



## URBAN GOVERNANCE IN INDIA: ICT APPLICATIONS AND DEVELOPMENT- A STUDY

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### **Introduction**

Increasing urbanization and awareness of sustainability issues are setting off a wave of investments in revitalization of existing cities and development of new ones. Businesses and governments are starting to recognize the role of technology in meeting these objectives. City investments that include a large ICT (information and communications technology) component can enable the designing of cities that offer a better quality of life for their residents while being more sustainable and cost efficient.

In India, the importance of urbanisation is increasingly being recognised, not only in terms of the size of the urban population, but also the importance of large cities in driving economic growth (Kennedy et al. 2014). The latest census, from 2011, indicates that 31 per cent of the population lives in cities, of which almost half live in cities with a population greater than one million. The number of metropolitan cities (more than one million inhabitants) has increased from twenty-three in 1991 to fifty-three in 2011.

Internationally, the rapid growth of ICT and GIS-based information within the government was initially seen as a strategic, neutral instrument. However, it gradually started to change the rules by which government information was organised, by necessitating much more precise and specific classifications of data and new ways of exchanging information, and by changing assumptions concerning the correctness of the information received (Prins et al. 2012). Prins discusses several issues related to when such information flows become networked within government, and when they outpace the responsibility of government policy and accountability to citizens.

ICT provides efficient storing and retrieval of data, instantaneous transmission of information, processing information and data faster than the earlier manual systems, speeding up governmental processes, taking decisions expeditiously and judiciously, increasing transparency and enforcing accountability. It also helps in increasing the reach of government – both geographically and demographically.

In India, the main thrust for e-Governance was provided by the launching of NICNET in 1987 – the national satellite-based computer network. This was followed by the launch of the District Information System of the National Informatics Centre (DISNIC) programme to computerize all district offices in the country for which free hardware and software was offered to the State Governments. Increasing Urbanisation has many problems and Governance has to play important role to render effective and efficient services to the public in this context this article is going to discuss two case studies one is E seva in Andhraradesh and another Bangalore one from Karnataka state.

### **National E-governance Plan**

The National e-Governance Plan (NeGP) has been formulated by the Department of Electronics and Information Technology (DEITY) and Department of Administrative Reforms and Public Grievances (DARPG) in 2006.

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, through common service delivery outlets and ensure efficiency, transparency & reliability of such services at affordable costs to realise the basic needs of the common man.”

### **ICT Governance**

Information and Communications Technology (ICT) to build a citizen-centric, development oriented where anyone can create, access utilize and share their information so that everyone will lead a sustainable development and improve their quality of lives (Gurumurthy, 2008). Citizens are making several visits to government departments where there is no necessity.

### **E- governance Programmes: E- Seva and Bangalore One**

The aim of this project is to understand issues and challenges in implementing e-government at local level across developed and developing countries. With over ten years of citizen services being efficiently provided by e-Seva, there is a need to have an independent survey to understand ICT challenges with a focus to technology. e-Governance efforts define the current ambition of achieving a Simple, Moral, Accountable, Responsive and Transparent (SMART) Government.



### **Bangalore One - Integrated Citizen**

In view of providing integrated services to the citizens of Bangalore, the Government of Karnataka deployed ICT tools to enhance Speed, Convenience, Certainty and Accountability in providing such services through the concept of a One-Stop-Shop facility. Accordingly, GoK decided to implement an e-Governance project called the Bangalore One or B1 Project on the lines of similar projects implemented elsewhere in India.

In line with similar e-government initiatives in other parts of India, particularly e-seva in Andhra Pradesh, Bangalore One is intended to vitalize the government-citizen interface. The Government of Karnataka intends to provide all G2C and G2B services along with the informational services from various departments and agencies of central, state and local governments in an efficient, reliable, transparent and integrated manner. The services are provided with certainty and through easy access to a chain of computerized Integrated Citizen Service Centers and other delivery channels like Electronic Kiosks, Mobile Phones and over the Internet.

