

# Keralam State

## Transforming Governance and Citizen Services Through Technology

Edited by **VINOD KUMAR GARG**

For more than three decades, National Informatics Centre Kerala has remained at the forefront of digital governance, playing a transformative role in strengthening the technological backbone of the Government of Kerala. Through a wide range of citizen-centric e-Governance initiatives, secure digital infrastructure and innovative ICT solutions, NIC Kerala has consistently enabled transparent, efficient and responsive governance across the state.

From modernising agriculture services and streamlining public distribution systems to enabling digital land governance, financial management, healthcare platforms and election management solutions, NIC Kerala has emerged as a key technology partner in Kerala's digital journey. The Centre has successfully implemented several mission-critical platforms that simplify governance processes, enhance service delivery and improve accessibility for citizens.

The state centre's contribution extends beyond application development. By providing robust network connectivity, cloud services, video conferencing infrastructure, cybersecurity support and digital communication platforms, NIC Kerala has built a resilient digital ecosystem that supports seamless coordination among government departments and institutions. Initiatives such as eOffice Kerala, ReLIS, K-SWIFT, IFMS, SPARK and Sandes reflect the Centre's commitment towards innovation-driven governance and digital empowerment.



**Dr. Suchitra Pyarelal**  
By. Director General & SIO  
[suchitra@nic.in](mailto:suchitra@nic.in)



NIC Kerala has implemented 60+ ICT initiatives across sectors including agriculture, finance, healthcare, education, elections, land administration and public administration to strengthen digital governance in the state. Platforms such as eOffice Kerala, IFMS, SPARK, ReLIS, K-SWIFT and eDistrict have streamlined government processes, improved transparency and enhanced citizen service delivery. Supported by digital infrastructure including NICNET, NKN, cloud services and Aadhaar-enabled systems, NIC Kerala continues to drive technology-enabled governance in Kerala.



As Kerala continues to strengthen its position as a digitally progressive state, NIC Kerala is focusing on emerging technologies such as Artificial Intelligence, Data Analytics, Cloud Computing and secure digital platforms to further improve governance outcomes. With an emphasis on transparency, inclusivity and future-ready digital infrastructure, NIC Kerala continues to contribute significantly towards building a smart, connected and citizen-friendly governance framework for the state.



The Integrated Finance Management System (IFMS) Kerala plays a pivotal role in the efficient management and execution of financial transactions fostering transparency, accountability and good governance across the State. By enabling comprehensive and collaborative digitization across departments and integrating diverse stakeholders, the system ensures seamless data validation, facilitates data-driven decision-making and strengthens accountability in public finance management.

I commend all departments involved in this transformative initiative with special recognition to the Finance and Treasury Departments for their exemplary leadership and to National Informatics Centre, Kerala for their vital contribution in providing the technological backbone and continuous support.

I extend my best wishes for continued collaboration and sustained progress as we strive to achieve even greater milestones in the digital transformation of public financial systems.



**Dr. A. Jayathilak, IAS**  
Chief Secretary

### ICT Initiatives in the State

#### Agriculture Development & Farmers Welfare

#### Agriculture Information Management System (AIMS)

AIMS provides a single-window platform for



▲ Fig 3.1 : Hon'ble PM Visit to Kerala ICT support given by NIC Kerala

farmers to register, declare land and crops and apply for services offered by the Agriculture Department. Farmers can apply for crop insurance, crop loss assistance, royalty support for cultivable paddy land and other schemes. Applications are processed digitally at Krishi Bhawan, block, district and directorate levels. The system is integrated with a centralized DBT module and state treasury for direct transfer of benefits.

### Automation System for Agro Services and Hiring Centre Activities (ASHA)

ASHA is an online workflow and accounting system for centres providing agro services such as farm machinery hiring and agricultural technician support. Farmers can view service centres, machinery availability, hiring charges and book services online. The system also enables users to track bookings, access bills and manage customer accounts digitally.

