

**e-Governance:
Strategy, Policy, Prescription and Prospect for the 'Common Man'...A
Case Study of Government of Orissa vis-à-vis India**

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**e-Governance:
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e-Governance is the application of Information and Communication Technology (ICT) for delivering Government Services, exchange of information, communication transactions, integration of various stand-alone systems and services between Government and Citizens (G2C), Government and Business (G2B) as well as back office processes and interactions within the entire framework of Government.

Through the e-Governance, the citizens will avail Government services in a convenient, efficient and transparent manner. The Government being the service provider, it is important to motivate the employees for delivering the services through ICT. To achieve this, the Government employees will need to learn the technology in order to realize the advantage of ICT. The aim is to train and equip them in details with e-Governance applications and make them responsive to the technology driven administration.

Evolution of e-Governance is a highly complex process requiring provisions of hardware, software, networking, process-re-engineering and change-management. In a good e-Governed system, there is minimal human interference and decision on cases. It must be 'system or structure driven' rather than 'unit (individual) driven'. This placates the scope for any subjective interpretation or misinterpretation in the process of disposal of the cases, particularly the routine cases.

The purpose of the paper is to delve into strategy, policy, prescription and prospects of the government of India vis-à-vis the government of Orissa in making e-Governance accessible to the common person. Author contends that some lessons have been learnt from the past, and Governments at both Center and State level are engaged in serious endeavors in making e-governance 'system-driven' rather than 'unit driven'. In the process, I have indicated many pitfalls and explored the prospects of e-Governance in Orissa vis-à-vis India. The message is loud and clear: unless the e-Governance concerns itself with the 'Common Person's needs, it is bound to fail in India.

AT THE CENTER (GOVERNMENT OF INDIA):

The NeGP

The Government's National Common Minimum Program accords priority to improve the quality of basic governance and in that context proposes to promote e-Governance on a 'massive scale' in the areas of concern to the common person. Keeping this priority in mind, the Department of Information and Technology has formulated the National e-Governance Plan (NeGP)¹. The NeGP aims at improving delivery of Government services to citizens and businesses with the following vision: "Make all Government services accessible to the common man in his locality, throughout his life through a One-Stop-Shop (integrated service delivery) ensuring efficiency, transparency and reliability at affordable cost to meet the basic needs of the common man."

NeGP presently consists of 10 components & 26 Mission Mode Projects (MMPs) in order to implement at the central, state and local Government levels. The table² below notes some of the key features that indicate the NeGP's mission to promote e-Governance on a 'massive scale' at a 'systemic level'—and distinguishes itself from the past 'unit driven', short-term oriented projects:

¹ www.nationalegovernanceplan.doc.co.in

²Neel Ratan, Executive Director, Pricewater House, "National E-Governance Plan of India: Driving Good Governance using ICT, July 2005, p.2, www.digitallearning.co.in

Central Government Projects	State Government Projects (Sub Programme)	Integrated Projects
<ul style="list-style-type: none"> • National ID • Central Excise • Income Tax • DCA 21 • Passports/Visa & Immigration • Pensions 	<ul style="list-style-type: none"> • Land Records • Property Registration • Transport • Agriculture • Municipalities • Gram Panchayats • Commercial Taxes • Treasuries • Police • Employment Exchange 	<ul style="list-style-type: none"> • EDI • e-BIZ • Common Service Centres • India Portal • EG Gateway • e-Procurement • e-Courts
Programme Components		
<ul style="list-style-type: none"> • Core Policies • Core Infrastructure • Support Infrastructure 	<ul style="list-style-type: none"> • Integrated Services • Technical Assistance • HRD & Training 	<ul style="list-style-type: none"> • Awareness & Assessment, • Organisation Structures • R&D

At the ‘design’ and ‘program’ level, it seems an excellent, all encompassing, comprehensive plan—different from previous experience of e-Governance projects as argued above. Willingness on the part of the Center (Government of India) to invest and expend sufficient ‘funding’ is a big plus. However, I argue it here and several others have argued elsewhere, the biggest challenge is to: a) place adequate ‘institutional mechanism’ at both the Center and State level; and b) strike balance and synergy at the inter-departmental and intra-departmental levels across the country—that will implement the ‘Plan’ into ‘Reality’.

Nevertheless, one has to call it a solid beginning in that the ‘Plan’ is massive and ambitious and it is a ‘break’ from the past. Before I get to the details of the ‘case’ here in the study (that is, State of Orissa), few words on the goodness and cautions of the plan is in order.

What is so good about the NeGP?³

First, as many critics will agree, the starting point is the ‘infrastructure’ in order to make e-Governance ‘citizen or common person oriented’, especially

³ This section is based on ideas of e-Governance experts like Neel Ratan (Pricewater House, India), M. Ramasamy and M. Appadorai of Madras University and article by Dilip Cherian in Deccan Chronicle, Op-ed Page (Sunday, April 27, 2008)

at the rural terrain. Both by UNDP and one recent account, in terms of e-Governance readiness (e-Readiness Index), India has slipped 26 places into a rank of 113 from previous rank of 87 in 2005⁴. The plan proposes three core pillars: 1. State Wide Network (SWAN); 2. National Data Bank/State Data Center; 3. Common Service/Citizen Centers. The success of these 3 ‘pillar components’ in its entirety will see India climb up the ladder of e-Readiness Index.