Considering the multiplicity of locations, departments and stakeholders, approximately 50 citizen service centers are planned to provide about 100 important G2C, G2B and B2C Services in Bangalore city. Initially, the government decided to establish 15 service centers initially for providing 24 basic services pertaining to 8 government departments. The goal is to bring the entire gamut of G2C and G2B services under the purview of B1 so that citizens and businesses need to go to government offices only for specialized and complex services.

### **Project Genesis**

Authorities at the local, State and Central levels offer a variety of services to citizens and business entities such as provision of electricity, drinking water; maintenance of law & order; issue of birth/death certificates, issue of passports; registration of vehicles; development of infrastructure and the like. Private operators too have started providing some of these basic services with or without the involvement of government departments and agencies. These services require citizens' interface with multiple agencies, involving avoidable costs, duplication of efforts, and often waste of time. Hence, the Government of Karnataka decided to use ICT for providing most of these services in an efficient and integrated manner through a single platform. Modeled along the lines of successful integrated services projects, particularly e-seva in Andhra Pradesh, Bangalore One is intended to reach out to citizens and businesses across the city and eventually the state. The Secretary, e-Governance, Government of Karnataka, and the Director of Bangalore One are driving the project, which seeks to redefine public service.

### **Vision**

The vision of the Bangalore One project is "to provide to the citizens of Karnataka, all G2C and G2B services and information of departments and agencies of Central, State and Local Governments in an efficient, reliable, transparent and integrated manner on a sustained basis, with certainty, through easy access to a chain of computerized Integrated Citizen Service Centers (ICSC's) and through multiple delivery channels like Electronic Kiosks, mobile phones and the Internet.

### **Mission**

Bangalore One has been launched with the mission "to be the One-Stop-Shop for all C2G interactions."

### **Objectives**

The following is the set of Objectives proposed for B1 Project

- Initially, to provide 24 G2C services in a convenient and efficient manner through 15 B1 Service Centers
- To scale up the operations to cover eventually all the G2C services throughout Bangalore
- To enhance the accountability, transparency and responsiveness to citizen's needs.
- To provide cost-effective methods of service provision to the departments and agencies
- To provide efficient and real-time MIS and EIS to the departments.
- To manage the service provision through partnership with a consortium of Service Providers, to be selected through a competitive bidding process
- To ensure speed and certainty of providing the services through enforcement of a Service Level Agreement with the selected Partner.
- To enable the government departments and agencies to focus on their core functions and responsibilities by freeing them from the routine operations like collection of revenues and accounting, issuing of certificates etc, and thereby enhance the overall productivity of the administrative machinery.



The larger objective is to render most of the routine and time-consuming processes, including collection of revenues, accounting, issue of certificates etc., online so that government departments and agencies can improve productivity by focusing on their core functions and responsibilities.

### **Stakeholders for the Project**

The project stakeholders include the director of Bangalore One, participating departments of the Government of Karnataka, implementation partners including the official bankers selected to provide integrated services, business houses offering their services and finally citizens of the city of Bangalore.

### **Services Provided by the Project**

The key services currently provided under Bangalore One project include:

- Payment of water, electricity, telephone bills etc as well as receipt of applications for new connections related to such services.
- Payment of property tax and provision of market value assistance.
- Issue of khatha, birth/death certificates etc.
- Filing of grievances
- Issue/renewal of driving licenses
- Booking of railway and airline tickets.
- Sale of application forms for new passports and registration of new passport applications
- Collection of taxes including KST, CST and entry tax.

### **Implementation Detail**

The Bangalore One project is being implemented through PPP mode, with minimal upfront investment from the government. The consortium consisting of CMS Computers Ltd and Ram Informatics Ltd. is the implementation partner for the project. The consortium has a service level agreement with Directorate of Bangalore one to ensure services of exceptional quality. Axis Bank (Previously UTI Bank) is the official banker for the project.

All of the participating departments make available essential data at a central site. A single application provides interface for all services, with connectivity between citizen centers, main data center and back-end of participating departments.

