

IT PLAN 2000-2005

Executive Summary

Importance of Information Technology (IT)

- **All the states of the country are competing with each other to attract IT companies to their states.**
- **IT is important to the State because it generates employment and increases efficiency.**
- **Above all, IT compresses time and space.**

Present Status

- **INFOCITY has already attracted Infosys, Satyam, Wipro, et al.**
- **Bhubaneswar occupies the seventh place in India, as an IT city.**
- **Three State Government organizations are active in the IT front.**
- **IT Parks and dedicated buildings are being constructed.**
- **Satellite data connectivity has been established.**
- **Internet and ISDN services are available.**
- **40 exporting software units are operational in Bhubaneswar.**
- **Major expansion plans of important companies like Infosys and Satyam are on.**
- **Many NRI and Medical Transcription units are operational.**
- **The IT sector today employs about 2000 persons directly.**
- **Export turnover of IT has been growing steadily over**

the last 3 years. During 2001-2002, IT export from Orissa was about Rs. 220 Crores.

- **More than 10000 seats are available in engineering colleges within Orissa in 36 engineering colleges.**
- **2500 seats are available in 48 MCA institutions.**
- **Good quality high-end training institutions are available in Bhubaneswar like NIIT, APTECH, SSI, et al.**
- **B.Sc. Honours courses in Computer Science have been started in 6 govt. colleges.**
- **High-end career courses, DOEACC accredited courses and short-term courses are available.**
- **Gramsat Pilot Project has already been started.**
- **IT manpower training has been done by DTET and STPI - Report placed herein.**

Comparative Advantages of Orissa

- **Crime rate one of the lowest in the country.**
- **Power is surplus and power rates are moderate, though quality has to improve.**
- **Cost of living is lower compared to bigger cities.**
- **Manpower cost is lower compared to bigger cities.**
- **Clean, green and pollution free.**
- **Good quality civic infrastructures are available.**
- **Attrition rate of professionals is one of the lowest.**
- **Smaller cities have been favoured by IT companies, like in the Silicon Valley.**
- **Best location in the Eastern India.**
- **People are peace loving.**

Deficiencies & Difficulties

- **Absence of Central Govt. funded technological institutions like BEL, ITI, NAL, HAL, ECIL, GTRL, HMT, LRDE, DRDO, ISRO, NPL, BARC, TIFR, CDAC, CMC etc., and top class educational institutions like the IIT, IISc, IIM which are the hidden strengths of cities like Bangalore, Hyderabad, Mumbai, Pune, etc.**
- **Funds constraint.**
- **Lack of convenient air connectivity with Bangalore. The least that should be done is to make the Calcutta-Bangalore flight a hopping flight with a stop at Bhubaneswar.**
- **Absence of an empowered single window facility.**
- **Lack of dispersal of IT activities beyond Bhubaneswar.**

Targets for 2000-2005

- **Orissa should become the destination of choice for IT ventures in the Eastern India.**
- **The State should gain a reputation as an IT-enabled modern State, responsive to the needs of the citizens.**
- **200 IT companies employing 10,000 IT professionals, and with an export turnover of Rs. 2000 Crores, should operate within the State by 2005.**
- **A further 5000 persons should find employment in IT-Enabled Service Industries by 2005.**
- **A large pool of technical personnel should be produced in the State through high quality training and educational programmes.**

Action Points to achieve the Targets

1. **Existing IT incentives should continue for 5 more years. Thereafter all incentives should stop. However Govt. services to IT industries should be better and more friendly.**

2. Government should be seen to be pro-IT. Government should be able to ensure that entrepreneurs and corporate houses desirous of pursuing genuine projects are given due RESPECT so that they can work within the state with DIGNITY.

3 Paradigm Shift There has to be a change in the mindset in recognizing that Govt Sector would not be able to provide the type of quality service expected by the IT sector. Govt sector should only act as a catalyst instead of providing services directly. Sustained and aggressive marketing for Orissa as a destination has to be undertaken. In this endeavour, private sector funds should be sunk in substantially, so that it has a large stake in marketing of Orissa as a destination.

