

E-Governance Report Card



Government
of
Bihar



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Foreword

The Bihar Government has a vision of becoming one of the top five e-governed, IT-enabled, e-literate states in the country by 2012. We have taken a number of measures to introduce ICT and related tools in the delivery of government services to the citizens, with a focus on reaching the most disadvantaged population.

We have, in this Report Card, attempted to give a flavour of some of the reforms that we have taken up. These reforms were implemented with the objective of providing an efficient, responsive, transparent and cost-effective government. I am happy to report that some of our path breaking innovations like Jaankari have attracted recognition at the national level. It was indeed a proud moment for our state when Jaankari won the Government of India's Gold Medal for outstanding performance in citizen-centric public service delivery. In fact, several states have come to Patna to study the Jaankari model and replicate it.

I must mention that the goal set out in our IT Policy is still to be realized fully. My dedicated colleagues and I are determined to achieve the goals well within the targets set for ourselves. On behalf of the Government, I would like to express my deep appreciation for their commendable performance and wish them all success in continuing their mission of improving service to the citizens.

Chief Secretary Bihar, Patna
and

Chairman BPSMS

(Bihar Prashasanik Sudhar Mission Society)

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Jaankari

Jaankari, a first of its kind helpline, paves the way in making the Right to Information Act accessible to all citizens. Based on a simple call centre model, it has created a citizen-friendly system that can be easily replicated beyond Bihar. Jaankari demonstrates that innovative technology can foster accountability and transparency in governance.

Features

- A 3 phone line model:
 - First line records the application on behalf of the citizen
 - Second line responds to RTI-related queries
 - Third line records complaints of those harassed on account of having filed an application. This information is forwarded to the Home Ministry for immediate action.
- Trained call centre operators to help people seek the right information while filing RTI applications, and also identify the relevant Public Information Officer (PIO)
- Facility to file RTI applications online at <http://www.biharonline.gov.in/RTI/> using a credit card
- Works in partnership mode with the Bihar Government and BELTRON, with operations handled by a private operator, Call2Connect



Achievements

- Serves all citizens across 38 districts in the State of Bihar
- Received 58,331 up to calls upto June 30, 2010
- Witnessed a fourfold increase in number of calls since inception in 2007
- Awarded the e-Governance award 2008-09 (Outstanding Citizen-centric Programmes Category) by the Government of India, and the Manthan Award South Asia 2009

Objective

To provide a transparent and user-friendly system for citizens in Bihar to access information from public authorities under the Right to Information Act, 2005

Benefits

- Citizens can easily file an RTI application from their home and save time, effort and money spent in traveling
- Operators help overcome the barriers of language and literacy
- Separate lines for queries about RTI, and complaints of RTI-related harassment
- Streamlines the overall RTI application process
- Sensitises the government about RTI and builds accountability
- Reaches remote rural communities, minorities, women and the disabled

The Right to Information (RTI) was enacted on 15 June 2005. It holds the central and State governments accountable to its citizens by legally requiring the disclosure of public information.

Filing an RTI application involves a trip to any government office or post office, completion of the necessary form, and payment of a 10 rupee fee.

Jaankari provides an alternative in Bihar. Launched in Patna in January 2007, its novelty lies in its ease of use.

To file an RTI application, one simply needs to make a phone call. Applicants are charged Rs.10 per telephone call - the same as they would pay for filing an RTI application in person. A trained call centre operator helps to articulate the problem at hand and record the application in digital format. A unique reference number is allotted to track the progress of the application. The request for information is forwarded to the relevant Public Information Officer (PIO) and a copy sent to the citizen. The PIO ensures that the requested information is provided within 35 days. To ensure that the applications are correctly drafted and forwarded, conversations are recorded and monitored by a retired government official.

Jaankari also has a separate phone line to answer people's queries on the Act, its purpose and usage. Citizens can call a third line in case of harassment while filing RTI applications.

Users of Jaankari have expressed utmost confidence in the programme. Jaankari's success lies in its ability to penetrate even

the most difficult-to-reach areas of the state and the most vulnerable and poor communities, including minorities, women and the disabled. Most common are requests for information on government schemes relating to the Human Resource Development and Rural Development departments.

Jaankari has succeeded in sensitising government officials and increasing their accountability to citizens. It has demonstrated an effective collaboration between the Bihar Government, the Bihar State Electronics Development Corporation Limited (BELTRON) - the nodal public authority providing technical expertise and oversight for Jaankari - and a private firm, Call2Connect (C2C) - the operating agency. The private agency provides an unbiased interface between government officials and the people, ascertaining the smooth filing of RTI applications. Citizens are saved the trouble of finding out which PIO to approach, and PIOs on their part save on time spent in collecting the applications.

Future enhancements include citizens receiving confirmations through SMS, and connecting Jaankari through Bihar State Wide Area Network to Common Service Centres (Vasudha Kendras) at the sub-division and block levels.

JAANKARI NUMBERS

Application line	155311
Query line	155310
RTI harassment helpline	2219435

M-technology for Good Governance

Nowadays, mobiles are abundant even in the most remote of areas. With this low-cost, low-tech, and widely available technology, what may have been unimaginable earlier is now a reality. This system utilizes the omnibus features of mobiles for the reporting and monitoring of public service delivery on the ground. Using a simple SMS facility, officers at the cutting edge are able to report on development at it happens, generating credibility and motivating performance in the long term.

Features

- Mobile-based daily reporting by officials
- Each official sends one SMS, reporting on a single scheme
- 10 schemes are monitored at block level
- SMS is sent from block to state central server
- Automated daily reports (bar charts) are generated at the state level
- Final reports display district-wise progress of schemes
- IT officers are stationed at districts to support functioning of the system



Achievements

- Aggregates daily performance data from 534 blocks on 10 important development schemes
- Displays scheme progress on public domain at <http://210.212.17.159/smsbihar/>
- Records a daily average of 4000 SMSs
- Has triggered a paradigm shift towards daily accountability, that can enhance performance of government functionaries

Objective

To enable policy makers and the public to monitor the progress of public service delivery at the cutting edge i.e. the block level, and beyond

Benefits

- Easy-to-use
- Generates daily reports from block level onwards
- Ensures continuity of work through daily monitoring
- Prevents manipulation of data as reporting is done on a daily basis
- Promotes efficiency of governance and increased accountability of officials to the public
- Reports progress of development in a timely manner
- Employs a simple mix of mobile and internet technologies

The Bihar Government has leveraged m-technology, using the SMS feature of mobiles, to strengthen administrative monitoring in the state. In the past, compiling reports on the range of state-wide development efforts based upon authentic block level data seemed to be an uphill task. SMS Based Monitoring System has provided a platform to do this in a simple and effective manner.

At present, the system is tracking the progress of 10 most public-oriented development efforts in all 534 blocks in the state. These include the National Rural Employment Guarantee Scheme (NREGS), Indira Awas Yojana (IAY), pension and bicycle/dress distribution, Targeted Public Distribution System (TPDS), Janani ewam Baal Suraksha Yojana (JBSY), and the Integrated Child Development Scheme (ICDS).

