Manipur
Digital Reach at the Lofty Heights

Edited by **KAVITA BARKAKOTY**

NIC Manipur was established in 1988 with an aim to promote the use of IT in government services. With its 16 district units, the State Centre is responsible for providing technical support to various state departments and agencies. This concerted effort by the Centre has played a crucial role in propelling eGovernance in the state forward.

ICT Initiatives in the State

NIC Manipur has created and implemented numerous digital solutions across all sectors in the state. Noteworthy products designed and developed by the institution are highlighted below:

N. Binod Singh
Sr. Technical Director & SIO
binod@nic.in

L. Premchandra Sharma
Sr. Technical Director & ASIO
premchand@nic.in

Nirish Wahengbam
Scientist-C
nirish.wahengbam@nic.in

Since its inception, NIC Manipur has been the technology partner of the state government, designing and developing IT systems and providing infrastructure to the government, while at the same time exploring and advising the government on the use of emerging technologies. As a strong arm of the government, it has efficiently been bridging the digital divide and making the lives of the citizens better in myriad ways.

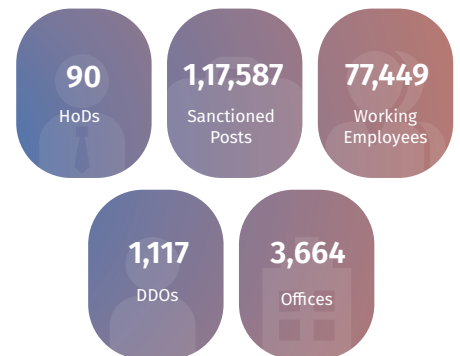### CMIS
https://cmis.man.nic.in/

CMIS (Central Management Information System) is an integrated Personnel Management and Payroll System designed specifically for Manipur Government Employees. It is based on the Sevaarth software of NIC Pune and responsible for maintaining an updated database of all employees and sanctioned posts of the government offices as well as generating monthly e-Payrolls for state employees.

It's erstwhile version, Computerised Personnel Information System (CPIS), has won the Prime Minister's Award of Excellence in Public Administration in 2007-2008.

Salient features

- Maintains an up-to-date database of employees and sanctioned posts

- Streamlines administrative processes and improves efficiency in government offices

- Facilitates preparation, processing, and payment of bills through a dynamic e-Payroll system

- Integrated with other systems including BEAMS, TreasuryNet, NSDL

- Improves accountability in the payroll process

- Ensures confidentiality of employee information and financial data

- Fast tracks transfer of NPS contributions to employee's accounts

90 HoDs

1,17,587 Sanctioned Posts

77,449 Working Employees

1,117 DDOs

3,664 Offices

▲ Fig 1.1

CMIS at glance

▲ Fig 1.2: Hon'ble Chief Minister launching Manipur Professional Tax Application at the CM's Secretariat, Imphal, Manipur

LouchaPathap

https://louchapathap.nic.in/

LouchaPathap is a G2C web application developed by NIC Manipur for the Manipur Revenue Department to digitize land records. The application provides land record information and aligns with the Manipur Land Revenue and Land Reforms Act, 1960. Citizens can access their Records of Rights (RoRs) information and view land tax dues using the application.

Overall, this application has fostered public confidence through enhanced transparency by enabling quick, effortless, and tamper-proof access. Moreover, it has aided the administration in safeguarding government land and preventing fraudulent transactions.

Salient features

● Generates MIS report for comprehensive information on the number of plots and their respective land types, along with total area measurements and ownership details

● Unique identifier called Factsheet Number is assigned for every transaction

● Mandates upload of Revenue Court Orders and Registered Deeds

● Integrated with REST API provided for AgriCensus, Farmer Registry, Modern Record Room

● QR Code on Public RoR for real-time verification at LouchaPathap Server

Currently, 506 out of 603 revenue villages have been commissioned, with over 727,622 cumulative transactions recorded on the system. Moreover, NIC State Data Centre at New Secretariat Imphal has configured one staging server for BhuNaksha, and five cadastral shapefiles have been successfully imported to the staging server.

