

## West Bengal: Transforming With Widespread Adoption of ICT

*West Bengal a leading state in Eastern India, famous worldwide for Darjeeling Tea produced in the northern hill region and Royal Bengal tigers found in the Sunderbans on its southern part forming the worlds largest delta by the mighty rivers Ganges, Brahmaputra and Meghna. It is also the world's largest estuarine forest. The state has a geographical area of 88,752 square kilometres. An agriculture-dependent state, occupies only 2.7% of the India's land area, though it supports over 7.8% of the country's population, and is also the most densely populated state in India. West Bengal can boast of its rich socio-cultural heritage, which makes Kolkata, the cultural capital of India. In the recent past many ICT based companies have flourished, transforming it into a major IT hub in the east.*



**N K Das**  
Deputy Director General, WB  
[sio-wb@nic.in](mailto:sio-wb@nic.in)



**Amitava Bose**  
Technical Director, WB  
[amitava.bose@nic.in](mailto:amitava.bose@nic.in)

West Bengal State Centre (WBSC) of NIC has been actively involved in promotion and penetration of Information Technology towards e-Governance in the State as well as at the district levels. The centre has developed & successfully implemented many Citizen centric service delivery systems and e-Governance applications touching nearly all sectors of the administration.

### Land Reforms Sector

**BHUCHITRA:** The software integrates ROR (Khatian) data with spatial data (digitized mouza map data) and provides copies of plot maps to citizens along with the certified copy of khatian. Online operations include Mutation, Conversion, Bargadar Enrolment, Homestead Benefits, Warish Enrolment, Vesting, Divesting and Pattadar enrolment.



*Distribution of Registered document (Deed) is in progress at Hooghly, WB by the DM.*

**CORD:** It handles the process of Registration of documents and delivers deeds on the same day. State-wide assessment of market value of

land is accessible to citizens. Presently, CORD is functional in 225 out of 237 Registration offices across the state.

**BHU-ADHIGRAHAN:** Land Acquisition process can be expedited with accuracy if the digitised ROR is available for the desired locations. BHU-ADHIGRAHAN software caters features like: capturing proposal details, case details, owner identification, generation of notices, awards and orders and compensation details by integrating Land Records data available at the blocks.

### Finance Sector

**Commercial Tax & VAT:** Information Management and Promotion of Administration in Commercial Taxes IMPACT software aims at improving revenue administration and enhancing collection. After introduction of VAT

regime, IMPACT was made VAT compliant. Registration of dealers, Recording of Tax payment and Revenue administration, Return filing and processing, Audit, Assessment, Monitoring of Goods Movement including import into the state and transit of goods using the state as corridor, Issue/utilization of central declaration forms

are some of the important services delivered through IMPACT. VAT/CST Return defaulter lists, new registered dealers, List of dealers

selected for assessment are also available on the web (<http://wbcomtax.nic.in>). Services like e-Registration, e-Return under VAT/CST, Issue/utilisation of waybill/CST declaration forms have been introduced. The VAT-compliant software was replicated in the states of Sikkim and Meghalaya also.

**XPERT:** An e-Governance system hosted at [www.wbexcise.gov.in](http://www.wbexcise.gov.in) involving creation, storage, analysis, dissemination and use of information to perform and monitor day-to-day activities of the Excise Directorate. The system has been in use by the Directorate, Licensees including Bottlers, Distilleries, Trades and Retail shops, SBI personnel, Consumers, Applicants for licenses and citizens.

**State Budget:** The process of compiling & preparation of state budget for the ensuing financial year and revised budget of the previous financial year are electronically handled. Re-Appropriation of budget allocation, answering queries raised by departments and NGOs, Statistical Analysis of different account heads, Web-casting Budget Speech, distribution of budget on CD-ROM and releasing the same on the website [www.wbfin.nic.in](http://www.wbfin.nic.in) are the other major activities involved.

Other initiatives in the sector include Treasury Computerisation System and Rural Infrastructure Development Monitoring System.

## Agriculture Sector

**AGRISNET:** AGRISNET, a centrally sponsored DAC project, implemented in the state delivers six types of citizen centric services. The portal to deliver services to the farmers can be accessed on <http://wbagrisnet.gov.in>.



Website of West Bengal Agricultural Department

The major services include Soil health card, pesticides licensing, fertilizer licensing, seed certification, seed licensing and project monitoring.

**Agricultural Portal:** The agriculture portal “Matir Katha” - designed and developed by NIC (WBSC), caters to five Departments viz. Agriculture, Agricultural marketing, Animal Resources, Fisheries and Horticulture. The information covered includes name and kind of seeds, availability, price and quality control, suggestions for Season / Area / Crop / variety wise cropping (based on crop calendar), information related to soil and fertiliser, cultivation technique of different crops, crop diseases and their remedies, Agro-Climatic Zones and schemes for cultivation of different crops in local language.



Inaugural function of Pesticide Licensing System in Kolkata

**AGMARKNET:** A nation-wide project of DMI has been implemented in the state successfully. The information on agricultural produces are collected and updated regularly from seventy-six locations comprising - Regulated, Wholesale, and other markets.

## Panchayati Raj and Rural Development Sector

**Central Projects:** The MGNREGA-Soft has been successfully implemented in the state. Job-Card, Scheme Information, Muster Roll and other details are uploaded on the central database directly from the Gram Panchayats and Block Panchayats. Under NSAP and SGSY, database was created for most of the districts. The MIS for schemes like PMGSY was also successfully implemented.