The other important aspect is to find ‘effective’ and ‘innovative’ ways to establish synergies in delivery channels integrating across property, public health, education, police and security and so on...Another unique feature of the ‘Plan’ is to get rid of ‘silos’ and build ‘integrated delivery capabilities’—a single source of service center that will provide several citizen services. This is a much ‘cheaper’ way to provide service at grass roots. Further, an Apex Committee, with Cabinet Secretary at the helm will steer all MMPs to guide, monitor and evaluate all service levels. An e-Governance Assessment Framework within the DIT will assess all e-Governance projects. Together these two bodies will secure the ‘focus’ on e-Governance objectives and meet the project dead lines.

To the sum up the ‘key elements’ of the plan: Large investments in Government Process Reengineering, Capacity Building, Training, Assessment and Awareness, MMPs with significant citizen interface, national infrastructure with fast, reliable and efficient connectivity, data storage and access, integrated citizen service centers, 24x7 web portals for access to government information and services that will greatly enhance the contours of Right to Information Act.

The strength of the NeGP is that it is devised as an ‘integrated program’. This is a clear break from the past when e-Governance was construed to be mere ‘Computerization’—buying and installing software into black boxes. Now the emphasis is on ‘citizen service’—to the extent the service reaches out to ‘common person’ in cost effective, efficient and faster ways. Previously, the focus was so ‘expenditure driven’—use of specific department funds in the approved timeframe. Now it is much more opaque and fluid—open to include or discard projects as per the needs of the

⁴ Dilip Cherien, “The Challenge of e-Governance”, Deccan Chronicle, Sunday, April 27,2008, Chennai, India

departments and people, MMPs' and ministries' inherent and voluntary ability to benefit the society—provide services to the citizens. In this sense, it is much more outcome and service oriented. Previously the responsibility of e-Governance was badly fuzzed between the Center and the State. Now the division of labor between Center and State is clear-cut: “centralized tasks (monitoring, administration and standard setting) at the Center, decentralized implementation by coordinating units of the Center and the State.

I also need to add that Capacity Building in the NeGP program focuses on combining both the ‘internal’ resources of existing departments and ministries with ‘external’ resources from industry and academia. This makes the program much more encompassing in terms of exposure, visibility and nation wide mandate. Finally, in determining the success of e-Governance, *technology is ‘half-the-story’*. IT components require quite a bit of funding, but success of the projects depends upon integrated and holistic professional handling of project management, change management, IT management and government process reengineering. Toward this end, the thrust of ‘integrated’ approach of NeGP makes it a comprehensive and well-designed program.

Now I turn to our case study: e-Governance in the State of Orissa...

e-GOVERNANCE IN THE STATE OF ORISSA⁵

e-Governance Projects

The e-Assessment Report 2004⁶, released by DIT, Government of India, terms *E-Readiness* or Networked Readiness Index (NRI) as “the capacity of a State to participate in a networked economy vis-à-vis other States”.

The e-Readiness or NRI for various States is calculated based on a set of broad parameters, which include:

□ Environment for ICT – market environment, regulatory framework, infrastructure facilities

⁵ www.orissaonline.egovernance.co.in

⁶ www.governmentofindia.dit.org

- Readiness of key stakeholders to use ICT – individual readiness, business readiness and government readiness
- Usage of ICT among these stakeholders – individual usage, business usage and government usage

States are divided into 6 categories, namely – Leaders, Aspiring Leaders, Expectants, Average Achievers, Below Average Achievers and Least Achievers. As per this categorization, Orissa is among “Average Achievers”, with States like Karnataka, Tamil Nadu, Andhra Pradesh and Maharashtra at the top as “Leaders” at the time (2004). In a recent report, Delhi is best governed State in the country, followed by Goa and Chhatisgarh. Tamil Nadu, Kerala, Maharashtra and Himachal Pradesh have scaled ahead of Andhra Pradesh—the pioneer in this field (Op-ed Page 7, Deccan Chronicle, Sunday, April 27, 2008).

Karnataka—the second best e-Governed State couple of years back has come down to rank 9. The political mayhem that has pervaded the State has negatively affected the e-Governance of the State. In this context, Orissa has been stable under the coalition government of Chief Minister (CM) Naveen Pattnaik. Couple of years back the Chief Minister was consistently rated as the number 1 leader in the India Today surveys of Chief Ministers in the States of India. With his stewardship, the Government of Orissa is making conscious effort to improve upon all the factors as described in the Networked Readiness Index Framework.