Professional Tax

https://professionaltax.mn.gov.in/

In compliance with the Manipur Professions, Trades, Callings And Employments Taxation Act of 1981, individuals who earn a regular income through their profession, trade, or employment

NIC has played a very crucial role in digital transformation in the State of Manipur, as a major technology partner of the State Government. Their expertise in developing and implementing eGovernance projects has helped the Government in improving service delivery and transparency. NIC has immensely contributed in the implementation of various eGovernance initiatives in different sectors such as in eTransport, eOffice, eHospital, Central Management Information System and other Integrated Financial Management Systems, also greatly benefitting the citizens. NIC Manipur in particular has been the backbone of the IT establishment in the State of Manipur stretching right from the Manipur Secretariat to all the District Headquarters for many decades now. I recall their pivotal role in the early 1990s when the District Administration had only the NIC to assist in its IT requirements and were dependent on the District NICs much like the Secretariat was upon the State NIC. I would like to extend my warm wishes and appreciation to the entire team of NIC both at the national level and particularly to those manning the State NIC in Manipur for their remarkable contributions to the State. We look forward for more engagements of NIC with the State to bring about even more significant change in the future.
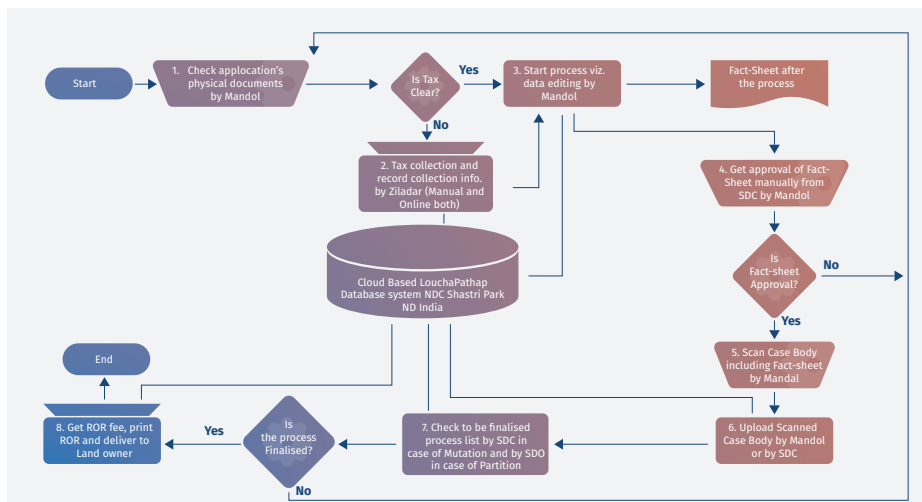
P. Vaiphei, IAS
Additional Chief Secretary
Social Welfare, Cooperation and Horticulture &
Soil Conservation Departments
Government of Manipur

are required to pay professional tax. To facilitate this, NIC Manipur has customized and implemented the Professional Tax Application of NIC Tripura, enabling individuals and organizations to easily register and pay their professional tax online in Manipur. The system is seamlessly integrated with the eGRAS payment system to ensure secure and efficient online tax payment. As of now, 2669 taxpayers have enrolled on to the system and a total of Rs. 26,76,336 have been collected.

BEAMS Manipur

https://beamsmanipur.nic.in/

Budget Estimation, Allocation & Monitoring System (BEAMS) is an online system that has been specifically designed to distribute budget and authorize expenditures. Once the budget is released, it enables departments to allocate

▲ Fig 1.3 **LouchaPathap System Workflow**

funds to their field officers. All expenditures are verified for budget availability before bills can be submitted, and monthly cash flows are monitored against predetermined targets. The system also allows for the re-appropriation of funds within specific limits, as well as the withdrawal or surrender of budget grants. While the system provides limited options to modify cash flows, the MIS section generates various reports on budget authorizations, cash flows, fund transfer transactions, and authorization slips

BEAMS has been customized from the application of NIC Pune and is fully integrated with CMIS and TreasuryNET. Since its implementation on 1st April 2014, the system has received over 52.88 lakh hits, and over 6.97 lakhs authorization slips have been generated.

