Allsec Technologies Ltd., a Chennai-based third party BPO firm offering both voice and non-voice services as well as Ma Foi, a leading staffing company see the North Eastern Region as a potential source for hiring talent<sup>7</sup>.

There are various other reasons which make the North East region an attractive place to invest in, not only from the ITES-BPO industry point of view, but also from a general investor's perspective:

- Growth Centres, IIDCs, Notified Industrial areas have been converted into Total Tax Free Zones for the next 10 years.
- Subsidies on Transport, Capital Investment, and Interest on the Working Capital etc. are available for industries in the NE Region.
- The region is specially attractive for foreign investment as:
  - It is close to Myanmar, the gateway to the ASEAN countries. South East Asia is one of the fastest growing potential markets today.
  - North East India has the potential to emerge as the strategic base for foreign and domestic investors to tap this market. Both land and water routes could be made available to investors for export to East and South East Asia.
  - Proximity to the SAARC countries of Bhutan, Bangladesh and Nepal gives foreign investors the advantage of international trade through SAPTA (South Asian Preferential Trading Agreement).

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<sup>6</sup> *Call centres favour talent from NE States*, January 2003. Retrieved on November 23, 2005 from <http://www.blonnet.com/2003/06/14/stories/2003061402790500.htm>

<sup>7</sup> *Allsec Spreads Net to North-East for Talent*, January 3, 2006. Business Standard Ahmedabad Edition, p15

## Section 4

### SCOPE AND METHODOLOGY

This report aims at identifying the various state administrative/commercial capital cities in the North East Region where IT-enabled service industry could be set up, and where conditions – government policies, business environment, manpower availability, law and order situation, etc. – conducive to the industry exist. It is also an attempt to rank the various cities in terms of their investment friendliness when it comes to the ITES industry.

This report involves a macro environmental analysis where the focus is mainly on the STEEP sector of the business environment, covering the social, technological, economic, environmental and political aspects that impact competitiveness. These factors are considered to be beyond the direct influence of an individual organization<sup>8</sup>. For the purpose of the study, they are broadly grouped under policy support and infrastructural support given by the respective state governments to the IT and ITES industry.

The report further divides the business environment into three distinct levels on the basis of which analysis was done:

- **The general environment** is broad in scope and has long-term implications. However, it is beyond the control of any single organization. Examples include demographics, technological advancements, regulatory climate, etc.
- **The operating environment** is the competitive or market environment that normally has relatively specific and immediate implications on the organizations. Examples include suppliers, labourers, customers, etc.
- **The internal environment** includes the forces that operate within an organization which can impact its performance in the business environment.

In addition to gathering information from various secondary sources, this report also incorporates views, insights and opinions from the industry as well as the Ministry of Information Technology. Interviews with the likes of people like Mr. Ravi Kurani, Business Development Manager, Motif India as well as with Mr. Abbasi, Director, Ministry of Information Technology helped in giving a

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<sup>8</sup> Fleisher, Craig S. & Bensoussan, Babette. *Strategic and Competitive Analysis: Methods and Techniques for Analyzing Business Competition*. New Jersey: Prentice Hall.

more balanced perspective to the whole report, with views from both the industry as well as the Government being considered based on these interviews.

In order to assess the competitiveness of the different cities based on parameters such as telecom and physical infrastructure, IT orientation and policy support provided, each city was ranked based on the various factors given in the following table:

| PARAMETERS                         | FACTORS  | POINT ALLOCATION                | WEIGHTAGE | TOTAL PARAMETER WEIGHTAGE |
|------------------------------------|--|---------------------------------|-----------|---------------------------|
| Govt. Policy                       | Separate ITES policy                               | 1 or 0                          | 3.65      | 14.60                     |
|                                    | ITES sector as Thrust Area                         | 1 or 0                          | 3.65      |                           |
|                                    | Incentives and subsidies specific to ITES sector   | 1 or 0                          | 3.65      |                           |
|                                    | Business savvy Government                          | 1 or 0.5                        | 3.65      |                           |
| Manpower                           | Educational Institutes – High schools              | Institutes/Benchmark No.        | 4.00      | 12.00                     |
|                                    | Educational Institutes – Colleges                  | Institutes/Benchmark No.        | 4.00      |                           |
|                                    | Educational Institutes – Professional Institutes   | Institutes/Benchmark No.        | 4.00      |                           |
| Telecom Infrastructure             | Existence of STPI                                  | 1 or 0                          | 4.87      | 14.61                     |
|                                    | No. of Telecom Service Providers                   | Providers/Benchmark No.         | 4.87      |                           |
|                                    | Broadband connectivity                             | 1 or 0                          | 4.87      |                           |
| Connectivity & City Infrastructure | Road links (connectivity throughout the year)      | 1 or 0.5                        | 3.93      | 15.72                     |
|                                    | Rail links   | 1 or 0                          | 3.93      |                           |
|                                    | Airport – Number of cities connected               | Cities connected/ Benchmark No. | 3.93      |                           |
|                                    | transportation/Commuting                           | 1 or 0.5                        | 3.93      |                           |
| Power                              | Power  | 1 or 0.5                        | 14.60     | 14.6                      |
| Law & Order                        | Law and order situation – Safety, crime rate, etc. | 1 or 0.5                        | 9.49      | 28.47                     |
|                                    | Law and order situation – Militancy                | 1 or 0.5                        | 9.49      |                           |
|                                    | Law and order situation – Bandhs and strikes       | 1 or 0.5                        | 9.49      |                           |

NOTE: Parameters and Weightage partly based on NASSCOM – Netscribes Study on City Competitiveness

#### Explanations

- The parameters and weightage are partly based on a NASSCOM study *The ITES-BPO Super 9: A NASSCOM – Netscribes Study on City Competitiveness* (Exhibit 4)
- In factors where point allocation is “1 or 0”, 1 point is allocated if a particular factor is present in a city which could ultimately contribute to the positive growth and development

of an ITES industry, while 0 point indicates absence or lack of such a factor. The same applies for factors with point allocation of “1 or 0.5”.

- The ‘business savvy-ness’ of a government is mostly based on the various yearly reports “*The Best States to Invest In*” by Business Today.
- The *Benchmark Numbers* indicate the highest possible point/number which can be scored by a city. E.g., in the case of No. of telecom providers, since Guwahati has the maximum number of providers, that number becomes the benchmark based on which the other cities’ scores are normalized.
- In the case of *Educational Institutes*, any institute where more than half of its students are non-local is given 2 points, while the other institutes carry 1 point each.
- The factors “Entrepreneurial history” and “City Perception” in the NASSCOM study *The ITES-BPO Super 9: A NASSCOM – Netscribes Study on City Competitiveness* is being replaced with “Law and Order Situation” in the case of this report. In the North Eastern region, the law and order situation plays a significant role in influencing the business environment and entrepreneurial drive among the people, hence, more points (28.47% of the points) are allotted to this factor.
- “Manpower” is allocated a lesser percentage than that allocated in the Nasscom – Netscribes Report as all the cities in the North East have more or less equal standing as far as this parameter is concerned.
- Since “Real Estate” as a deciding factor for setting up an ITES-BPO in the North Eastern cities is cheap and relatively easy to get, this factor has been replaced by “Connectivity” in the form of linkages through roads, railways, airports and public transportation systems.

## Section 5

### CITY PROFILES

#### GANGTOK, SIKKIM

Gangtok is the capital and largest town of Sikkim known for its clean surroundings and temperate climate. Mountainous terrain results in the lack of train or air links, limiting Gangtok's potential for rapid industrial development. The government is the largest employer in the city, both directly and as contractors.

Gangtok receives around 200,000 tourists and earns Rs. 42 crores annually. Its economy does not have a manufacturing base, but cottage industries such as watch-making, country-made alcohol and handicrafts are present. Among the handicrafts are the handmade paper industry made from various vegetable fibers or cotton rags<sup>9</sup>.

Gangtok's close proximity to Darjeeling and Kalimpong, coupled with the large English-speaking populace in the region is definitely an added advantage for the city. Moreover, the North Eastern Development Finance Corporation has identified the State as having great potential for IT enabled services as well as hydro power.

With increasing liberalization at both the economic level and at the societal level, business protocol has begun to adhere to western standards<sup>10</sup>.

POPULATION (2001): 62,979  
 POPULAR LANGUAGES: Nepali, English & Hindi  
 PER CAPITA INCOME (STATE): Rs.9,472/- (1995-96 at current prices)  
 POWER GENERATED State sector (1999-2000): 28.77 MU

<sup>9</sup> *Gangtok*, WIKIPIDIA *The Free Encyclopedia*. Retrieved November 27, 2005 from <http://en.wikipedia.org/wiki/Gangtok>

<sup>10</sup> Gangtok: Money & Business, JourneyMart.com. Retrieved November 28, 2005 from <http://www.journeymart.com/DEplorer/AsiaIS/India/Sikkim/Gangtok/default.asp?SubLink=DEplorer%2FAsiaIS%2FIndia%2FSikkim%2FGangtok%2FviMoney%5FInc%2Ehtm>

## POLICY SUPPORT

- Central and State sales tax shall be exempted for a period of 9 (nine) years, from the date of commencement of actual commercial production.
- The BPO sector (Electronics & Software) came under the State's *Thrust Areas*.
  - Subsidy of 30 percent of power tariff to industrial units coming up under Growth Centre or Thrust Areas.
- 100% reimbursement of power bill for consuming upto Rs.50,000/- (Rupees fifty thousand) per annum.
- Green Channel Committee: A prospective investor should get all his requirements and information relating to setting up of any trade or business cleared through a single authority. The Department of Industries will offer this one stop facility through a Green Channel Committee headed by the Secretary Industries, with officials of other concerned departments.
- Government will reimburse annually up to 30% of the realistic wage bill for local tribal employees – for 3 years from the date of commencement. The maximum limit of such subsidy is Rs.1 lakh.
- Fifty percent of the cost incurred on the training of local employees will be reimbursed subject to the following conditions, namely:
  - Such trained person being absorbed in the unit, failing which the unit will refund the subsidy amount paid for the same.
  - Training shall be conducted in an Institute approved by the State Government.