The monitoring system requires 10 implementing officers from every block in the state to send an SMS from a registered mobile number, between 5pm and 8pm, giving data on selected parameters indicating the day's progress on a scheme.

Sent messages are directed to a centralised server, where they are processed and uploaded to an online database accessible to all at <http://210.212.17.59/smsbihar/>. The reporting process is regulated by IT managers stationed in district offices. The data is analysed at the state level and provided to the concerned

departments, who in turn take appropriate action based on the findings.

Initially, implementers visited all blocks, training the relevant officers on the use of mobile to compose and send short standardised messages. Reporting officers were provided with a mobile phone under the Closed User Group (CUG) System, where phone charges are borne by the Government. Once initial resistance to technology and change were overcome, the system was easily adopted with a high rate of compliance amongst officials.

The information transmitted via SMS helps in reporting a programme's performance on the ground by automatically compiling into a user-friendly state level report in the form of bar charts. The system's foremost advantage lies in its minimal dependency on factors such as infrastructure, electricity and internet connectivity, which makes it functional in even the least developed areas of the state.

The Bihar Government plans to extend it to other departments and has already received enquiries from other states for technical assistance in setting up similar systems.

Janta ke Darbar mein Mukhyamantri

In a country so vast that distance between policymakers and beneficiaries can often be large; Janta Ke Darbar Mein Mukhyamantri is a platform that uniquely promotes direct interaction. Literally meaning 'Chief Minister at the people's court', the initiative ensures fast-track grievance redressal for the people of Bihar. As the name suggests, citizens can directly and easily voice any of their concerns to the Chief Minister and feel confident that their grievances will be disposed of in a timely manner.

Features

- Citizens are encouraged to meet the Chief Minister and register their grievances. They are guided by trained personnel.
- Women and handicapped are prioritized
- Cases are:
 - Received and seen by the Chief Minister
 - Digitised by the Public Grievance Department and forwarded to the concerned department
 - Addressed by the concerned department within 30 days
 - Followed-up with rigorous review meetings led by the Chief Secretary to ensure timely disposal
- If the individual is dissatisfied with the response, he /she can revisit the Chief Minister the following month



Achievements

- An average of 1500 cases are registered weekly
- 1,84,342 grievances have been received to date (2006-2010)
- All departments of the Bihar Government are accessible to the public on a rotating basis
- Has increased citizens confidence in the Government
- Has enabled the Government to understand the 'pulse of the people'

Bihar Public Redressal System

Department receives complaint;
reviews and responds within 30 days



**All departments are
represented; 10 departments
are accessible every Monday
on a rotating basis**



Registration begins



CM hears complaint; directs
citizen to the next level



Computer cum scanning unit; documents, scan and sends
complaints to the concerned authority

Objective

To ensure citizen-centric governance through a grievance redressal mechanism that directly links the people to the Chief Minister

Benefits

- Directly connects the people with the Chief Minister and department ministers
- Reduces distance between government officials and citizens
- Provides opportunity for citizens to voice grievances in person
- Guarantees immediate response and timely disposal of grievances
- Chief Minister and department ministers receive valuable feedback on the functioning of the administration
- Generates effective 'management by listening'

Janta Ke Darbar Mein Mukhyamantri, also known as the Bihar Public Grievance Redressal System, was initiated in 2006. Citizens with grievances ranging from social services to property disputes are encouraged to meet the Chief Minister on any given Monday. This programme significantly lowers the barrier between the policymakers and citizens by providing an effective alternative redressal mechanism.

The Chief Minister is present at every Janta Darbar, with 10 ministers by rotation, covering all departments within the month.

Registration begins at 7:30 in the morning and closes at 10:00. Preference is given to women, followed by disabled persons and then men. Trained personnel provide guidance for completion of grievance forms and every citizen complaint is given a unique code number.

The average number of citizens attending a Janta Darbar ranges from 1200 to 2000 and all corresponding requests are filed during the same day.

The Chief Minister listens to every complaint and directs the course of action. The appeal is immediately documented, scanned and stored in the

database. It then becomes instantaneously accessible to concerned departmental ministers on their individual computers at the Darbar. Departments are required to respond to the citizen's request within 30 days. Citizens who are dissatisfied with the response can revisit the Darbar at any time.

The Chief Secretary convenes monthly review meetings to track the progress of grievance redressal. At the department level, cases are reviewed on Fridays to ensure timely disposal. In addition to conducting weekly sessions, the Chief Minister on his tours of all districts in the state (Vishwas and Vikas Yatra) has reached out to remotely located citizens with an opportunity to voice their grievances.

Janta ke Darbar has proved to be a tremendous success with the disposal of more than 1.8 lakh grievances to date.





System for Computerised Registration (SCORE)

Awarded for achieving a phenomenal reduction in time required for land registration, SCORE has deployed a self-sustainable operational model, under which hardware is rented only as needed, keeping costs in line with operations at all times. Today a person can approach the registration department with better understanding, and confidence in the efficiency and reliability of the process.



Features

- Hardware On Hire Basis (HOHB) model
- Software developed by NIC
- Database stores Minimum Value Rate (MVR) for land
- Property details including location, nature of use and quality of construction are electronically registered
- Land owner details including biometric thumbprint scan and digital photo are stored in database
- Direct depositing of registration fee into banks

Achievements

- Recipient of Prime Minister's Award for Excellence in Public Administration 2007-08
- Enabled a radical change from manual to automated processes reducing the processing time from several days to about 40 minutes
- Registered more than 7 lakh land deeds in Patna in a single year
- Implementation by 38 societies at district level and 1 at headquarters, formed under the Societies Registration Act to enable this process
- 38 district registrar and 77 sub registrar offices are computerised

Objective

To computerise the registration of documents in a timely manner, ensure authenticity of deeds, protect individuals from faulty transactions, and guaranty land owners security against loss of documents concerning immovable property

Benefits

- Replaces time-consuming manual system with standardised e-mechanism
- Cost effective operations due to 'hardware on hire basis' (HOHB) model
- Digitally indexes and endorses documents
- Ensures on time delivery of documents
- Eliminates illegal circulation of stamp papers
- Streamlines revenue collection and controls corruption within the department
- Improves efficiency and objectivity within the Registration Department through increased transparency
- Digitised registered documents since 2006

Registration is crucial as it gives legitimacy to deeds. It protects against fabrication or loss of deeds, and prevents fraud and forgery.

Previously, the registration process was manual and cumbersome for both individuals and registering officers; with the introduction of SCORE in 2005, computerised registration replaced the manual procedure and now the entire process can take place in about 40 minutes.