Each of the 2,000-sq feet uniformly designed citizen centers has 15-20 manned counters that offer service all through the year from 8 AM to 8 PM. Citizens can access any service from any center. The citizen centers are designed to handle redundancy, additional load, offline services and disaster recovery.

Citizens and business entities can pay in cash or through card/cheque/demand draft. Queues are managed electronically in every center, which has seating space for 50 visitors. Amenities provided for visitors include TV, newspapers, writing stand, filtered water and a grievance redressal facility.

The project took off following signing of an agreement with the PPP Partner. The consortium of M/s Ram Informatics - CMS Computers Ltd developed the application software, established B1 centers and installed all hardware cum networking equipment. The consortium is successfully running the centers since April 2005.

### **Current Status**

Launched formally on April 2, 2005, Bangalore One presently covers 17 centers. These centers currently offer 26 services pertaining to 11 government departments and six private operators. The centers currently handle over 3.5 Lakh transactions per month valued at Rs 1.5 crore per day. The Bangalore One has 195 counters across the city manned by 465 operators. The Government has decided to replicate the project in the twin cities of Hubli-Dharwad in Karnataka.

### **Accolades for the Project**

Bangalore One bagged the 2005-06 CSI-Nihilent e-Governance Award for being "Best in service orientation." The award is presented annually by the Computer Society of India and Nihilent Technologies.

Media Snippets and Useful links

- Following the success of Bangalore One, the Government of Karnataka initiated steps to launch 'Karnataka One,' which will be designed to give the common man direct access to the Chief Minister of the State, ministers and officials. According to media reports, the e-governance department will implement the statewide project, which includes a dedicated help line. Private partners will be involved in the project.



## E- Seva

This model has been implemented in its true sense in case of the state of Andhra Pradesh. Andhra Pradesh is one of the largest states of India with 75 million people, 48 percent of whom are illiterate. Seventy percent of them are involved in agriculture. The people in state have limited access to electricity and running water. There are 5 different languages being spoken in the state.

Citizens depend on state for a wide variety of services like admissions to schools, death and birth certificates, taxes, utility bills, driver's licenses and registration of property etc. The role of government is pervasive. These challenges make this an unlikely place for a world class e-governance system.

But irrespective of all this there exists a world class system of e-governance (*e-seva*). AP gave a lot of importance to IT which is indicated by the following,

- Departments have realized that they can respond better to citizens needs using IT
- Many departments have a full-fledged MIS wing – with nodal officer for IT initiatives in place (CIO)
- Minimum 2% of Plan budget is ear marked for e-governance
- Currently over 60 e-government projects are under implementation
- Delivery Channels separated from Dept. Offices – citizens' convenience given priority – e-seva network, Call Centre, Aponline

### Benefits to Citizens and Businesses

- Streamlined & standardized electronic information gathering and access
- Electronic delivery of services to meet citizen/business expectations and requirements
- Convenient & anytime, anywhere citizen/business services
- Significant improvement in G2C,G2B and (even B2C) interfaces

### Benefits to Government

- Increased employee productivity
- Facilitation of information reuse across and within the departments of Government
- Reduced system maintenance and training requirements by adopting standardised system and process
- Cost-efficiency in the operation of Government agencies
- Improvement in Government-to-Government (G2G) interfaces

### Infrastructure Developed in the State

- 245 e-seva centres with over 2000 counters
- RAJiv – 8618 being rolled out
- Aponline –a web based service
- Parishkaram –30 seat toll free 24 x 7 call centre
- Emergency Monitoring and Response Institute (108)
- Police, Ambulance, Fire – rescue teams to reach in 10 minutes – pilot project in 5 cities on lines of helpline of 911 in USA and 112 in Europe

### Capacity Building Measures

- Trained over 3500 Students through Student Knowledge Forum launched in 35 Engineering Colleges in 19 districts
- Trained 600 faculty members from about 200 engineering colleges providing self-sufficiency in having staff capable of maintaining campus IT facilities and imparting the same skills to all the students

### Recent Initiatives in ICT Applications

**Direct Cash Transfer:** To facilitate disbursements of Government entitlements like NREGA, Social Security pension, Handicapped Old Age Pension etc. of any Central or State Government bodies, using Aadhaar and authentication thereof as supported by UIDAI.

