E-Governance Initiatives in Tamil Nadu

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Introduction

NIC, Tamilnadu State Centre has implemented a large number of e-governance projects across many departments of the Tamilnadu State Government. Some of the successful projects rolled out in the state are e-District Scholarship system, e-District Social welfare, e-District Revenue, Online VAT registration for Commercial Taxes Department, ePension for Directorate of Treasuries and Accounts, Dr. Muthulaksmi Reddy Maternity Benefit Scheme for Directorate of Public Health, e-Services for Transport, Scheme monitoring System for Rural Development Department, CCTNS project for the Tamilnadu Police, Online Allotment for PDS, Pre-Examination Monitoring System for Anna University etc.

National Knowledge Network (NKN) connectivity is established at more than 1000 locations across the country covering all IITs, NITs and major Research and Educational Institutes. The NKN will enable scientists, researchers and students from different backgrounds and diverse geographies to work closely for advancing human development in critical and emerging areas.

All the Districts in Tamil Nadu have minimum of 34 Mbps connectivity. NIC Data Centre, Chennai has 55 servers with a total capacity of 21 TB SAN space with an online tape library. Video Conferencing facility has been provided to the State headquarters and to all the Districts and is being extensively used by the State & Central Government Departments in the State.

Minority Welfare Scholarship System (http://www.momascholarship.gov.in/)

The Objective of the Merit cum Means Scholarship Scheme of Ministry of Minority Affairs is to provide financial assistance to the poor and meritorious students belonging to the Minority communities for studying Professional courses. A web based system has been designed and developed as part of the eScholarship project. The system handles the complete processing of applications till disbursement of scholarship.

e-Services for Commercial Taxes (http://www.tnvat.gov.in/)
The basic objective is to facilitate the Dealers to file online VAT monthly Return along with facility for e-Payment and also track the status of applications submitted online so as to avoid visit to Commercial Tax Offices. The following services are also available to the Dealers:

- Online filing of e-Request for saleable forms
- Online submission of Form-W refund Claims
- Online submission of Goods movement through Checkpost for quick clearance at Checkpost (Fast Track Clearance System)
- Online submission of New registration application
- Online issue of C and F forms
- e-Payment facility with five nationalized banks
- Filing online and issue of Transit pass

**eDistrict – Revenue (http://edistrict.tn.gov.in/**)

The objective of the eDistrict project is to computerize the workflow system and internal process of the administration of the Districts with the help of Information and Communication Technologies (ICT), thereby enhancing the delivery of the following services to the citizens:

- To bring in more transparency and accountability in the system of processing.
- To facilitate citizens to apply for various certificates through CSCs
- Built in electronic workflow to the system for processing the application
- To create an efficient delivery mechanism of services from the District administration to the doorstep of citizens

The services that are covered are No Graduate Certificate, Deserted Women Certificate, Income Certificate, Community Certificate, Nativity Certificate etc.

**e-Services for Transport (transport.tn.nic.in/transport/)**

The following services are enabled through e-Services for Transport

- Online filing of New Vehicle Registration Applications
- e-Payment facility enabled for dealer to pay fees and taxes related to New Vehicle applications with the banks.
- Online filing of Learner’s License
- An average of 1.57 Lakh New Vehicle Registration applications is being filed online every month. More than 80,000 learner’s license applications are filed online every month.

Tamil Nadu Local Body Elections (http://tnsec.tn.nic.in/)

Voter’s database is created for Local Body Election from Electoral database and the Electoral Roll printing was done. Result Dissemination is also done through web.
- Printing Draft Electoral Rolls
- Printing Photo Electoral Rolls
- Printing of Booth Slips
- Voters Reservation entry for various Local Body Posts
- Nomination entry of Candidates
- Dissemination of results

ePension System (epension.tn.gov.in/)

The system handles all pension related activities of the Department of Pensions by providing better quality service to TN Govt. Pensioners and terminal benefits to pensioners.
Pregnancy and Infant Cohort Monitoring Evaluation System

The DPH&PM annually registers about 12.46 lakh Ante Natal Cases and renders various services to pregnant mothers. An online reporting system has been developed to monitor the health status of Pregnant Women registered with any PHC and Infants in the rural areas of Tamil Nadu. The system tracks the health of the women during Ante-Natal, Delivery and Post Natal care. Infants are linked to the Mother by Registration ID.

Government e-Procurement System (http://tntenders.gov.in)

The eSubmission Tender System of Tamil Nadu enables the Tenderers to download the Tender Schedule free of cost and then submit the bids online through this portal.

Tamil Nadu Textbooks Online (www.textbooksonline.tn.nic.in)

The entire textbooks for the school students of class 1 to Class 12 published by the School Education Department, Government of Tamilnadu are available in pdf format for the General public.
The primary objective of this web application is to enable Anna University Examination Section to monitor all the ‘Pre Semester Examination Processes’ effectively.