SCORE has been implemented in 38 district registrar and 77 sub-registrar offices of the state. The software used is able to capture details of the deed, identify and evaluate the minimum value rate (MVR) of property, check the correctness of stamp duty and registration fees. It also has features to capture photos of parties, identify fingerprints and print endorsements. Lastly, it allows for document scans and issuance of a token number, serial number and book wise deed number to every deed for identification and retrieval.

The facility for direct deposit of stamp duty has been introduced after amendment of relevant stamp acts and rules. Similarly registration fees and service charges can be deposited into designated banks. This is convenient for the citizen and helps to avoid corrupt practices within the department.

Citizens have thus benefited from less complex procedures in registration; more time saved and reduced risk of malpractice.

One of the greatest advantages of SCORE has been its cost effectiveness.

The software has been developed by National Informatics Centre (NIC), a central government organization, at no cost. Hardware is hired, allowing for the supply of five computers, one printer, one webcam, and one scanner, at a mere renting cost ranging from Rs.10,500 to Rs.19,000 per month. Furthermore, revenues are generated through a charge of Rs.20. Hence, there is no financial liability and the generated revenue has made the model locally self-sustained.

Another improvement effected by SCORE is with regard to the MVR, a government enforced Minimum Value Rate on property determined on the basis of its location, use and quality of construction. This is now automatically computed and stored in the electronic database. Prior to the computerisation of MVR, landowners looking to sell property would deflate the market value to avoid having to pay higher taxes. Post-implementation, SCORE has been able to check such unlawful practices to an extent.

SCORE has completely eliminated manual handling of documents by the registering officer (RO) and at present, boasts the electronic registration of more than 7 lakh documents per year. A third version of the data management software to increase security features and computerised mapping comprised of MVR of property of all districts is being developed for future adoption. With SCORE, registration has become an easy practice for officials thereby ensuring issuance of deeds, with accuracy, to citizens on time.

E-Shakti

A single swipe of an E-Shakti smart card can ensure employment for rural workers under the National Rural Employment Guarantee Act (NREGA). The e-tool will digitize NREGA operations for compiling muster rolls and directly releasing wages, while also reducing opportunities for exploitation.



Features

- Microchip enabled smart card stores worker identification and demographics in digital format
- Biometric fingerprint & GPS verified attendance of workers that will enable real time data migration to central server
- Payment software to calculate entitlement, generate invoice, and credit wage to worker bank account
- Data centre for facilitation of card transactions
- Self sustainable through Build, Own, Operate, Transfer (BOOT) model where assets are owned by an external vendor and payments are made according to vendor outreach



Achievements

- Piloted in Patna district
- Biometric registration and distribution of E-shakti card is underway
- Over 15,000 queries responded at toll free call centre

Objective

To improve rural livelihoods through the provision of direct and easy access to NREGA worker registration; to automate NREGA operations in order to limit corruption and exploitation

Benefits

- Provides easy access to the complete NREGA cycle – job card information, muster roll, and wage collection - through user-friendly technologies
- Prevents leakage in muster rolls
- Streamlines backward and forward NREGA information flows
- Improves worker access to payment through elimination of financial middle men
- Allows the disadvantaged to access the banking sector
- Improves rural livelihoods through provision of direct access by beneficiaries to NREGA
- Helps in budget planning as NREGA entitlements, both earned and paid out, are stored in a single server and accessible for analysis



The Government of India implemented the National Rural Employment Guarantee Act (NREGA) in 2005. The Act calls for the public provision of rural employment in unskilled labour for a maximum of 100 days per household per year. It promises work within 15 days of request and payment of up to 100 rupees per day.

In Bihar, NREGA functions in 23 districts; state funds are used to support the scheme in an additional 15 districts. A major challenge has been to reach out to beneficiaries scattered across the state. Corrupt practices that falsify worker's attendance are also widespread. E-Shakti was developed to tackle these issues.

Launched in 2008-09, E-Shakti initially experienced teething problems. Vested interests in the old system, poor power infrastructure, and inaccessibility to rural areas during monsoon seasons slowed the technology from reaching its potential.

Today, E-Shakti has reached most beneficiaries in the district of Patna.

The embedded microchip in the GPS-enabled smart card stores biometric fingerprints to verify workers' attendance and compile muster rolls – all in real time. The payment software will then calculate entitlement, create invoices, and directly credit wages to the workers' bank account.

A toll free number on the back of the smart card connects workers to the E-Shakti call centre. Set up in October 2009, the centre receives around 120 calls per day from those inquiring about the programme. Eight operators respond to the phone calls and manage a dashboard of frequently asked questions (FAQs). Call centre operations are outsourced to a private firm, Smaartechn.

The success of E-Shakti is best encapsulated in a letter signed and sent to the call centre by 117 NREGA workers. The letter requested the expansion of the programme to their village – a sure sign that the E-Shakti model has begun to make a real difference on the ground.

Comprehensive Treasury Management Information System (CTMIS)

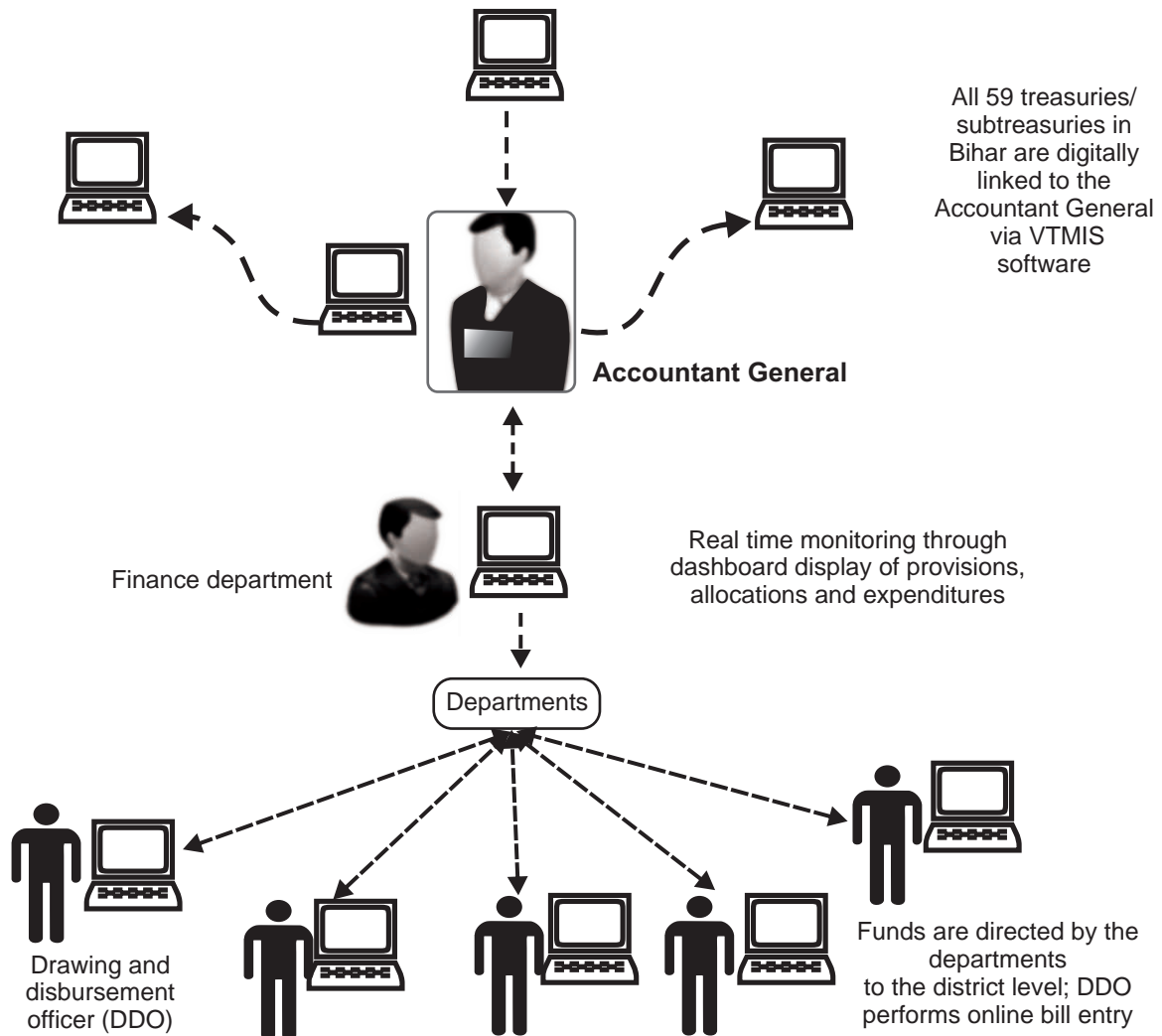
In response to the serious irregularities that occurred in the past, a new system has been implemented to promote effective budgetary control. Through the digital linking of all treasuries and the Accountant General (AG), the e-programme enables real time and comprehensive monitoring and regulating of expenditure.



