

e-ABGARI - Complete IT Driven Supply Chain Management System for State Excise

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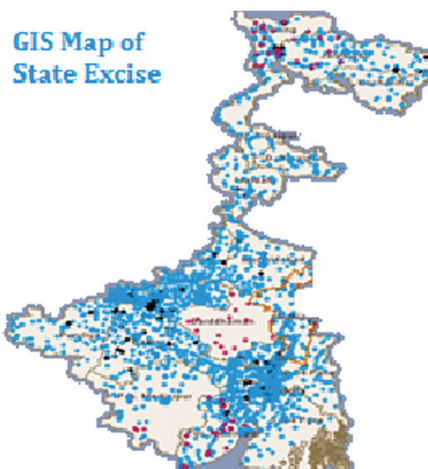


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State Excise is the 2nd highest revenue earning resource component in most of the States in India. It provides around 20 per cent of the share of the government’s own revenue in most States. The statutory objectives of State Excises in India are effectively controlling the production, manufacturing, possession, transport, purchase and sale of intoxicating liquor, and thereby optimising the collection of government duties & fees on excisable commodities and safeguarding public health, at the same time. Due to the changing fiscal environment in Post-GST scenario and the utmost need for compliance with the FRBM Act to ensure sustaining long-run fiscal health through transparency in fiscal operations, the State Governments have started to explore the possibilities of augmenting their revenues by mobilizing State Own Revenue Resources through adoption of ICT driven schemes.

Improving tax compliance by businesses and professionals, adoption of good administrative procedures, and building robust system to combat sources of Tax



State Excise GIS Map

base erosion/ arresting revenue leakage points can strengthen Revenue Resource Mobilization (Ref. World Bank Report on Domestic Resource Mobilization (DRM), March 29, 2016). In most of the States in India, ICT enablement in State Excise is in basic stage. Presently, the States, with utmost importance, have started to explore suitable e-Governance solutions for adoption in State Excise (i) to arrest revenue leakage points and (ii) to control excise crimes for better revenue realization from State Own Revenue Sources.

PROJECT e-ABGARI

The e-Abgari project (<https://excise.wb.gov.in>) is a strategic administrative reform initiative of West Bengal State Excise leveraging state-of-the-art modern technology to provide a workflow based end-to-end solution covering all activities of the directorate. Prior to 2012-13, operations of West Bengal State Excise were purely manual, based on antiquated procedures which had not been changed for decades. Apart from this, the hooch tragedy at Sangrampur in South 24 Parganas, West Bengal in late 2011 which claimed over 170 lives acted as an immediate trigger for the Government to start thinking of replacing and re-engineering the activities of the State Excise in order to give more teeth to the Excise administration. NIC was entrusted to work as ICT consultant in this regard.

The reengineering initiative involved implementation of Information Technology solutions for state excise operations. The outcome of the reengineering initiative was e-Abgari project, designed, developed by NIC in close association with Excise Directorate, and it has tremendous transformative effect on the functioning of West Bengal State Excise. The project is built on the methodology of “Reduced discretion - Electronic workflow - Electronic service delivery” adopting a web-enabled delivery mechanism to ensure the delivery of G2B, G2C, G2G services in a

timely, transparent, more accessible and reliable manner.

45+ONLINE e-SERVICES

e-Abgari is an umbrella solution for a number of electronic services. At present more than 45 services are covered under e-Abgari. Some of which are -

- Grant of New Excise License & Renewal of Excise License
- Change in Excise Establishment Management
- Registration of Brand & Labels of Packaged Liquor
- Collection of Excise Duties/ Fees.
- Hand Held Terminal/ Bar-code Scanner driven Supply Chain Management of Packaged Liquor
- Import of Molasses, Bulk Spirit, SDS, Methanol, Medicinal spirits, Packaged Foreign Liquor from other States
- Export of Molasses, Bulk Spirit, Packaged Foreign Liquor, Packaged Country Spirit to other States
- Transport of Bulk Spirit, Packaged Foreign Liquor & Country Spirit within the State
- Transport Packaged Foreign Liquor from Custom Bonded Warehouse
- Transport of Packaged Country Spirit within the State
- Permission for Late Serving in Retail Outlets
- Grant of Temporary Bar License
- Computerization of Chemical Examination Laboratory
- Daily Preventive Raid Reporting system
- Daily Sales Reporting & detailed Inventory of Retail outlets
- Monthly Revenue Return from Excise Licensees
- Monthly Revenue & Intoxicant Consumption Report from O/c, Excise Districts
- Integrated service with Police Authority for NOC for grant of License/ Late Closing
- Supply Chain Management of QR Coded Holograms from Press till its affixing on Packaged Liquor through