Benefits

- Effective budget control

- Builds data bank for decision support

- Real-time expenditure monitoring through MIS

- Helps in monitoring budget and expenditure information across the departments

- Check DDO expenditure for budget availability before submission of bills

- Control monthly cash flows against pre-determined targets

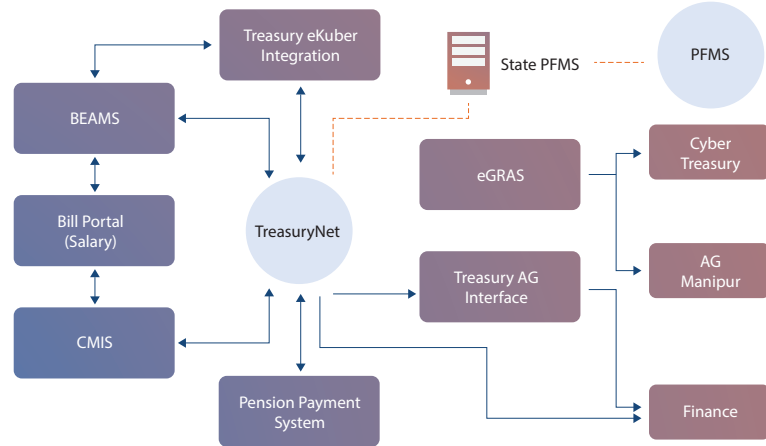## TreasuryNET Manipur
https://treasurymanipur.nic.in/

TreasuryNet Manipur is an online application that has been customized from the NIC Pune application to automate payment and receipt processes. Its implementation has greatly improved the internal efficiency of Treasuries while preventing misappropriation and over-drawal of funds. It processes bills that have been prepared by DDO / Departments through BEAMS and CMIS, and these bills are electronically audited at various levels within the treasury.

With its effective budget control capabilities and proper classification of Head of Accounts, the system generates comprehensive reports on the State's revenue and receipts. It has been integrated with the e-Kuber Payment System of Reserve Bank of India since 11th February 2020.

Benefits

- Compiles and classifies Head of Accounts

- e-scrolls sent by RBI on following day for accounting by treasuries

- Enhanced finalization and reconciliation of accounts with Accountant General (AG) Office

- 100% e-Payment through e-Kuber

- Generates comprehensive reports on the state revenue and expenditure

- Facilitates better management of state finance

▲ Fig 1.4   **Manipur Integrated Financial Management System**

- Integrates monthly compiled accounts with voucher level compilation system of AG Office

eGRAS Manipur
https://egrasmanipur.nic.in/

eGRAS is a web application implemented in Manipur on March 27th, 2021, to facilitate electronic transactions for online payment of Tax and Non-Tax Revenue. It is customized from NIC Pune software and enables taxpayers and remitters to make payments through the eGRAS portal or departmental portals that have integrated with eGRAS. The receipts are credited to a pooling account established with participating banks, which upload daily scrolls that are verified and processed by the Cyber Treasury Officer. eGRAS is integrated with various department portals and has collected 6,140 challans and Rs. 92,16,98,672 to date.

e-Budget Manipur
https://ebudgetmanipur.mn.gov.in/

Launched on 21st July 2022, e-Budget Manipur provides State Budget information to various stakeholders through a single window. It facilitates access to budget documents, including Demands for Grants, Annual Financial Statement, Budget Speech, Supplementary Demands Speech, Manipur FRBM Ordinance, etc. It also enables digital viewing of these documents in an eco-friendly manner by legislators, officials, and the general public.

Online Pension Payment System
https://pensionmanipur.nic.in/

Online Pension Payment System is a G2C application that streamlines pension payments in the state and enables Treasuries, the Finance Department, and AG office communicate faster.

The system captures all necessary information from the Pension Payment Order and takes photos of the pensioners every six months as proof of liveness, to auto-calculate the monthly pension / advisory bills. It generates bills for commutation, revised commutation, gratuity, revised gratuity, and has facility for automatic recovery. It also provides various reports that Treasury Officers require, such as summaries of the number of

Fig 1.5: Hon'ble Minister for Municipal Administration Housing and Urban Development (MAHUD) and RD & PR launching Online Registration of Shops and Establishment & Renewal of Licence on 11th July 2022

pensioners, expenditure details, etc.

The system is integrated with TreasuryNET, which is operational in all treasuries and allows for direct payment of pensions to the payee's account through eKuber of RBI. With this system, the process of rendering monthly accounts to the AG Office has improved significantly.

Online GPF Information System
https://agmpr.cag.gov.in/gpfonline/Index.aspx

This is a web-based platform developed for Manipur AG Office to support GPF subscribers (excluding Group D employees) of the Manipur State Government. It provides annual GPF statements and SMS alerts about their contribution, deduction, and recovery status. The system also offers additional services, such as PULL SMS by DDO / STO / TO for checking previous withdrawals from Treasuries.