## INFRASTRUCTURE SUPPORT

STPI: A Software Technology Park providing bandwidth facilities to potential investors has been functional for the last 6 months<sup>11</sup>.

TELECOM: Bharat Sanchar Nigam Limited has launched its dataone broadband services in the state, and the services were currently available only in Gangtok and its immediate neighbourhood like

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<sup>11</sup>*Initiatives in IT Sector*, Sikkim Government. Retrieved November 28, 2005 from [http://sikkim.gov.in/ASP/Misc/sg\\_initiatives.htm](http://sikkim.gov.in/ASP/Misc/sg_initiatives.htm)



Deorali, and Tadong and soon they will be extended to other towns<sup>12</sup>. BSNL, Reliance and Airtel have the three largest cellular networks in the town.

**EDUCATION:** Though Gangtok has many good schools, it only has a single college offering a degree in arts and commerce. Gangtok does not have a university within the city limits. However, just 8 km from here is the headquarters of the Sikkim Manipal University. Due to lack of institutes of higher education, many of its residents migrate to nearby Siliguri or Kolkata in pursuit of higher education. This problem has been compounded with the growing unemployment in the state, due to the lack of large-scale industries.

**PHYSICAL INFRASTRUCTURE:** Gangtok is connected to the rest of India by an all-weather metalled highway, NH-31A, which links Gangtok to Siliguri, located 114 km (71 miles) away in the neighbouring state of West Bengal. The nearest railhead connected to the rest of India is the station of New Jalpaiguri, a suburb of Siliguri, situated 124 km (77 miles) away. Gangtok is linked to Bagdogra airport, near Siliguri, via a regular helicopter service, the Sikkim Helicopter Service. A new airport, which would be the state's first, is slated to be open soon. The problem of the occasional landslides on NH-31A which often cuts off the city from the rest of the country will be solved by this new airport to a considerable extent.

Due to the abundance of natural springs in the vicinity, Gangtok does not suffer from a water shortage.

**POWER:** Gangtok has an almost uninterrupted electricity supply due to Sikkim's numerous hydroelectric power stations. At present Sikkim's power is supplied through a combination of the state's own generation and the state's quota from the central sector generation. Central sector power flows into Sikkim from the West Bengal State Electricity Board (WBSEB) grid via the Vidyutnagar-Melli 66 KV line. Unfortunately the weakness of the WBSEB grid and the large dependence on run-of-the-river projects results in frequent tripping of power in Sikkim<sup>13</sup>.

**TRANSPORTATION:** The taxis are the most widely available public transport within Gangtok. Those residing some distance away from the city-center generally make use of share-jeeps, a kind of

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<sup>12</sup> BSNL, *Launches Broadband in Sikkim*, The Times of India, September 12, 2005. Retrieved November 27, 2005 from <http://economictimes.indiatimes.com/articleshow/1228132.cms>

<sup>13</sup> POWER, Sikkim Government Website. Retrieved November 27, 2005 from <http://sikkim.gov.in/ASP/Visiondocument/POWER.htm>

public taxi. It is the only capital city in India to have a cable car covering a distance of 0.6 miles – initially constructed for the elected MLA's to reach the state Assembly and is now open to the public.

LAW & ORDER: Sikkim is known for its very low crime rate<sup>14</sup> and, though official statistics for urban crime are not available, Gangtok can indirectly be said to have one of the lowest crime statistics in India.

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<sup>14</sup> Ministry of Home Affairs, Government of India, *CRIME DATA*. Retrieved on November 27, 2005 from <http://mha.nic.in/crida.htm>

## AIZAWL, MIZORAM

Aizawl is Mizoram's business centre and storehouse of all important Government offices, State assembly house and civil secretariat. There are no major industries in the state. Small-scale industries include sericulture, handloom and handicrafts industries, sawmills and furniture workshops, oil refining, grain milling, and ginger processing.

Mizoram is isolated from the rest of India making communication difficult. The State's poor transport and communication system are a major obstacle to economic growth. Although a road system is being developed, a single road links the towns of Aizawl and Lunglei in Mizoram to Silchar in Assam. There is no railway line in the State.

Business opportunities in the state are being explored. Government and public sector undertakings have their base in the city of Aizawl. Business is still in its infancy in Mizoram and the corporate sector has made negligible investments. With Mizoram's high literacy rate (82%), stable law and order situation as well as untapped hydro-power potentials, Aizawl presents an interesting option for investment.

Tata Economics Consultancy Services has recommended the State to establish software development centres and IT-enabled Services centres to ensure full exploitation of the qualified engineering manpower that is currently available<sup>15</sup>.

|  |
|--|
| POPULATION (2001): 260,000<br>POPULAR LANGUAGES: Mizo & English<br>PER CAPITA INCOME (STATE): Rs.22,207/- (2002-2003, at current prices)<br>POWER GENERATED State sector (1999-2000): 18.45 MU |
|--|

## POLICY SUPPORT

Mizoram has a separate policy for IT and IT-enabled Services organization. Any IT/ITeS Company can avail the incentives given below as long as they provide employment for minimum 50 persons, wherein the employment should be provided for a minimum period of 3 years and the unit shall provide a minimum wage of at least Rs. 5000 per month per employee:

<sup>15</sup> *Investment Potential in Mizoram*, North Eastern Development Finance Corporation. Retrieved November 20, 2005 from [http://databank.nedfi.com/content.php?menu=1609&page\\_id=799](http://databank.nedfi.com/content.php?menu=1609&page_id=799)

- Power subsidy shall be available for a period of 5 years, from the date of going into commercial production. The amount of subsidy shall be 60%, subject to a ceiling of Rs. 10.00 lakhs per year.
- The subsidy on captive generating set including non-conventional energy generation set shall be 60% of the cost of the generating set, subject to a ceiling of Rs. 15.00 lakhs per industrial unit.
- State Capital Investment subsidy of 40% on the capital investment on land, building, plant & machinery etc., subject to a ceiling of Rs. 15.00 lakhs shall be provided to an IT unit under the policy.
- 60% subsidy on shed rent payable to STPI shall be available for a period of three years from the date of going into commercial operation, subject to a ceiling of Rs. 5 lakhs per annum.
- 40% subsidy on Hot line / Lease line connectivity paid to STPI or BSNL or VSNL subject to a ceiling of Rs. 10.00 lakhs per annum shall be available to the units for a period of three years from the date of commercial operation.

#### INFRASTRUCTURE SUPPORT

STPI: Mizoram has plans to set up Hi-Tech Complex with an STP in its premises under the joint effort of the Government of Mizoram and Ministry of IT meant for IT and ITES industry under the IT Policy of Mizoram. However, no clear deadline mentioned as to when such a complex will be functional.

TELECOM: Bharat Sanchar Nigam Limited is the current sole telecom provider, with Reliance and Airtel to enter the market by this year-end. With 80 per cent of optical fibre cable (OFC) laying work completed, the broadband internet service would also be available very soon<sup>16</sup>.

EDUCATION: The North Eastern Hill University has a campus at Aizawl. Mizoram University at Aizawl also has various colleges under its wing. Since most of the schools in Aizawl are not English-medium schools, there can be a problem when it comes to spoken English. However, with a large chunk of students studying in English-medium institutes and Convents outside the State and always ready to come back given an opportunity, the problem of getting good English-speakers will not pose much of a problem.

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<sup>16</sup> BSNL Upgrades its Mobile Networking System in Mizoram, Daily Excelsior, October 14, 2005. Retrieved November 28, 2005 from <http://www.dailyexcelsior.com/web1/05oct15/busi.htm#3>

**PHYSICAL INFRASTRUCTURE:** Aizawl is connected with the rest of the country by NH 54 through Silchar in Assam. The city is also served by Lengpui Airport (1 hour drive) which connects the city with daily flights to and from Kolkata, Imphal and Guwahati.

**POWER:** There is currently power shortage in the State which hampers the growth of industry in the region<sup>17</sup>. Power requirement currently stands at 79 MW and is likely to rise to 141 MW by the end of the 9th Plan. Power availability, which is mainly met through import from outside the State is 36 MW only. As per the trend, requirement of power is likely to increase at the rate of 10 to 15 per cent per year.

**TRANSPORTATION:** Inside the city, taxis are the only way to get around. The rates are negotiable because they change frequently according to your nationality and clothes!

**LAW & ORDER:** NGOs in the State, especially the Young Mizo Association and the Mizo Zirlai Pawl (MZIP) are known to take the law into their own hands. There has been instances of YMA's activists beating people to death in the recent months. There are two militant groups active in the State, namely, the Bru National Liberation Front and the Hmar Revolutionary Front.

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<sup>17</sup> *Power Shortage Hampers Industrial growth in Mizoram*, NEWSLINK Aizawl Edition, November 19, 2005

## AGARTALA, TRIPURA

Agartala, located barely 2 kms from the Bangladeshi border is the state capital of Tripura is struggling to keep pace with its essential services vastly outstripped by an increasing population. Most of the population is employed in the Government and other Government owned enterprises, such as ONGC, BSNL, etc. There is a wide variety of private enterprises also and the main Business area of the city Gul Bazaar has a huge conglomeration of shops, bazaars, banks, etc.

