

12	Status and prospects of IT Sector in NER and area specific pre-investment feasibility study on setting up of IT park in select NE states viz. Tripura, Mizoram, Manipur and Meghalay	WEBCON, Kolkata	2001
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## **EXECUTIVE SUMMARY**

### **1. INTRODUCTION**

The dawn of the 3<sup>rd</sup> millennium has brought about a significant shift in way of our thinking across the globe. This new millennium is significantly characterised by the effort of consolidation and co-operation through merger of various markets and civilisation into a global economy, and thereby, a “global village”. A paradigm shift is perceived across the globe from asset-driven to knowledge-driven civilisation.

Information Science & Technology is considered as one of the paramount factors that have brought about such a paradigm shift. A new terminology, “Knowledge Worker” started in the societies around the world.

Although computers started proliferating as a productivity tool in the Indian Industrial scene in the seventies, but, it was only in the mid-eighties that forecasters, analysts and government planners began to understand the potential of Indian talent in IT.

This realisation led to the formulation of the Computer Software Policy in the year 1986. The National Task Force for IT sector was formed at the initiative of the Prime Minister around May 1998. In July 1998 the National Task Force submitted 108 recommendations to the Government of India (GoI). The Ministry of Information Technology (MIT), GoI was made the nodal agency to get the recommendation into action. The IT bill was tabled in end-2000.

### **2. INDIAN PERSPECTIVE**

The IT industries in India, grew from a mere 50 million USD in 1988-89 to 4 billion USD in 1998-99. National Association of Software and Services Companies (NASSCOM), which has played a pivotal role in catalyzing the growth, set their aspirations to achieve 87 billion USD (50 billion USD in exports alone) in industry annual revenues by 2008.

For India, IT hardware segment has remained as a laggard when compared with IT Software and Services segment. Analysis of report shows that, the Electronic Hardware sector has an average annual growth rate which is negative (-4%). Whereas the Computer Software & Services Sector had shown a positive average annual growth rate, which is 50%. The other sectors, namely Telecom Services and Project Export recorded an average annual growth rate at 19%, and Video Film Software sector has shown a growth rate of 66%. The Video Film Software Sector has shown a spike of growth, which has reportedly started in 97-98. The study

observes that it is a recent activity and has not attended any maturity. Therefore this sector is excluded from further investigation.

In view of the above the present study remain focussed on IT Software and Services Sector (Computer Software and Services) only.

According to NASSCOM, the IT software and service industry in India grew at the rate of about 50% per annum, on an average, during the last couple of years. Presently the rate is centred around 40%, much owing to US and European economy slowdown. NASSCOM has reported that the Software Industry in India was about Rs 24,350 crores (USD 5.41 Billion) in 1999-2000. Export earnings during the period was Rs 17,500 crores (USD 3.89 Billion). A recent survey conducted by NASSCOM revealed that despite of the IT slowdown, the contribution of IT software and services export revenue for the first quarter has increased from 20% in 2000-2001 to 21.5% in 2001-2002.

### **3. IT IN NORTH EASTERN REGION**

Over the years the southern and western region of the country has dominated the IT industry in India with a combined share of about 80% of the revenue. Of late the Eastern and the North Eastern region have been showing signs of integration with the national scenario. In 1999, 7% of national export has been from this region. The share of IT and IT industry from the NER has still remained negligible.

The declaration of IT as a priority sector by the central government, stupendous growth rate, and negligible share of NER in IT has made NEDFi focus on this sector. Subsequently, NEDFi commissioned WEBCON along with CMC to conduct a study on Status and Prospects of IT Sector in NER against specified scope of work. Accordingly, WEBCON –CMC team of professionals conducted the study and prepared the report.

### **4. THE FINDINGS**

The experience gathered during the study tour has helped the team identify the critical factors responsible for the growth of IT in the NE Region. Different critical factors that would influence the prospect, and hence, the growth of the IT sector in the NE Region are:

- Infrastructure
- Manpower
- Government Initiative
- Demography
- Economy
- Culture
- Financial Institutions and Banks
- Presence of various IT business segments
- Geo-political Factors
- Digital Divide / Empowerment.

These factors have direct / indirect bearing on the IT Sector. These factors were put on a weightage scale according to the criticality. The study team had put in place a rationale to impart weighted scoring against the critical parameters based on their understanding of the subject (IT), domain expertise, and cumulative experience in the field. It may be highlighted that each of these critical factors was further broken into various sub-components to fathom out the criticality further. These sub-components were also weighted upon in a similar fashion as has been outlined earlier.