Achievements

- All 59 treasuries/sub treasuries in the State are digitally linked to the Accountant General
- Reduced three month budgetary planning process to two weeks
- Enables effective re-appropriation of funds by identifying surpluses and deficits
- 17 facilitation centres have been established to facilitate DDOs to make online bill entries
- Dashboard available to senior officials that provides information on provisions, allocations and expenditures

Effective budgetary control through CTMIS



Objective

To create an interconnected and transparent system between treasury offices, departments of the Government and the Accountant General for efficient planning and allocation of state budgets

Benefits

- Provides transparency to monitor and control expenditure, including where to cut expenses and where to expand
- Allows for real time expenditure tracking
- Dashboard monitors display trends of expenditure and income
- Enables pinpointing of allotments that require double checking
- Makes withdrawal movements transparent down to the DDO level
- Creates an easier way of paying taxes through the instant generation of TV number
- Piggybacks on BSWAN, thus connectivity is through an ensured network

Stemming from the significant need to facilitate and regulate budgeting through real time tracking of expenditure and income trends, the Comprehensive Treasury Management Information System (CTMIS) programme was piloted in three treasuries in the Secretariat and one district treasury. Upon the success of the system within the testing field, it was expanded in May 2008 to all 59 treasuries throughout the state of Bihar.

CTMIS is an integrated system that links all the treasuries and the Accountant General, the Reserve Bank and the State Finance Department. It improves the entire cycle of finance-related functions performed by treasuries by networking them effectively.

Firstly, the automated system allows for rapid and reasonable formulation of budgets. Secondly, through the consolidation of local budgets at a central level, allocation is made easy. Lastly, encashing and recording of bill payments is speeded up.

Today, the successful functioning of CTMIS is only after a gradual rollout that involved a number of steps. First, 1200 computers were purchased for functionaries. Training was conducted for seven to eight months to develop data entry operators in 38 districts. SecLAN and BSWAN, government dedicated telephone networks, were leveraged to provide a single avenue through which the entire network of government actors involved would be able to communicate.

The future of CTMIS will be an enhanced system including databases for pensioners and employees. Additionally, 41 new facilitation centres are being established to assist all DDOs in online bill entry.

Features

- Intranet-based workflow driven application for the management of treasury functions including budgets, allocations, payments and receipts
- Envisioned as a core component to the BRAIN (Bihar Revenue Administration Intranet) project
- Key stakeholders: Finance Department, BSNL, BELTRON, Tata Consultancy Services



Value Added Tax Management Information System (VAT-MIS)

The digital Value Added Tax System offers a user-friendly and convenient method of paying taxes and filing returns and this has convinced dealers in Bihar to pay online. More than 50% of tax collection is now online and this has corresponded with an over 20 percent growth rate in VAT-related revenue collection.



Features

- Dealers can transact online at <http://www.biharcommercialtax.gov.in>
- E-registration – online registration of new dealers
- E-payment – online payment of taxes by dealers at using net banking with SBI
- E-return – online filing of returns
- E-communication – enables email communication between the field offices and headquarters as a closed group
- 1 server connected to all 49 circles through BSWAN
- Trained data entry operators

Achievements

- More than 60% taxes are now paid online illustrating the ability to gain dealers' confidence within a short span of one year
- 25.89% VAT growth in 2009-2010 over 2008-09, as compared to a growth rate of 23% over past 3 years
- Analysis of data allows for the identification and punishment of nonpaying dealers
- Computer awareness amongst officers and dealers has increased

Objective

To improve overall tax compliance by providing dealers with a convenient way of paying taxes, filing returns, obtaining forms and getting refunds; and officers with an efficient mechanism for processing and monitoring

Benefits

- Creates transparency in dealer payments:
 - Highlights nonpayment
 - Allows for efficient management of VAT generated revenues
- Makes tax and other payments convenient for dealers
- Incentivises new dealer registration by making the process clear and simple

The common belief that value added tax (VAT) collection generates more revenues for the state encouraged the Government of Bihar to be an early signatory of the system. The government also launched, in 2008, a centralised, integrated MIS for efficient administration of VAT.

The current VAT MIS is comprised of four applications: e-registration, e-payment, e-return and e-communication. The first allows a new dealer to register through the simple completion of an online form. E-payment and e-returns gives dealers the opportunity to save time and money on transportation by permitting web-based payments and filing of returns. Payments are facilitated through net banking facility with the State Bank of India.

These applications run on a single server that houses data from all 49 circle offices. The department functionaries can then readily access the data for analysis and appropriate action.

The transformation to an online VAT system was not easy. At the start, officers were comfortable working under the old system, so encouraging them to comply

with a completely new programme that required technical skills that many lacked, was difficult. With dealers, the main struggle was creating awareness about the new system and its benefits. Additionally, there were a few technical challenges including the synchronisation of old and new data systems, and the determination of compatible software and hardware.

After only a year in operation, the programme was able to channel more than half of all dealer payments through the web. This clearly demonstrates that the dealers have found the computerised system more convenient. As dealers continue to prefer the VAT MIS system, the department expects to cover the entire dealer population within a short time.