Tripura has business ties with Bangladesh adding Rs 170 million to its revenue. Natural gas, rubber, tea, food processing, handicrafts and tourism are the focal points of the state's business. Despite this, Tripura is still leaps away from thorough professionalism. Business protocol has begun to adhere to western standards with increasing liberalization at both economic and societal levels<sup>18</sup>.

|   |
|---|
| POPULATION (2004): 2,00,000<br>POPULAR LANGUAGES: Bengali, Kokborak, English, Hindi<br>PER CAPITA INCOME (STATE): Rs.9,768/- (1999-2000 at current prices)<br>POWER GENERATED State sector (1999-2000): 312.31 MU |
|---|

## POLICY SUPPORT

The Government of Tripura has already a package of incentives to set up any industry in Tripura. In addition to these incentives, the following incentives are proposed to be given to encourage young entrepreneurs to set up industry, especially for software development, in Tripura:

- The Government of Tripura will give the same status to the sector of IT-enabled services as is given to the sector of software development.
- IT software industry will be exempted from locational regulations.
- The IT Software industry will be exempt from the provisions of certain acts/ regulations, like Pollution Control Act, Factories Act and Contract Labour (Regulation) Act to facilitate easy setting up of software units.
- Department of Industries & Commerce shall create a separate area for setting up the units for major IT companies. This area shall be designated as an IT Park. The State Govt. would provide basic infrastructural facilities at the Designated IT Park, including uninterrupted power supply. In case the unit wants to set up its own captive power generation, no permission would be required from any agency for DG sets up to 50 KVA. The land may be

<sup>18</sup> Money and Business: Agartala, JourneyMart.com. Retrieved November 29, 2005 from <http://www.journeymart.com/DEplorer/AsiaIS/India/tripura/agartala/default.asp?SubLink=DEplorer%2FAsiaIS%2FIndia%2Ftripura%2Fagartala%2FviMoney%5FInc%2Ehtm>

- allotted in these areas at concessional rates for IT units, subject to their giving employment to a minimum of 20 persons from the State.
- The State government will also set up a Software technology Park in Agartala with the help of STPI, a registered society under Department of Electronics (Ministry of Information Technology, Govt of India). In this park, provisions will be made for single - window clearance for software development units to be set up, as per the existing schemes of Government of India. The State government will administer the Software Technology Park through a designated agency / corporation<sup>19</sup>.

IT Industries (hardware and software), have been declared as a thrust industry in the "Tripura Industry Incentive Scheme, 2002". In addition, IT industry would be given the following incentive support:

All IT industries employing a minimum of 25 persons would be entitled to-

- 50% concession on floor space rentals for a maximum period of 5 years (including Clause (b) below, wherever applicable).
- Standard certification re-imburement, within the overall ceiling of Rs. 2 lakhs per unit. This will be inclusive of the incentive under Clause 12.
- All IT industries set up by local entrepreneurs of Tripura would be given a 50% concession on floor space rentals, for period of two years from the start of the unit.
- Provided that 50% concession on the floor space rentals will be subject to a ceiling to be notified by the State Government, in Industries & Commerce Department.

Explanations:

- The IT enabled services would be included in definition of IT industries for the purpose of Clause 12A
- The benefit of concession in floor space rentals will continue to be available to a particular unit, till the expiry of the 5 year or 2 year period (as the case may be) from the date of setting up of that unit, even beyond the thirty first day of March, 2007<sup>20</sup>.

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<sup>19</sup> IT in Tripura, Tripura.nic.in. Retrieved November 27, 2005 from <http://tripura.nic.in/itin3.htm>

<sup>20</sup> IT in Tripura, Tripura.nic.in. Retrieved November 27, 2005 from <http://tripura.nic.in/itin3.htm>

## INFRASTRUCTURE SUPPORT

STPI: North Eastern Development Finance Corporation Ltd. is setting up an IT Park at Agartala where small and medium entrepreneurs can start their own IT and IT-enabled Services units. In addition to the IT Park, the Tripura Directorate of IT submitted a proposal to Central Government in the Ministry of Information Technology (MIT) for setting up of a Software Technology Park (STP) in Agartala. The Ministry of IT has agreed to set up a Hub centre at Agartala. The work on this centre is expected to start very shortly at the ITI Building, Indranagar<sup>21</sup>.

TELECOM: Bharat Sanchar Nigam Limited plans to launch its dataone broadband services in the state very shortly<sup>22</sup>. Powergrid has also launched its broadband services in Agartala<sup>23</sup>. Reliance Telecom Limited and BSNL are the two cellular phone service providers in the city.

EDUCATION: Tripura has good network of schools and colleges spread across the State, including an Engineering College, a Polytechnic and four ITIs.

PHYSICAL INFRASTRUCTURE: Roads link the neighbouring states to Agartala. Direct buses from Guwahati (25 hours) and Silchar (12 hours) ply regularly. You may even hire 4WDs but buses are definitely safer because they move with armed escorts. There are flights from Kolkata (daily) and Guwahati (tri-weekly) to Agartala. It takes 3 hours to drive from Dacca, the capital of Bangladesh, to Agartala.

POWER: At present, Tripura under Tripura State Electricity Board has a total of five installed projects under the state sector (two hydel, two thermal and one diesel) with total installed capacity of 85.35 MW. Under the Central Sector, North Eastern Electrical Power Corporation (NEEPCO) has commissioned the 84 MW Agartala Gas Turbine Project. There are some more projects under the state sector in the pipeline like Baramura Gas Thermal Extension Project (24 MW), Rokhia Gas Thermal Project, Phase-1 (21 MW), Rokhia Gas Thermal Project, Phase-2(21 MW) and micro hydel project with a capacity of 1MW.

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<sup>21</sup> *IT in Tripura*. Retrieved December 20, 2005 from <http://www.tripurainfo.com/abouttripura/itintripura.shtml>

<sup>22</sup> *BSNL Launches Broadband Service in Meghalaya*, *The Hindu*, July 8, 2005. Retrieved November 27, 2005 from <http://www.hindu.com/thehindu/holnus/002200507081552.htm>

<sup>23</sup> *Power Grid India. List of Cities covered by Power Grid's Broadband Telecom Network*. Retrieved November 27, 2005 from <http://www.powergridindia.com/pgnew/01-0015-006.asp>



In the summer of 2004, NEEPCO threatened the Tripura Government to suspend power supply unless the Government clears its dues immediately. This figure went up to Rs 90 crore in the previous year. As a power-deficit state, Tripura generates 85.35 MW from its own sources, imports 60 MW on an average daily from NEEPCO and the 30 MW daily shortfalls is made up by load shedding. The State's daily import requirement of power is 86 MW, but NEEPCO can never supply more than 60 MW<sup>24</sup>.

**TRANSPORTATION:** The main mode of transport within the city consists of a vivid network of cycle-rickshaws, auto-rickshaws and buses.

**LAW & ORDER:** There has been a problem of armed conflict in Tripura since the end of 1970s. Given below is a list of some of the Separatist Organizations operating in the State:

- .All Tripura Liberation Organisation
- Tripura Tiger Force
- Bangla Mukti Sena
- Borok National Council of Tripura
- National Liberation Front of Twipra
- Tripura Armed Tribal Commando Force
- Tribal Commando Force
- Tripura Liberation Force
- Tripura Liberation Organization Front
- Tripura National Army
- Tripura People's Democratic Front
- Tripura State Volunteers
- Tripura Tribal Democratic Force
- Tripura Tribal Volunteer Force
- United Bengali Liberation Front

Tripura has business ties with Bangladesh adding Rs 170 million to its revenue. Despite this, Tripura is still leaps away from thorough professionalism<sup>25</sup>. The following 2 companies have signed MOU with the State Government for setting up of IT and IT-enabled Services Companies:

- South-Asian Management Technologies (P) Ltd., a company designing knowledge based software for use of professionals and organizations alike.
- Leading Edge Technology & Consultant (P) Ltd has agreed to set up Call Centres in the State.

<sup>24</sup> NEEPCO threat looms over Tripura, The Telegraph (May 9, 2004). Retrieved on November 27 from [http://www.telegraphindia.com/1040509/asp/northeast/story\\_3223916.asp](http://www.telegraphindia.com/1040509/asp/northeast/story_3223916.asp)

<sup>25</sup> Tripura: Money & Business, Journemart.com. Retrieved on November 25, 2005 from <http://www.journemart.com/DEplorer/AsiaIS/India/tripura/agartala/default.asp?SubLink=DEplorer%2FAsiaIS%2FIndia%2Ftripura%2Fagartala%2FviMoney%5FInc%2Ehtm>

## GUWAHATI, ASSAM

Guwahati is often considered to be the gateway to the North Eastern region. Guwahati today is important because it is close to the seat of power in Assam, is a commercial centre, and is the node that connects six other northeastern Indian states of Arunachal Pradesh, Nagaland, Manipur, Mizoram, Meghalaya, and Tripura.

Guwahati is a bustling city divided into half by the temperamental Brahmaputra River. The nerve centre of northeastern India, this city is well connected by air, road and rail. It is home to the intellectual elite of Assam and has seen days of strife and bloodshed in the early 1990s when the educated and vocal took to militancy to protect interests of the indigenous Assamese people. Guwahati also has a thriving business class, comprising of people from all over India. The skyline of the city is similar to that of any Indian metropolis – a riot of buildings of all shapes and sizes arching upwards in a desperate attempt to get a piece of the sky.

Dispur continues to make efforts for gearing up industrial activities in the State with a view to create a strong industrial base by harnessing the un-tapped resources available in the State through various growth inducing factors besides taking steps for removal of existing infrastructure inadequacies. The Industries and Commerce Department of the State as well as some other agencies like AIDC are closely associated with implementation of various promotional schemes meant for industrial development of the State. Despite various constraints a favourable industrial climate is gradually being created in the State as discernible from the increasing interest shown by investors of the State as well as from outside.