## 5. IT READINESS OF STATES IN NER

Analysis of the critical parameters reveals that, among all the states of the North East, Assam stands at number one, on the whole. On a maximum 100 point weighted score, Assam made upto 89.95, steering clear of the nearest rank holder, Sikkim by an overwhelming margin of about 31 points. Sikkim's score stands at

58.91. Close on the heels of Sikkim lies the score of Tripura, which has attained a score of 57.49. In an order of highest to lowest scores, the states that follow the champion, the 1<sup>st</sup> and the 2<sup>nd</sup> runner-ups are as follows:

<b>States</b>	<b>Ranking</b>
Assam	I
Sikkim	II
Tripura	III
Mizoram	IV
Manipur	V
Meghalaya	VI
Nagaland	VII
Arunachal Pradesh	VIII

## **6. IT IN INDIA- FUTURE POTENTIAL**

The NASSCOM - McKinsey study on Indian IT Strategies reported (Dec 1999) that the Indian IT services and IT- enabled services sectors possess the greatest wealth creation opportunity in India's history. The potentials envisioned at 2008 depicts that this opportunity will substantially benefit the overall Indian economy by:

- Accounting for nearly 7.5% of overall GDP growth
- Creating employment for over 2.2 million people, including highly-skilled, skilled, and semi-skilled workers, a growth of about 86% per annum, on an average, is expected.
- Earning over 35% exports revenues for the country, amounting to around \$50 billion in 2008
- Attract foreign direct investment of over \$4-5 billion in 2008, more than the total FDI in all industries put together in 2000.

Several recent studies, conducted by pre-eminent research firms, such as, Giga Information group of US, McKinsey & Co etc. have indicated that in IT sector India would likely continue remaining in an advantageous position over its competitors, such as, Ireland, Israel, Philippines, China, Canada, Russia, Ukraine et al, simply because of its comparable quality human resources at cheapest cost. Moreover, in terms of numbers the IT resources in India are only second to the US in the world.

## **7. GROWTH ENABLERS - NER**

- IT - a Declared Priority Sector
- Availability of Vast Resource pool.
- Initiatives towards e-Governance
- Upto 3% IT spending allocation against each dept in state ministry for 5 years
  - this will lead to an amount of Rs. 650 crores.
- Attractive Fiscal Incentives and Support from Central Govt
- Abundance of Funds

## **8. IDENTIFICATION OF PROJECTS**

Based on the IT Potentials for India and the growth enablers for IT in NER, a number of projects varying in value and volume together with technology and availability of resources are identified for further exploration. The projects identified have been some ballpark estimates for understanding and reference. However, a detailed market survey is recommended before investing on such projects. Some of the projects that may be mentioned include:

- Training Schools
- Desk Top Publishing
- Cyber Kiosks & Cyber Cafes
- IT-enabled Services
- IT Services
- IT Parks
- Hi-tech Habitat

## **8. MARKETING STRATEGY OF NEDFi**

NEDFi, being an apex development bank, has got some advantages in its functioning along with some perceived limitations. The entire North Eastern region which is, unfortunately, lagging behind in IT sector when compared with other parts of the country, can of course change its landscape with concerted efforts from various agencies at work. While it is expected that the state governments will primarily act as the drive engines, NEDFi on the other hand can act proactively and become a valuable catalyst in the process that will ramp-up the region to some extent. Three types of marketing strategies are recommended for NEDFi, and these are General, Short term and Long term. The strategies, if pursued proactively, will expectedly help NEDFi to play a vital role in changing the IT landscape for the NE Region. The highlights of the strategies are depicted as follows:

### **General Strategies:**

- Create Separate IT Cell within NEDFi
- Create the IT Package of the North East
- Organise IT Fairs & Roadshows
- Creation of Venture and 'Incubators'

### **Short Term:**

- Promotion through assistance of Policy Makers and Nodal Agencies i.e.
  - Ministry of Information Technology, Govt of India
  - North East Council
  - Indian Institute of Technology (IIT), Guwahati
  - Various State Governments:
    - ✓ To promote e-Governance / Public Interface
    - ✓ Utilisation of Departmental IT Budget at State Governments.
- Co-ordination with various Government departments and agencies like, BSNL, VSNL, STPI etc.
  - Leverage Organisations like, FINER, NASSCOM, CII etc.
  - Entrepreneur Mobilisation:
  - Develop links with NRI groups having NE Origin:
  - Organise IT Specific Entrepreneurs Development Programme (EDP)
  - Attract Established IT Service Providers

### **Long Term:**

- Creation of Relationship with Educational Institutions
- Participation in Creation of Centre of Excellence
- Sponsoring Fellowship in the Educational Sector
- Look around for Global Market.