The Department is now working under a Mission Mode project of the Government of India - to enhance facilities through upgrading of hardware and software applications. Added features will include e-refunds and downloading of e-forms among others. Dealers will also be further facilitated through net banking enabled with other banks as well.

E-reforms in HRD

Technology has the power to change any given situation – it can also create new avenues of change. Computerisation in the HR Department has both led to the efficient use of space, and raised employee productivity. The use of technology is also empowering women by teaching them basic literacy.

Objective

To leverage simple technologies to increase the efficiency of the HRD department, and for the effective delivery of educational services

The Human Resources Development (HRD) Department, Government of Bihar, through its staff of 250 members located at the Central Secretariat aims to ensure proper implementation of policies and programmes for education and to monitor and regulate the functioning of schools, colleges and universities across the state. Bringing greater efficiency into back end operations would ensure better delivery of education to all young people and adults in the state.

Since 2008, the department has initiated implementation of the Integrated Workflow and Document Management System (IWDMS). A computerized catalogue has been created, covering about 1.5 lakh documents. Staff has now been trained



Achievements

- Enabled easy location of 1.5 lakh documents by means of a “computerised catalogue” (file location has been linked via IWDMS)
- Biometric attendance piloted in all sections of the department and in 2 colleges

on this system to quickly determine the physical location of any file stored in a newly created record room by running a search on parameters like title, subject and year.

In the coming months these files will be scanned and digitised. Radio Frequency Identification Devices (RFID) will be fitted to each file to track its movement in and out of the record room and across departments.

Also envisaged is a computerised central despatch system to streamline outgoing mail.

To reduce workload, redundancies and manual labour, 200 computers have been installed in the department. These are internally networked through a Local Area Network (SecLAN) and equipped with internet facilities. Photocopy and fax machines have also been provided. Modernisation has boosted employee productivity and efficiency, making them more industrious in achieving citizen-centric goals.

The department has piloted a biometric attendance system in its own central office as well in 2 colleges in Patna. Following the success of the system, it is planned to install the system in all 500 colleges in the state.

Efforts are also underway to implement Enterprise Resource Planning (ERP) in the department, state universities and constituent colleges that will promote systematic monitoring of budgets, utilisation of funds, daily income and expenditure in a real time basis. It also envisages a centralised and common platform for declaration of exam results, mark sheets and issuance of certificates on public domain.

Future Enhancements

- Digitisation of legacy documents and files
- Radio Frequency Identification Devices (RFID) to track file movement and ensure their security
- Centralised and automated despatch system for outgoing mail
- Biometric attendance system to replace manual registering of attendance in HRD and 500 colleges
- Enterprise Resource Planning (ERP) in HRD, State Universities and their constituent colleges to monitor budgets and utilisation of funds, daily income and expenditure; and to provide centralised online platform for examination results, mark sheets and certificates



E-monitoring of Akshar Anchal Yojana

This is a literacy programme targeting 40 lakh women between 15 to 35 years of age. They receive training from 2 lakh school teachers known as 'Akshar Doot' (messengers).

To measure outcomes and to monitor the implementation of the scheme, an e-application is under development. Codification of centres and teachers' details is complete. A Programme Monitoring Unit would use this database for recording attendance and measuring the attainment of cognitive learning milestones, including ability to read and understand eligibility and benefits under key government schemes.

E-initiatives under the Women Development Corporation

The Women Development Corporation of Bihar has undertaken a comprehensive programme for economic, social and cultural empowerment of women and girls. In some of their initiatives, Information and Communication Technologies (ICT) are being widely used for addressing domestic violence, skill building, and knowledge enhancement, as well as girl child protection and micro finance programmes for women and girls.



Services

- Offers platform for women to lodge complaints via toll free helpline
- Offers shelter homes to women in distress
- Provides counseling, legal and medical facilities, and monetary assistance to distressed women
- Benefits up to two girl children from every BPL family under Mukhya Mantri Kanya Suraksha Yojana (MKSJ)
- Imparts computer training to young women under Mukhya Mantri Nari Shakti Yojana (MNSY) which invariably generates job opportunities for beneficiaries
- Offers knowledge building opportunities on various issues including child marriage, female foeticide, micro-credit and micro-enterprise using multimedia and e-learning material.

Achievements

- Women's helpline in 34 districts of Bihar; will soon extend to remaining four districts
- Toll free helpline launched in 22 districts in July 2010
- On an average, 45 cases of violence against women are received per month in Patna district; 40% of these cases are received through telephone
- Around 7 lakh girls from BPL families awarded UTI career bonds worth Rs.2,000 each under MKSJ
- Computer training given to 1020 beneficiaries in 12 districts under MNSY
- E-learning modules have been developed to cater to 22,000 self help groups (SHGs) across 27 districts, each with 13 to 15 women
- The community based organisations are managing resources worth Rs.15 crores through a computerised data base.

Objective

To ensure improvement in the quality of lives of women and adolescent girls of Bihar

The Women Development Corporation runs a women's helpline in 34 districts including Patna. These act as crisis intervention centres that respond to telephone calls and visits from women in distress. They provide access to a range of services including arbitration of family disputes, provision of short stay homes, medical and counselling services, and legal aid.

In July 2010, WDC, with BSNL as the service provider, launched toll free helplines in 22 districts of the state.

The Mukhya Mantri Kanya Suraksha Yojana provides the first two girl children from BPL families with a bond worth Rs 2,000 and a maturity period of 18 years. The fund, invested in the UTI-Children's Career Balanced Plan, is effectively managed by the UTI Asset Management Company Ltd., through extensive use of information technology. This scheme will help in checking female foeticide and ensuring birth registration throughout the state. About 7 lakh bonds have been issued to date.

Under the Mukhya Mantri Nari Shakti Yojana, girls and women from low income and BPL families who have passed the intermediate (10+2) examination are offered job oriented computer education through professional agencies. The cost per beneficiary for this six month module is Rs 10,000. 1020 women are being trained under this scheme.



To impart skills and knowledge to women and girls, the Corporation, in collaboration with the professional agency Visionlabs, has developed audio visual learning material on relevant women's issues. These cater to 22,000 self help groups across 27 districts each with about 15 members.

The WDC is in the process of deploying GIS and web based tools for monitoring its schemes across the state. With women and girls accounting for a significant part of the state population, the efforts undertaken by WDC to improve their economic and social status is sure to have a significant impact on overall citizen welfare.

Patna women's helpline numbers

0934414466/ 09334414466/ 0612-6540157

**Toll free number for Patna helpline
launched in July 2010: 1800-345-6247**

Health Management Information System (HMIS)

The State Health Society, Bihar has implemented an online Data Capturing & Monitoring System for aggregating data related to health services under the National Rural Health Mission. Data originating at every level, from the Primary Health Centre to the Sub Divisional Hospital and District Hospital, is recorded and published on a portal. The HMIS processes the data for monitoring and evaluation of health service delivery across the state. Online recruitment of doctors, nurses and Auxiliary Nurse Midwives (ANM) is being also done through a web application.

