

Informatics



- e-Taal
- e-Hospital EASYGAS, KISAN
- Powering GIGW Compliance
- Big Data Analytics and Governments
- ICT in Districts (Jind, Malkangiri)

INFORMATICS

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EDITORIAL

The institution of CSI Nihilent e-Governance Awards, is widely valued for its objective to recognize various innovative and exemplary e-Governance initiatives in the country. In this Issue of INFORMATICS, we have included a special section featuring exclusive coverage on the NIC's achievers of CSI Nihilent e-Governance Awards 2012-13.

In the E-Gov Products and Services section this time, we have showcased on how the diversity of ICT initiatives is leveraging the cause of e-Governance in the country. The highlights of this section includes e-Taal, e-Hospital, e-CCI, Powering GIGW Compliance, Manav Sampada, ICT enabled implementation of Forest Act 2006 in Maharashtra, EASYGAS, KISAN etc.

The Technology Update section in this Issue will apprise you on the technicalities of Linked Data, Node.js and Big Data. The District Informatics section covers the success story of ICT revolution in the Jind and Malkangiri districts. Our regular sections viz. International e-Gov Updates, Cyber Governance, In the News would update you on the latest happenings around the e-Governance domain. This Issue also highlights the Hindi Pakhwada Celebrations, 2013 at NIC Headquarters and various NIC State Offices across the country.

Wishing you and your family a very Happy and Prosperous New Year. Hope you enjoy Peace, Health and Prosperity throughout the New Year 2014...

NEETA VERMA

We invite your valuable articles and write-ups for Informatics.

Please send your inputs/contributions/feedback to our State Correspondents or else directly to us at the address below:

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CSI-NIHILENT E-GOVERNANCE AWARDS 2012-13

With rapid expansion of e-Governance movement in India, many new initiatives have been conceptualized and implemented to strengthen the cause of good governance by fostering transparency and accountability. CSI Nihilent e-Governance Awards have been instituted to acknowledge the exemplary initiatives/projects/services in the realm of e-Governance. Running into its second decade, the award is a golden yardstick for evaluating the mileage of various e-Governance initiatives running in the country. Alike previous years, this year too, an overwhelming number of entries were in the race for this prestigious accolade. This year also awards were conferred for the categories including 'Award of Excellence' along with 'Award of Appreciation', 'Award of Recognition' and 'Appreciation for Sustenance'. Nominations to each category were judged by the Awards Selection Committee, comprising of members from Government, Industry and Academia. Each of them were subjected to rigorous selection process and evaluated on three indicators i.e. Results, Enablers and Value Indicators. Finally, the winners were honored at a grand ceremony during the CSI's 49th Annual Convention held at Vishakhapatnam on 13th & 14th December, 2013. Shri J. J. Satyanarayana, Secretary, DeitY, Government of India presided as the chief guest of the event. And the winners are:



Awarded Project/Product/Service Name: Himachal Pradesh Government
Award Category: Award of Excellence, State Category
Team Members: Director (Information Technology), Government of Himachal Pradesh; Dr. Saurabh Gupta, SIO NIC Himachal Pradesh



Awarded Project/Product/Service Name: Haryana's Web-based Integrated Workflow System of Paperless Admissions for Technical Education
Award Category: Appreciation of Sustenance
Team Members: NIC-Haryana: Shri Ghan Shyam Bansal, DDG & SIO; Shri Susheel Kumar, TD; Shri DP Saini, SSA; **Haryana Technical Education:** Shri K K Kataria, Director Technical Education Haryana, & Shri K K Dhiman, Jt. Director DTE



Awarded Project Name: Government e-Payment Systems - COMPACT & GePG
Award Category: Award of Excellence, Project Category
Team Members: Shri Dipankar Sengupta, STD and Project Manager; Shri Vivek Joshi, PSA; Shri R. K. Sharma, PSA; Ms. A. Saravanambika, SA & Team Lead; Ms. Sangeeta Biswas, Programmer; Shri Prakash Kala, Programmer



Awarded Project Name: e-Hospital[®]NIC - Integrated Hospital Management Information System Product
Award Category: Award of Excellence, Project Category
Team Members: Shri C.K.Dhar, STD & SIO; Shri Nilkamal Dey Purkayastha, SA; Shri Prabhash Debnath, SA; Shri Gaurav Basu, Shri Radhey Shyan, Shri Umesh Kumar, Shri Rudra Prasad Bhattacharya, Shri Debajit Ghosh (Scientific Officer/Engineer-SB)