Applicators

- Country Spirit Salesman Registration Module
- Court Case Monitoring System, Excise Misc. Case Monitoring System & Excise Criminal Information System
- Public Grievance Monitoring System
- **eBevco** is an ERP solution under e-Abgari, which has been developed for West Bengal State Beverage Corporation Limited (WBSBCL) to provide end-to-end solution comprising of Registration of business associates, Automated Supply Order to Suppliers, regulating and monitoring movement of packaged spirits upon receipt at warehouse and upto shipment to Retail Outlets, Release of payment to supplier on receipt of sale information from retailer based on indentation, Invoice management, Tracking, reconciliation of bottles/ cases with alerts & exception reporting, Reporting and analytics of key operational & financial parameters, Management of supplies and inventories of packaged liquors, Integration with banking payment gateways etc.

INNOVATIVE APPROACHES

A number of innovations are incorporated into e-Abgari to meet changing requirements of the domain. A few of such innovations are mentioned here -

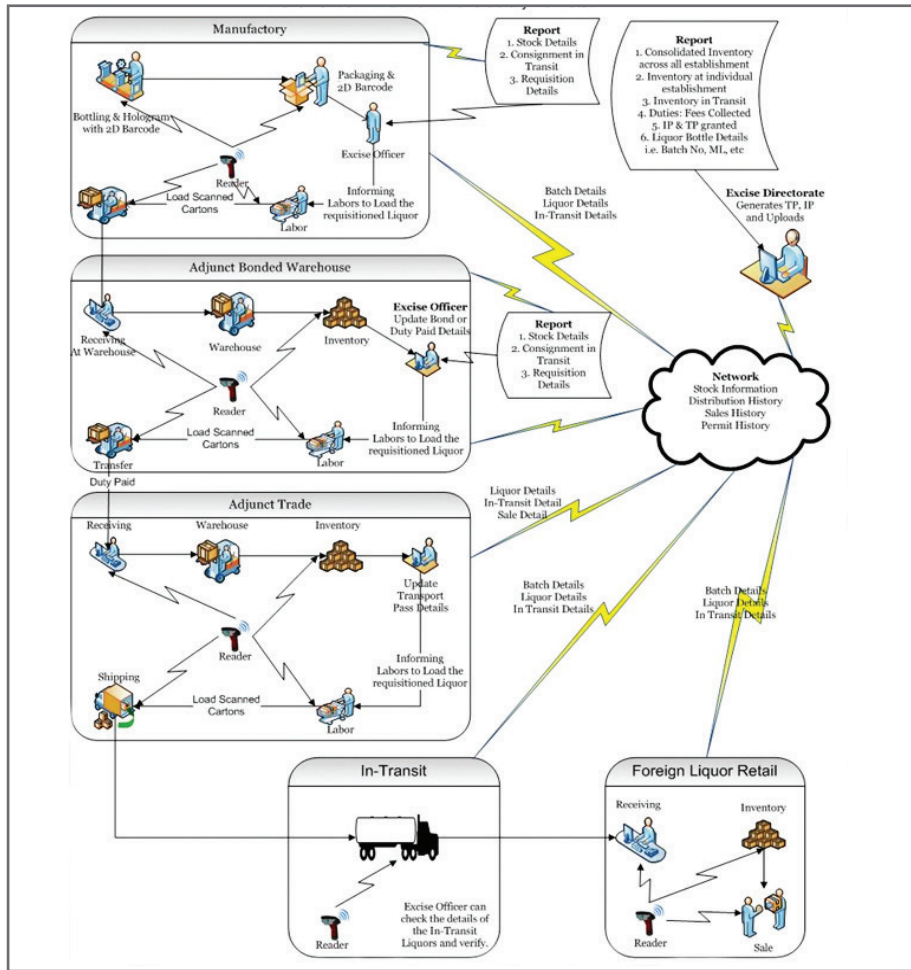
- Online communication among all excise officials across the state, all licensees, administrative departments & other stakeholders through work-flow based systems hosted in state excise portal <https://excise.wb.gov.in>
- Collection of data from the lowest level in state excise supply chain to build centralized data-bank containing relevant information of regulatory activities, licensees, registered liquor brands, production and movement of excisable goods and transaction of revenues
- Track & Trace – Automated Supply Chain Management of Packaged Liquor using QR Code based Labels on Cases/ Cartons and Hand Held Terminal (HHT)
- QR Code based Hologram labels on Liquor Bottles to ensure authenticity of Packaged Liquor through web services
- Monitoring and maintaining records of inventories of liquor, and spirits used for the manufacturing of liquor, at all the

liquor-manufacturing, wholesale and retail locations in the state in real-time basis and thereby ensuring reconciliation of every drop of spirit imported or manufactured