4. Three organizations in the Government sector, which are active in the IT area, namely OSEDC, OCAC and, if possible, IDCOL Software Ltd, should be consolidated under one umbrella as a new corporation. The new corporation is to be called the Information Technology Corporation of Orissa. This would permit pooling of resources and synergization of activities.

5. IT campaigns should be held in major cities in India and abroad.

6. Air connectivity of Bhubaneswar with other IT cities, particularly, Bangalore, would have to be improved.

7. Ready-to-occupy buildings as incubators and dedicated IT Parks should be set up at Bhubaneswar and three other towns like Rourkela, Sambalpur and Berhampur. A few infrastructure building and parks, being built by some of the PSUs might prove to be expensive, compared to similar facilities in other states. In certain cases retrofitting is being attempted, which might not yield the desired result. In the ultimate analysis, IT units would come to Orissa only if the cost of operation here is lower, and services better, compared to other IT cities.

8. High Speed Data connectivity through STPI or VSNL should be made available at these places. As a first step, STPI, Rourkela Centre should be started immediately.

9. In response to a proposal from Berhampur Development Authority, Ministry of Commerce, GOI, has sanctioned Rs 2 crores for an Infotech Centre, at Berhampur. The project is estimated to cost Rs. 11 crores. It is to be expedited.

10. An empowered single window facility should be created.

11. A Venture Capital Fund of Rs.15 Crores jointly with SIDBI should be set up.

12. An Indian Institute of Information Technology (IIIT) should be set up. Government should earmark and hand over 50 to 100 acres of land for gradual development of the second phase of the IIIT. A possible affiliation with IIIT, Bangalore would be explored.

13. A fibre optic cable based Secretariat Local Area Network (LAN) should be established. There is a possibility for getting a grant for this purpose from UNDP.

14. A Wide Area Network (WAN) covering the entire state is in the process of being established. The Gramsat project has already started. Within 6 months limited access to district head quarters will be available through a mobile Earth Station and VSATs. The project is likely to be completed soon, by which time 24 hours, on line, wide band connectivity would be established through a full fledged, permanent Earth Station. Two-way video conferencing, up to district level, will also be available. In view of this, redundant communication networks, for which funding is being offered by World Bank and other funding agencies, should be discouraged.

15. A Foreign Language Training Centre at Bhubaneswar would be established to feed IT-Enabled Services and Export Software sectors.

16. Two high-end training centres in association with Oracle and Sun Micro Systems would be opened for industry related technology training

Why IT is important for Orissa

Information Technology is very important for the country as a whole. IT has compressed time and space, so that the world has become a global village. It is an environmental friendly industry. This sector has been growing at a compound annual growth rate of more than 50% for the last seven years. During 98-99, IT turnover of the country was about Rs.16,000 crores, out of which Rs.11,000 crores was from exports. The country, as a whole, is gearing up to achieve a turnover of US\$ 87 billion by the year 2008, which would include US\$ 50 billion of exports. Today, India has about 2,80,000 people working in the software and service sector. This is expected to go up to 22,00,000 by 2008. Thus, being an environmental friendly industry, which generates valuable foreign exchange while providing quality employment to a large number of people, IT is obviously very important for the country as a whole.

However, the importance of IT for Orissa can be summarized as follows:

- Growth of IT creates quality employment opportunities for the people of the state, with the**

resultant spin-off effects. Such employment could be inside the State or out side.

• Use of IT facilitates efficient governance through

- 1. better control over the finances of the state;**
- 2. making available relevant data for quick decision making;**
- 3. providing the means for more transparent and speedy redressal of citizens grievances;**
- 4. providing the means to improve speed of governance, and**
- 5. providing the means for disseminating Government information to the people for better appreciation of the efforts of the Government.**

Status of IT in Orissa

IT belongs to the service sector. The spread of IT in India has, by and large, been limited to metropolitan and major cities with adequate communication, connectivity, social infrastructure and availability of trained manpower. Big cities like Bangalore, Mumbai, New Delhi, Chennai, Hyderabad and Pune are regarded as major centres for IT. The position of Bhubaneswar is immediately after these cities. This has been recognized by the Prime Minister's IT Task Force by recommending that one of the first five High-Tech Habitats in the country should be located at Bhubaneswar.