Awarded Project/Product/Service Name: Interoperable Criminal Justice System
Award Category: Award of Excellence, Project Category
Team Members: Dr. Saurabh Gupta, SIO NIC Himachal Pradesh; Shri Ajay Singh Chahal, Sr. TD; Shri Sandeep Sood, PSA; Shri Sandeep Kumar, SSA; Shri Parveen Sharma, Scientific Officer; Shri CL Kashyap, Scientific Officer; Shri Prithvi Raj, STAB



Awarded Project/Product/Service Name: XGN – Xtended Green Node for State Pollution Control Boards
Award Category: Award of Excellence, Project Category
Team Members: Shri Harish Advani (STD & Adtl. SIO); Ms. Julee Prajapati, Programmer



Awarded Project/Product/Service Name: Jansahayak (www.jansahayak.gov.in), Haryana's Workflow Based MIS for Effective e- Delivery of Citizen Services
Award Category: Award of Recognition
Team Members: **NIC-Haryana:** Shri Ghan Shyam Bansal , DDG & SIO NIC Haryana, Shri Ramesh Gupta, DIO Yamunanagar; **State Government:** Shri Arun Kumar Gupta, IAS then Secretary AR Haryana



Awarded Project/Product/Service Name: Online Monitoring System for Nirmal Bharat Abhiyan, NIC-Ministry of Drinking Water and Sanitation (MoDWS)
Award Category: Award of Recognition
Team Members: Shri Saraswati Prasad, Joint Secretary, MoDWS; Ms. Pratima Gupta, Director (Sanitation), MoDWS; **NIC Team:** Mrs. Seemantinee Sengupta, STD; Shri Om Prakash, PSA; Shri Pramod Kumar, Programmer



Awarded Project/Product/Service Name: Integrated Management Information System (IMIS)
Award Category: Award of Recognition
Team Members: Shri Satyabrata Sahu, Joint Secretary, MoDWS; Shri Sujoy Mojumdar, Director (Water), MoDWS; **NIC Team:** Mrs. Seemantinee Sengupta, STD; Ms. Geetashree Thakur, SSA; Shri Shiv Kumar, Programmer; Shri Surya Mohan Srivastav, Programmer



Awarded Project/Product/Service Name: Dealer Point Registration of Transport Department (<https://vahan.meg.nic.in>)
Award Category: Award of Recognition
Team Members: Shri Timothy Dkhar, Sr. TD & SIO, Smti Indrani Das Swer, Scientist-B, Shri Elekson Thabab, Technical Asst. -B



Awarded Project/Product/Service Name: IntraGov Haryana Web Portal with integrated e-Office
Award Category: Award of Appreciation
Team Members: NIC-Haryana: Shri Ghan Shyam Bansal, DDG & SIO, Shri Deepak Bansal, STD; Shri Yash Pal, SSA,
State Government: Shri Arun Kumar Gupta, IAS then Secretary AR Haryana



Awarded Project/Product/Service Name: Web enabled Planning and Monitoring Information System, WePMIS, for Saakshar Bharat
Award Category: Award of Appreciation
Team Members: Dr. Gautam Bose, Mrs. Pratibha Singh, Mr. Ashwni Kumar



Awarded Project/Product/Service Name: e-Cooperatives (A web enabled system for Department of Co-operation Madhya Pradesh)
Award Category: Award of Appreciation
Team Members: Shri M.Vinyak Rao, SIO, M.P.; Shri A.N Siddiqui, TD; Shri Tajwar Musharraf, PSA; Shri Musharraf Sultan, SSA; **Department of Co-operation, M.P Team:** Shri Maneesh Shrivastava; Shri A.K Dixit, Addl.RCS; Shri Sanjay Mohan Bhatnagar, DRCS (Govt. of M.P.)