In the past a number of e-Governance projects were undertaken through individual initiatives; some of them have succeeded while some have not produced the desired results or withstood the test of time. Based on lessons learnt from the past and experiences from successful e-Governance applications that have succeeded at national and international levels, the Government of Orissa has identified some of the following projects among other potentials:

M/S Tata Consultancy Services in line with "aponline.gov.in", is developing an e-Governance portal for Orissa— "orissaonline.gov.in". NIC in line with "Bhoomi" project of Karnataka state, is working on Orissa's land record Project—“Bhulekh”. The State is also developing IT kiosks by providing subsidy and training to the educated unemployed entrepreneurs. Unicode

based Oriya language is being developed by Microsoft India is developing Unicode based Oriya language's incorporation into MS-Windows and MS-Office in order to enable the citizens to use ICT based projects. Computerization of schools and colleges, treasury, commercial tax, registration office, transport sector, Panchayati Raj, election office etc. are being developed on stand-alone basis.

Future Plan

GramSATS (Gram=Village, Sat=Satellite) under ORSAC (Orissa Remote Sensing Application Center), are installed at each DRDA (Department of Rural Development and Administration) and Block levels of Orissa. SWAN project is coming up as a better alternative solution to facilitate ICT in Orissa. The e-Governance related projects are running in isolation will be integrated soon. Human Resource Development & Training has been started for Government staff (6000 employees will be covered) and public entrepreneurs. A state level Centralized Data Center is in pipeline.

The NeGP and Current Developments in Orissa

The CM released the e-Governance roadmap of Orissa on June 14 2006. It comprises the following:

- e-Governance vision
 - e-Governance Strategy & Blueprint
 - Capacity building roadmap
 - Detail Project Report
- It has identified 15 Depts. where MMPs are to be taken up for providing more than 200 services.

It lays down Statewide e-Gov architecture, which includes core policies, infrastructure & applications and lays down the Institutional Framework by way of a State eGov Council, State Information Technology Services Board, State eGov Mission Team (SeMT), Project eGov Mission Team (PeMT) and District Information Services Council (DISC).

The subsequent sections would detail current environment for ICT in the State, existing readiness of stakeholders to use ICT and actual usage of ICT among these stakeholders in order to highlight the effort that has been put in by the State Government of Orissa and to draw out the areas that still need attention.

The NeGP necessitates State Governments to prepare:

□ **e-Governance Roadmap (EGRM)** clearly defining the e-Governance Vision and strategies to achieve the developmental agenda of the State and provide good governance to the citizen leveraging ICT as an enabler tool. EGRM also depicts the big picture e-Governance Blue print of the State Government. Based on this blueprint, the effort and the competence needed to manage the State e-Governance initiatives could be planned.

□ **Capacity Building Roadmap (CBRM)**, which lays down the plan for developing institutional mechanisms, acquiring the technical expertise within and outside the Government, sets plan for training on specific areas for this team and projects the need (and costs) for outsourcing activities which require specialized skills. This document encompasses suggestions for structure of the institutional framework & changes in the present institutional framework and outlines the capacity requirements in line with the EGRM & the Training need analysis to build the internal capacity of the Government.

The document, titled '**Detailed Project Report**' (DPR), is a summary of the above two documents, and details the nature & scale of e-Governance initiatives planned by Government of Orissa in the next three years and presents the capacity building requirements for the state. The existing capacities need to be complemented and strengthened with major managerial and technological resources, particularly for implementation of the State Mission Mode Projects by concerned Departments of the State. It also summarizes the estimated funds requirement under NeGP from the Government of India for Capacity building of the State of Orissa. The funding will be used to build capacity at Program level to drive the massive e-Governance initiatives of Government of Orissa as per the EGRM of the state.

e-Governance Road Map (EGRM)

Environment for ICT

State Government has already framed the Information Technology Policy in 2004, which aims at developing a well-planned, robust and futuristic IT architecture in the State to bring about positive changes in all walks of life & society, resulting in:

- Ease and convenience in transaction
- Augmenting employment opportunities to the educated youth
- Ushering higher economic growth in a definite period.

Further, a number of core ICT infrastructure projects are being implemented in the State, that include:

Orissa State Wide Area Network (OSWAN)

OSWAN is being established to support VOIP, Video Conferencing, Teleconference, Fax and Web Enabled & WAN Based Applications for the Government Employees, Citizens and Businesses across the State. A 2 Mbps Data Link from the Secretariat to the Districts has already been established (through NIC Net) and connectivity to Sub-Divisions, Blocks and Tehsils will be provided in partnership with BSNL (utilizing OFC Backbone).

GRAMSAT (Gram=Village, Sat=Satellite) would provide connectivity to all DRDAs (Department of Rural Development and Administration) / Blocks and would facilitate dissemination of Government Information, monitoring of fund utilization and bring about transparency in various projects being executed at Panchayat/Block levels. 128 Kbps link has already been established up to DRDA and Blocks in each District utilizing the Satellite Communication Infrastructure provided by ISRO (Indian Space Research Organization). Plan is under consideration to enhance the bandwidth to 2 Mbps.