### Farm Mechanisation System (FMS)

FMS is a workflow-based application for managing subsidies related to the purchase of agricultural machinery. The platform supports online application processing, verification and subsidy approval. Subsidies are transferred electronically to eligible beneficiaries through e-payment systems.

### Dairy Development Department Ksheerashree

Ksheerashree is a web-enabled platform providing digital services for Dairy Cooperative So-

cieties, dairy farmers and the Dairy Development Department. The system supports farmer registration, online application submission, beneficiary selection, workflow-based approvals and subsidy disbursement. The portal is integrated with milk analysers, weighing machines and display devices for transparent milk quality assessment.

### Civil Supplies Department

#### Public Distribution System

The Public Distribution System platform pro-

▼ Fig 3.2 : Launch-of-Direct-Selling-Business-Portal Portal developed by NIC Kerala



vides digital services related to ration card management through CSCs and citizen portals. It supports categorisation of ration cards under NFSA provisions and digitised beneficiary identification using inclusion and exclusion criteria.

### Direct Selling Business Portal

The Direct Selling Business Portal was launched for registration and monitoring of Direct Selling Entities in Kerala following the Consumer Protection (Direct Selling) Rules, 2021. The bilingual portal supports workflow-based management and regulatory monitoring of direct selling businesses in the state.

### Ente Ration Card Mobile App

The "Ente Ration Card" mobile application allows citizens to access ration card details, application status and related e-services on mobile devices. The app also supports the use of digital ration card data for purchasing ration.

### e-Card System

The e-Card system enables citizens to apply online for new ration cards or modifications in existing cards without visiting offices. Approved bilingual e-cards can be downloaded and used across the country under the Integrated Management of Public Distribution System (IMPDS).

### Legal Metrology Operations and Management System (LMOMS)

LMOMS enables online application and renewal of manufacturer, dealer and repairer licences along with registration services for packers and importers. The portal also supports verification services for weights and measures.

### State Food Commission Kerala Portal

The portal supports dissemination of information related to the National Food Security Act, 2013 and facilitates awareness and grievance redressal activities of the State Food Commission.

### Civil Supplies Public Grievances Portal

The grievance portal allows citizens to register complaints related to the Public Distribution System. Complaints can be submitted with supporting evidence including audio and video files. The system supports complaint routing, monitoring and feedback mechanisms for grievance resolution.

### Education Department

#### iExaMS-HSE and iExaMS-VHSE

iExaMS is an open-source web-based application for managing Higher Secondary, Vocational



▼ Fig 3.3 : Inauguration of Ksheerashree Portal developed by NIC Kerala

Higher Secondary and Higher Secondary Equivalency examinations. The platform supports activities from candidate registration to result processing and publication.

**hsCAP**

hsCAP is the centralized online admission system for Plus One courses in Kerala Higher Secondary schools. Students can apply online and select multiple school-course options through a single application process.

**Scholarship Portal**

The Scholarship Portal provides online access to scholarship and merit award schemes under various departments including DCE, DMW and HEC. Students can apply digitally based on eligibility criteria defined for each scheme.

**Kerala Differential Aptitude Test (K-DAT)**

K-DAT is an online aptitude assessment system conducted by the Higher Secondary Department for students completing Class 10. The platform generates analytical reports and charts to support counselling and academic guidance.

**State Board of Technical Examinations (SBTE) Portal**

The SBTE portal supports online management of academic and examination-related activities for polytechnic and diploma students in Kerala, covering admission, examinations and result management.

**Election Department**

**State Election Commission Portal**

The portal supports electoral roll management, polling activities, counting operations and publication of election statistics and results for local body elections in Kerala.

**Officials Randomly Deployed for Election Kerala (ORDER)**

ORDER is a web-based solution developed for random deployment of polling officials during elections. The system performs three-level randomisation and assigns officials to polling stations digitally.

**TREND**

TREND is used for collection and dissemination of election-related data including voter turnout and counting statistics. The platform collects table-wise counting data and publishes polling percentages and results.