Awarded Project/Product/Service Name: Exam Results & Counseling Online Project
Award Category: Award of Appreciation
Team Members: Ms. Neeta Verma(DDG). Shri Vijay Kumar Vishwakarma, TD; Shri Anupam Johri, SSA; Ms. Sangyogita Gurung, SSA; Shri Monawwar Hussain, SA; Shri A. Ramadevi, Shri Rohit Kumar, Shri Mohammad Amir, Shri Atul Kr Choudhary, (Scientific Officer-SB)



Awarded Project/Product/Service Name: e-Payment of Taxation Department
Award Category: Award of Appreciation
Team Members: Shri Timothy Dkhar, Sr. TD & SIO, Shri Benos Lyngskor, TD, Shri Pynbianglut Hadem, Scientist -B



Awarded Project/Product/Service Name: e-Government Procurement, Government of Kerala
Award Category: Award of Appreciation
Team Members: Shri Balakiran IAS (Director, Kerala State IT Mission), Shri Shaik Mohamed G.A (NIC, Kerala), Shri. Sreepakash. B (SBT)

eTaal:

ELECTRONIC TRANSACTION AGGREGATION & ANALYSIS LAYER

To measure the impact of various e-Governance initiatives at national and state levels, NIC in collaboration with Department of Electronics and Information Technology (DeitY) has developed eTaal application. It provides an integrated view of e-Transactions taking place under various e-Governance applications implemented in Government including Mission Mode Projects (MMPs) under National e-Governance Plan (NeGP) on the basis of transaction count shared by them in an automated manner using Web Services technology.



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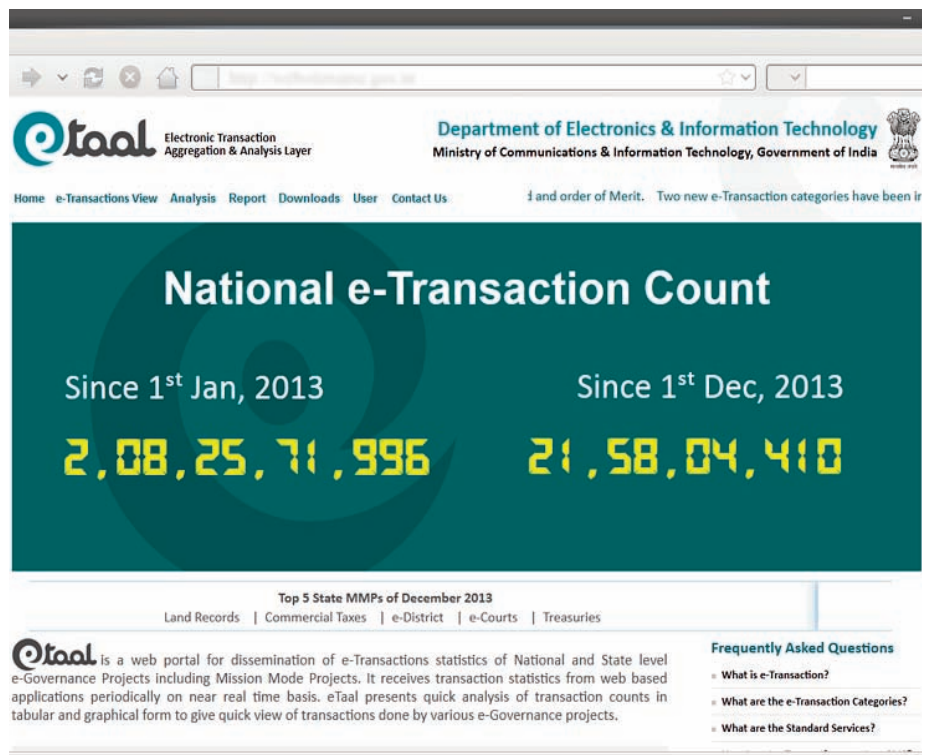
PROJECT IN BRIEF

Numerous e-Governance initiatives are being implemented by the Central and State/UT Governments. While some applications have specific internal performance measurement mechanisms defined through service levels and Key Performance Indicators (KPIs), there exists no standard Government-wide criterion or metric to evaluate the impact of all initiatives. DeitY and National Informatics Centre (NIC) have identified the number of end-to-end electronic transactions as the best indicator for measuring the real-time performance of e-Governance services in terms of service delivery to citizens. A transaction in delivering a public service which uses

Information Technology complies with the following four conditions:

- Service is requested through electronic means including mobile devices;
- Workflow/approval process is electronic;
- Database is electronic/digitized;
- Service delivery is electronic.