Secretariat LAN To connect all the computers in various Departments at the State Secretariat, a 1000 Mbps Fiber Optics Network Backbone with 2 Mbps Network Connectivity has been established. The Offices of Chief Minister, Cabinet Ministers, Secretaries, Additional Secretaries, Directors and all the Department Computer Centers have already been provided with

connectivity. This is being extended to cover all the remaining Officers and all Sections of various Departments in the Secretariat Information Kiosk.

Information Kiosks are being set up throughout the State, particularly in the Urban and Semi –Urban areas through Self-Employment Mode. The kiosks will offer a variety of services like email, internet browsing, computer education, DTP work and PCOs. An e-Seva type of model that has been pioneered with so much success in Andhra Pradesh is being explored in the areas of Agriculture, Animal Husbandry, and for utilities bill payment.

Uniform Connectivity all across would be the most essential part of the proposed e-Governance Architecture of Orissa and it is necessary that **Orissa State Wide Area Network** or OSWAN reaches up to the Village-level at the earliest.

In order to effectively manage and maintain this SWAN, the State Network Management Center should be established in Bhubaneswar and District Network Management Stations should be established at all the 30 District Headquarters across the State. These establishments should be staffed with Network Administrators and Engineers under the jurisdiction of Department of IT or the Nodal Agency for e-Governance in the State and should be responsible for efficiently maintaining and monitoring network-segments corresponding to their regions on 24 x 7 basis to ensure connectivity to Stakeholders across the State.

Local Language Resource Center

Resource Center for development and promotion of Oriya Language based Computer Tools has been established. Applications such as Oriya Spell Checker & Thesaurus, Bilingual Chart, e-Dictionary, Trilingual Word Processor, E-Mail Application, software for Optical Character Recognition and Oriya WorldNet Software have already been developed.

An IT Park (named **Infocity**) has been established at Bhubaneswar, covering an area of more than 350 acres and having all the necessary infrastructure & communication facilities. A number of Multi-Storied Towers have also been created at Bhubaneswar to provide office-infrastructure for Small & Medium IT Companies. Software Technology Parks of India (STPI) have already been established at Rourkela and Bhubaneswar to attract export-oriented software development firms. A similar Park is being setup at Berhampur.

State e-Gov Resource Center

State e-Gov Resource Center (or State Data Center as per the generic terminology) at Bhubaneswar would house, manage and serve all the Data & Knowledge Resources for various Departments and Organizations of State Government. It would also house the Application & Web Servers, Print & Rendering Systems and Mailing Servers to facilitate various applications of the State Government and to fulfill other technology requirements.

Following Primary Databases could be deployed and maintained:

□ **Citizen Database** (for the data of all citizens of Orissa, including value-added data such as EPIC, BPL, e-Shishu, Land Records Data, etc.)

□ **Employee Database** (for the data of all State Government Employees, including their Service Records)

□ **Core GIS Database** (for the data and maps for all the administrative units of the State)

□ **Administrative & Accounting Units Database** (for the details of all Offices under the Government in the State)

□ **Asset Database** (for the detail of all the movable and unmovable assets of State Government)

Additionally, various Departments could ‘extend’ scope of the above-mentioned Databases to create their respective Departmental Databases. Section 4 contains the details of these extended Databases within their Sectoral Strategies. In order to backup for all the Government Data stored in various repositories, a **Disaster Management Center** could be established to link up in real-time with State e-Gov Resource Center and with various Departmental Databases. This establishment could also house a number of Servers to act as backup for the Primary Server-Set deployed at Bhubaneswar. Upon the failure of Primary Server-Set, the Statewide Application Infrastructure should be able to switch over to the Disaster Management Center’s Servers.

PKI, Localization Framework and State Portal

Orissa Government needs to implement the **Public Key Infrastructure (PKI)** as the Statewide Registration & Certifying Authority for securing various e-business transactions, eliminating the need for separate processes for verification of identity and electronic signatures. This Infrastructure would minimize the burden on businesses, citizens and the Government

itself while obtaining services online by providing a secure infrastructure for all online transactions.

The Government also needs to establish the Statewide **Language Localization Framework** for facilitating the delivery of various digital services in Oriya Language. The scope of the Bhasa Project (initiative by TDIL) could be enhanced in order to facilitate this and the **Oriya Bhasa Pratisthan** could play an important role all these initiatives.

The State Government further needs to implement a **Common Payment Gateway**, directly interfaced with the Treasuries and FI / Bank. Various Departments could collectively utilize this Payment Gateway, such as by Commercial Taxes, Excise, Electricity, Transport and Land Revenue Collection, and various Urban Local Bodies and Gram Panchayats could utilize it.

Service Delivery

A common set of Service Delivery Channels, including **Citizen Service Centers (CSC)**, **Web Portals**, **Call Centers** and **Department Service Windows**, need to be established for efficiently delivering various Governmental Services to citizens and businesses across the State. The basic mandate of these delivery channels should be to act as One-Stop-Shop for delivering various services provided by the Government and make the life of common citizens easier.