Features

- Online health monitoring system – web-based consolidation of NRHM data from the block level up
- Online doctor/nurse appointment management system
- Data centre in every hospital (1 computer, 1 operator, internet)
- Online human resource management
- Digital transfer of funds between health centres across the state



Objective

To build an effective Health Management Information System (HMIS) providing accurate and timely data to strengthen NRHM planning and implementation at every level

Benefits

- Enables quick and accurate tracking of:
 - Immunisations
 - Pregnant women
 - Nurse and doctor appointment
 - Other NRHM schemes
- Consolidates state-wise, district-wise as well as hospital-wise health data in a timely manner, which allows for better planning, monitoring and evaluating of health services
- Integrates entire state health system, enhancing coordination between hospitals and hence providing better care to patients
- Encourages hospitals to submit monthly updates of progress

The Health MIS (HMIS) Portal (<http://nrhm-mis.nic.in>) was launched by the Ministry of Health & Family Welfare, Government of India in October 2008. The intent was to place NRHM related information in the national database and also in public domain. The national web portal is integrated with District Health Information Software version 2 (DHIS 2) (<http://bihar.nhsrhc-hmis.org>), the NHSRC, New Delhi supported state application using the free and open source software. Through continuous customization, the system is refined to meet state specific needs, while at the same time ensuring the national reporting requirements through the web-portal.

The HMIS application allows facility based data entry, reporting and analysis, enabling the meeting of NRHM goals of decentralisations, integration and evidence based decision making.

Currently, almost all 533 Primary Health Centres in the state are prepared to file monthly online reports. Data collection pertains to National Rural Health Mission (NHRM) indicators that surround family planning, institutional deliveries, and immunisations.

In addition to the health monitoring scheme, there is a web-based doctor, nurse and ANM – Appointment Management System. Data centres

equipped with one computer, one operator, and internet connectivity have been installed throughout all hospitals of the state.

Transferring of funds between health centres across all 533 blocks has been digitised, which has resulted in a reduction of time taken from three to four months to one day.

With the expansion of centres, additional personnel, including doctors and nurses, will also be required. Computerised management of services and recruitment will prove crucial to the fast and effective delivery of public services.

Nearly three lakh rupees are annually invested in connectivity. An IBM Web Server has been installed and working in State Health Society, Bihar with leased line connection and all required network equipments. Now, with the proper tools in place, health services have the potential to improve dramatically.

Crime and Criminal Tracking Network System (CCTNS)

The Bihar Government is moving towards a system under which one police station can directly talk to another - a system in which consolidated records of crimes and criminals can be accessed and utilised for improved policing.

Features

- Digital crime record system
- Police stations to store digitised data of criminals and their offences from 2005
- Markers like biometric identification would make criminal records securely accessible nation-wide



Objective

To enable speedy investigation of crime, and detection of criminals through a nationwide IT enabled tracking system

Benefits

- Will provide police officers with information and tools for quick detection of criminals
- Will foster information sharing between police stations, districts, state/UT headquarters and other police agencies
- Will reduce the need for manual and redundant record keeping
- In the long run, will reduce crime and promote better law and order in the State
- Improve delivery of citizen-centric services

Crime and Criminal Tracking Network System (CCTNS) is a Mission Mode Project under the National e-Governance Plan (NeGP), Government of India. Bihar is a forerunner in the implementation of this project.

The potential of CCTNS lies in its ability to provide real time remote data access to police officers in the field. Queries concerning crime and criminals will be automatically compared to existing data for links with past and present investigations. Speedy access to criminal history will expedite the investigation of crimes.

Data pertaining to criminals and their offenses will be digitised and stored at the police station. A unique identification of criminals would be effected through the use of biometric devices, scanners and digital cameras. This data will be searchable on a range of parameters and accessible to other stations across the country over a dedicated network. At the same time, different levels of security would regulate information access to appropriate quarters.

Currently, with fund allocation to the tune of 50 crores, the Government has initiated hardware procurement and software systems analysis and design. The State Crime Records Bureau (SCRB) is the state nodal agency assisted by the state CID. Professional agencies are being identified to provide technical handholding and for entry of legacy data. Discussions are on with BSNL in regard



to setting up dedicated connectivity for data sharing. A large number of personnel are being trained and a concerted effort to change mindsets from manual to e-processing is ongoing.

The web-based records system will be of tremendous help for crime control as any crime reported in one part of the state would often have links in other parts of the state. As reliance on manual records give way to digital ones, police effectiveness in criminal investigation and crime control would increase manifold.

With information at the police fingertips, identifying and detaining of criminals is bound to increase. Moreover, as new technologies allow for advanced police functioning, overall crime is likely to reduce.

Transport E-reforms

A set of reforms are underway that will allow civil servants and citizens to improve transport-related public service delivery by way of increased transparency. This integrated system of digital registration and GPS tracking of vehicles, is consumer, government and business friendly.



Features

- Computerisation of District Transport Offices (DTOs) for networking of data into central server
- VAHAN - digitised registration of vehicles stored on smart card
- SARATHI - digitised drivers licenses stored on smart card

Proposed enhancements:

- Toll free helpline to address citizen transport concerns
- Computerised dealer point registration where data migrates from dealer to DTO
- E-ticketing for Bihar State Road Transport
- Digital display of public transportation schedules at bus stops
- GPS tracking of public transport vehicles

Achievements

- 36 out of the 38 District Transport Offices (DTOs) have been computerised to date
- 87,856 smart card-based driving licenses have been issued since 28 May 2008 till date, in Patna
- 84,117 vehicles have been registered on smart card, since 28 May 2008 to date, in Patna
- Legacy data digitisation is underway
- 6 checkposts on national highways are being setup with hardware to access all centralised vehicle data
- Computerisation of Patna Regional Transport Authority (RTA) is underway, remaining 8 RTAs are planned to be computerised

Bihar Transport e-Tracking System

36 out of 38 District Transport Offices are computerised to receive information from the central server

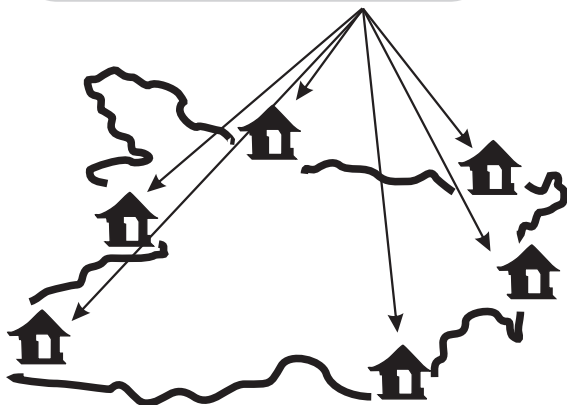


Stores digital records of vehicles and drivers



Central Server

Information sent via computerised process



6 check posts will be connected to the central server to monitor inter-state traffic