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| POPULATION (2001): 12,00,000<br>POPULAR LANGUAGES: Assamese, English & Hindi<br>PER CAPITA INCOME (STATE): Rs.10,198/- (2000-2001 at current prices)<br>POWER GENERATED State sector (1999-2000): 867.00 MU |
|---|

## POLICY SUPPORT

The Assam government appears to be committed towards the development of IT and ITES industry in the State. It is making an earnest effort to set up an Electronic City solely for the use of the Information Technology Industry and allied services wherein private sector participation is greatly encouraged. Efforts were also being made to establish a branch of premier rating/quality certification

agencies like ISO and SEI at Guwahati, which shall be authorized to issue certifications as may be necessary.

The State IT policy promises that IT and ITES companies in the State would be assisted with the development of telecommunication network in the state for which Government and its agencies would constantly liaise and co-ordinate with Department of Telecommunication and draw up time bound action plans for up-gradation and strengthening of telecommunication net works. As a short-term measure, various development agencies of the State Government are allowed to make block bookings for telecommunication connections in potential areas and locations. This is done to ensure that entrepreneurs who come forward to set-up IT and ITES Industry can be sanctioned telecommunication facilities immediately on application.

In addition to providing various incentives to the IT and ITES sector, the Assam Government also has special considerations and incentives for the ITES sector<sup>26</sup>:

- Power subsidy shall be available for a period of 5 years, from the date of going into commercial production. The amount of subsidy shall be 60% subject to a ceiling of Rs.10.00 lakh per year.
- The subsidy on captive generating set including non-conventional energy generation set shall be 60% of the cost of the generating set subject to a ceiling of Rs.15.00 lakh per industrial unit.
- State Capital Investment Subsidy of 40% on the capital investment on land, building, plant & machinery etc., subject to a ceiling of Rs.15.00 lakh shall be provided to an IT unit under the policy.
- 60% subsidy on shed rent payable to STPI shall be available for a period of three years from the date of going into commercial operation subject to a ceiling of Rs.5 lakh per annum.
- 40% subsidy on Hot line / Lease line connectivity paid to STPI or VSNL subject to a ceiling of Rs.10.00 lakh per annum shall be available to the units for a period of three years from the date of commercial operation.

The eligibility criteria specifically for the IT enabled sector are as follows.

- The unit should provide employment for minimum 100 local persons.
- Employment should be provided for a minimum period of three years.

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<sup>26</sup> North Eastern Development Finance Corporation. IT Policy of Assam. Retrieved on November 25, 2005 from <http://nerdatabank.nic.in/asITpol1.htm>

- A minimum wage of at least Rs.4500 per month per employee shall be provided by the unit.

## INFRASTRUCTURE SUPPORT

STPI: STPI Guwahati maintains an International Gateway via an IBS Earth Station located at Borjhar, Guwahati. The existing capacity of the Earth Station is 6 Mbps which could be upgraded as per requirement of the users in the North Eastern States. In addition to the earth station at Borjhar, STPI is also maintaining a Hub Centre at the Institution of Engineers (India) Building at Panbazar locality.

The facility at STPI Guwahati is capable of providing Internet as well as IPLC (International Private Leased Circuit) services. Software exporters, IT Entrepreneurs, Internet Users may avail the services from both the Earth station and the Hub Centre through Radio connectivity or BSNL leased circuits in different configurations as per requirements<sup>27</sup>.

The following are some of the facilities offered by STPI Guwahati:

- High Speed Data Communication (HSDC) Services through its own Satellite Earth Station
- Physical Infrastructure and Common Amenities
- Incubation Center
- Single Window Statutory Services
- Marketing Assistance

TELECOM: Bharat Sanchar Nigam Limited along with Powergrid, Tata Indicom and Reliance Telecom have launched their broadband services in the state<sup>28</sup>.

EDUCATION: The Assam Engineering College, Indian Institute of Technology Guwahati and Gauhati University are prominent institutes which play a dominant role in the education scenario in the entire North east region. Besides these institutes, the state also has three universities, one Agricultural university, three Medical colleges, two engineering colleges, 23 vocational training institutes and eight polytechnics. Guwahati and its surrounding areas also have numerous convents

<sup>27</sup> Impacts of National IT Environments on Business: Guwahati. Retrieved November 23, 2005 from <http://www.american.edu/initeb/mk5916a/guwahati.htm>

<sup>28</sup> Tata Indicom Broadband. Retrieved November 23, 2005 from [http://www.tataindicom broadband.in/access/services/roamingdialup\\_access.htm](http://www.tataindicom broadband.in/access/services/roamingdialup_access.htm), Cellular News (June 2004). Retrieved November 23, 2005 from <http://www.india-cellular.com/News-Apr-Jun-2004.html>

and English-medium schools churning out a hundreds of qualified students every year. Assam in general and Guwahati in particular has enough pool of skilled and educated man power. Tea gardens, Oil refineries, organized big industries and small scale industry employs skilled man power with cheap rate.

**PHYSICAL INFRASTRUCTURE:** The Government of Assam recognizes the importance of infrastructure in industrial development and has taken the initiative for providing a sound and efficient infrastructure base. Guwahati is well connected by air with both Indian Airlines and all the private airlines catering to the needs of the region. The airport at Guwahati is also the region's only International airport with direct flights to Bangkok.

Guwahati has a fairly good drainage system leaving communication relatively unaffected by the rains. Air traffic does get affected though.

**POWER:** Power cuts and 'load shedding' is a regular feature all over Assam. The overall Power Supply position in the State is erratic. In order to meet the shortage of power Supply the State continued to purchase power from other sources. The net import of power by the State was 2582.737 (MU) in 2002-2003 as against 2461.182 (MU) in 2001-2002<sup>29</sup>.

**TRANSPORTATION:** Guwahati has a good road transport system. The city bus system is very efficient and adequate. Most hotels arrange for cars-on-hire. The most common mode of transport is cycle rickshaws. If you have boarded one in any other Indian city, you will realize that the ones here are more comfortable than their counterparts elsewhere<sup>30</sup>.

**LAW & ORDER:** Political disruption is usually localized in Assam. One needs to keep abreast of the daily happenings in his surroundings and destinations through local newspapers and cable television and stay indoors if there is a "bandh". The State Government recognizes the fact that the prevailing situation in the state has slowed down the pace of industrial development. Therefore, it has given special attention for security to the industries to be set up in the State<sup>31</sup>.

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<sup>29</sup> Assam Government (2004). Economic Survey of Assam 2003-04. Retrieved November 27, 2005 from <http://www.assamgov.org/Ecosurvey/index.htm>

<sup>30</sup> Assam: Money & Business, Journeymart.com. Retrieved on November 25, 2005 from <http://www.journeymart.com/DEplorer/AsiaIS/India/Assam/Guwahati/default.asp?SubLink=DEplorer%2FAsiaIS%2FIndia%2FAssam%2FGuwahati%2FviAround%5FInc%2Ehtm>

<sup>31</sup> North Eastern Development Finance Corporation. Industrial Policy of Assam. Retrieved on November 25, 2005 from <http://nerdatabank.nic.in/asindpolicy3.htm>

'Say no to bandh' (general strike) is the latest catch phrase in Assam with some eminent citizens trying to drum up public support to prevent frequent strikes that hit normal life. Though the campaign against the 'bandh culture' in Assam is gathering momentum, it is yet to be seen if it has the backing of the government workforce that invariably keeps away from offices during any strike call<sup>32</sup>.

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<sup>32</sup> Syed Zarir Hussain (January 12, 2006). *Campaign against Assam's 'bandh' culture gathers pace*. New Kerala. Retrieved January 30, 2006 from <http://www.newkerala.com/news.php?action=fullnews&id=84636>

## SHILLONG, MEGHALAYA

Shillong, the capital of Meghalaya, is the district headquarters of East Khasi Hills District and is situated at an altitude of 4,908ft (1,496 m) above sea level. Shillong has steadily grown in size and significance in its own traditional way from a mere village as it used to be when it was made the new civil station of Khasi and Jaintia Hills in 1864 by British. It has undergone substantial change – both in character and form. The tiny administrative unit has now become a vibrant city with commercial activity overshadowing the hill resort it once was. It has a temperate climate conducive for setting up precision instrumentation and electronics industries.

Shillong is described as the 'Scotland of the East' because of its striking similarity with that of the Scottish Highlands and has been attracting indigenous and foreign tourists for decades. The city boasts of many beautiful churches and cathedrals.

Shillong is also the headquarters of the North Eastern Council, it also has the HQ of the Eastern Air Command of Indian Air Force, the HQ of the Assam Rifles, the Assam Regimental Centre and the 101 Area of the Indian Army. The main university is the North Eastern Hill University with campuses in Mizoram and Nagaland. A bench of the Guwahati High Court has been set up in Shillong. Shillong is a major educational center in north eastern India.

With the rapid urbanization, Shillong now faces shortage of water, inadequacy of sanitation and civic amenities which have been stretched to the limit. Shillong at present has the problem of any big city in India including long and unending queues of cars, a long line of kerosene consumers and degraded urban environment. However, it still is one of the most pleasant and livable cities in the country.

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| POPULATION (2001): 2,60,000<br>POPULAR LANGUAGES: Khasi, English & Hindi<br>PER CAPITA INCOME (STATE): Rs.11,678/- (1999-2000 at current prices)<br>POWER GENERATED State sector (1998-1999): 555.75 MU |
|---|

POLICY SUPPORT<sup>33</sup>

The Meghalaya Government has declared IT and ITES sectors as thrust areas and has made efforts to facilitate the establishment of IT Enabled Services centres in the State.