A Statewide Network of Citizen Service Centers, which could have names with regional flavor, should ideally be constructed in such a manner that no citizen should need to travel more than 2 Kilometers to access their services and/or every Village should have one. However to achieve this during the Course of NeGP itself, the State should adopt a step-by-step systematic approach.

District Information Services Councils (details of these have been provided in [Section 5.1](#) of EGRM) could play an essential role in deciding the order/sequence for establishing these Citizen Service Centers within their respective Districts.

Public-Private Partnerships (PPPs) can substantially aid in establishing this desired network of Citizen Service Centers in Orissa and the State Government should explore all the possibilities of entering into relevant Service Level Agreements (SLAs) with Private Corporations for establishing and operating these Centers at various locations.

Readiness to use ICT

In Orissa, more and more citizens are having access to technology and are also becoming capable of availing various benefits from it. A number of Government and Private Educational Institutions across the State are offering a variety of courses in ICT, including various Graduate level courses and Post Graduate courses such as M.Tech and MCA. Each year, more than 15,000 Engineers & MCAs and 3000 MBAs successfully complete their courses from various Institutes across the State.

Orissa Computer Application Center (OCAC)

OCAC has been designated as the Directorate of the Information Technology Department and plays an important role in training Government Officials, as well as ordinary students. Various Training programs conducted by OCAC include a course in IT Basics for Government Officials, Skill Development Program (CAD) for Engineers and a number of courses, such as Networking Program, Accredited Programs and Japanese Language Program, for Students. OCAC also has 2 Facility Centers at Berhampur and Rourkela with requisite IT hardware.

A state-of-the-art **IT Training Center** has been established at the Secretariat for capacity building of Government Employees. Computer Awareness Program in Government Schools has also been introduced in partnership with Private Computer Firms to benefit both, the students and the teachers. At OCAC, a Transit Node of ERNET with advanced educational-content has been established in partnership with Ministry of IT, Government of India. In most of the departments, there are employees who have aptitude towards computers and have basic computer knowledge. However, the overall computer literacy is low in most Departments and to implement with success e-governance projects in the State, there is a need to equip the key drivers with required IT skill. Government needs to adopt a proactive approach to send the Officials to the IT Center for training on IT Basics to start with. Engineers in Departments like PWD (Public Works Department) could be

sent for CAD Training program conducted by OCAC. However, it is also true that once the departments start having a training plan and a training budget allocated, these steps will automatically follow in. Further, majority of ongoing e-Governance Projects in the State are driven through Committees or Teams, which are formed on task basis and not by an institutionalized team or task force. Due to a lack of an institutionalized framework for e-Governance, Projects face stiff challenges on grounds of ownership, implementation and roll out both at the State level and at the Department level.

Strengths and Weaknesses of OCAC

OCAC, the Directorate of IT as well as the Nodal Agency, is responsible for conducting and arranging a number of Training programs. The Training programs range from IT basics to CCNA certification. Due emphasis is being given on the 'Hands On' aspect of IT Training. A judicious mix of Theory and Practical IT Training is being practiced. In addition, the Agency has faculty and infrastructure required for training in place. The appointment of faculty is outsourced to a Private Organization namely Flagship Solution Pvt Ltd which actually enables OCAC to concentrate on providing required infrastructure and design appropriate material for Training purpose.

However, the benefit of the Training programs of OCAC is reaped mostly by the student community and not to that extent by the political leadership of the state or the bureaucracy. It can be observed that the training activities are more focused towards generating IT awareness/e-literacy and there is a lack of focus towards imparting training which would help in successful implementation of e-Governance projects on a sustainable basis viz. Project Management, Financial Analysis, Change Management, etc.

There is an immediate need of Structured Training Need Analysis mechanism, which will help in identifying the people who need to learn new skills, techniques, and people who need to upgrade. Another pertinent need is to use contemporary tools and techniques for Training purpose. Collaboration and Partnership with more and more Private IT Training institutes would help in getting access to readymade, structured and proven training programs for beginners and would automatically broaden the reach. A proper feedback and review mechanism would help in evolving the

programs to the next stage with necessary up gradation and identification of focus areas.

Usage of ICT

A number of Core and Departmental e-Governance Initiatives have been taken up in the State. Some of these include:

State Level Core e-Governance Projects:

Orissa State Portal Official Website of State Govt. currently provides a host of government information, policy & procedures, tenders & forms, etc. Services such as payment of utility bills, filling of various kinds of returns, etc. are being added and the aim is *to deliver multiple citizen services through multiple channels* like internet, IT Kiosks, Mobile phones, etc. Sectoral Applications of only the 15 MMP Sectors have been described here.

9 x 9 Program: 9 x 9 Program (or *Transparency & Accountability Program*) aims at development of Information Systems and access of information to citizens at Panchayat, Block and District levels for 9 Departments across 9 Districts in the State.