IT Policy of the State:

- 1. Information Technology has been assigned the status of a priority sector and a thrust area in the Industrial Policy 1996 and special incentives are available to IT ventures under this policy.**
- 2. Special emphasis has been given in Information Technology Policy 1998 on the Government sector computerization, IT education and on the growth of IT industries in the state.**

IT Budget:

- 1. The IT Department is the Administrative**

Department for the IT sector. The Government has notified a separate IT Department for better focus on IT activities. Budget for this Department has already been quantified. For 10th Five Year Plan period the budget was pledged at Rs.1388.40lakhs i.e. at an average of Rs.278.00 lakhs per annum.

State Government IT Organizations:

The following three State Government organizations are active in the IT front.

1. The Orissa State Electronics Development Corporation, which has been designated as the nodal organization for promotion of the IT sector in the state. It is a purely promotional organization without any commercial goal. IT department has administrative control over OSEDC. The following services are provided by OSEDC :

1. Single Point contact for setting up IT ventures.

2. Provides escort service to entrepreneurs.

3. Provides single point interface for Govt. approvals.

4. Helps in arranging land, electricity, manpower, etc.

5. Implements and provides inputs for the IT Policy.

6. Administers incentives announced by the State in the Industrial Policy and IT Policy.

7. Campaigns within the country and outside for attracting IT projects to the State.

8. Provides Venture Capital for IT industries and helps in arranging institutional loan.

9. Promotes industry oriented quality IT education and training. A high-end IT training institute called Orissa Centre for IBM Software is being run in association with IBM.

10. Participates in equity of selected IT units up to 11%.

11. Provides technical help to entrepreneurs in identification of projects, sourcing of technology, collaboration, capital goods and in preparation of bankable project reports.

12. Runs Electronics Test and Development Centre (ETDC), Bhubaneswar, which is a unit under the STQC Programme of the Ministry of Information Technology, Government of India. It provides Calibration, Repair, Testing and Certification services to industries.

2. Orissa Computer Application Centre, which is the organization for taking up computerization jobs in the Government sector and also for training of Government employees on use of computers. IT department has administrative control over OCAC. OCAC is also active in the following areas:

1. Running of different types of short-term training programmes for students and executives.

2. Running of long-term DOEACC training programmes at O, A, and B levels.

3. Running of a Japanese language training programme.

4. Running of teachers' training programme for college teachers for conducting B.Sc. level courses in their respective colleges.

5. Helps government departments and organizations in procurement of computer hardware and software.

6. Provides consultancy for computerization of Govt. organizations.

7. Develops software for different applications in the Govt.

8. Manages the transit node of the Educational and Research Network (ERNET) of the Ministry of IT.

9. Undertakes R&D activities in Oriya language based technology solutions such as Oriya Spell Checker with CDAC, Pune.

3. IDCOL Software Ltd., which is a joint venture of the Orissa State Electronics Development Corporation Ltd. and Industrial Development Corporation of Orissa Ltd. This organization trains people on Microsoft related technologies and also takes up computerization jobs both in the Government and private sectors. Industries department has administrative control over this company.

Usage of IT in Orissa:

There is a need to accelerate the growth of computer application in the Govt. sector. Different departments, field units and corporations of the state have stand-alone computer systems/ networks, which are used for data processing and document creation. However, integration of the stand-alone computerization efforts of different departments and organizations is yet to materialize. Though the use of computers at home and smaller commercial establishments is increasing, it is nowhere near international averages.

IT Infrastructure and Connectivity:

1. Two State Government Corporations (IDCO and OSEDC) are in the process of building about 3,00,000 sq.ft. of ready-to-occupy and wired-space for the IT sector. The Government has recently permitted OSEDC

to raise funds through private placement of Bonds so that a 10 storeyed building of about 1lakh sq.ft. can be built to act as an incubator for IT units.