Web Enabled District GIS for Cuddalore & Nagapattinam Districts (http://tngis.tn.gov.in/)

District GIS has been initiated for two pilot districts viz. Cuddalore and Nagapattinam under the guidance of Tamil Nadu State Planning Commission. The Spatial and Non-spatial data were collated from varied Government departments. More than 80 layers for Cuddalore district and 60 layers for Nagapattinam district have been prepared.

Salient features of the web based framework designed and developed include the following:

- Any layer may be dynamically linked to any kind of attribute dataset for querying and thematic mapping;
- Unique Symbol mapping using Non-numeric based data, such as, Soil, Geomorphology, etc.
- Spatial Search on Administrative Units
- Dynamic spatial queries including Buffer generation, distance based queries, villages without schools / health facilities, etc.
Chennai Utility Mapping Project

Union Planning Commission initiated “Computer Aided Digital Mapping Project” in Chennai. Digital base map of 192.5 sq. km. area covering more than 80 layers, using aerial photography under stereoscopic vision has been created with the same origin and accuracy covering Building structures, Financial Service, Railways, Water Bodies, Recreational, Religious, Transportation, etc. The following departments have been provided with sufficient infrastructure such as hardware, software, LAN with training to utilize the base layers generated under this project:

The following organizations are stakeholders in the project.

1. Corporation of Chennai
2. Tamil Nadu Electricity Board (TNEB)
3. Chennai Metropolitan Development Authority (CMDA)
4. Chennai Metro Water Supply and Sewerage Board (CMWSSB)
5. Chennai City Police
6. Bharat Sanchar Nigam Limited (Chennai Telephones)

Distances from Base Station Centre to Base Tower Stations
Location Based Services using SOA (GPS based)

An online mobile based system has been implemented for Rural development and Panchayat Raj Department, Government of Tamil Nadu, India. This system is used by the department for monitoring the execution of various road projects executed in rural area of Tamil Nadu.

**Viewing the Photos of a Road Work on the Google Map**

![Google Map Screenshot](image1)

**View in the Mobile Device**

![Mobile Device Screenshot](image2)


![Portal Screenshot](image3)

The Citizen gets the basic details of all the **450+ Polytechnic Colleges**. The Diploma Students studying in these Polytechnic Colleges can also get to know the Attendance details for the current Academic Year.


![Cooperative Department Screenshot](image4)

An SMS based system has been developed for collecting stock details from FPSs & Godowns on a daily basis, for planning timely movement of stocks of PDS commodities. The online system will make the process of data collection, compilation & collation more efficient.
Intranet Based Monitoring & Management System for Noon Meal Scheme

An Intranet based Monitoring and Management system is developed to assist in effective implementation, tracking and planning of activities related to the Noon Meal Programme.

TN Government State Portal & CMS (www.tn.gov.in)

‘Any Time, Any Where’ access to the information and services of the State Government at all levels from State Government to District Administration or Panchayat level for the Citizens and Business. Consolidation of all the information presently available at existing departmental websites & portals are done. Development of State Portal is based on State Portal Framework and National Portal content structure.
National Knowledge Network

- NKN provides a common platform to the scientists, researchers, doctors, scholars and students to work together for advancing human development.
- NKN shall be a knowledge base for revolutionizing the education system of country
- The architecture of NKN has been designed for reliability, availability & scalability
- The network consists of an ultra-high speed core, starting with multiple 2.5/10 G and progressively moving towards 40/100 Gigabits per Second (Gbps)
- The core is complimented with a distribution layer covering all districts at appropriate speeds
- The participating institutions at the edge would seamlessly connect to NKN at Gigabit per second speed.

Conclusion

During the last three decades, NIC has implemented many "network centric" application software for Programme implementation in various ministries and departments, using state-of-the-technology software tools. During 1980s and early part of 1990s, the policy thrust was on creating "Management Information System (MIS)" and "Decision Support System (DSS)" for development, planning and responsive administration in governments which led to the genesis of present day "e-Governance" / "e-Government". "Bridging the Digital Divide", "Social and Financial Inclusion through ICT" and "Reaching-the-Unreached" concepts were tried and made operational in the late nineties.

NIC has vast expertise and experience in the design, development and operationalisation of various e-Government projects in the areas of Public Administration and Governance like Agriculture & Food, Animal Husbandry, Fisheries, Forestry & Environment, Industry, Health, Education, Budget and Treasury, Fiscal Resources, Transport, Water Resources, Court Management, Rural Development, Land Records and Property registration, Culture & Tourism, Import & Exports facilitation, Social Welfare Services, Micro-level Planning, etc. With increasing awareness leading to demand and availability of ICT infrastructure with better capacities and programme framework, the governance space in the country witnessed a new round of projects and products, covering the entire spectrum of e-Governance including G2C, G2B, G2G, with emphasis on service delivery.