Bhasa Project (Unicode Based) Resource Center has been established at OCAC for development & promotion of Oriya Language Based application. Tools such as Word Processor, Thesaurus, E-Mail Application in Oriya, Trilingual Word Processor (English-Oriya-Hindi), have already been developed. A MoU was signed with Microsoft to provide Oriya Language Functionality in Windows and Microsoft Office.

Sectoral e-Governance Projects:

Orissa Telemedicine Application Network

A telemedicine network, in collaboration with Indian Space Research Organization (ISRO), has been established to connect Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow with Medical Colleges at Cuttack, Berhampur and Burla through V-SAT Network for delivery of healthcare from experts at remote locations.

Bhulekh (Land Records Computerization)

Directorate of Land Records & Surveys has taken up computerization of land-records to facilitate maintenance and up gradation of changes occurring

due to consolidation of land holdings, transfer of ownership, land acquisition, etc. and to provide accurate copies of Records of Rights (ROR) to the landowners all across the State. The initiative involves 2 issues – Record of Rights and Digitization of Cadastral Survey Maps. ORIS (Registration Office Computerization): Revenue Department is implementing ORIS for computerized registration of Deeds, endorsement of Documents and issue of Encumbrance Certificates.

29 Tehsils have been operationalized in the 1st Phase to facilitate computerized issue of RoR Certified Copy & Miscellaneous Certificates and to undertake Mutation Cases through computer. Preparation of village-wise digital maps and linking these to the computerized database of land records (to maintain & update land records efficiently and to provide accurate & quick service to the citizen) is also being done via a Pilot Project by OCAC.

e-Shishu Project School & Mass Education Department and Orissa Primary Education Program Authority (OPEPA) have initiated creation of a comprehensive & authentic database of all children below 14 years for MIS & Planning purposes. This project also involves mapping of all Gov. Schools in the State using GPS for getting information on their infrastructures and the consolidation of various data pertaining to Teachers for effective management of the School Education Infrastructure.

Districts are Koraput, Malkangiri, Nowrangpur, Rayagada, Ganjam, Mayurbhanj, Angul, Cuttack and Kalahandi. 9 Departments identified for pilot-projects are Women & Child Development, ST & SC Development, Food Supplies & Consumer Welfare, Health, School & Mass Education, Panchayati Raj, Agriculture, Rural Development and Water Resources. Currently data is being entered across the State and Pilot-Implementation of a Web-Based System would shortly commence.

13 DSR/SR Offices have already been computerized and made operational under ORIS. In addition, funds have been provided for computerization of 13 more DSR/SR offices during the current financial year.

The data capturing of around 70 Lakh children from across the State has been completed and a web-enabled interface has been created for allowing various stakeholders, including parents, to access / utilize this data via

queries, reports and other tools. Other 2 sub-projects (Orissa GIS School Mapping Project and Orissa Education Personnel Information Project) are also being implemented.

Treasury Automation

This project involves automation of all the processes at District / Special Treasuries, including payment of Bills, payment of Pension Bills, receipt of Challans and other accounting activities.

Computerization of Commercial Tax

This involves the automation of various processes of Commercial Tax, such as disposal of registration application, quick information on tax collection, quick identification of defaulters & non-filers of returns, faster issue of statutory forms and reduction of interface between dealers & the staff to achieve high efficiency in VAT Administration.

Integrated Transport Management Information System (ITMIS)

The project involves computerized issue & renewal of Driving License (via **Saarathi**), Registration & Permits for motor vehicles (via **Vaahan**) and the collection of Motor Vehicle Taxes (via **Check Gate Computerization**). 8 PRIASOFT Web Based Application for monitoring Funds Flow in the Panchayati Raj Department. 30 DRDAs, 314 Blocks and 6234 Gram Panchayats use PRIASOFT PAMIS Web Based Desktop application (with Oracle 9i and D2K platform) for monitoring various Accounts of the Panchayati Raj Department. PAMIS is being used by 30 DRDAs and 314 Blocks

RURALSOFTE Web Based Application for monitoring Physical Progress of Projects/Schemes under various Poverty Alleviation Programs. The main platform is SQL server and ASP using JAVA/VB Script. Beside these, a number of other initiatives have also been taken up by other Departments and are under implementation. These include e-Procurement, Human Resource Management System, Tourist Information & Reservation System, RFIDBased Food Grain Delivery Monitoring System (for WCD and Food Supplies & Consumer Welfare Departments), Web-Enabled Scheme Monitoring System (for WCD and ST & SC Development Departments), and Land Survey & Settlement using GPS, Orissa Online Project and e-District Project.

Further, majority of the Departments have their Official Websites for providing a variety of information to the citizens and some of these sites also facilitate online transactions and form-submission. Modules for receipt of Challans and other accounting activities have been implemented at 16 District / Special Treasuries. Modules for payment of Bills and for payment of Pension Bills have also been developed and will be soon implemented. Infrastructure for computerization is complete in all the places and the system is in operation.