**Poll Manager**

Poll Manager includes mobile applications, portals and dashboards developed for management of polling activities during elections. The platform supports coordination between Chief Electoral Officers, District Electoral Officers and field officials.

**Electronics & Information Technology**

**eOffice Kerala**

eOffice Kerala has been implemented across Secretariat departments, district collectorates, taluk offices, village offices, universities and public sector institutions. The platform digitises file movement and office processes. Supporting applications include eTapal, RTI Portal, Court Case Information System and Employee Grievance Management Portal.

**eApplication**

eApplication enables citizens to submit applications and petitions to the Government online either directly or through Akshaya centres.

**eOffice Citizen Portal**

The portal provides citizens access to eOffice statistics along with facilities for file search, government order search and receipt tracking.

**eDistrict Kerala**

eDistrict Kerala is a Mission Mode Project under NeGP for delivering government services digitally through Common Service Centres, public portals and departmental offices. The platform supports efficient and transparent service delivery at local levels.

**eProcurement Kerala**

The eProcurement portal provides a single platform for government tendering activities across Kerala using the GePNIC system. It supports online tender publication, bid submission, payment processing and bid opening.

**Ente Jilla**

Ente Jilla is a mobile application developed to provide district-level information for all districts in Kerala. Users can access and switch between district-specific information through a single application.

**Finance Department**

**Integrated Financial Management System (IFMS)**

IFMS is an integrated financial management platform connecting Finance Department, Treasury Department, RBI, Accountant General and other stakeholders. The system supports end-to-end treasury modernisation and integration with applications including SPARK, PFMS, e-Kuber and PlanSpace.

**Service and Payroll Administrative Repository for Kerala (SPARK)**

SPARK is an integrated HR, payroll and establishment management system for government employees across departments, schools, judiciary and universities. The system manages personnel records, payroll processing and administrative services through a centralized platform.

**Budget Web Portal**

The Budget Web Portal supports preparation and management of the Kerala Government budget, including budget estimation, publication and post-budget activities such as supplementary allocations and fund regularisation.

**e-Anumathi**

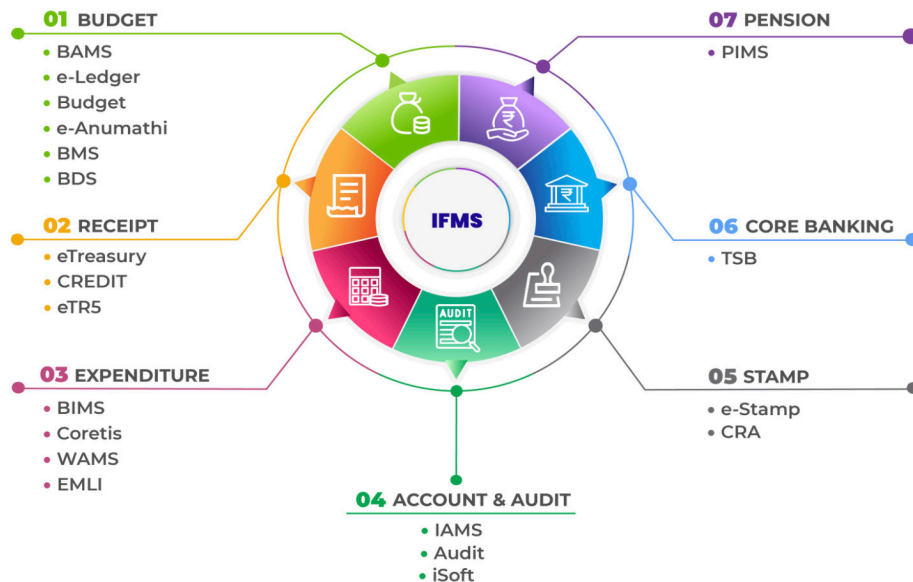
e-Anumathi is a workflow-based single-window platform for generating digitally signed administrative sanctions with unique sanction numbers and expenditure tracking facilities.

**Bill Discounting System (BDS)**

BDS enables contractors to receive discounted payments against approved bills through participating banks. The platform supports issuance of promissory notes and digital processing of bill payments.

