ANDHRA PRADESH- Sun Rise State Striding ahead with Excellence in e-Governance through ICT

Besides developing and implementing eGovernance applications and other customised software, a host of Services are offered by the NIC State Centre, Andhra Pradesh. These include Video Conferencing, Virtual Class rooms and supporting various ICT initiatives through NICSI. In addition, Data Centre Services, Network & Internet Services, Email Services and NKN Services are also provided.

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Andhra Pradesh, the combined State until 2014, was the 4th largest in area and the 5th largest in population. As one of the prominent States contributing to the upward economic growth of India, it had a new beginning as a sunrise State with 13 Districts and Amaravati as its new capital after the State got officially bifurcated in 2014. Andhra Pradesh has withstanded the new changes, challenges, assimilates new technologies and hence no wonder it is still one of the most preferred destinations for IT and other sectors.

National Informatics Centre in Andhra Pradesh has come a long way, successfully completing vital e-governance projects for Central, State Governments and Public Sector Departments, operationalised in 1986 connecting all the 23 District Hqrs. in the State over NICNET. In the sunrise State of AP, NIC-APSC officially started working in a makeshift premises at Vijayawada during June 2017 with 1600 sq.ft. workspace and 1000 sq.ft. at Velagapudi to provide ICT solutions to the State government departments. Within one month of the commencement of the centre, it got a full fledged VC studio at both the places with 1 Gbps NICNET backbone extended from Hyderabad.

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VIDEO CONFERENCING AND VIRTUAL CLASS ROOMS

- All 13 Districts of AP are on VC Network through terrestrial links
- Studio-based VC Systems have been commissioned at NIC-APSC, Vijayawada since September 2017. Around 50 VCs have been successfully conducted within the first month of its commencement
- Exclusive Studio-based VC has been commissioned for AP Secretariat and at Chief Secretary's office
- Virtual class rooms and e-learning framework is a part of NKN services

Video Conference conducted for all Universities in the State

Smart work spaces at the Centre

Conference room with a brilliant ambience

EGOV APPLICATIONS INITIATED & IMPLEMENTED

- Website Design, Development & Hosting including Domain registration, Security audit, Remote publishing for Computer-aided Administration for Registration Department (CARD)
- *Webland,* a web-based land records management information system for Revenue Dept.
- *RuralSoft,* a financial accounting system for Dept. of Rural Development
- *e-Panchayat* for Panchayat Raj Dept.
- *Watersoft*, a web based MIS for Panchayat Raj, RWS
- Online web-based counseling for Engineering, MBA, MCA, LAWCET & Polytechnic courses
- GIS based school information system
- Stock and financial accounting system for Civil Supplies Corporation
- Girl child protection scheme portal for Women and Child Welfare Dept.
- Missing persons portal for Women and Child Welfare Dept.
- Revenue services through *MeeSeva*
- Business Information System for AP High Court
- A system for integrated services to farmers and other stake holders of horticulture, agriculture and allied sectors
- Case Information System (Dist. Courts)

e-GOVERNANCE INITIATIVES

AEPDS (Aadhaar enabled Public Distribution). The supply chain management, the Fair price Shop transactions, were automated with Aadhaar based bio-metric enabled POS device. With this effective G2C and C2G eGov application, the Ration card data has been digitized and seeded with Aadhaar. Every month, nearly 1.3 crore Aadhaar beneficiaries (ration card holders) are availing the subsidized ration which has resulted in savings of nearly Rs.1,100 crores.

Since May 2015, *AePDS* has been implemented in entire Andhra Pradesh, covering 13 Districts with 29,488 Fair Price Shop outlets. The % of population covered by *AePDS* involves 1,38,90,139 ration cards comprising of 3,95,09,233 beneficiaries. *AePDS* is unique due to the following aspects:

- A beneficiary can withdraw his ration from any part of district, irrespective of his local fair price shop outlet. A beneficiary can withdraw his ration from any outlet within the State also.
- The program can be replicated for any scheme with the availability of Aadhaar platform. It does not require any major infrastructure for implementation.
- A unique innovation in *AePDS* is that the stock received by dealer is authenticated by him using aadhaar and hence he cannot deny the availability of stock.
- The stock available electronically is only allowed to be distributed and hence exact position of stock is known.
- There is a GPS tracking mechanism for the trucks carrying food commodities facilitating online monitoring of their movement in *AePDS*.
- For differently-abled beneficiaries, rations are delivered at their door step by vRealize Orchestrator Configure (VRO) authentication.
- All ePOS devices are connected to elecronic weighing machines through Bluetooth.
- At Multiple Listing Service (MLS) all dispatches are electronically weighed and dispatched.

Built on Java technologies, the *AePDS* and the supply chain management applications have become very popular across the country and is now getting implemented in other States such as Haryana, Tripura, Punjab, Maharashtra and Uttar Pradesh, after their successful implementation in Andhra Pradesh.

E-SEED

This Aadhaar Enabled Seed Distribution System, alias, *Dkrishi* ensures smooth distribution of seeds to eligible farmers. It accepts farmer's Aadhaar number at distribution point and on verification fetches land data from *webland* database. Based on the total extent held by the farmer, quantity of the seed that can be issued is decided by the system. The farmer can avail the seeds in person or can authorize his/ her family member to take the seeds. In case of family member, the system fetches the data of ration card for the Aadhaar and does biometric authentication. It is a G2C and C2G eGov application.