Benefits

● Makes the system efficient and cost-effective by reducing paperwork

● 24 x 7 availability GPF related information

● Provision to report discrepancies online

● Real-time debit / credit details through SMS

● Backlog adjustment of missing credits

● Authentication of GPF statement by DDOs / TOs through Android App, SMS or web

Pension Processing System

This system is designed to provide timely delivery of pensions and other benefits to retiring state government employees, while preventing fraudulent pension cases. It is integrated with the AG Office by sharing required XML data for pension cases, enabling them to download and import the information into their system for further processing and generation of pension payment orders.

Salient features

● Integration with CMIS to access employee details, salary, and GPF information

● Ensures authenticity and integrity of pension documents and reduces the risk of fraudulent cases by utilizing digital signatures

● Integrated with SMS gateway to provide real-time updates to pensioners regarding their pension and pending case status

● Issues Non-Accommodation Certificate (NAC) and the Termination Order by various authorities

mPension Manipur
https://pensionmanipur.nic.in/app

mPension Manipur app is a progressive web app developed by NIC Manipur that utilizes AI technology to enable pensioners to update their periodic photographs online through their smartphones. The system checks the liveness of

▲ Fig 1.6: Hon'ble Chief Minister of Manipur launching mPension Manipur for state government pensioners at the CM's Secretariat, Imphal

the person being photographed to prevent fraud. It also has mechanism to submit feedback to Treasuries. Pensioners receive notifications about the status of their photograph submission and responses to their queries.

Since 4th January 2021, 76,840 pensioners' photographs have been uploaded through the app. It covers all state pensioners across all 15 Treasuries / Sub-Treasuries in the state.

Online Building Permission System (OBPS)
https:// obps.mn.gov.in/

OBPS is a state-of-the-art e-governance solution that streamlines the review of building plans, permit applications, and online delivery of building permission certificates. Developed by NIC Meghalaya, the application is equipped with cutting-edge features such as QR code generation, online payment gateways, and SMS gateways to ensure a seamless and hassle-free process. By
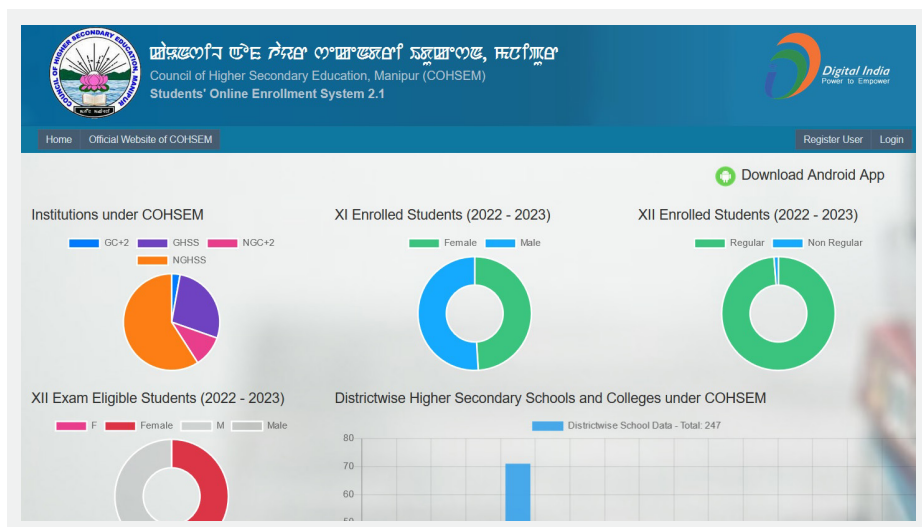
minimizing human interface, it has transformed service delivery and significantly reduced the time and cost associated with traditional processes.

The system has successfully increased local government revenue by making the overall process efficient. Additionally, It improved the quality of construction by ensuring that building plans are thoroughly scrutinized and that construction adheres to approved plans and standards.

Salient features

● Facilitates online document submission

● Facilitates online scrutiny of building plans

● Online fee payment

● Automates the workflow of building permit processing

● Provides real-time updates on the status of building permit applications

▼ Fig 1.7: COHSEM Manipur (Student's Online Enrollment System) Homepage

Face Recognition Attendance System

This is an AI-based attendance system which automatically marks the attendance of employees by recognizing and verifying their facial features. Developed by NIC Manipur, the system has been implemented at the District Administrations of Imphal East and Imphal West and around 350 officials in these districts use the system for marking attendance.

e-Municipal Services
https://serviceonline.gov.in/

This is an e-governance initiative undertaken by the State Centre under the aegis of the Ministry of Housing and Urban Development, along with the Manipur Town Planning Department as the implementing nodal department. It aims to digitize and streamline the delivery of municipal services in Manipur by providing citizens with access to online services. Developed on the ServicePlus platform, citizens can avail the following four services: 1. birth certificate issuance, 2. death certificate issuance, 3. dislodging of septic tank and 4. registration and renewal of shops.