- Online dynamic dashboards enabling tracking process pendency at all hierarchical levels, easy monitoring & tighter administrative control through better inventory management, decision making, policy changes, and timely and intelligent report generation
- Auto SMS, Email alerts/ notifications to stakeholders
- Extracting process status information or validating authenticity of permits/ passes/ packaged liquor through SMS Pull service
- Checking authenticity of Bar-coded Permits/ Passes of in transit consignments through e-Abgari Mobile Apps by excise officers using smart phone devices
- Use of GI tools like GPS mapping of Excise Licensed Premises across the State
- Data Collection, Aggregation & Monitoring of enforcement activities against the manufacture, distribution, sale and possession of narcotics – Breach Case, Criminal Case and Illegal Activities, thereby arresting revenue leakage points
- Application software driven Business Analytics: Supply Chain Planning forecasting within inventory, demand & supply, and thereby balancing demand & supply based upon intelligent algorithms



QR Code Scanning & HHT for Track & Trace



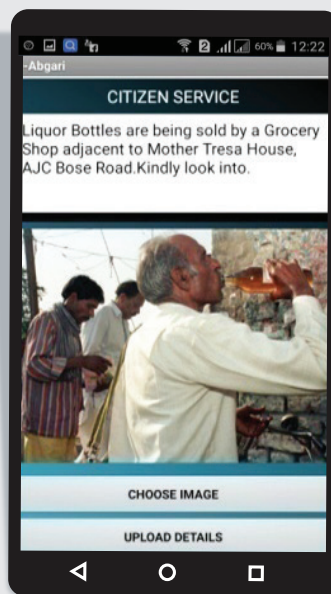
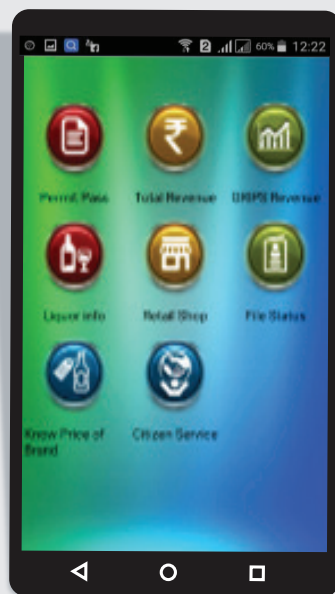
Movement of IMFL from Manufactory to Retail

- Warehouse Management through overcoming supply flaws (overstocking or under stocking)
- Creating Supply Chain visibility and gaining supply risk insights through usage of cognitive technology to track and predict supply chain disruptions based on gathering and correlating external data from disparate sources such as news-feeds, weather forecasts and historical data
- Mobile App to facilitate Asynchronous Data Capture in text format with the facility to store it temporarily in Mobile Device Storage and upload the data when Mobile Network is available for providing seamless e-Services to Excise Retail Licensees of Rural Areas suffering from lower bandwidth, intermittent internet connectivity and interrupted power supply
- Extracting process status information or authentication of permits/ passes or SKUs of packaged liquor on the field through Bar Codes and QR Codes or through free Pull SMS or Mobile App
- Reporting of excise related crimes by Citizens (along with Photographs) using e-Abgari Mobile Apps
- Incorporation of standard web technologies and techniques such as HTTP redirects, cookies, JavaScript SOA, XML SOAP etc. strong symmetric key encryption (MD5 Hashing) to deliver the single sign-in service over https for ensuring secured transactions
- Seamlessly integrating a wide array of modern ICT technologies- the web, bar-codes and QR codes, PUSH/ PULL SMS, Artificial Intelligence (AI) driven Supply Change Management, GIS, Mobile Apps, Hand Held Terminal (HHT), the e-Abgari project has significantly reduced service-delivery times and has greatly enhanced the government's regulatory capabilities

