## System for Debt Redemption Scheme A Success Story From Andhra Pradesh

**Surmounting various** challenges in the process of design, development and implementation, the software application developed by NIC successfully enabled end-to-end processing and implementing of the second installment of 'Debt Redemption Scheme' of Government of Andhra Pradesh. With the release of beneficiaries list on 22 June 2016, the system so far has processed 83.28 lakhs of loan accounts spanning 35.41 lakhs of farmers and 29.71 lakhs of farmer families



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he Government of Andhra Pradesh announced redemption of debts to farmers as per the Government Order of 14th August 2014. The basic objective of this scheme is to waive the agriculture crop loans and gold loans availed for agricultural purposes, together the amount not exceeding Rs.1.50 lakhs per family.

National Informatics Centre, Andhra Pradesh was entrusted to provide an Information & Communication Technology (ICT) based system within a short time span of 30 days to complete the study, design, develop, test, train and roll-out of the software. After the requirement study, a web-based system was designed, developed and successfully implemented.

The first release of the software was on 11th September 2014, which enabled data entry by the banks. This task was completed in 2 months, which followed data verification and purification phases in November 2014. Processing of data resulted in the declaration of beneficiaries' list of first phase on 6th December 2014.

### **STAKEHOLDERS**

The following diagram outlines the stakeholders and their roles during the entire process of implementation of the scheme.



## **PROCESS**

The process adopted for the implementation of Scheme is diagrammatically represented below:

## ACTIVITIES

Following are the activities and processes involved in the Data preparation:

## **DATA CAPTURE**

This involved two different modes of data entry-

- Online: Partial data porting from Core Banking System
- Offline: Excel-based entry with extensive data validations and facility for conversion to XML and uploading

# DATA VERIFICATION & VALIDATION

- Online:
- Aadhaar number validated against State Resident Data Hub (SRDH)
  by popping-up demographic details including photograph
- o Populating land details like village, survey-number, khata-number





from Land Records Database

- Verification of Ration card numbers with Electronic Public Distribution System (ePDS)
- Offline:
- o Batch mode check of all above

Data Merger, Aggregation, Purification & Processing

- Data obtained from both modes was merged, aggregated and subjected to final verification
- Highly complex final processing

involving compounded queries

- Full-fledged Management Information System (MIS) portal was deployed, facilitating flexible statistical abstracts and detailed reports such as Cleared lists, Verification reports, 'Not-as-per-Norms' lists: branch-wise and District-Mandal-wise
- Web-based portal for grievances and redressal was developed and enabled through Citizen Service Centres

## **STATISTICS OF THE PROCESS**

- 43 banks comprising of 6822 branches entered data
- 20 banks opted for online entry and 23 for offline mode
- 83.28 lakhs loan accounts entered in all
- About 35 lakhs hits received during each phase of release by general public through online loan status reporting system
- 24x7 Helpdesk support over phone and e-mail during peak phases of data entry
- About 17000 Village Janmabhoomi Committees (VJC) worked on data collection and data purification
- Around 700 Mandal Level Grievance Redressal Committees (ML-GRC) examined grievances of farmers
- 35.41 lakhs farmers having 54.98 lakhs loan accounts and 29.71 lakhs farmer families benefitted in the first installment

## CHALLENGES FACED AND OVERCAME

• ICT enablement was a big challenge due to the voluminous data, rigid timelines and political implications involved

- Requirement gathering was carried out through SLBC and the Finance department. SLBC could not consolidate the requirements at one go on behalf of all the Banks. It took many sessions to freeze the requirements
- Due to non-uniformity in the conventions/ standards adopted by banks, designing the database was a challenge
- Provision of alternate solutions of entries to Banks, enabling similar kinds of validations during both the modes of entry
- Lack of Internet connectivity at remote branches compelled one major commercial bank to opt for offline mode of entry during the midway of the process
- Restricted hours of data entry at branches (due to Banks' routine activities), required NIC helpdesk to operate on 24x7 basis
- Verification of entry of invalid/ incorrect figures such as loan and outstanding amounts
- Seamless merging and streamlining of offline data with online entries to maintain consistency and integrity
- Entire data had to be processed in a single go to apply G.O norms uniformly
- The task was resources demanding such as enough RAM, processing speed, storage disk size and physical monitoring
- Procurement of high-end servers at NIC and Andhra Pradesh State Data Centre exclusively to meet the demand



### **BEST PRACTICES**

- The basic activity of requirement gathering was carried out spending copious amount of time
- Cross validations on data performed with other electronic databases
- Project Management activity vested with a group of senior officials from the Government and NIC
- Follow-up Video Conferences with district collectors regularly conducted by the Chief Secretary to the Government
- Every major mile-stone-activity was documented
- Sign-off from the Government

#### **SUMMARY**

Success of this system was a right combination of key decisions, resolving of problems and practical issues for implementation of such a complex project. The system improved quality of services and provided easy access of information by citizens as the entire technical ecosystem was established, maintained, controlled, balanced and monitored progressively.

The convergences of political will, efficient ICT solution and the stakeholders' engagement made this ambitious project possible. Effective project management, efficient helpdesk operations, suitable budgeting and the robust technologies used led to implementation success of the project.

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