**Aadhar Enabled Payment System (AEPS):** AEPS is a bank led model which allows online interoperable financial inclusion transaction through the Business correspondent of any bank using the Aadhaar authentication. This has helped in financial inclusion. The four Aadhaar enabled basic types of banking transactions are as follows:-

- Balance Enquiry
- Cash Withdrawal
- Cash Deposit
- Aadhaar to Aadhaar Funds Transfer



#### **Future : PPP ( Public Private Partnership)**

- No Capital cost to the Government
- State of the art technology
- High quality resources
- Low Risk
- Combining accountability with efficiency
- Best services to suppliers and departments

#### **Conclusion**

We have seen how the concept of e-governance and m-governance has evolved in Indian scenario and how much it is required for transparency and accountability on the part of government and at the same time it is also a toll to increase the participation of people in policy making by empowering them with the right information at right time. The penetration of internet, telecommunication services in India has increased in the last decade and this gives a ray of hope to the citizens of India to fight with the long persisting problems of poverty, corruption, regional disparity and unemployment. But at the same time, due to slow pace of project completion, red-tape and resistance from the side of government employees and citizens too has not given the desired results. Thus, ICT gives new revolutionary ways to our cities in the form of green buildings, intelligent traffic management, new efficiencies in energy consumption, waste management, exchanging information & knowledge and establish communication link among the people. ICT can provide simulation software that can help planners and architects to set up the optimal locations of buildings, schools, health services and public transportation routes to reduce mobility needs and eventually support low-carbon lifestyles. The use of ICT by planners in the field of planning are known as E-planning which presents a platform for using easily accessible public portals in amalgamation with Geographic Information System (GIS) and also facilitates the citizens with the opportunity to participate in urban planning processes. E-governance is considered as another approach of ICT which allows access to information, time-saving convenience for citizens, and conveys efficiency and transparency in the system. ICT technologies permit cities to save capital expenditures while transforming government employees and citizen behavior to become more sustainable over time. Through E-governance, local governments can become more efficient both in terms of internal operations as well as through their relationships and transactions with citizens, businesses and other levels of government. Presently, ICT has changed a city's image from being a common city to a virtual city due to the extensive use of Internet. A good website with meaningful content can be a powerful tool to attract business, residents, educational institutions and tourists. At this time, cities are moving towards adoption of new technology, while protecting and preserving the environment, and these technologies have made the city more vibrant and lively. Thus, the extensive usage of ICT technologies are continuously transforming our cities and making them more advanced, habitable and livable in terms of economically, socio-culturally and environmentally as compared to earlier cities.

#### **References**

1. Anthopoulos L. G. and Vakali A. (2011) "Urban Planning and Smart Cities: Interrelations and Reciprocities" p.1, Springer-Verlag Berlin Heidelberg.
2. Audirac I. (2005) "Information Technology and Urban Form: Challenges to Smart Growth" International Regional Science Review 28, P- 119–145.
3. Dwivedi S. K. & Bharti A. K. (2005) "E-Governance in India Problems and Acceptability" Journal of Theoretical and Applied Information Technology, Little Lion Scientific Islamabad, Pakistan.
4. Faster, Smarter, Greener: The state of city innovation on climate change and other urban challenges (2013). The Climate Group, thecleanrevolution.org
5. Department of Information Technology, Government of India (GoI) Annual Report 2009-10.
6. E-Seva: A new paradigm in citizen services. Published by IT&C, GoAP.
7. H M Jha "Bidyarthi" and Ashish K Srivastava (2009). Citizen's perspectives of e-Governance.
8. J Satyanarayana, IAS (2004). e-Government: ... the science of the possible. Prentice-Hall of India, New Delhi.
9. Mohan Datar et al (2009). Emerging Trends in e-Government (In) Critical Thinking in e-governance.