Registration and Exam Processing System

This application facilitates the registration and examination processing activities of the Council of Higher Secondary Education Manipur (COHSEM) for classes XI and XII. The system is sub-divided into following modules

- Registration
- Issuance of examination roll number
- Allocation of examination centre
- Codification of roll numbers
- Evaluation
- Tabulation of marks
- De-codification
- Declaration of results
- Issuance of mark-sheets and certificates

Students' Online Enrollment System 2.0
https://cohsemmanipur.nic.in/

This web application is designed for the submission of enrollment data of Class XI and XII students from schools affiliated with the COHSEM. It enables schools to pay enrollment fees online for their students.

Additionally, there is an android mobile app called mCOHSEM which helps students view their enrollment details and request corrections if there are any mistakes.

Online Certified Copy Application System for High Court of Manipur
https://hcmcertifiedcopy.nic.in/

This is a web-based application that facilitates citizens, advocates, and litigants to obtain certified copies of judgments, petitions, or related documents. To request a certified copy, the applicant must register on the system and submit a request by paying a nominal processing fee. The request is then digitally processed by the High Court and the final prepared documents are digitally signed and made available for download by the applicant. If a hard copy is required, the applicant must submit an online intimation through the system and pay a printing fee. The hard copy can be collected by the applicant from the Copying Section of the High Court of Manipur.

Certificate Chain Application
https://certificatechain.nic.in/

This system is designed to securely store the marksheets (Certificate Chain) of the Higher Secondary Examination (Class XII) conducted by the COHSEM, and can be accessed by authorized individuals or institutions to ensure that the certificates issued are genuine and have not been tampered with. This system is customized for Manipur and is based on an application developed by Block Chain Technology, CoE, NIC Karnataka, Bengaluru, which is typically used to store various certificate details like birth, death, caste, and mark-sheets. The system has already uploaded the marksheets of 28,383 Class XII students for the year 2022 of COHSEM.

Integrated Road Accident Database

iRAD is a centralized accident database developed with an aim to reduce accidents and increase road safety. It enables its stakeholders including Police, Transport, Road and Health to capture accident details from different perspectives to analyze causes and formulate policies. It was launched on 28th Jan 2022 and implemented across all 16 districts.

Other Major Initiatives

The State Centre has successfully implemented various major government projects including eOffice, eHospital, eProcurement, SPARROW, eProsecution, eChallan, Vahan & Sarathi, eCourts, ePDS, NGDRS, ALIS, IVFRT. Other initiatives include NeVA, CuBOS, Heliservices, Online Certified Copy for High Court of Manipur, Paddy Procurement Portal , School Monitoring System for Chandel District, Mid-Day Meal in Districts (Senapati District), Farmers Registry, Computerization of DBT Schemes, AI-based OCR and transliteration for Meitei Mayek-Manipur (Bengali), Veterinary Hospital Management System, Guest House Room Booking System, Inventory Monitoring System for Manipur General Administration Department and BhuNaksha.

mGovernance

- **DagShang:** This app tracks applications / letters received at DC Office, Imphal East.

- **Ngaklou:** This is disaster warning and damage reporting app developed for the citizens of Ukhrul.

The Transport Mission Mode Project, driven by the MoRTH and executed by NIC has successfully automated the operations of RTOs in the state of Manipur also. It brings efficiency, transparency, accountability and reliability in services through Vahan, Sarathi, eChallan, National Permit, mParivahan. This system has modernised the IT infrastructure and service delivery model in the entire sector of RTOs.

Dr. Nivedita Lairenlakpam
Director, Department of Transport
Government of Manipur

- **mHospital:** This app provides access to information on healthcare facilities, including details about doctors' schedules and specialities, ambulance services and bed availability.

- **mAnganwadi:** This app helps in monitoring all anganwadi centres in Bishnupur district, Manipur.

- **eYojna:** This app shows government schemes in a district, informing citizens and helping them access benefits. It also allows to check eligibility criteria and nodal officer details for each scheme.

