Informatics

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Bird's Eye View

National Informatics Centre (NIC) introduced Information Technology (IT) in Rural Development (RD) sector in the year 1986 and since then the three entities have been going hand in hand

leading to the evolution of Rural Informatics in India. It is worth mentioning that induction of IT in Rural Development and its subsequent evolution have not been easy tasks, owing to the unstructured nature of RD domain, slow pace of development reforms, low IT literacy and usual reluctance to adopt IT. Nevertheless, Rural Informatics has reached a stage today where IT finds a significant place in RD, not only in terms of expanse and magnitude of its application but also in terms of technological advancement.

NIC's incessant efforts towards computerisation of RD sector have not only facilitated the planning and monitoring agencies but have also created a foundation for building IT services which are of direct significance to the public.

Following is a windows view of major IT applications across various layers of administrative set up under the Rural Development sector.

Application Software packages

Database Applications

Some of the database applications developed by NIC for the Ministry of Rural Development include Financial Release software for Integrated Rural Development Programme (IRDP) & National Social Assistance Programme (NSAP), Inventory Control System and Concurrent evaluation of IRDP, Training of Rural Youth for Self Employment (TRYSEM), Jawahar Rozgar Yojana (JRY), Indira Awaas Yojana (IAY) and Million Wells Scheme (MWS)

Besides, Below Poverty Line (BPL) Survey Computerisation has been done for various DRDAs in the country.

Management Information System (MIS) to process data related to poverty alleviation schemes, known by the product name of RuralSoft, has also been designed, developed and operationalised at 15 pilot DRDAs in the country.

Web-based Applications

Web Sites for Ministry of Rural Development (www.rural.nic.in), Council for Advancement of People's Action and Rural Technology (CAPART) (http://capart.nic.in), National Institute of Rural Development (NIRD) (www.nird.org) have been prepared.

Web Sites have also been developed for Rural Development Departments of various States like A.

P, U.P etc.

Programme Status Report (PSR) providing physical and financial status of rural development schemes with supporting maps and charts have been designed and developed for MRD (http:// vikas.delhi.nic.in)

Daily' is a dynamic web based application focussing on day-to-day activities and requirements of the MRD officials like file monitoring, lodging infrastructure related complaints etc.

GIS Application

A Geographic Information System (GIS) based analysis has been carried out for some of the watersheds in East Distt. & North Distt. (Sikkim), Raipur, Etah, Udaipur, Salem, and Pune Districts.

A cadastral level spatial database has been developed for Tintek block, East District, Sikkim, which has been suitably integrated with attribute data to evolve a Management Information System

Multimedia Applications

Several multimedia applications have been developed to cater to the training and monitoring needs of Rural Development Institutes, which include Ministry at a Glance, Convergence of Services and Hill Area Development with Specific Reference to Uttarakhand.

IT Infrastructure

Local Area Network

All three Bhawans viz. Krishi Bhawan, Nirman Bhawan and Paryavaran Bhawan, where offices of Ministry of Rural Development (MRD) are located have been provided with Local Area Network (LAN) and Internet connectivity. Many of the District Rural Development Agencies (DRDAs) are also provided with LAN. LAN facility with Internet Connectivity has recently been extended to 30

blocks in North Eastern States, under Community Information Centre (CIC) Project.

Wide Area Network

Krishi, Nirman and Paryavaran Bhawans have been connected with States and Districts through NICNET. NICNET connectivity has also been extended up to Block level in Kerala and up to village level in Warna Nagar, Maharashtra .

Videoconferencing System

A State-of-the-Art Videoconferencing system has been installed at Conference Room ('Unnati') of Krishi Bhawan.

Training

Several training programmes have been conducted for various applications software and related technologies to clients and end users across all layers of administrative set up.