**Effective Monitoring of Letter of Credit Issuance (EMLI)**

EMLI is a web-based system developed for automating issuance of Letters of Credit based on bills submitted by government departments. The platform supports online bill processing, fund al-



location and issuance of government orders.

**GAINPF-IFMS**

GAINPF-IFMS is a web-based Provident Fund monitoring system for aided institutions in Kerala. The system manages PF accounts, advances and workflow-based processing for institutions under multiple departments.

**Legislative Assembly Constituency – Asset Development Scheme Portal**

The portal supports sanctioning and monitoring of constituency asset development works proposed by MLAs. It provides workflow-based approval and financial concurrence mechanisms across government departments.

**Gazetted Entitlement Management System (GEMS)**

GEMS manages pay fixation, leave and pension-related activities for gazetted officers in Kerala. The system supports processing of promotions, grade fixation and other entitlement-related functions.

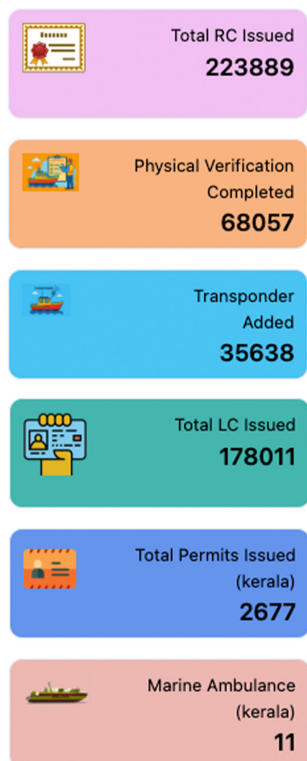
**Pensioner Web Management System**

The Pensioner Web Management System supports processing and management of pension entitlements for gazetted officers by the offices of the Accountant General in Kerala.

**Accountant General GPF Web Portal**

The GPF portal manages provident fund accounts of state government employees, including account creation, advances, withdrawals and account closure activities through a web-based

▼ Fig 3.5 : ReALCraft Dashboard



▲ Fig 3.6 : Two-Day National workshop on IT solutions for Ayush Sector

system.

**Fisheries Department**

**ReALCraft**

ReALCraft is a national database system developed for registration and monitoring of fishing vessels to strengthen coastal security. The platform assigns unique registration numbers to fishing vessels and supports monitoring by coastal security agencies. It also facilitates subsidy and insurance support for fishermen.

**Fisheries Information Management System (FIMS)**

FIMS is a workflow-based platform for maintaining online fisherfolk family registers and managing welfare schemes and services. The system stores Aadhaar details, bank accounts, occupation records, education status and vessel ownership information for scheme processing and DBT-enabled benefit transfer.

**System for Easy and Legal Issuance of Fuel Permits and Fuel (SELF)**

SELF is an integrated workflow-based system linked with ReALCraft, FIMS and SAGARA for managing fuel card distribution and fuel permit issuance to registered fishing vessel owners. The platform provides end-to-end digital services related to fuel distribution for fishermen.

**General Administration Department**

**Court Case Information System (CCIS)**

CCIS facilitates digital processing and management of court cases involving government departments. The system enables exchange of documents and communication between departments and the office of the Advocate General.

**Guest House Management System**

The Guest House Management System enables online booking of government guest houses and conference halls through a public portal. The platform supports digital application processing, booking approvals and SMS-based status updates.

**Jeevan Rekha**

Jeevan Rekha is a biometric authentication platform developed for pensioners receiving social security and welfare board pensions in Kerala. Pensioners can complete annual life certificate verification through Aadhaar-based biometric authentication at Akshaya centres.

**Sarkar Diary**

Sarkar Diary is a mobile application providing contact information of senior officials and government offices in Kerala. The application integrates with the government directory management system for annual updates and digital access to official contact records.