2. IDCO is developing a dedicated 205 acre Export Promotion Industrial Park (EPIP) at Chandaka Industrial Area.

3. A Satellite Earth Station (STPI) is already functional providing data connectivity to IT companies.VSNL Gateway is under construction.

4. Internet services have been introduced by the Department of Telecommunications (DoT) for general public in Bhubaneswar. Internet services for other types of customers are already available from NIC and STPI. Two private ISPs (Internet Service Providers) have started their services.

5. DoT is expanding its Fibre Optic Network in Orissa and has launched ISDN services. About 85 % of the telephone exchanges in Orissa have already been connected through fibre optic cable.

6. The Gramsat Pilot Project of the Department of Space has recently been inaugurated by the Hon'ble Prime Minister. This project, when fully completed, would provide broad band computer connectivity between the State Head Quarters and different locations in the state, including district tehsil, block and panchayat head quarters, with selective video and audio capabilities.

IT Industries

1. 40 number of exporting software units, including Indian majors like Infosys Technologies Ltd. and Satyam Computers Ltd. are operating in Bhubaneswar. Both Infosys and Satyam started their operation from rented premises. Satyam has already constructed its own building and recently shifted to it. Infosys, which has a major expansion plan in Bhubaneswar, has acquired 25 acres of land and started construction. Infosys today employs over 500 software professionals. They have plans of employing 2500 persons by the year 2005. Though Satyam employs about 100 persons today, they have plans to

reach the employment figure of 600 persons by 2005.

2. Five NRI units are operational in Bhubaneswar.

3. Three Medical Transcription units are also operational.

IT Turnover in Orissa

1. IT turnover within the state has been steadily growing over the last three years. Whereas export was nil during 1996-97, a small beginning was made in 1997-98. Export during 1997-98 was Rs. 4.76 crores. During 1998-99, exports multiplied to Rs. 53.37 crores. In spite of the super cyclone and the associated disruption in connectivity and loss of person days, exports during 2001-2002 have risen to about 220 crores.

2. The domestic IT turnover also has been growing rapidly.

IT Employment

1. Employment in the IT sector has also been steadily growing over the last three years. It is estimated that about 2000 persons are employed today directly within the State. The indirect employment would be many times more.

IT Education & Training

1. Professional IT companies prefer to employ engineers. Therefore, the number of seats available in engineering colleges is an indicator of the availability of IT manpower in the state. Today, there are 36 engineering colleges operating in the state, having a total of more than 10,000 seats.

2. 48 MCA institutions having a combined capacity of 2500 seats are functional in the state.

3. B.Sc. (Hons) courses in Computer Science have been introduced in 6 government colleges. Steps have been taken to start this course in 9 more colleges.

4. Two high-end IT training centres in the Government

sector namely, Orissa Centre for IBM Software and IDCOL Software Ltd. are already operational in association with world leaders like IBM and Microsoft.

5. OCAC and many other institutions run DOEACC accredited courses. OCAC also runs short-term courses on Oracle, AutoCAD, Auto Lisp, Finite Element Analysis, and courses for college teachers and Govt. employees.

6. Multiple centres of almost all major IT training houses like NIIT, APTECH, KARROX, IIS-INFOTECH, SQL-STAR, LAKHOTIA Computers, SSI, etc are operational.

7. An institute of excellence called "Indian Institute of Information Technology" has been planned.

Comparative Advantages of Orissa

1. In spite of various front page cases of atrocities, crime rate in Orissa is one of the lowest in the country and outside entrepreneurs and professionals would feel safe to work in Orissa.

2. Power is surplus in Orissa and power rates are moderate, though quality has to improve. The power situation in terms of availability, cost and quality is worse in Bangalore, Hyderabad, etc.

3. Cost of living is lower in Orissa compared to bigger cities. Hence employees of IT companies can have a better life with the same pay.