National Level Projects - A Glance

Computerised Rural Information Systems Project (CRISP) (www.crisp.nic.in), Council for Advancement of People's Action and Rural Technology (CAPART) Computerisation (http://capart. nic.in), Providing Multimedia and communication facilities at National Institute of Rural Development (NIRD) and State Institutes of Rural Development (SIRDs), Integrated Management Information System (IMIS) for Rajiv Gandhi National Drinking Water Mission (RGNDWM) and Land Records' Computerisation (LRC) are some of the National level Projects in the Rural Development Sector,

Taking IT to the Masses

Convergence of IT efforts at various layers of RD administrative set up, as described above, also termed as backbone computerisation, has made it possible to bring the relevant information and

services into the public domain, thereby easing the life of a common man. On top of the backbone IT services, application software packages of direct public relevance are being developed to form a Citizen-IT interface. Following are some of the examples where IT has reached the unreached to reduce the need of visiting Govt. offices for trivial purposes and help the citizen take more informed decisions.

RuralSoft2000

RuralSoft2000 is a GUI based software, which, aims at capturing data related to poverty alleviation schemes. The software has been developed, as a part of ongoing efforts under CRISP, to meet the needs of monitoring agencies like DRDAs etc. It is a scalable solution and can be installed at the levels of Panchayats, Blocks, DRDAs and States depending upon the availability of computing and communication environment. Beside facilitating the monitoring agencies, the software generates information of public interest, which has been put on the web and can be accessed on anywhere-anytime basis using an Internet browser. The information includes Below Poverty Line (BPL) summary data, status of Loan application filed by a beneficiary under Swarn Jayanti Gram Swarozgar Yojana (SGSY), physical and financial progress of various poverty alleviation schemes etc.

Rural Bazar

A Prototype of Rural Bazar has been developed (<u>http://164.100.219.3</u>) which shall host information about products designed and manufactured by rural artisans. Ministry of Rural Development has taken this initiative to provide a platform for marketing the rural products. An e-commerce version of this site is under construction to support on-line transactions for buying and selling these products, which will be implemented after necessary approval from MRD's.

Wired Villages - Warana

Wired Villages of Warana have turned into reality the concept of automated villages. The primary objective of the project is to demonstrate the effective contribution of IT infrastructure in accelerating socioeconomic development of a cluster of 70 contiguous villages around Warana in

the Kolhapur and Sangli Districts.

Facilitation Counter

A Facilitation Counter has been established at Gate No. 6, Krishi Bhawan, Ministry of Rural Development, New Delhi to provide information to the visitors about various activities of the Ministry.

Summing up the Yesteryears

NIC has been setting the tone of e-governance in the Rural Development sector for over a decade now. A wide range of software applications, adequately supported by IT infrastructure have been developed during this time to aid planning, monitoring and sharing of information among various agencies.

And a Peek into the Future

The future efforts in Rural Informatics would be targetted towards

- Sustaining the on-going efforts
- Providing better communication facilities
- Extending full Geographic Information System (GIS) support
- Providing e-commerce solutions
- Developing Expert System for Rural Development Schemes

Bird's Eye View

Having built a sound base of IT services, NIC is now instrumental in establishing a direct

Citizen-IT interface, so that a common man is also benefited by the technological advancements that have taken place in RD.

IT will thus provide a hand-shake between the governing bodies and the people governed, thereby bringing in total e-governance in Rural Development.

Note : For articles related to Rural Informatics, please refer the following issues of Informatics :

- Vol 7 No.2 Oct'1998 (CRISP)
- Vol 8 No.3 Jan'2000 (Ruralsoft)
- Vol 8 No. 4 Apr'2000 (Warana Project)

For any further information, kindly contact

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Around the NIC world

Saluting the Brave ...

- Workshop on Bio-Medical Research
- President of India Utilizes VC Services
- PM Inaugurates Optical Fibre Link Over VC
- Inauguration of Land Records Computerization
- Sikkim Home Deptt Website Launched
- New Web Sites on NIC's Web Servers

Products/Services



Tamil Nadu Maps on the Web

The GIS Division of NIC, Tamil Nadu State Unit has placed various maps of Tamil Nadu on the web which is accessible with the URL

http://chennai6.tn.nic.in/tngis

This website has base maps for all the Districts, Revenue Divisions, Taluks and Blocks of Tamil Nadu, prepared in coordination with GIS Division of NIC HQ and updated to include the details relating to the new districts, taluks and blocks. Detailed taluk level maps with 6 layers are also available for three districts, namely Thanjavur, Thiruvarur and Nagapattinam.