Issue of Computerized Driving License has started from RTO (Road Transport Office), Bhubaneswar. Supervision and control of the R.T.O offices and border check gates and Issue and renewal of permits for passenger and goods vehicles are being computerized. The functions of the Road Transport Authorities are also being automated. The department plans to introduce smart cards for license and registration certificates, modernize check gates with e-connectivity and create consolidated data bank.

CONCLUSIONS AND PROSPECTS:

There has been a lot of excitement about the NeGP itself and its prospects. The World Bank has been swayed to send two missions: a fact finding preparatory mission in late 2004 and another in April 2005 committing approval of \$500 million for support in principle to the ambitious NeGP—that the Bank designates as e-Bharat. The Plan has in its turn propelled several States, including Orissa, to carry on its ‘massive’ mandate based on ‘three core pillars’ toward establishing adequate infrastructure: 1. State Wide Area Network; 2. State Data Center; Common Citizen Centers. Institutionalization (and coordination) of all these three pillars is germane to the success of e-Governance in India—in other words, these institutional mechanisms are slated to translate the ‘Plan’ into ‘Reality’.

We see above that Orissa Government has worked toward these institutional mechanisms as per the e-Governance Roadmap of Orissa (EGRM) laid down by the Chief Minister and his technology team in June 2006. It may be too early to assess the ‘translation of NeGP into reality’. Nevertheless, it

is important to keep in mind the pitfalls and be cautiously optimistic about the future of e-Governance in Orissa vis-à-vis India.

The Economist, published from London, in a recent article on e-Governance⁷ (February 16, 2008), argued about the three major aspects that bedevil the prospects of e-Governance in general: lack of competition, bureaucratic tendency to ‘reinvent the wheel’ and emphasis on technology than leadership and integrative organization.

Competition

I have mentioned above that the neighboring State of Orissa—Andhra Pradesh—has been very successful at pioneering e-Seva system⁸—a network of public internet system where customers pay their bills online. e-Seva is processing some 110, 000 transactions a day—about 60% of all payments for public services. Prospects for e-Seva’s growth are great, with the users demand growing some 25% percent a year. So the State is launching a massive expansion scheme—expanding from the present 119 seva centers to 4, 600 across the State—one for every six villages using the existing post offices.

The key to the success of e-Seva system is that it has very little to do with State machinery. The service is outsourced to private competitors through ‘tender’. After 6 years, there is a new contractor. Incentive is ‘service driven’—no wait for customers means extra commission, 15 minutes wait cuts that commission into half and half-an-hour wait means no commission. Orissa’s EGRM has emphasized the fact that it is following the e-Seva model. Other States have surpassed Andhra Pradesh in e-Readiness index by successful emulation. Therefore, to argue as the lead article of The Economist does that Google vs. Yahoo type competition is absent in e-Governance—is fast changing.

e-Seva type service is well and good so far India’s middle class is concerned. One of the major bottlenecks seems the lack of infrastructure (telephone poles) and literacy in village India. So e-Governance thinking has changed gears: now the buzzword is m-Governance—making mobile

⁷ Lead Article, “Government offline: Why business succeeds on the web and government mostly fails”, The Economist, Page 13, February 16-22, 2008

⁸ Most of the following data are from “The Electronic Bureaucrat: A Special Report on Technology and Government”, The Economist, February 16, 2008

phones compatible to the needs of e-Governance. Wireless technology does not need physical infrastructures like telephone poles for internet and coverage. Illiterate mass is easily made to be 'numerate'—learning 1 to 10 numbers is a piece of cake for a poor farmer. In addition, Mobile phones are much more affordable than a computer black box...and they are 'mobile' not static.

The mobile technology for id purpose uses biometric identifier—a thumb print. This year two banks in Hyderabad are offering m-banking services—customers pay bills by sending SMS and a security code. National Institute for Smart Government (NISG) has instituted the pilot scheme starting in the illiterate Karimnagar and Warangal regions of Andhra Pradesh for payment of pensions and unemployment benefits. Thumbprint and photograph is incorporated into 'smart cards'. A local agent with .5% of each transaction as commission comes with a terminal to check the validity of smart cards and disburses the money. The Economist argues that it is a small beginning with huge potential—"The scheme is metamorphosing into online bank".

The Corrupt, Lethargic, Inefficient and Ambivalent 'Babus'—The Bureaucrats:

The Economist also ran a lead article⁹ (March 8, 2008): What is holding India back? It argues that failure to reform the bloated civil service is putting country's huge economic achievements at risk. On the positive side, Lalu Prasad Yadav—the Railway minister—with his seminar presentation at Harvard and Yale Management schools— is credited with the transforming the Railway ticketing system by going online. This all started in 2002. Until then, the small time 'ticket collectors babus' were epitome of corruption that had become so much part of Indian commuting life. Tickets were hoarded and then, sold to desperate passengers for a commission. Now passengers can book the ticket and reservation online, get an e-ticket printout or pick up their tickets while they get to the railway station before the commencement of their journey.