BENEFITS ACCRUED – FACTS & FIGURES

e-Abgari has proved to be extremely beneficial for the state in terms of revenue and efficiency gains. A few key benefits delivered by the system are -

- Facilitates to handle the process transaction in an efficient manner. For example: (a) Issuance of Permits/ Passes : Pre-eAbgari (15-30 days) and



e-Abgari Mobile App

Post-deployment (Same Day). (b) Label Registration of Packaged Liquor: Pre-eAbgari (20-45 days) and Post-deployment (Same Day). (c) Permission for importing life-saving drugs: Pre-eAbgari (20-30 days) and Post-deployment (Same Day). (d) Payment of duties and fees: Pre-eAbgari (Time consuming, cumbersome and during office hours on working days) and Post-deployment (Instant and 24 x 7). (e) Status of Service Requests by stakeholders: Pre-eAbgari (Lack of transparency) and Post-deployment (Instant- both online and through SMS). (f) ePayment of duties and fees: Pre-eAbgari (0 %) and Post-deployment (100 %)

- Ensuring supply of life saving drugs to CCUs, Issuance of Permits/ Passes for bulk spirit/packaged liquor, Label Registration of Packaged Liquor, Supply of Industrial Alcohol & Alcohol for Research etc. within 90% reduced time
- GPS mapping of all excise establishments, enabling effective policy interventions
- Processing of around 253,00,00,000 QR coded security holograms to identify counterfeit liquor bottles
- Around 19,00,000 system generated Alert SMS
- Generation of around 45,00,000 Permits/ Passes/ NOCs/ EVCs
- Reporting of around 40,000 Enforcement Raids
- Initiation of 3,50,000 Criminal cases,

Serving Summons, Generation of Judgment Notes, Collection of Penalty- all in work-flow based manner- using e-Abgari

- Minimum Consumption Maximum Revenue ensured- while consumption of intoxicants in the State has risen by only about 5-6 percent annually since 2014-15, the collection of Excise revenue has gone up from Rs. 3581 Crores during 2014-15 to around Rs. 9,600 Crores during 2017-18 registering a CAGR of over 38 percent. During last 1 year, WBSBCL has already seen a business of over 10,000.00 Crores with a wholesale margin of over 200.00 Crores

- Through successful implementation of e-Abgari since last 3 years, West Bengal has earned the distinction of becoming the lead state in the country to implement all activities of State Excise under an umbrella e-Governance project.

- It has proved to be a Classic example of cost-effective solution in comprehensive transformation of government processes facilitated ease of doing business (EoDB). It has made easier for liquor retailers, wholesalers and manufacturers to transact business with the government, while, at the same time, provide the state excise authorities an effective and efficient mechanism to regulate the manufacture and sale of liquor in the state and carry out the enforcement activities.

AWARDS

Success of e-Abgari has been acknowledged and appreciated across

India. Several accolades and awards are bestowed upon the project. Some of the Awards bagged by the e-Abgari :

- National e-Governance Award 2018,
- Technology Sabha (Indian Express Group) Award 2018,
- CSI-Nihilent e-Governance Award 2016
- Skoch e-Governance Award (Platinum) 2015
- e-Abgari project has been selected for inclusion in e-Gov App Store to make it available as a National Product.

CONCLUSION

With e-Abgari, it has been possible to reconcile every drop of spirit imported or manufactured in the state and tracking duty evasion by generating a 360 degree profile of the Excise Licensees, Permits & Passes issued for movement of excisable goods. Through successful implementation of e-Abgari for last 3 years, West Bengal has earned the distinction of becoming the lead state in the country to implement all activities of State Excise under an umbrella e-Governance project. It has proved to be a classic example of cost-effective solution in comprehensive transformation of government processes, and thereby facilitating the ease of doing business in the state.

Inspired by the success story of West Bengal State Excise, many States in recent time have shown interest in the replication of e-Abgari. This includes Maharashtra, Punjab, Tripura, Sikkim, Uttar Pradesh, Haryana, Assam etc. The project e-Abgari is developed abiding Bengal Excise (BE) Act 1909, the oldest Excise Act of India and all other State Excise Acts are framed based on BE Act 1909 with few state specific modifications. Hence e-Abgari project can be replicated at other States in shortest possible of time as customization requirement is minimum.



Hon'ble Union Cabinet Minister, Shri Narendra Singh Tomar conferring award for e-Abgari project to Shri Mainak Mukhopadhyay, Technical Director, NIC, West Bengal

For further information, please contact:

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