**Health Department**

**Lab Diagnosis Management System (Labsys Portal)**

Labsys is a web-based portal for monitoring diagnostic tests conducted by government and empanelled private laboratories. The platform tracks testing data, hospitalization details and disease trends to support public health monitoring and response.

**Kerala Clinical Establishment Act Portal**

The portal supports registration and regulation of clinical establishments under the Kerala Clinical Establishments Act, 2018. It covers institutions from modern medicine, Ayurveda, Homoeopathy, Siddha, Unani and other recognised systems of medicine.

**Kerala State Organ and Tissue Transplant Organization (K-SOTTO)**

K-SOTTO manages registration of donors and recipients, organ allocation and licensing of transplant and organ retrieval centres in Kerala. The platform supports implementation of organ transplantation regulations and monitoring activities.

**eHospital Kerala**

eHospital@NIC is an open-source Hospital Management Information System implemented in

hospitals under the Directorate of Indian Systems of Medicine in Kerala. The platform supports hospital administration and healthcare service management.

### Industries Department

#### Kerala Single Window Interface for Fast & Transparent Clearance (K-SWIFT)

K-SWIFT is a single-window platform developed for providing statutory clearances and approvals for businesses and investors. The system integrates multiple departments through open APIs and supports online processing of permits and approvals throughout the project lifecycle.

#### Kerala – Centralised Inspection and Compliance Monitoring System (K-CISCO)

K-CISCO is an extension of K-SWIFT developed to streamline inspection and compliance activities across departments. The platform addresses duplication and improves coordination, transparency and accountability in inspections.

#### Entrepreneur Support Scheme (ESS)

ESS includes public and office portals for processing applications related to startup, investment and technology assistance schemes. Entrepreneurs can apply online, track approvals and download agreement documents through the portal.

### Labour Department

#### Employment Portal

The Employment Portal digitises employment exchange services including registration, seniority management, employer management and job fair coordination.

#### Athidhi Portal

Athidhi is a multilingual portal developed for registration and management of migrant workers in Kerala. The platform supports mandatory registration and related administrative activities for migrant labourers in the state.

▼ Fig 3.8 : NICNET Connectivity



▲ Fig 3.7 : NKN Connectivity

### Law Department

#### Case Information System for Kerala Administrative Tribunal (CISKAT)

CISKAT is a case management system developed for Kerala Administrative Tribunal. The platform manages applications from filing to disposal and provides services including case status, judgments, cause lists and case history.

#### Management Information System for Advocate General Kerala (MISAGO)

MISAGO is a workflow-based platform developed to streamline activities of the office of the Advocate General. The system supports digital exchange of case documents, personnel management and information dissemination to stakeholders.

### Public Works / Engineering Department

#### Project Information & Cost Estimation (PRICE)

PRICE is a works management and cost estimation software developed for infrastructure projects executed using public funds. The platform standardises work methodologies, project estimates and administrative processes across departments.

### Registration Department

#### PEARL

PEARL Suite is a web-based application developed for the Registration Department to support activities of Sub Registrar Offices and online citizen services. The platform integrates with systems including ReLIS and eTaal for digital service delivery.

### State Information Commission

#### RTI for Second Appeal

The RTI for Second Appeal platform enables online filing of Appeal Petitions (AP) and Complaint Petitions (CP) before the State Information Commission. The system supports workflow-based processing, petition tracking and issuance of final orders in English and Malayalam.

### Digital Solutions

#### NICDSign

NICDSign is a cross-platform digital signature solution supporting browser-independent signing using PKCS#11 tokens. The solution supports digital signing of documents and PDF files across Windows, Linux and macOS environments and



▲ Fig 3.9 : DG (NIC) with Team NIC Kerala during the visit of DG (NIC) to NIC Kerala

can be integrated with applications developed in Java, PHP and .NET.

### Mobile App Development Competency Centre, Kannur

The Mobile App Development Competency Centre provides support for development of Android and iOS mobile applications for government projects. The centre also supports app publishing, consultancy services and capacity building programs related to mobile technologies.