Infrastructure Support and Network Services

NIC Manipur provides network connectivity through NICNET, NKN & SWAN across the state with more than 1100 active nodes in Secretariat. The Centre also hosts and manages several state government websites. Further, it provides VPN and mail services to state user departments.

In addition, the State Centre also extends video conferencing (VC) services at several state government offices. For this, it has set up 22 VC studios across the state. One each at Raj Bhavan, CM Secretariat, Chief Secretary Office, DGP Office, NIC District Centers (16) and two studios at the State Centre itself.

Especially during the COVID-19 pandemic, these services emerged as vital support for government agencies to carry out necessary administrative activities.

Important Events Organised

- Hon'ble Home Minister, Shri Amit Shah launched eOffice for Government of Manipur on 27th December 2020

- Hon'ble Chief Minister of Manipur, Shri N. Biren

▼ Table 1.1: Project implementation status

Project	Implementation Status	Type
eOffice	• User Departments / Offices: 192 • eOffice users: 3,482	G2G
eHospital	• User Hospitals: 8 • Transactions: 2,63,547 • OPD registrations: 22,90,842	G2G, G2C
eProcurement	• Total worth of projects implemented: Rs. 31000 crore	G2B
SPARROW (Manipur Organised Services)	• Total number of Officers onboarded: 231	G2G
eChallan	• Implemented in all DTO Enforcement Offices and started in Traffic Police Offices	G2G
Vahan	• Implemented in 10 RTOs • Vehicles registered: 5,40,774 • Revenue collected: Rs. 4,33,25,90,898 • Permits issued : 4858	G2C
Sarathi	• Implemented in 11 RTOs • Learning license issued: 2,72,208 • Driving license issued: 3,51,803 • DSL issued: 12 • Revenue collected: Rs. 21.12 crore	G2C
eCourts	• Districts covered: 12 • Court complexes covered: 17 • Court establishments covered: 38 • Case registered: 1,50,783 • Case orders available: 11,371	G2G
PDS	• Ration Card Management System (https://rcmsmanipur.nic.in) • Food and Essential Commodities Security Target (https://feastmn.nic.in) • Automation of Fair Price Shops (https://epos.nic.in/manipur)	G2C
NGDRS	• Registered documents: 441 • Revenue collected: 21.71 lakhs	G2C
ALIS	• Districts covered: 9 • Weapons license issued: 12818	G2C
IVFRT	• Foreigner Registration at FROs	G2G

Singh launched the Professional Tax Application at CM Secretariat on 9th November 2022

• Hon'ble Minister of Municipal Administration Housing Development (MAHUD), Shri Yumnam Khemchand Singh, launched the Online Building Permission System

• Hon'ble Minister, MAHUD, Shri Yumnam Khemchand Singh, launched Online Registration of Shops and Establishment & Renewal of Licence

• Hon'ble Chief Minister of Manipur launched mPension Manipur for pensioners drawing service pension from the government of Manipur

• Commissioner, MAHUD, launched 3 online services for 27 Urban Local Bodies of Manipur

Accolades

• Award of Recognition for eGRAS at 20th CSI eGovernance Awards 2022

• Award of Recognition for LouchaPathap at 20th CSI eGovernance Awards 2022

• Award of Recognition for eOffice at 20th CSI eGovernance Awards 2022

• 19th CIS SIG eGovernance Awards 2021 for CMIS

• 19th CIS SIG eGovernance Awards 2021 for TreasuryNet

• Best Performing State in Electronic Procurement 2019 for eProcurement

• National Award for eGovernance 2019 for LouchaPathap

• Promising Digital State of India Award 2018

• Gems of Digital NE Award (Silver) 2018 for CPIS

• Gems of Digital NE award (Silver) 2018 for TreasuryNet

• Prime Minister's Awards 2007-08 for Excellence in Public Administration – CPIS

Way Forward

NIC Manipur has introduced innovative solutions and improved productivity through its technical initiatives, which have revolutionized various sectors across the state. In the future, with the rise of new technologies, more cost-effective and sustainable technical solutions are envisaged. These include extensive use of blockchain for RoR, exam certificates, and birth and death certificates, as well as the implementation of Parichay and Jan Parichay. Furthermore, there will be integration of applications for finance, incorporation of Chatbots in applications, adoption of a mobile-first approach, and development of microservices.