NEDFi's role in the development of a region may be reckoned well. The study team recognizes that the effort that NEDFi has initiated by creating an IT park in Guwahati is quite laudatory.

## 9. RECOMMENDATIONS

The major recommendations of the study are tabulated below.

■	<p><b>Start Lobbying with the Central Govt:</b> The State Governments of NER should start lobbying with Central Govt. Deptts./Agencies vigorously for allotment of fund for development of IT business and IT related infrastructure in their respective State. NEC may play a vital role in co-ordinating this effort.</p>	<p><b>Actions to be taken :</b> State S&amp;T/IT Deptt. &amp; NEC.</p>
■	<p><b>Initiate “Pack Hunting” Exercise :</b> NEC, State Govt. and NEDFi should jointly start "Pack Hunting" for development of IT and IT related infrastructure in the NE States. Road shows and specific EDPs, etc. may be organised jointly in select locations.</p>	<p>State S&amp;T/IT Deptt. , NEC and NEDFi</p>
■	<p><b>Ensuring Quality Power Supply :</b> Power Department of the State Governments must ensure availability of quality power for IT industry. The State Governments should take immediate step to provide stable and quality power supply in their respective states. If necessary, special scheme may be declared for IT industry.</p>	<p>State Power Department</p>
■	<p><b>Emphasising Computerisation In Education :</b> Emphasis should be given by the State Govts. for introduction of computer courses in the education sector so as to create overall IT awareness &amp; produce quality manpower for development of IT in the State.</p>	<p>State Education Deptt.</p>
■	<p><b>Ensuring Proper Connectivity and Bandwidth :</b> Without proper connectivity, IT business particularly online remote sensing activities cannot be undertaken. Since most of the NE states are linked with inadequate connectivity, VSNL and BSNL should formulate specific plans and programmes to provide good connectivity through V-Sat/ OFC link to the NER. The role of VSNL/BSNL assume more importance for NER since private ISP providers will find it difficult to establish gateway in these States due to the sensitive nature of the region.</p>	<p>VSNL &amp; BSNL</p>
■	<p><b>Taking Initiative for Creating IT Awareness:</b> The Chambers of Commerce like FINER in Guwahati should take initiative for creating awareness about the potential of IT in the NER among local entrepreneurs by organising seminars, workshops, etc. involving Govt. Deptts./Agencies and NEDFi.</p>	<p>Regional Chambers of Commerce like FINER and All India Industrial bodies like CI</p>
■	<p><b>Selecting States on Merit :</b> Based on ranking of IT readiness of the States, NEDFi should adjust its investment decision on creation of IT infrastructure and on IT enterprises.</p>	<p>NEDFi</p>
■	<p><b>Capturing Initiative on Domestic Market :</b> NEDFi should capture initiatives that are aimed at servicing the domestic market requirements, particularly for the NER. Internet connectivity/ ILPC should not come as a prohibitive factor in such cases.</p>	<p>NEDFi</p>
■	<p><b>Focusing on Remote Servicing Activities :</b> NEDFi should also encourage investments in the areas of Call Centers, Medical Transcription and Back Office Operations etc.. Emphasis should, however, be given on the activities, which does not require online connectivity. NEDFi should also maintain close liaison with VSNL and BSNL for getting adequate internet connectivity in such cases.</p>	<p>NEDFi</p>
■	<p><b>Team Up With Govt./ Govt. Agencies :</b> NEDFi should encourage investments from private enterprises and team up with various Governments and infrastructure service providing agencies to see such initiatives fructify.</p>	<p>NEDFi</p>
■	<p><b>Creating and Promoting VC Fund :</b> NEDFi should create venture capital (VC) fund and participate in venture creation and</p>	<p>NEDFi</p>

	create incubators. Meanwhile efforts may be made to make use of SIDBI's VC fund for promotion of IT enterprises with NEDFi's involvement.	
■	<b>Encouraging Quality Projects :</b> NEDFi should encourage quality social infrastructural projects like quality housing, quality educational institutions, quality hospitals, etc. which will send attractive signals to the entrepreneurs from other region and other countries as well.	NEDFi
■	<b>Image Building :</b> NEDFi should emphasise on its own image building exercise to propagate its existence in the NER.	NEDFi

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