On successful Aadhaar authentication of the receiver using NIC-ASA service, the system allows to issue coupon with pre-printed number (with QR code) allotted for each counter in each mandal. The coupon is submitted at the godown point to make the delivery. At the godown, the QR image on the coupon is scanned to populate the number and on clicking the issue option, the delivery details are uploaded to the server and stock balance is automatically updated. Stock entry details are captured from movement of stock at main godown to individual godowns and maintained agency-wise. This facilitates the administration to track the stock and plan adjustment among mandals in case of shortage.

e-Seed was implemented for Groundnut

in Anantapur district last year and as of now, it has been implemented in all the 13 districts with the distribution of a variety of seeds. 3,33,292 farmers benefitted during last Rabi, while 13,38,400 farmers benefitted during Kharif season. The current Rabi season already has 1,92,173 beneficiaries, as of now.

SOCIAL IMPACT & ASSESSMENT SURVEY

Developed a mobile application to capture the details of project affected families for construction of Nuclear Power Plant at Kovvada Village in Ranasthalam Mandal of Srikakulam District.

UNIFIED BIRTH & DEATH REGIS-TRATIONS FOR ULBS AND RLBS

Developed and successfully implemented a web based Unified Birth and Death (UBD) registration with QR code. Following is the status as on date:

- Total birth events digitally signed: **1,17,11,495/ 1,32,92,471 records (88%)**
- Total death events digitally signed: **25,73,327/ 30,06,739 records (86%)**
- **60 lakh** certificates distributed through MeeSeva Centres.

WEBLAND- LAND RECORDS SYSTEM

This is a G2C, C2G and G2G application which was successfully implemented in the State to store and manage 2 crore land records belonging to 80 lakh agricultural land owners along with crop particulars. All the records are digitally signed by the respective Tahasildars and land related services are provided across the counter through Citizen Interface Kiosks.

A citizen portal, *MeeBhoomi* is also launched as a C2G portal. Today, the citizen can print his Pattadar passbook online from the portal. To facilitate bankers to access land records before disbursing the loans to farmers, *Loan Charge Module,* a G2G portal has been implemented. Built on .NET technologies, Aadhaar authentication for verification, QR Code and digital signing of the records have been incorporated successfully.

DEBT WAIVER

An online system for the successful implementation of this flagship welfare scheme of the Government of Andhra Pradesh. The application had been developed and implemented using .NET technology in a record

time and had won government appreciation.

WATERSOFT

Aimed at bringing accountability and transparency, *Watersoft* is an integrated web based workflow MIS-Suite for digital empowerment of all the stakeholders involved in creating and managing the infrastructure for drinking water distribution in the rural areas. Developed and implemented since 2008 across the State, this system integrates Rural Water Supply & Sanitation (RWSS) offices and its laboratories of the State including the RWSS head office and the Secretary's office. The database is enriched day by day and serves as a treasure chest for the Department. Its salient features are:

- Complete workflow and integration of all RWSS modules
- Mobile interface
- Help Desk
- Dashboard Services
- Role Based, OTP based Authentication
- Transaction based Audit
- Online transfer of funds
- Automated habitation coverage status
- Financial & physical drill down reporting
- Centralized system for online entry of transactions/ data.
- Integration of all the offices of RWSS
- Accountability and transparency
- System generated alerts for concerned officials on logon on critical tasks
- Facility to generate various kinds of Results Framework Document (RFD), free format and drill down reports. Built on Java technologies, this eGov application is also being implemented in the states of Telangana and Madhya Pradesh.

BIO-METRIC ATTENDANCE MANAGEMENT

Aadhaar enabled Bio-metric Time and Attendance Management system is being implemented at all the major State Govt Offices in A.P. AEBAS implemented since 2014 and Vidyawaan since 2016. AP stands first in country by on-boarding 3655 Institutes, 11 Organisations, 51000 employees and 9 lakh students as on date and are linked to CM Dashboard in real time for analytics reports.

E-OFFICE

In the entire state of Andhra Pradesh , e-Office is being implemented successfully. 33 Secretariat departments, 144 HOD

Departments and 13 Districts and up to Gram Panchayat level. 83,500 employees are registered, 14,52,083 files were created and 64,65,569 files movement had been monitored so far.

E - GOVERNANCE AWARDS

Of the many eGovernance Awards won by NIC AP State Centre, the recent ones are:

- Aadhaar enabled Public Distribution System- SKOCH award, Vodafone India and NASSCOM award, Manthan Award and CSI Nihilent e-Governance Award, National e-Governance Gold Award and World Summit Awards in 2016
- ePDS- Gem of Digital' India Award in 2017
- Integrated Workflow RWSS MIS Suite - SKOCH Order of Merit Award (2011, 2015)
- WEBLAND- Best e-Governance Award in e-India 2012, Gold Award under Business Process reengineering - National e-Governance Event,2017

LAND HUB - A NEW BEGINNING

As a part of ePragati (flagship Program of the Govt. of Andhra Pradesh), a common data warehouse, Land hub is being built for land sector. Various land related data of Government lands, rural and urban lands, forest lands etc. shall get integrated along with the data from the Depts. of Revenue, Registration, SS & LR, MAUD, Panchayat and Forest. Similar to Aadhaar for the Citizen, the land parcel will be identified by a *Bhudhaar number* to provide integrated services and Landhub is going to be the single source of truth for all land related matters in the State, ultimately. This is under development with hybrid technologies of both .NET and Java, since there are heterogeneous applications under Land Hub integration. It is being piloted shortly, before rolling out across the state.

WAY FORWARD

During the recent visit of DG, NIC to the State, Hon'ble Chief Minister of Andhra Pradesh has assured new and bigger office premises to accommodate the entire State Centre and to expand NIC's activities in the coming days.

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