Having said that, in a recent report that circulated in all the Indian newspapers, the 'bureaucratic' establishment of India detests computerization and e-Governance. They are corrupt, lethargic, inefficient

⁹ Lead Article, The Economist, "What is holding India back", p.11, March 8-14, 2008

and ambivalent. E-Governance will take away their, open them to the public, rebuke them to be trained (Government Process Reengineering). By one estimates, bureaucracy eats up one third of Indian exchequer. My biggest fear is that if at all anything can stop translating the NeGP into reality—it the bloated bureaucracy.

Bureaucrats have this tendency to grab on to the power and privilege of their independent departments. NeGP is a break from the past in its emphasis on crosscutting e-Governance across federal and state departments—this ‘integrative’, crosscutting thrust is to counter the mammoth monolith of Indian bureaucracy.

How does one promote fluidity and interdependency among massive federal and state administrative structures when their ‘babus’ are so set in their old corrupt, powerful and independent ways. This would be the biggest hurdle to e-Governance both the Center and the State. Government Process Reengineering or Government Process Reform (GPR) requires ‘extensive changes to law, rules and regulations’. Neel Ratan—an e-Governance expert with Pricewater House India Inc. asks: “... whether a sufficient momentum exists in the country to undertake such wide ranging government process reform?”

There are several examples of MMPs that are languishing because the bureaucrats concerned are neither providing leadership nor show interest in implementing the changes...there are instances of MMPs staff playing solitaire in there computers due to this over all ‘ambivalence’ at the top. In my mind, the success of GPR is the litmus test for e-Governance in India.

Leadership and ‘Integrative’ Organization:

I have indicated before that ‘technology is only half the story’ for the success of e-Governance (page 3). Success of the projects depends upon integrated and holistic professional handling of project management, change management, IT management and government process reengineering. Toward this end, the thrust of ‘integrated’ approach of NeGP makes it a comprehensive and well-designed program. But leadership in technology and politics in motivating and changing the mind-set of ‘recalcitrant bureaucrats’, encouraging experts from ‘business’ and ‘industry’ to partnership with the bureaucrats, intelligent resource allocation, clear cut

division of labor and fluidity in interdependency across departments at Center and the State—are all vital to the success of e-Governance.

The Special Report in The Economist article argues the pluses: the way the Sheikh of Dubai with much less ‘democratic credential’ is ruthless in rewarding the successful and eliminating the draggers and inefficient. How Vivek Kundra—‘the make it happen’ man—runs e-Governance in so efficient manner that of the municipal administration of America’s District of Columbia that houses Washington D.C. Whether he outsources work to Google and gets things done in the most cost-effective and efficient ways, or distributes i-phones to police or hires administrators in hours or handles police procurements and warehouses—he does it all with that ‘magic bullet’ that transforms things—that is, the right kind of leadership.

I have mentioned above how Indian State of Karnataka has slipped in ranking to 9 from 2 couple of years back is because of the mess of the State leadership and politics. There is an intrinsic and ‘symbiotic’ link between political stability and effective administration. Orissa has had a very stable ruling regime and its Chief Minister Naveen Pattnaik has been rated among the most progressive, straightforward and ‘clean’ leader who has fired and hired bureaucrats for effective administration.

Now the State of Orissa is in a big political churning because of the desire and efforts of the leadership to invite multinationals¹⁰ and ‘globalize’ the local mining and natural resource potential of Orissa. The tussle between the tribal locals and ‘land grabbing’ multinationals has waxed and waned the Chief Minister’s image and that of the ‘clean administration’ he embarked like Rajiv Gandhi in the late 1980s at the Center. We all know Rajiv Gandhi’s fate...

Naveen Pattnaik’s regime may have different trajectory and legacy. The e-Governance initiative started in June 2006. It is too early to judge the results.

Two things one must note with cautious optimism:

¹⁰ Posco, Arcelor-Mittal, the Tatas and many other big concerns are already there, have signed in deals and are in the thick of things.

One, Naveen Pattnaik's regime may win or lose, fail or survive in the next election round the corner, the fate e-Governance of the State of Orissa can not be disentangled from it. To the extent that the institutional mechanisms will be established in a faster pace, it will live up to the 'massive' billing of NeGP and India baiters.

Two, we all know Chandra Babu Naidu's fate in Andhra Pradesh. He metamorphosed the face of 'Hyderabad' –put it in the league of international metropolises that prize 'information revolution'. The middle-class reveres him for e-Seva and other tech-savvy achievements. Before his 'second phase' aspiration to connect with rural Andhra and bring the electronic revolution to the 'common person' (Aam Admi)—he ran out of time, lost the election and as a result, the BJP at the Center lost its mandate to run the country for another 5 years.

Naveen Pattnaik's regime Orissa better heeds: forget history, Dalai Lama will say—recent or past—not its lesson. The effort to bring 'information revolution' to the doorstep of 'common person'—so that he or she can 'communicate not commute', be 'online not in line'—will make or break e-Governance in India and the State of Orissa.

The End