4. Manpower cost in Orissa is lower compared to bigger cities. Manpower cost is roughly 50% of the production cost in an export oriented IT unit. Hence cost of operation for IT companies is lower in Orissa.

5. Most of Orissa, particularly its Capital, is still clean, green and pollution free, where as the pollution levels in bigger cities is alarming.

6. Unlike cities like Bangalore, the civic infrastructure in Bhubaneswar like schools, colleges, clubs, road traffic, housing, hospitals etc. are yet to be over stretched.

7. The rate at which professionals change jobs in big cities is alarming. This puts the IT companies into a lot of difficulties. The attrition rate in Bangalore is about 20%. In Bhubaneswar the rate is about 2%.

8. In the USA, IT activities are mostly carried out in clusters of small cities and towns, rather than in big cities. Whereas San Francisco and Los Angeles are not known for IT activities, Silicon Valley consisting of small towns like Santa Clara, Palo Alto, Milpitas, San Jose, Mountain View, Clear Water, Sacramento, etc in the California Bay area, are famous for IT. This is because IT professionals work long hours and, therefore, like to be near their homes. That way, a lot of commuting time is saved. Bhubaneswar is such a place.

9. Employees are the raw material for the IT sector and valued very much by the IT companies. Good companies go out of their way to keep them happy. Human beings are most happy, and best nurtured, in their native surroundings. Hence the trend in India is for the IT companies to set up development centres in different parts of the country, so that local talent can be employed and retained in situ. For various reasons, Orissa, particularly, Bhubaneswar appears to be the best location in the Eastern India.

"Deficiencies & Difficulties"

1. Prominent IT cities of the country, like Bangalore and Hyderabad, Mumbai, Pune, etc have been tremendously helped by the local presence of Central Govt. funded technological institutions like BEL, ITI, NAL, HAL, ECIL, GTRL, HMT, LRDE, DRDO, ISRO, NPL, CMC, BARC, TIFR, CDAC, etc. Besides, these cities have been helped by the existence of prominent educational institutions like the Indian Institute of Technology, Indian Institute of Science, Indian Institute of Management, etc. and Central Govt. funded R&D organizations. These institutions have been responsible for the local availability of a large pool of people with domain knowledge relevant to IT. Thus when the first multinational company, namely, Texas Instruments Ltd. wanted to set up an off-shore development centre, Bangalore was the obvious

choice. Orissa has no such Central Govt. establishment or technical educational institute of national importance.

2. IT activities tend to be centered around major cities with large populations (50lakhs plus), and commensurate civic infrastructure, because of obvious reasons. The role of State Governments in promotion of IT in such cities, therefore, need not be very significant. However, for a State like Orissa, which is generally regarded as a backward state, a pro-active role of the State Government is essential. The Government has to provide IT infrastructure in the form of availability of communication facility, air connectivity, dedicated IT Parks, suitable buildings as incubators and a regulatory framework to reduce the hassles of the IT entrepreneurs.

3. The major constraint in promotion of IT in the State of Orissa has been scarcity of resources. The Governments of Karnataka and Andhra Pradesh have been spending hundreds of crores for development of the IT sector and also for e-governance. With the creation of the IT Department and allocation of specified funds, many of the difficulties faced earlier are expected to ease out. However, significant amounts of funds have to be committed for any meaningful initiative to be taken.

4. For an entrepreneur trying to set up an IT unit in the state, the task of arranging land, electricity, water, government incentives, registration, finance, Central Excise and Customs formalities, Sales Tax formalities, Municipal formalities, etc., means many visits to different organizations. Such experience could be very frustrating, and it detracts from the IT friendliness of the State Govt. It will be a great help and big boost for the IT sector if all the Government permissions, concessions, finances, etc can be handled by an empowered single organization, namely the IT Corporation. One empowered officer from all the relevant departments and organizations should be posted to the IT Corporation, so that all the necessary permissions and services are available at one physical location. It would then be the responsibility of the concerned official to obtain clearance from his own department or organization, in a time bound manner,

rather than the entrepreneur having to make the rounds himself.