<sup>33</sup> Meghalaya Government (2004). IT Policy 2004. Retrieved November 23, 2005 from [http://meghdit.nic.in/IT%20Policy\\_2004.pdf](http://meghdit.nic.in/IT%20Policy_2004.pdf)

The Government recognized IT Enabled Services as a key opportunity area for the IT industry and tries its best to play a proactive role on this front and announce policy decisions as regards to tax, physical infrastructure and also shall work together with the Industry in order to form suitable strategies to establish a suitable environment to capture the market and also providing incentives to attract units of IT Enabled Services and attractive policies wherein free land is given to IT services subject to certain conditions. In addition to the various incentives applicable to the IT sector, the Government also offers the following benefits specifically to the ITES sector:

- Power subsidy shall be available for a period of five years from the date of going into commercial production. The amount of subsidy shall be 60% subject to a ceiling of Rs. 10.00 lakhs per year.
- The subsidy on captive generating set including non-conventional energy generating set shall be 60 % of the cost of generating set to a ceiling of Rs. 15.00 lakhs per industrial unit.
- State capital investment subsidy of 40 % on the capital investment on building, plants and machinery etc. subject to a ceiling of Rs.15.00 lakhs shall be provided to an I.T. Unit under the policy.
- 60% subsidy on shed rent payable to I.T. Park shall be available for a period of 3 (three) years from the date of going into commercial operation subject to a ceiling of Rs.5.00 Lakhs per annum.

Some other important incentives and benefits offered by the State also indicate the Government's commitment towards the ITES sector:

- **Priority for Disbursement:** The disbursement of the incentives by the implementing agency shall be in accordance with the chronological order of approved claims. Priority shall, however, be given to 100% export oriented units.
- **Interpretation:** The decisions of the Department of Information Technology, Government of Meghalaya as regards to interpretation of these policy resolution/ incentive schemes shall be final.
- **Inter-connectivity of International Call Centers / IT Enabled Services:** The Government shall permit inter-connectivity between call centers or other units of IT Enabled Services. This includes Load Sharing between the Centers for optimum utilization of expensive resources (International Bandwidth), Interconnect two facilities through fibre optic cable to help companies to establish customer / expertise specific centers of excellence, International call center, etc..



- **Single Window Clearance:** To facilitate and expedite the various clearances and Government approvals required by entrepreneurs as also to promote investments in the State, the Government had setup a single window agency for all investments in the State.
- **Venture Capital Fund:** Several Venture Funds are available in the country which have been created in the last one to two years – like the Rs.100 crores Venture Capital Fund at the National level, promoted by the Ministry of Information Technology, besides the funds created by several state governments like Andhra Pradesh, Tamil Nadu and Gujarat. The State Government shall promote for setting up a dedicate corpus / venture capital fund (in private sector) with funding of Rs. 15 crores towards funding start-ups and entrepreneurial efforts for catering to IT Enabled Services Market. It is necessary to ensure that these funds are managed professionally with the least involvement of the Government.
- **Working Capital from Banks:** Government will encourage lead Banks to set up special cells to provide working capital to Information Technology enabled services units.
- **Data Processing Centres:** Government will encourage setting up of Data Processing Centres to facilitate employment. The purpose of these centers would be 'digitise' all the relevant and archival government data. Moreover, the state has lots of unemployed educated young men and women.
- **Creating the Ideal environment:** The Government shall allow the setting up of an IT enabled services unit in residential areas and *no power cuts shall be accorded to the industry.*
- **IT Policy to encourage women entrepreneurs and employment:** Meghalaya has a large number of educated unemployed women. Teleworking or working from home would provide immense opportunity for women to work from their houses. Special incentives to encourage women entrepreneurship in the IT Enabled service sector, such as easy access to venture capital / bank loans, subsidised computer education, easy loans for procuring hardware / software etc.

## INFRASTRUCTURE SUPPORT

STPI: Efforts have been made by the State Government to set up the Software Technology Park of India, Shillong Centre. The Government of India has already sanctioned an amount of Rs.50 Lakhs towards procurement of High Speed Data Communication (HSDC) facilities for the STPI at Shillong. The Software Technology Park at Shillong is expected to cater to the local Software Exports, IT Enabled Services, Call Centres and other IT related activities.

TELECOM: BSNL, Reliance and Airtel have the three largest cellular networks in the town. BSNL, Reliance and Powergrid are the major broadband service providers in town.

EDUCATION: St. Edmund's College, St. Anthony's College, St. Mary's College, Lady Keane College and Shillong College are among the most well-known colleges in the entire North eastern region. Shillong has become the heart of North Eastern education, at times occupying a more prominent role than that of Guwahati. In fact, the North Eastern Development Finance Corporation Ltd. (NEDFi) informed the Meghalaya Government that most of the manpower in the ITES industry in Guwahati come from Shillong. As a result, NEDFi feels that they need to set up another Software Technology Park in Shillong<sup>34</sup>.

#### PHYSICAL INFRASTRUCTURE:

The drive from Guwahati to Shillong takes 4 hours and Silchar to Shillong 9 hours. Roads are well maintained though narrow in certain parts. There is no railway network within Meghalaya. Guwahati is the nearest railway station connecting the North-East region with the rest of the country through a broad/metre gauge tract network. There is a plan for extending the rail link from Guwahati to Byrnihat in Meghalaya which is about 20kms away from Shillong. Presently Umroi (30 km. from Shillong) is the only airport in Meghalaya having landing facility for smaller aircrafts.

The city is one of the few hill stations with motorable roads all around.

POWER: Shillong has a relatively better power supply compared to its counterparts in the region. The peak demand of the State at present is about 92 MW. The surplus energy is sold to the neighbouring States. Recently an agreement has been signed with the Government of Mizoram for evacuation of 100million units (MU) yearly to that State. With the ongoing expansion of transmission line by Power Grid Corporation of India, it will be possible to evacuate Meghalaya's surplus power to other states through the North-Eastern, Eastern and the national Grid. Power Grid Corporation and MeSEB are currently exploring the possibility of exporting power to Bangladesh which is just across the border to the South and only a few kilometers away from the existing 132 KV Shillong - Cherrapunjee line. Meghalaya has also a fairly extensive transmission network for power evacuation

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<sup>34</sup> Meghalaya Government (2004). *Initiatives of the Government*. Retrieved November 23, 2005 from [meghdit.nic.in/it\\_industry/initiative.htm](http://meghdit.nic.in/it_industry/initiative.htm)

**TRANSPORTATION:** For internal transport, Shillong has a large fleet of yellow and black taxis, which are regularly available. Share Taxis also run on fixed point-to-point basis and charge a flat rate. The State Transport Corporation covers a few routes while the Shillong City Bus Syndicate runs regular bus service. Mini buses are also available with same fare structure.

**LAW & ORDER:** Political disruption in Meghalaya is usually localized and everyone's aware of there being potential trouble days ahead. Read the local newspapers and keep an ear to the ground. Areas that may be avoided are Mawkhar and Jail Road that in any case have restricted tourist activity. Please ensure you reach your destination before 1900 hours because life in the state almost comes to a halt after sundown. Cases of mugging, theft and worse aren't completely unheard of but by and large serious crimes against travellers are few and far between.

## IMPHAL, MANIPUR

Imphal city (1991 pop. 202,839), capital of Manipur state, in the Manipur River valley, 2,500 ft (762 m) above sea level. Industries include weaving and the manufacture of metalware; the town is an important trade market. Until 1813, when Manipur was conquered by the Burmese, Imphal was the seat of the Manipuri kings. The inhabitants, of Tibeto-Burman origin like the rest of the region except parts of Assam and Tripura, are famous for their music and dance. Imphal has three colleges affiliated with Guwahati Univ., as well as a technical college. The city was the site of a major victory (1944) for British and Indian troops against the Japanese in World War II.

The climate of Imphal is moderate. The valley gets the reflection of the heat of the summer and the cold of the winter from the neighbouring hills.

Imphal is the modern commercial centre for the State of Manipur where various items are collected and marketed from different parts of the state. Agricultural and electronics industries are also one of the main parts of Imphal's economy.

With recent modernization, the population of the city has increased, added to by the influx of people from rural areas. Problems of unplanned housing, water shortage and traffic congestion do not take away from the picturesque location of the city.

Business is still at its infancy in Imphal. Business standards may not be as professional as they are in the main cities of India. Commerce is mainly confined to government offices and public sector undertakings. The corporate sector is yet to find its footing here.

The state is heavily dependent on imports from outside for almost all items of everyday need.

POPULATION (1991): 202,839  
 POPULAR LANGUAGES: Manipuri, English & Hindi  
 PER CAPITA INCOME (STATE): Rs.11,370/- (1999-2000 at current prices)  
 POWER GENERATED State sector (1999-2000): 83.75 MU (Overdrawn from Central Sector Power Plants in the region)

## POLICY SUPPORT

Recognizing the vast potential of IT industry in the State, the Government of Manipur accords high priority to the Electronics and Information Technology sector as a major thrust area of development.

A special package of incentives is provided to facilitate competitive growth of the sector.

Manipur has vibrant manpower potential ideally suited for electronics and IT based industries. The Manipur Industrial Development Corporation Ltd. has been established as a public sector undertaking to fill up the gaps for development of electronics including information technology based industries in the State.

The Centre for Electronics Design and Technology of India (CEDTI) at Imphal caters to the entire North-East India. This Centre has been imparting training to all the prospective youth and officials of the State Government and other organizations from Manipur and the Region.

Some IT areas where private participation is encouraged

- Setting up of an IT Park.
- Setting up of IT Enable Service Centres such as Call Centres etc.
- Development of a backbone network "Manipur State Wide Area Network" (MANNET) for voice, data and video transmission and dissemination.
- Issue of multi-function Electronic SMART cards to citizens.
- IT literacy programme in schools and colleges.
- To create infrastructure throughout the State for promotion of distance learning through IT.
- Setting up of Information Kiosks.
- Internet over Cable and other new technologies for internet penetration.

#### INFRASTRUCTURE SUPPORT

STPI: A Software Technology Park providing bandwidth facilities has been set up at Imphal.

TELECOM: Bharat Sanchar Nigam Limited and Airtel are the main cellular service providers in the State. A snapshot of the telecom infrastructure in Manipur is given below:

- Independent Satellite link with Delhi and Shillong
- Micro-wave link with Kohima and beyond
- 40 Digital Exchanges
- Internet C-II Net Working at Imphal with 810 connections to all District HQs.