*Training on SGSY-MIS under progress at SIPRD, Kalyani, West Bengal.*

**Portal & e-Compendium:** The portal and e-compendium of P&RD Department was developed. The portal includes various activities of the Department including MIS which monitors distribution of fund under twelfth Finance Commission, State Finance Commission, expenditure against seven development schemes and monthly progress of work. e-Compendium, a web based information system, developed under the project DRISTI (Decentralized Rural Information Services and Technology Initiatives) provides Acts/Rules/Orders of P&RD Department. e-Compendium was supported by National Institute of Smart Government (NISG) and UNDP.

**e-Procurement:** NIC - Government e-Procurement (GeP), an online tendering system facilitates online creation & publishing of tender notice on the web, online participation by bidders using Digital Signature Certificate(DSC), financial and technical evaluation, award of contract and Post tender project evaluation. The system has been implemented in P&RD Department and in Zilla Parishads. Both the World Bank and Asian Development Bank have reviewed and approved the various features of the system.

### Welfare Sector

**Post-Matric Scholarship Monitoring System (PMSMS):** A district level application s/w helps office of the District Welfare Officer (DWO) to capture master and transaction data. It calculates and posts the entitled

amounts, approves necessary sanction orders, prepares utilization certificates and compile progress reports etc.

**OBC and SC/ST Certificate Application and Review (OSCAR):** A web based software implemented which captures application details and facilitates review of caste certificates. The estimated number of certificates at present is 50 lakhs growing yearly at the rate of ten percent.

**WBTDC:** A web based software implemented covering major functions of WBTDC encompassing activities at HQ, ROs, BOs levels. Large-sized Multipurpose Co-operative Societies (LAMPS) are formed by tribal people to pursue village level economic activities falling under centrally / state sponsored schemes. MIS for LAMPS covers Processing project proposals, loans, marketing of Kendu leaves, Sal Seeds etc.

### Transport Sector

**VAHAN and SARATHI:** The Smart Card based applications facilitate issue of Vehicle Registration and Driving Licences to citizens. The applications provides for collection of fees, tax, penalty, recording of photograph etc. VAHAN has been implemented at all the 24 RTOs while SARATHI at 9 locations. SMS service operational on pilot site at Public Vehicles Department, Beltala verifies the owner and its tax details. VPN over broad band was established at all the RTOs of the state. Data replication initiated at RTO Barasat towards building up of the state register.

### Sea Port Sector

**Comprehensive Computerization for Haldia Dock Complex (HDC):** Port Operation Management System (POMS) was developed and implemented on a turnkey mode. The system handles Vessel /Cargo /Container Operations & Management, Container Yard Planning, Billing (Vessel/Cargo), Port-Custom EDI, Container Freight Station (CFS) activities and Port Community System Integration and MIS.



## Port Operations Management System for Kolkata

**Port Trust (KoPT):** Skills acquired in HDC inspired the state centre to go for horizontal transfer of POMS, along with its architecture to Kolkata Dock System (KDS) of KoPT.

**Port Operations Management System for Ennore Port Limited:** Later POMS Project was replicated at Ennore Port, Chennai, jointly by NIC (WBSC) and NIC (TNSC).

## Judicial Sector

**Calcutta High Court:** Case Management Information System, Caveat Information System, Judicial Service Information System and Other Office Automation Systems have been implemented. Cause list is published daily through portal.

**WBAT Case Management System:** A LAN based software manages approximately 40,000 cases filed in WB administrative tribunal. The s/w provides facilities for Filing of cases, Finding the status of cases, Generation of cause list and certified copy of court order/judgment.

## Other ICT Initiatives

**Missing Children Tracking System:** NIC (WBSC) has developed and deployed a portal [www.trackthemissingchild.gov.in](http://www.trackthemissingchild.gov.in) towards sharing of information on missing and tracked children among the stakeholder organizations. During the last two years of its operation an alarming 10,000 children were reported missing in the state alone. Concerned personnel in almost



*State level Workshop on Missing Children Tracking System*

all the 500 police stations in the state were trained by NIC (WBSC). The portal turned out to be extremely useful for better monitoring of cases by the police administration.

**West Bengal State Election Commission:** State Election Commission conducts local body election for Panchayats & Municipalities of the State. A portal (<http://wbsec.gov.in>) was designed & developed to disseminate election related information and results.

**General Elections (Loksabha & Vidhan Sabha):** Activities like formation of polling parties, EVM randomisation, result transmission etc. in all General Elections are carried out with the customised software developed for the purpose.

**Initiative in Postal Sector:** Central projects in postal sector like PLI/RPLI Application, PATAM, Instant Money Order (IMO), and Circle Postal Accounting (CPACT) have been implemented.

**Generic Applications:** Generic applications developed and implemented in the State are Fund Flow Monitoring System, Letter & File Monitoring System, Cabinet Meeting Information System (CMIS) and Computerization of Salary Accounts (COSA).

## ICT Infrastructure/Services

In order to provide effective ICT services, a strong backbone is required. NIC (WBSC) has established an Internet Backbone, OFC based Connectivity, iNOC, Leased Circuits and Data Centre. The Web-Hosting Services covers Design & Development of Web-Sites, Domain Registration, maintenance, security auditing etc. Video-Conferencing facility has been extended to many Central & State government departments in the state.

### *For further information:*

**N.K. Das**

State Informatics Officer  
National Informatics Centre  
Dept. of Information Technology  
18, Rawdon Street, First Floor  
Kolkata-700017  
Ph-91-33-22877320

*Edited by:* Prashant Belwariar