Smart card driving license issued through Sarathi

Advantages of issuing smart card driving license:

- Prevents duplication of licenses through biometric identification on card
- Penalties can be incurred on the card in case of traffic violations
- Carries details of all traffic offences
- Monitors crimes as information can be circulated across the via central server



Smart card e-registration of vehicles through Vahan

Advantages of issuing e-registration of vehicles smart card:

- Regulates movement of vehicles
- Enables better crime-control through vehicles-tracking

Objective

To enhance the welfare of citizens and enable effective administration and regulation through IT-enabling of transport-related public services

Benefits

- Will enhance citizens' welfare through:
 - Simple licensing and vehicle registration process
 - Improve public transport service with planned routes and time schedules
 - Access to tax liability and payment information
- Will increase tax revenues, plugging loopholes where collection has failed
- Can aid enforcement of transport rules and regulations
- Will enable better route planning through vehicle-tracking

The Transport Department of the Government of Bihar is undertaking a major reform called VAHAN-SARATHI and the project is going to be fully functional within the coming months as all DTOs are linked to the Central Server at State headquarter.

VAHAN refers to the registration of vehicles while SARATHI is the issuance of driver licenses. Both use a smart card platform to store digital records of state vehicles and drivers.

DTOs are being computerised and will be networked to a central server. Smart card information from across the state will be held in this server. The server will also hold legacy dealer data that is currently being digitised; this process is estimated to finish within the next few months. The availability of data on the server will enable effective regulation of private and public transport as well as commercial goods and passenger vehicles.

Six highway check posts are being setup with access to smart card information to monitor inter-state traffic. Other e-reforms that are in the planning and

design stages include e-payment of vehicle taxes, and e-ticketing for passengers of public transportation. These will make transport-related processes more convenient for the citizens.

A toll free helpline will soon be available for transport-related queries and concerns. The purpose is to disseminate information to citizens about department services through the telephone.

Another reform in the process is the GPS tracking system for public transport vehicles (buses) where owners will be required to purchase global positioning systems (GPS) that will be linked to the state register. This will enable real time monitoring of movements, timely identification of traffic bottlenecks, and appropriate action to boost overall operational efficiency of public transport systems. Further, bus schedules will be digitized to display at stops – an effort that will give customers an opportunity to better plan their travel and also participate in the enforcement of timely transportation.





Bihar State Electricity Board (BSEB) E-reforms

The BSEB envisions a future where consumers are satisfied, operations efficient, and revenue collection is high. Digitisation of billing, grievance redressal, the installation of an IT-based facilitation centre and any time payment (ATP) kiosks are steps towards realising this vision.

Features

- Local area network technology has enabled interconnectivity within the BSEB
- Web-based information related to the Department is available on public domain at <http://bseb.bih.nic.in/>
- IT-based information facilitation centre in every division that acts as a 'one-stop shop' for consumers
- Cash collection counters to encourage on time payment of bills
- Any Time Payment (ATP) counters with trained personnel to guide the consumer on how to use the new technology



Achievements

- 100% billing and enhanced collection
- Waiting time at counters reduced - a great relief to consumers

Objective

To facilitate easy and accurate billing and payment for the consumer, improve internal efficiencies, and increase revenue collection through easy-to-use technologies

Benefits

- Provides consumers online access to billing information
- Enables quick and easy payment of bills through ATP kiosks and cash collection centres
- Informs consumers on billing procedures and system updates
- Addresses complaints through online grievance redressal system
- Increases revenue collection through effective automation of services
- Digitises paperwork for the improvement of operational efficiency
- Stores billing data that can be analysed to determine an optimal billing model

The Bihar State Electricity Board (BSEB) has digitised the processes of electricity billing, payment and collection.

Thirty-two computerised revenue collection counters are operational across Patna. More recently, Any Time Payment (ATP) kiosks have been installed at each of the 10 divisions in Patna to facilitate easy payment of bills. Additionally, consumers can access their current and previous bills; submit grievances or check their status online at <http://bseb.bih.nic.in/>. The user friendly site offers an FAQ with advice on getting a new connection or restoring an existing one; it also offers a detail of electrical safety guidelines and advice for energy conservation. Information on state-wide energy initiatives, including rural electrification, is also available on the site.

The history of household energy consumption or payments made either through collection centres, ATPs or the web is available to the electricity board and department officials to determine consumption, payment and billing patterns, and later for strategising best ways to meet the power demand, and enhance revenue collection.

At present, the online database stores and organises, by division and account number, the billing history for 3 lakh consumers. The number of consumers tracked by the database has been growing at around 10 percent year over year, illustrating a rapidly expanding system. Computerised energy auditing will also be introduced in the near future. The aim is to account for energy generated and utilised, along with corresponding collections on a regular basis. Such a mechanism will be beneficial for tracking energy wastage or leakage.



A Supervisory Control and Data Acquisition (SCADA) system has been proposed for online disposal of consumer complaints relating to billing and poor power supply. Implementation of the Restructured Accelerated Power Development and Reforms Programme (R-APDRP) has been initiated in aims of enhanced energy auditing in 71 towns of Bihar. Under this programme, electronic meters will be installed in every household to measure energy consumption. Additionally, underground cables will be laid to stabilise the energy supply. Power service stations will be interconnected through fibre optic cable to ensure proper distribution of energy. E-tendering within the BSEB has also been initiated to bring about transparency and to streamline procurement procedures.

IT development in BSEB has benefited consumers, the State Energy Department and the Board itself. In summary, the e-reforms have reduced BSEB's manual workload a great deal, improved billing options for consumers, and expedited revenue collection.

Integrated Workflow & Document Management System (IWDMS)

The public is dependent on government officials to make well-informed and timely decisions; however, this is often hindered by the extreme amounts of paper files that store all pertinent government-related information. Today, the Government of Bihar has called for a complete overhaul of the system through the digitisation of paper files. This is the first and most critical shift towards efficient file tracking leading to better informed decision making. In the long term, transparency generated through this centralised 'less-paper' system will surely empower policymakers throughout the state.



Features

- Centralised software architecture – all government stakeholders are privy to a consolidated archiving of information via their computers
- Automation of routine activities – workflow, numbering, personal register
- File digitisation
- Monitoring of large number of litigations/ cases
- Interdepartmental interface which allows for creation, movement, tracking and closure of files

Achievements

- Eight departments have adopted IWDMS
- More than 3,000 important documents are digitised for better storage and retrieval
- Assistants and section officers of finance department trained in use of IWDMS

Objective

To computerise government records and automate routine office activities, facilitating informed and timely decisions

Benefits

- Government officials have ready access to files
- Enables timely disposal of files
- Generates the ability to pinpoint delays in decision-making and hence, take appropriate action
- Allows for greater ease by which the Right to Information is fulfilled
- Allows for the monitoring and management of critical activities like court cases
- Requires low cost for future leveraging of the programme

The Integrated Workflow and Document Management System (IWDMS) is an electronic file movement system initiated by the Bihar Government in 2006.