**EDUCATION:** Imphal has numerous well-known schools and colleges which can provide a steady flow of people to work in the ITES industry. The colleges in Manipur come under the jurisdiction of the Manipur University, where there are numerous programmes being conducted which are relevant to the progress and development of the country in general and the north-eastern region in particular

**PHYSICAL INFRASTRUCTURE:** Imphal is well connected by air with Delhi, Calcutta and Guwahati. Further, NH-39 and NH-53 link the State with the rest of the country respectively through the railway heads at Dimapur in Nagaland at a distance of 215 km. and Silchar in Assam of 269 km. from Imphal. The total road length in Manipur is about 7170 km in a net-work connecting all the important towns and far off villages of the State.

Imphal Airport, the second largest airport in the region is only 7 km. from the heart of the Imphal city.

**POWER:** Power cuts and 'load shedding' is a regular feature all over Manipur. The Power supply of the State of Manipur depends upon the Central Sector Power Plants located in the North Eastern Region. At present the State draws 83.75 MW by overdrawing 20 MW from the Central Projects.

**TRANSPORTATION:** The main modes of transport within the city are cycle rickshaws and auto rickshaws. A city bus service also operates within the city.

**LAW & ORDER:** Manipur can be an unsafe destination because of the rise of insurgency in the state. It is advisable to read local newspapers and keep an ear to the ground to avoid being caught unawares.

## DIMAPUR, NAGALAND

Dimapur is Nagaland's largest city. The name Dimapur comes from the Kachari dialect meaning "the city neat the great river." One of the fastest growing cities in the region, its population has grown three folds in the last 15 years.

Unlike other places in the state, this city has a heterogeneous mix of people from all over India, and for which it is also known as "mini India." Besides the dominant Naga tribes who comprise about 50% of the city's population, other prominent groups include Bengalis, Assamese, Nepalese, Biharis, Marwaris, Punjabis and also Tamils. In the last two decades Tibetan traders have also settled in the city. Dimapur is indeed "unity in diversity" as Church spires find prominence alongside hindu temples, mosques, gurudwaras and buddhist Gompa.

Apart from it being an important commercial centre, Dimapur is also an important military center, with the headquarters of the BRO Sewak located here. There is also a huge CRPF establishment, and the Rangapahar army cantonment adjoining the municipality. The peace camp headquarters of the National Socialist Council of Nagaland (IM) is also located here.

Along with the rest of the world, Dimapur is marching along as it welcomes visitors from across the globe. It is the only place in Nagaland that does not require the Inner Line Permit (ILP), but one needs the Restricted Area Permit to go beyond the city. Dimapur remains the Gateway to the states of Nagaland and Manipur.

Nagaland is waking up to business opportunities and Dimapur is the centre of commerce. Government and public sector undertakings in the state have their headquarters in the capital, Kohima. The Corporate sector is yet to find its feet in the state.

POPULATION (2005): 1, 56, 234

POPULAR LANGUAGES: Nagamese, Angami, Lotha, Rengma, English & Hindi

PER CAPITA INCOME (STATE): Rs.12,594/- (1999-2000 at current prices)

POWER GENERATED State sector (1999-2000): 52 MU

## POLICY SUPPORT

Although IT and ITES sector is declared a “Thrust Area” by the State Government, the Government does not have specific policies towards the ITES industries. However, the various other incentives given to other industries like 3% Interest Subsidy on Working Capital Loan<sup>10</sup> years and Tax Holiday for Excise duty & Income Tax apply to the ITES industry as well<sup>35</sup>.

## INFRASTRUCTURE SUPPORT

STPI: Dimapur, or Nagaland for that matter, does not have any Software Park as of now.

TELECOM: Bharat Sanchar Nigam Limited, Reliance and Airtel are the main cellular service providers in the State<sup>36</sup>.

EDUCATION: All the villages in Nagaland have Primary Schools and there are Middle Schools in every cluster of 4-5 villages which are within walkable distance of 5-7 kms from each village. There are eight Government Colleges, one Law College, one Agriculture College and one College of Education. The campus of the North East Hill University (NEHU) has been conducting Degree and Post-Degree courses in the Humanities and Science streams for several years. A separate University of Nagaland was created by an Act of Parliament in 1994. It is now functional and all colleges in Nagaland are attached to this University. A Polytechnic at Atizu, Zunheboto and three Industrial Training Institutes including one ‘TIP’ at Dimapur which caters exclusively to women students have been conducting technical courses in engineering and awarding diplomas. These institutes cater almost exclusively to Naga students. And with English as a link language between the 16 tribes of the State, most of the centres of learning adopt English as a medium of teaching, thereby greatly impacting on the proficiency of the Nagas in the language.

PHYSICAL INFRASTRUCTURE: Dimapur has a railway station as well as airport.

POWER: Power cuts and ‘load shedding’ is a regular feature. Department of Power, Nagaland is responsible for generation, transmission and distribution of power in the state. Out of total requirement of 52 MW of power in the state, Micro hydel stations and diesel stations in the state

<sup>35</sup> Nagaland Government (2004). Nagaland State Industrial Policy. Retrieved November 23, 2005 from [http://nagaland.nic.in/new\\_policy/investment.htm](http://nagaland.nic.in/new_policy/investment.htm)

<sup>36</sup> Integration, scams dominated Nagaland in 2005 (January 15, 2006). Retrieved January 23, 2006 from <http://www.zeenews.com/znew/articles.asp?aid=266034&sid=ZNS>



sector generate about 4.26 MW. In the central sector, NEEPCO has recently commissioned the 75 MW Doyang Hydro Electric Project.

The allocation from NHPC and NEEPCO for Nagaland is only 25 MW and therefore the department has arranged with Meghalaya State Electricity Board and Assam State Electricity Board to meet the short fall.

**TRANSPORTATION:** The modes of transport are jeeps, which can be hired or shared, cycle rickshaws and auto rickshaws. A minibus service also plies around the city.

**LAW & ORDER:** Nagaland can be an unsafe destination because of the insurgency in the state. It is advisable to read local newspapers and keep an ear to the ground to avoid being caught unawares.

## Section 6

### ANALYSIS AND CONCLUSION

Policy initiatives set the pace for any industry. Industry-friendly policies not only instill confidence in the entrepreneurs, they ease the process of setting up businesses. Most of the cities (and states) in the North East have specific policies and offer incentives for the ITES industry. States like Sikkim, Manipur and Nagaland do not have a separate ITES policy. However, it might be noted here that both Manipur and Sikkim already have STPIs which are functioning well.

Guwahati and Shillong score well when it comes to infrastructure, however, they could not score as high as Gangtok when it comes to law and order as well as power situations. In fact, other than Gangtok, all the other cities considered seem to have problems with load shedding and power shortage. A reliable and continuous power supply needs to be provided for the efficient and proper functioning of any ITES-BPO set up. With inconsistent and fluctuating power supply, ITES companies need to have their own backup power systems to supplement the utility's supply, thereby increasing the cost of operations.

When it comes to connectivity, Guwahati scores well above the rest of the cities in the region – may it be rail, road or air link. Cities like Aizawl, Gangtok and Imphal have problems with road connectivity – in the case of the first two cities, it is usually due to landslides during the rainy season whereas for Imphal, the reasons are more due to man than nature in the form of bandhs and economic blockades.

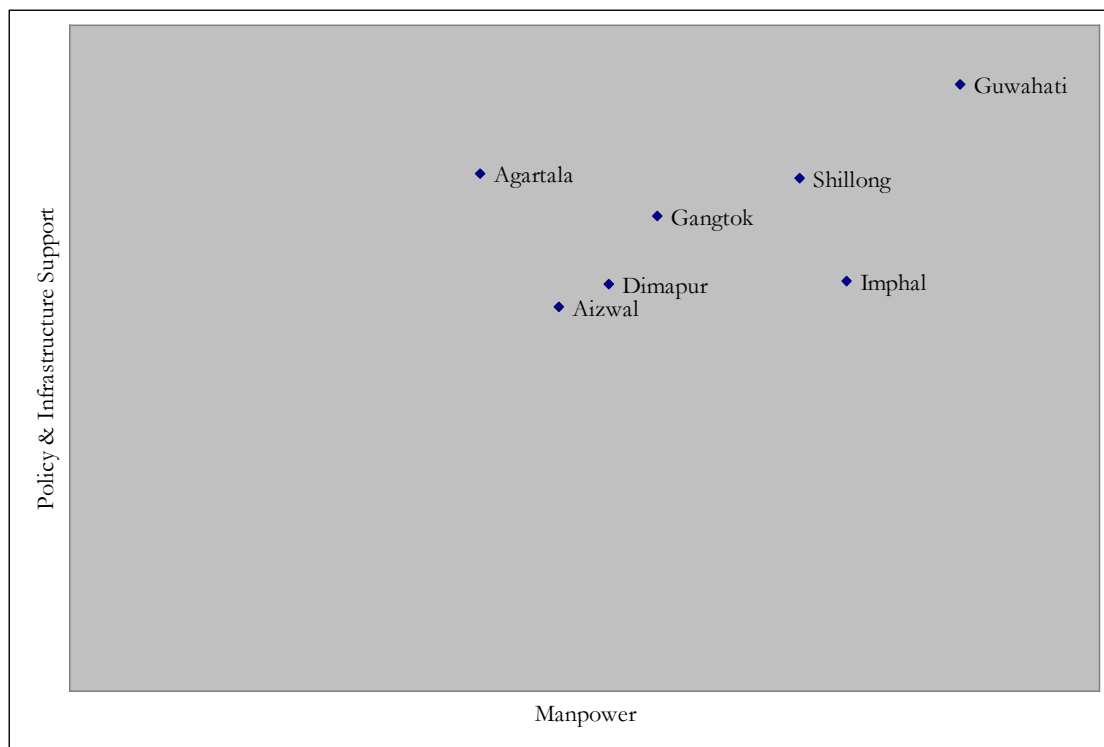
A city's competitiveness draws mainly from the infrastructure it provides and the policy incentives it offers. If a city ranks high on both counts, it is considered highly competitive. The cities, if pitted against each other on these counts, show that what matters is the combination of initiatives on both counts, not one.