The site offers chloropleth thematic maps based on Census '91 data taking into account the new districts that were formed since 1991. The thematic maps are at State and District levels. This web site hosts more than 250 maps with different levels of boundaries and themes.

Sikkim Government's Gazette CD

A compact disk containing replica of whole 1999 Sikkim Government Gazettes (Ordinary and Extra ordinary) and a software to search of contents was released by the Hon'ble Governer of Sikkim, Sh. Randhir Singh on the occasion of State Day Celebration of Sikkim. The CD has been developed by NIC Sikkim State Unit in order to make the government gazettes portable . A user-friendly interface with standard features is the essence of the software. It enables keywords based search , and free text search, as well as querying dynamically on the gazette parameters. Animated tour has been provided to guide the user to access the information available on the CD.

The software does not use any document search tools to implement the free text search. 32 bit windows applications with OLE automation feature have been incorporated to achieve this facility.

Computerized Tax Collection Window at Agartala

A Computerized Tax Collection window has been set up by NIC Tripura State Unit at the Revenue Complex of Agartala Municipal Council. The system is a part of the total Computerization of Agartala Municipal Council (CAMC) project undertaken by NIC Tripura . Household, construction, Land, revenue, and other details of approx 29,000 municipal holding have been recorded and now the Tax collection collection window is operational. Work is under way for computerizing the other sections of the Council.

The system was recently inaugurated by Shri Pabitra Kar, Hon'ble Minister Industries & Commerce, Govt of Tripura. In his inaugural speech he stressed the necessity of e- governence and praised NIC for its effort in the same direction.



Public Information and Facilitation System

A Public Information & Facilitation System [PIFS] has been developed by NIC-Haryana to facilitate the public to get the information about various Schemes of Haryana Government. Public can have information about any scheme, its eligibility conditions, procedure, contact addresses, forms required to get the benefits of the scheme and much more.

PIFS is GUI based generalized ready-to-use software and available in front-end and back-end modules. The database of sectors, departments, schemes and their details is created using back-end module. Front-end module is again available in two modes viz. Stand alone and Web-enabled. The same database, created back-end module, is used for both the front-end modes. The data can be maintained in any of the formats.

Office Procedure Automation Software

The Civil Aviation Information Division of NIC has developed an **Office Procedure Automation** (OPA) software to help monitor pendency of cases and assist in easy tracking of letters and files. This software has been identified for implementation in all Ministries/Departments as part of Minimum Agenda for e-governance.

The Cabinet Secretary in his D.O letter No. 110014/40/97-TPP-US(T). Vol. IV dated 12th August, 2000 to all Secretaries, has desired that the minimum Agenda for e-governance be implemented by the end of December 2000, enclosing therewith the minimum Agenda for e-Governance. One of the important points in the Agenda advises the various Ministries/Departments to start using the Office Procedure Automation Software developed by NIC with a view to keeping a record receipt of dak, issue of letters, as well as movement of files.

OPA is a on-line system which gives administrative support right from Diarising of receipts, Updating its status, Opening new files, various file movements, Despatch of letters/files & Record management. It supports electronic file movement also.

All reports prescribed in the Manual of Office Procedure can be generated through this system. It has been standardised by the Department of Administrative Reforms and Public Grievances & NIC for implementation in all Ministries, Departments and State Govts. An important aspect of the OPA software is that it has evolved over a number of years, tested with time and is available on a variety of platforms. It is an integrated software which is operational in the Ministry of Civil Aviation since 1993. The latest version is already running in the Cabinet Secretariat for the last two years & also in many other Ministries.