### Sandes (Government Instant Messaging System)

Sandes is an open-source instant messaging platform developed by NIC Kerala for government organisations. The platform supports end-to-end encrypted messaging, encrypted backups and secure OTP delivery through government infrastructure.

### Core Services

Kerala's e-Governance framework is powered by a resilient and future-ready digital ecosystem that ensures secure data exchange, uninterrupted connectivity and efficient delivery of public services across government departments. This integrated infrastructure strengthens administrative coordination while enabling scalable citizen-centric services and streamlined internal workflows.

At the core of this ecosystem are NICNET, NKN

and the Kerala State Wide Area Network (KSWAN), which connect government offices through high-capacity and secure communication networks. These networks support critical digital services such as internet access, email communication, VPN connectivity, cloud integration, web hosting, LAN support and Wi-Fi services, enabling seamless collaboration and real-time information sharing across departments.

Complementing this infrastructure, NGC Cloud Services provide departments with a centralized, secure and scalable platform for application hosting and data management. The cloud environment enables rapid deployment of digital services, optimized utilization of IT resources and enhanced operational flexibility.

The Aadhaar Enabled Biometric Attendance System (AEBAS) promotes accountability and workforce transparency through real-time attendance tracking and automated monitoring, thereby improving administrative efficiency across the State.

In addition, Video Conferencing (VC) Services facilitate seamless virtual interactions among Central, State and district-level offices, enabling timely decision-making, reducing travel requirements and ensuring continuity in governance operations.

Collectively, these technology-driven initiatives provide a strong digital foundation for efficient governance, secure service delivery and sustainable digital transformation across Kerala.

▼ Fig 3.10 : Inauguration of DIO Workshop by DG (NIC) in presence of Secretary (E & IT) & CEO Kerala, State Coordinator (Kerala), SIO (Kerala & Lakshadweep) and HoG (Personnel)



## Important Events Organized

- Kerala achieved recognition in Udyog Samagam 2025 for the second consecutive year under the State Business Reforms Action Plan assessment conducted by the Department for Promotion of Industry and Internal Trade (DPIIT), Government of India.
- The Hon'ble Minister of General Education and Labour launched the Private Employment Portal developed by NIC Kerala at Thiruvananthapuram.
- The Bhoomi National Conclave was inaugurated by the Hon'ble Chief Minister of Kerala in the presence of Cabinet Ministers and senior officials. The conclave brought together representatives from 22 states to discuss digital land governance initiatives.
- The Hon'ble Chief Minister of Kerala launched the Direct Selling Business Portal along with Direct Selling Guidelines and awareness videos in Thiruvananthapuram.
- The online distribution system for survey records through digital kiosks was inaugurated by the Hon'ble Revenue Minister of Kerala.
- The Chief Secretary of Kerala visited NIC Kerala State Centre to review ongoing IT projects and digital governance initiatives implemented in the state.
- The Director General of NIC inaugurated the DIO/DIA Workshop 2025 at NIC Kerala State Centre in the presence of senior officials including Secretary (E&IT), CEO Kerala, State Coordinator Kerala, DDO & HoG (Personnel) and DDO & SIO (Kerala & Lakshadweep).

## Way Forward

NIC Kerala aims to further strengthen digital governance in the state through adoption of emerging technologies including Artificial Intelligence, Data Analytics, Cloud Computing and Cyber Security solutions. Future initiatives will focus on improving governance efficiency, strengthening digital infrastructure and expanding citizen-centric digital services.

The focus areas include wider adoption of eOffice, integration of departmental digital services, enhancement of interoperability between government systems and promotion of paperless governance. NIC Kerala also plans to expand mobile-enabled services and strengthen secure digital communication infrastructure across departments.

NIC Kerala will continue to provide technical consultancy, capacity building support and digital solutions for government departments while supporting transparent, efficient and technology-driven governance in the state.

Contact for more details

### State Informatics Officer

National Informatics Centre Kerala State Centre CDAC  
Building Vellayambalam, Thiruvananthapuram  
Kerala, 695033  
Email: sio-ker@nic.in, Phone: 0471-2729894