At the end, this is how the cities stand vis-à-vis each other.

| CITY     | SCORE | RANK |
|----------|-------|------|
| GUWAHATI | 77.25 | 1    |
| SHILLONG | 71.42 | 2    |
| AGARTALA | 67.24 | 3    |
| GANGTOK  | 66.83 | 4    |
| IMPHAL   | 56.08 | 5    |
| DIMAPUR  | 54.32 | 6    |
| AIZAWL   | 53.94 | 7    |

*Condensed from Exhibit 5*

The point is illustrated in greater detail in the following diagram which is derived from *Exhibit 5*.



In this diagram, the north-easternmost part represents both high infrastructure availability and policy support and suitable manpower availability, and thus, the most competitive cities will fall in this region. The more a city moves up the X-axis, the higher is its infrastructure availability and policy support. Moreover, the more a city moves to the right of the graph along the Y-axis, the greater is its availability of suitable talent pool.

Guwahati, Shillong and Imphal seem to be high on manpower availability. This could be attributed to the availability of a good number of schools and colleges in these cities. Colleges and schools in cities like Shillong and Guwahati usually end up having students from all over the region. Imphal, however, seem to fare quite badly when it comes to policy and infrastructure support. Agartala on the other had, fared very well in terms of Government policy and infrastructure support, but did quite badly in terms of the availability of suitable talent pool.

As far as the North Eastern cities are concerned, manpower does not seem to be a problem at all. In fact, leading staffing companies like Ma Foi has been actively involved in exploring talents from the North East for the past two years now. Third party BPO firms like the Chennai-based Allsec Technologies Ltd. sees the region as a potential source of hiring talent. The initial experiences of the company with people from the region have prompted Allsec to start looking at the North East as a potential source of quality manpower<sup>37</sup>. Companies like Allsec are exploring the possibilities of forging tie-ups with universities and educational institutions from the region to hire potential talent.

The path to ignite a small revolution in the ITES-BPO industry in the region thus lies in making the business environment friendlier towards the industry. Improvements in the areas of relevant policy formation and infrastructure would greatly lead to furthering the growth of this industry sector in the region. With quality manpower no longer an issue for the industry as companies from other regions are already coming to recruit specifically from the North East, the various governments in the region should now have a re-look at their policies and infrastructure scenario.

#### CREATING INVESTMENT FRIENDLY AND ITES FOCUSED STATE GOVERNMENTS

Some of the steps which the respective state governments could take to enhance their image and make it easier for entrepreneurs and investors to start ITES-BPO industry and do business in the states are:

- A **single-window clearance system** for new businesses, especially those in the IT and ITES sector, needs to be set up by each state government. This will considerably reduce the time required for procedures and clearances, thereby reducing an entry barrier for most entrepreneurs. This clearance body could even be done at the North Eastern Region level, with each state being given the liberty to frame their own policies to suit their needs, which at the same time, have a common application form for the whole region. This way,

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<sup>37</sup> *Allsec Spreads Net to North-East for Talent*, January 2006. Business Standard Ahmedabad Edition, p15

even if an entrepreneur/investor is looking at a particular state, he is given easy access to all the other states in the region. The clearance window, however, should have officials who are empowered to take overarching policy decisions. The range of an administrator's discretionary powers would be minimized and clearly defined. This will reduce the pressure on the State Government departments and the head offices of the relevant agencies that today have to approve even the most minor clearances.

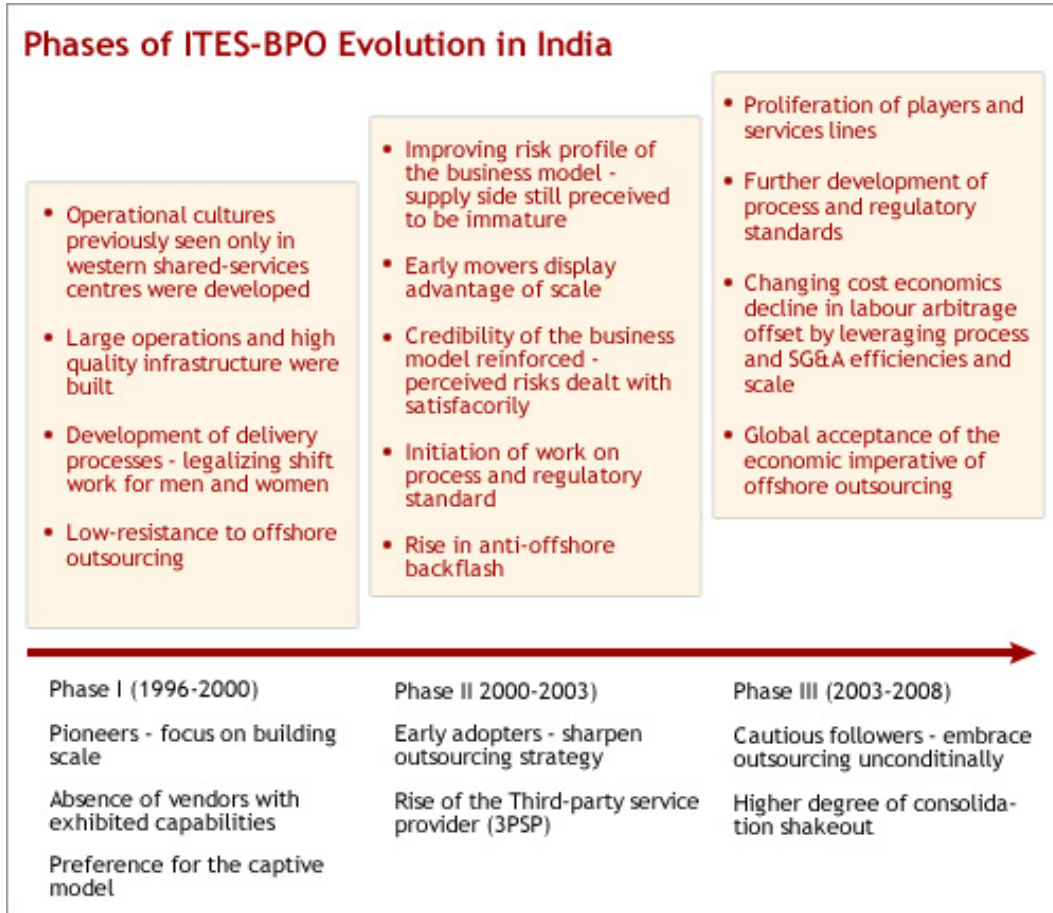
- In case of a conflict between policies of different departments, they should have a say in which policy should prevail, considering the best interest of the respective states and their ITES policies. They should not become just 'forwarding agents', unable to take any significant decision.
- An **integrated and stable set of policies** from the respective state governments could go a long way in removing all bottlenecks and entry barriers to the growth of the ITES industry. To minimize policy conflicts and consequent procedural delays, the state governments need to formulate a set of integrated and overarching policies in consultation with all the relevant government departments. The policies should be relatively stable and transparent. However, this in itself is not enough to speed up procedure. To do so, it is critical to **create awareness of these integrated policies among administrators and bureaucrats** responsible for giving approvals and clearances.
- To simplify and expedite the entire clearance process, the respective state governments should set up State ITES Task Forces to review the various clearances required and then rationalize or consolidate them. The task force will also look for ways to **make procedures simpler and more transparent**, and also classify clearances into buckets to be tackled at various levels of bureaucracy. All these processes should be backed by an **efficient and comprehensive information system**.
- Considering the frequent power cuts and law and order problems plaguing most of the places in the region, the respective state governments could go in for **ITES-BPO townships** where the entire infrastructure requirements – manpower, telecom, connectivity, power, etc. will be made easily available. Each township will function as independent settlements, having its own bank, hospital, shopping complexes, etc. This will also spare investors the critical but cumbersome and time-consuming step of identifying suitable land, with adequate infrastructural facilities, for their projects.

In addition to the above initiatives, the respective State Governments in the North East can have a common ITES-BPO focused framework and work towards it using the currently available platforms like the North Eastern Council and DONEAR.

- **A common branding exercise for the region:** The North Eastern Region should be presented as a cost-effective destination driven by skills and quality. It should project itself as a viable and lucrative option for any kind of investment, especially those in the ITES-BPO sphere.
- **A conscious effort towards sound infrastructure:** Encouragement and initiation of participation from both the public as well as the private sector in investment in infrastructure, with all concerned bodies adopting a customized approach to meeting the needs of the BPO industry.
- **Availability of risk capital and flexibility in taxation:** The availability of risk capital needs to be enhanced in early stage ventures. Third party hosted infrastructure BPO companies should be eligible to favourable tax treatment afforded to the infrastructure sector.
- **Raising the bar for education system:** Industry in association with schools and colleges in the region should develop BPO specific programmes and modify curriculum and the quality of instruction in entry-level educational institutions. Moreover, the new Indian Institute of Management coming up in Shillong could also develop ITES-BPO related programmes and courses for mid-management, and design a common ITES-BPO related curriculum for other management schools in the Eastern Region. Technical institutions like the Regional Engineering College at Silchar and the Indian Institute of Technology at Guwahati should develop competency around the specialized technology required for the BPO industry.