For further information, write to :

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Projects

COLLECTORATE 2000' Launched in Maharashtra

Computerization of Courts in Rajasthan

Working Group on IT for Masses

'COLLECTORATE 2000' Launched in Maharashtra

National Informatics Centre recently embarked on the ambitious project "Collectorate 2000" at the National Level. As a first step, the NIC Centre at Pune has developed 12 application packages which will automate the day-to-day working of the Collectorates.

These applications support Devnagiri script under Windows platform with GUI interface. These Applications run on stand alone PCs and also ensure seamless migration to LAN and Web based platforms.

The Collectorate at Nanded District in Maharashtra has taken a lead in the implementation of these applications. In a function organized at Nanded Collectorate on 8th September,2000, Hon'ble Minister for Revenue Sh. Ashokrao Chavan released the 'Collectorate 2000' CD in the presence of several dignitaries.



The CD contains the software for various tasks such as Single Window service, Land Acquisition, EGS, Civil Supply, Collectorate Expenditure Monitoring, Performance Appraisal, Small Savings and Payroll etc.

On this occasion, Sh. D.P Bopde, Deputy Director General, NIC announced that the Collectorate 2000 CD will be made available to all the Collectorates in Maharashtra free of charge. Also present on the occasion was the Hon'ble Guardian Minister Shri.Manikrao Thakrey who, in his address, appreciated the efforts taken by National Informatics Centre in enabling a major step towards E-Governance in the State of Maharashtra.

Computerization of Courts in Rajasthan

The project for computerization of the District Courts in Rajasthan by the NIC Rajasthan State Unit has been on for quite some time. As a part of the on-going project, a new software to meet the expectations of District Court and High Court procedures has been developed after exhaustive system analysis and meetings with Judiciary officers at both the levels. The system covers extensive and varied parameters for all the case types related to Civil and Criminal law. Other life cycle modules of any case type like Scrutiny and Registration of Court Room Proceedings, Disposal of Cases etc are catered extensively by the system. Day to Day reports/ registers and statistical reports are the result of the parameters entered during the entire life cycle of the case.

Various types of reports/registers that are possible through the usage of the system are Filing Register, Court Fees Register - Daily and Consolidated, Institution Register, Peshi Register,

Cause List, FIR Register, All master database reports, Number of Cases Instituted during a period, Number of cases disposed during a period, Balance Register of period, Return Number. 20 of Sessions Cases and various Statistical Reports.

Judicial officers, Advocates and the litigants are equally to be benefitted through the various queries incorporated in the system.

Working Group on IT for Masses

A Working Group on Information Technology for Masses has been constituted by the Ministry of Information Technology with the aim of formulating a set of policy initiatives to be implemented to achieve wide spread application of IT in all possible areas in the shortest possible time.

The terms of reference of the Working Group, which includes prominent IT Experts from MIT, NIC and the IT industry, include: :

To review various schemes and major initiatives taken by various Government agencies for taking IT to masses

- To identify potential areas and applications for deployment of IT for masses.
- To recommend development schemes/ programmes for citizen participation for taking IT to masses
- To prepare a comprehensive plan for taking IT to masses

The Working Group has identified some applications of higher priority to be undertaken at different levels in the country at the earliest. Some of the major milestones thus recommended include :

November 2000 - IT Yatras (In three phases – up to June 2001)

January 2001 - At least one citizen-oriented service in every department of central government and state governments to be made IT enabled.

April 2001 - All government regulations, schemes and forms on Internet.

June 2001 - Pilot Project for computer education at one block (10 secondary schools) in a 100% literate district in every state and Results of all public examinations on Internet.

- August 2001 All government Tenders on Internet.
- January 2002 On-line bookings of all government services.
- December 2002 IT literacy to be essential requirement for recruitment to government.
- December 2003 IT infrastructure up to working level staff in central / state governments.
- All government payments to be made available through Internet.
- December 2005 All normal day-to-day government functions to be IT enabled.