The system is operational through a set of newly installed technologies. Scanners as well as computers were purchased to digitise and store files. The Secretariat Local Area Network (SecLAN) was installed to enable communication between different departments under the State secretariat using IP phones and computers. BSWAN, the Bihar State Wide Area Network, was installed for connectivity from the blocks to the district and state offices.

In the long run, IWDMS is intended to lead towards a paperless office. Evidently, this shift from a paper-based office is not an easy one, with several steps ranging from planning and procurement of hardware and software; scanning, digitisation and indexing of the files; to creating the software that determines how data will be stored, retrieved and disseminated.

General Administration and Finance are foremost amongst eight departments that have initiated IWDMS to varying extent and with differing degrees of success. Departments are able to track files easily and to access information that is needed for timely public-oriented action. By tracing file movement it is now possible to pinpoint delays, inaccuracies, frauds and establish

accountability. Making information available to the public as self disclosure or in response to RTI queries has become simpler.

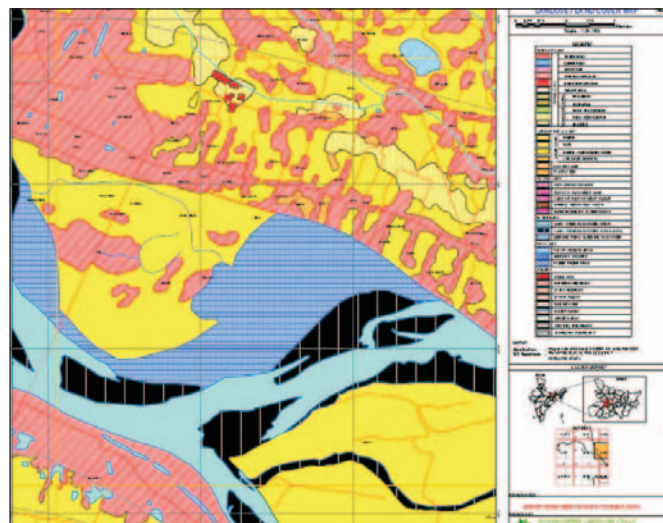
IWDMS has the potential to deal with a vast range of governmental functions increasing efficiency, accessibility of information, and ease of decision making – examples of some governmental functions that have been simplified include monitoring of legal cases – with possibility to identify pending cases, prepare statement of facts, and file counter-affidavits, issue oath numbers and record judgments – assets and vehicle management, service registers, leave processing, pensions and benefits to retired employees.

Hurdles have been many and included the paucity of trained staff, the absence of reliable connectivity, overcoming resistance to new technology and processes. Digitised signature and data security are two issues that need immediate attention. Training needs to be in a coordinated manner and on an extensive scale.

Key project owners including the Finance Department, BELTRON and Tata Consultancy Services are working to make the system more user friendly and to enable more departments to implement the system and benefit from it.

E-reforms by the Urban Development & Housing Department

The Urban Development & Housing Department (UD & HD) has leveraged Information Technology to improve internal efficiency and foster accountability & transparency leading to better service delivery. E-Governance projects have aimed to improve the quality, accessibility, and effectiveness of Government services for citizens and businesses across 140 Urban Local Bodies in Bihar.



Features

- CGRC online application allows for retrieval of complaint data to review status, monitor and take action
- MUDRA – a computerised property tax collection system for ULBs
- GIS provides a database of key utilities and facilitates urban management
- Accounting reforms to aid financial planning and control

Proposed augmentation:

- State-wide IVRS based complaint registration system
- Online grievance redressal and tracking system
- SMS based system for informing the citizen on the resolution of their complaint
- A one-stop destination for providing information related to government schemes
- Web-enablement of MUDRA, and integration with the GIS application

PATNA MUNICIPAL CORPORATION

Facilities

- Operational user friendly gateways:
 - Citizen Civic Centres for property tax payment
 - Citizens can file complaints online with the Citizens Computerised Grievance Redressal Cell at <http://www.patnanagarnigam.org>
- Grievances can also be registered with the Control Room cum Service Centre
- Garbage collection is monitored on a daily basis
- Digitisation of birth and death certificates
- SMS based monitoring with monthly meetings to review data on property tax, number of workdays and employees
- Biometric facility for reporting attendance
- Two-way radio communication between corporation executives and field level officers



Objective

To improve urban planning and services through the IT-based service delivery systems

Benefits

- Citizens can register complaints and check status by calling up the CGRC
- Department can ensure better compliance and revenue generation through property tax processing through MUDRA
- Computerised re-evaluation of individual holdings using MUDRA
- Quick and accurate accounting systems and documentation for policy makers and implementers
- Greater transparency

The **Control Room cum Citizen Grievance Redressal Cell** is an ICT enabled public call centre that registers citizen's complaints/queries related to the UD & HD. Citizens can call the centre at 2210 000 at local charges to register their complaint. Call centre operators transcribe the grievance in the system.

CGRC employs a web-based complaint registration & tracking software to store all complaints/queries entered by the operators. These are forwarded to the concerned ULB. Officials log into the system to view the complaints, take appropriate action and update status. Citizens can call the centre to check the status of registered complaints. This initiative has helped the ULB to improve the quality of the service provided to urban citizens.

Implemented in Muzaffarpur, **MUDRA (Municipal Corporation towards Digital Revenue Administration)** is a computerized property tax collection system for Urban Local Bodies (ULBs) in Bihar. Facilities include bill generation and despatch, online tax collection, and generation of reports like the Demand Collection Balance (DCB) report and Aging Analysis report. This is now being web-enabled, so that holding owners can easily check for details like holding data, taxes due and payment dates.

The UD & HD has started **GIS mapping** of Purnea, Katihar, Biharsharif, Munger & Begusarai, Patna urban agglomerate,

and Bodhgaya. Mapping of rest of the ULBs will be taken up in a phased manner. High resolution satellite data will be used to prepare a detailed digital base map of each town on 1:1000 scale, showing road, sewerage, water supply and drainage networks. Outputs will include building footprint maps, contour at 0.5 m intervals and property maps. Decision makers can access the latest information for planning in areas like solid waste management, land management, and property tax reforms. Information collected through digital maps and property surveys can enhance municipal revenue significantly.

The Double Entry Accounting System (DEAS) is implemented in the Patna Municipal Corporation (PMC), and it is in process for other ULBs as well. E-Reforms have covered the preparation of policy documents like the BMAM (Bihar Municipal Accounting Manual), Fiduciary Risk Mitigation Plan and Revenue Enhancement Plan; processing of treasury payments, assets management, and electronic fund transfer for devolution of funds and monitoring of utilisation. Digitised file tracking, e-procurement and web tracking of progress on government schemes are also planned – providing real-time MIS for decision makers.