EXHIBITS

Exhibit 1: Phases of ITES Evolution in India



Source: NASSCOM

Exhibit 2: Recent M&A Activity in the BPO Sector

| Month  | Acquiring company               | Target                                  | Deal value   |
|--------|---------------------------------|---|--------------|
|        |                                 |   | (\$ million) |
| Mar-03 | Automatic Data Processing       | ProBusiness Services                    | 496.50       |
| Apr-03 | Paychex                         | Interpay                                | 182.00       |
| Jun-03 | Parthenon                       | Capital EdiX Corp                       | 64.00        |
| Jan-03 | Affiliated Computer Services    | CyberRep.com                            | 45.00        |
| Jul-03 | Daksh eServices                 | Etelecare International                 | 30.00-40.00  |
| Jun-03 | National Processing             | Bridgeview Payment Solutions            | 32.30        |
| Apr-03 | HIG Capital                     | Oasis Outsourcing                       | 30.20        |
| Mar-03 | Welsh Carson Anderson & Stowe   | Mutual Energy Service                   | 30.00        |
| Nov-03 | Essar Group and Deutsche        | Bank Aegis Communication Group          | 28.70        |
| Jun-03 | Northgate Information Solutions | Carapeople                              | 22.00        |
| Jun-03 | Exult of PriceWaterhouseCoopers | Business Process Outsourcing Operations | 17.00        |
| Oct-03 | Datamatics Technologies         | CorPay Solutions                        | 13.00        |
| Jul-03 | Perot Systems Corporation       | Healthsource India                      | 10.00        |
| Oct-03 | LogicaCMG                       | Experian                                | NA           |
| Oct-03 | Keane                           | Worldzen                                | NA           |
| Nov-03 | SPI Technologies                | Kolam Services                          | NA           |

Source: Destination success on BPO road, Express Computer February 23, 2004. Retrieved on February 1, 2006 from <http://www.expresscomputeronline.com/20040223/nasscomsp02.shtml>

Exhibit 3: Map of North Eastern Region





Exhibit 4: Parameters and weightage used in the ranking of the North eastern cities are partly based on a NASSCOM study *The ITES-BPO Super 9: A NASSCOM – Netscribes Study on City Competitiveness* shown below

| RELATIVE IMPORTANCE OF VARIOUS FACTORS |        |
|--|--------|
| FACTORS                                | WEIGHT |
| MANPOWER                               | 8      |
| REAL ESTATE                            | 7      |
| TELECOM INFRASTRUCTURE                 | 6.5    |
| POLICY INITIATIVES                     | 6.5    |
| POWER SUPPLY                           | 6.5    |
| CITY PERCEPTION                        | 5      |
| ENTREPRENEURIAL HISTORY                | 5      |
| TOTAL                                  | 44.5   |

Source: Netscribes survey

Exhibit 5: City Ranking Details

|                                    |  | Gangtok |       |       | Aizawl |       |       | Agartala |       |       | Guwahati |       |       | Shillong |       |       | Imphal |       |       | Dimapur |       |       |
|------------------------------------|--|---------|-------|-------|--------|-------|-------|----------|-------|-------|----------|-------|-------|----------|-------|-------|--------|-------|-------|---------|-------|-------|
|                                    |  | P       | W     | S     | P      | W     | S     | P        | W     | S     | P        | W     | S     | P        | W     | S     | P      | W     | S     | P       | W     | S     |
| Govt. Policy                       | Separate ITES policy                                       | 1.00    | 3.65  | 3.65  | 1.00   | 3.65  | 3.65  | 1.00     | 3.65  | 3.65  | 1.00     | 3.65  | 3.65  | 1.00     | 3.65  | 3.65  | 0.00   | 3.65  | 0.00  | 0.00    | 3.65  | 0.00  |
|                                    | ITES sector as Thrust Area                                 | 1.00    | 3.65  | 3.65  | 1.00   | 3.65  | 3.65  | 1.00     | 3.65  | 3.65  | 1.00     | 3.65  | 3.65  | 1.00     | 3.65  | 3.65  | 1.00   | 3.65  | 3.65  | 1.00    | 3.65  | 3.65  |
|                                    | Incentives and subsidies specific to ITES sector           | 1.00    | 3.65  | 3.65  | 1.00   | 3.65  | 3.65  | 1.00     | 3.65  | 3.65  | 1.00     | 3.65  | 3.65  | 1.00     | 3.65  | 3.65  | 0.00   | 3.65  | 0.00  | 0.00    | 3.65  | 0.00  |
|                                    | Business savvy Government                                  | 1.00    | 3.65  | 3.65  | 0.00   | 3.65  | 0.00  | 1.00     | 3.65  | 3.65  | 1.00     | 3.65  | 3.65  | 1.00     | 3.65  | 3.65  | 0.50   | 3.65  | 1.83  | 0.50    | 3.65  | 1.83  |
| Manpower                           | Educational Institutes – High schools                      | 0.10    | 4.00  | 0.39  | 0.26   | 4.00  | 1.04  | 0.11     | 4.00  | 0.43  | 1.00     | 4.00  | 4.00  | 0.23     | 4.00  | 0.91  | 0.75   | 4.00  | 3.00  | 0.15    | 4.00  | 0.59  |
|                                    | Educational Institutes – Colleges                          | 0.12    | 4.00  | 0.48  | 0.18   | 4.00  | 0.73  | 0.24     | 4.00  | 0.97  | 0.70     | 4.00  | 2.79  | 1.00     | 4.00  | 4.00  | 0.94   | 4.00  | 3.76  | 0.61    | 4.00  | 2.42  |
|                                    | Educational Institutes – Professional Institutes           | 0.44    | 4.00  | 1.78  | 0.11   | 4.00  | 0.44  | 0.44     | 4.00  | 1.78  | 1.00     | 4.00  | 4.00  | 0.56     | 4.00  | 2.22  | 0.56   | 4.00  | 2.22  | 0.56    | 4.00  | 2.22  |
| Telecom Infra                      | Existence of STPI  | 1.00    | 4.87  | 4.87  | 0.00   | 4.87  | 0.00  | 1.00     | 4.87  | 4.87  | 1.00     | 4.87  | 4.87  | 0.00     | 4.87  | 0.00  | 1.00   | 4.87  | 4.87  | 0.00    | 4.87  | 0.00  |
|                                    | No. of Telecom Service Providers                           | 0.60    | 4.87  | 2.92  | 0.40   | 4.87  | 1.95  | 0.80     | 4.87  | 3.90  | 1.00     | 4.87  | 4.87  | 0.40     | 4.87  | 1.95  | 0.40   | 4.87  | 1.95  | 0.60    | 4.87  | 2.92  |
|                                    | Broadband connectivity                                     | 1.00    | 4.87  | 4.87  | 1.00   | 4.87  | 4.87  | 1.00     | 4.87  | 4.87  | 1.00     | 4.87  | 4.87  | 1.00     | 4.87  | 4.87  | 1.00   | 4.87  | 4.87  | 1.00    | 4.87  | 4.87  |
| Connectivity & City Infrastructure | Road links (connectivity throughout the year)              | 0.50    | 3.93  | 1.97  | 0.50   | 3.93  | 1.97  | 1.00     | 3.93  | 3.93  | 1.00     | 3.93  | 3.93  | 1.00     | 3.93  | 3.93  | 0.50   | 3.93  | 1.97  | 1.00    | 3.93  | 3.93  |
|                                    | Rail links   | 0.00    | 3.93  | 0.00  | 0.00   | 3.93  | 0.00  | 1.00     | 3.93  | 3.93  | 1.00     | 3.93  | 3.93  | 0.00     | 3.93  | 0.00  | 0.00   | 3.93  | 0.00  | 1.00    | 3.93  | 3.93  |
|                                    | Airport – Number of cities connected                       | 0.00    | 3.93  | 0.00  | 0.45   | 3.93  | 1.79  | 0.64     | 3.93  | 2.50  | 1.00     | 3.93  | 3.93  | 0.36     | 3.93  | 1.43  | 0.64   | 3.93  | 2.50  | 0.64    | 3.93  | 2.50  |
|                                    | Modes of transportation, ease of transport within the city | 1.00    | 3.93  | 3.93  | 1.00   | 3.93  | 3.93  | 1.00     | 3.93  | 3.93  | 1.00     | 3.93  | 3.93  | 1.00     | 3.93  | 3.93  | 1.00   | 3.93  | 3.93  | 1.00    | 3.93  | 3.93  |
| Power                              | Power  | 0.50    | 14.60 | 7.30  | 0.50   | 14.60 | 7.30  | 0.50     | 14.60 | 7.30  | 0.50     | 14.60 | 7.30  | 1.00     | 14.60 | 14.60 | 0.50   | 14.60 | 7.30  | 0.50    | 14.60 | 7.30  |
| Law & Order                        | Law and order situation – General perception               | 1.00    | 9.49  | 9.49  | 0.50   | 9.49  | 4.75  | 0.50     | 9.49  | 4.75  | 0.50     | 9.49  | 4.75  | 1.00     | 9.49  | 9.49  | 0.50   | 9.49  | 4.75  | 0.50    | 9.49  | 4.75  |
|                                    | Law and order situation – Militancy                        | 1.00    | 9.49  | 9.49  | 1.00   | 9.49  | 9.49  | 0.50     | 9.49  | 4.75  | 0.50     | 9.49  | 4.75  | 0.50     | 9.49  | 4.75  | 0.50   | 9.49  | 4.75  | 0.50    | 9.49  | 4.75  |
|                                    | Law and order situation – Bandhs and strikes               | 0.50    | 9.49  | 4.75  | 0.50   | 9.49  | 4.75  | 0.50     | 9.49  | 4.75  | 0.50     | 9.49  | 4.75  | 0.50     | 9.49  | 4.75  | 0.50   | 9.49  | 4.75  | 0.50    | 9.49  | 4.75  |
|                                    |  |         |       | 66.83 |        |       | 53.94 |          |       | 67.24 |          |       | 77.25 |          |       | 71.42 |        |       | 56.08 |         |       | 54.32 |

P = Point

W = Weightage

S = Score

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