- Land Records to be computerized in all the states
- 1 million IT Kiosks
- December 2008 100 million Internet connections

For further information, please visit <u>http://itformasses.nic.in</u>

In the Limelight

NIC Jhabua - Taking Informatics Services to Tribal Areas



The district Jhabua is a tribal dominated district situated in the South-Western corner of Madhya Pradesh. Rajasthan lies in its North and Gujarat state in the West. The district headquarters is at a distance of about 350 Kms. from Bhopal, the state capital.

The district of Jhabua, in many ways, is a unique district, not only in Madhya Pradesh but also in the Country as a whole. Despite being faced with stark realities of extreme poverty, socioeconomic backwardness, migrating population in search of employment during slack season, and an extremely difficult geographical terrain, the District still retains a unique kind of tribal culture. The vagaries of weather, poor soil conditions and uneven topography put a lot of challenges before the government, social workers and voluntary agencies. The literacy rate of the District, as per the 1991 census, is a mere 19.01 %, which is the lowest in the Country. Illitracy is the root cause of poverty and most of the socio-economic problems in the region.

The total area of the District is 6458 Sq.Km having eight tehsils and 1357 villages. Out of the total population of 11,30,405, the tribal population has an overwhelming ratio of 85.96 %

NIC in Jhabua

The NIC District Centre at Jhabua was established at the Collectorate during 1988-89 to extend informatics services to all the Government Departments in the district. The primary aim of the NIC district centre is to assist the district administration in overall computerization of different administrative processes and procedures, so that the related information for decision making is readily available at all the levels.

Spreading the informatics culture in a district having the lowest literacy rate was by no means an easy task. But true to the spirit of NIC, the Jhabua District Unit took it up as a challenge and since its inception, it is providing effective support services in the areas of design, development implementation of appropriate MIS/Databases for district level applications, training, assistance in electronic communication, processing of various data, etc.

Project Profile

NIC Jhabua district centre not only provides the E-mail facility to the user departments but also helps in maintaining and analyzing importment information and provides training to the officers of various user departments in the district.

The coordination between the NIC District Centre Jhabua and the District Administration has resulted in the evolution of a number of computer facilities, which has helped the District Administration in carrying out its routine work effectively to a great extent.

The district centre has already taken up various projects in order to extend technical support and guidance to the various

Departments & developed the software, viz., Merit list of Lower Division Teachers (Tribal Welfare Department), Rural Development Information System (RDIS), Time Limit Papers System (TLP), Computerization of Arms Licences, Rajeev Gandhi Watershed mission (Plantation software), Panchayat Management Information System (PMIS), etc.

Beside thePayroll System which facilitated the computation of the employee's pay and preparation of their pay bills, many other areas have already been covered in the district. Some them are Preparation of Budget, Preparation of monthly progress report on Total Literacy Campaign, Providing Census'91 data & necessary reports to all Government Departments, Researchers & Private users, Daily reception & transmission of E-mails, Word Processing facility

to the staff of Collectorate, etc. These may be considered to have significantly contributed towards office automation in the Collectorate and various departments in the district.

The NIC district centre implemented various national and state level projects successfully in the district with planned and organized approach. Besides implementation of national & state level projects, DIC has also actively participated in the Pulse Polio, Immunization, Primary Health checkup, Exit Poll data, Election Result data, etc. and played important role in their success.

Computer based satellite network (NICNET) is extensively used by the district administration for communication purposes.

Fullfilling the Purpose

It would be right to say that the computer and communication facility established at NIC District Centre, Jhabua is fulfilling

its aim by aiding the District Administration to function with greater efficiently and effectiveness. Today, NIC Jhabua is one of the busy and an indispensable NIC computer centre among others. Its sincere efforts have awakened the people in this remote area with its use and importance.

NIC, Jhabua holds explicit future plans for computerization in important areas such as Panchayat Management Information System, District Court Computerization and providing Internet, E-mail facilities to the various Government departments in the district.

The success story of informatics in Jhabua stands out as a living example of utility of advanced technology in relatively backward societies.