DeitY and NIC have developed eTaal, an electronic dashboard providing a real-time aggregated view of e-Services delivered at different levels of governments- Central, State, District and sub-District (Tehsil/Block) level. eTaal automatically pulls the e-Transaction count from applications integrated with it in real-time using Web Services technology.



The dashboard also facilitates quick analysis of transaction data in tabular and graphical forms enabling users to drill down to lowest level without compromising on privacy, security or integrity of the application software. Users can view consolidated e-Transaction statistics of e-Governance projects across the country and visualize their real-time utilization status.

The project covers all Central Ministries and State/UT governments. As on December 31, 2013, 2035 services from 21 Ministries and all the 35 states/UTs have been integrated with eTaal.

PROJECT OBJECTIVES

eTaal project is based on the principle: “You can MANAGE effectively, what you can MEASURE”. The objectives of the project are:

1. Providing quick view of transactions performed electronically (self-service or assisted access mode)
2. Measuring the number of transactions performed by various e-Governance applications on a real time basis.
3. Act as an indicator of scale of services being delivered to the citizens
4. Providing quick analysis of transactions in tabular and graphical form– analysis by the service, by the time-period, by the State/Department, or by the geography, instantaneously
5. Enable the Ministries/Departments implementing e-Gov projects in getting a real-time view of the impact of their projects and take remedial steps, interventions where needed

LIST OF STANDARD SERVICES

A large number of services are being offered by various Ministries/Departments/Organizations at Central and State Governments. However, the name of a particular service may vary across the states. For example, the Record of Right (RoR) is known as Pahani, Khatauni, Patta etc. in different states. For ease of classification, grouping and presentation in a uniform manner, the services have been defined by NIC and DeitY. These are depicted in the table-1.

Sl. No.	Standard Services	Sl. No.	Standard Services
1	Certificates	16	Grievance
2	Licenses and Permits	17	RTI
3	Land Records	18	Information Service
4	Integrated Finance Management Services	19	Property Registration
5	Commercial Tax	20	Health
6	Utility Services and Bill Payment	21	Rural Development
7	Social Welfare and Pension	22	Employment
8	Transport	23	e-Procurement
9	Education	24	Industry and Commerce
10	Public Distribution System	25	Urban Development including Municipality Services
11	Agriculture & Allied	26	Passport and Visa Services
12	Court and Judiciary	27	Financial Inclusion
13	Election	28	Skill Development
14	Police	29	State Specific Services
15	Personnel and Admin	30	Other Services

TABLE 1. List of Standard Services

CHANGE MANAGEMENT

State-wise workshops are being organised across India to sensitize State level Departments and to bring all e-Governance applications on board. During the early stages, a large number of services were compiled as potential candidates for integration with eTaal. However, the services having partial electronic workflow and partial manual processes were not included. This in turn, had a positive impact and encouraged departments to bridge the gaps through effective process re-engineering and evolve existing e-Governance services into end-to-end electronic workflows, thereby leading to efficiency gains and optimal realisation of the potential of Information Technology. eTaal is acting as a motivating factor for different departments to provide more services online and linking them to eTaal which is a step towards outcome-oriented approach.

HIGHLIGHTS OF THE PROJECT

The most important facet of the initiative is that it provides the means to evaluate performance in the highly

technical IT/e-Governance field through a completely non-technical metric and places real-time information proactively in the public domain allowing the users to drill down to the lowest denominator. The only restrictions are with respect to individual privacy and cyber-security. Hence, eTaal not only provides information to administrators and citizens, but also provides them the means to objectively evaluate their performance and identify areas for improvement.

Most of the projects designed on the principle of consolidation work on a push mechanism. However, eTaal is distinctive because it pulls the data from clients in real-time. The eTaal Data Pulling Engine collects the data automatically in real time through a synchronization mechanism between the Data Server Connector hosted centrally at NIC's National Data Centre and the Data Client Connectors hosted at the respective servers hosting the connected applications. After a synchronization frequency is set, the Data Pulling Engine automatically draws out the data from respective client server. Thus, eTaal is a

unique offering in the sense that there is no overhead on the users for synchronizing the data in terms of manpower or monetary resource requirements.

TECHNICAL ARCHITECTURE

eTaal is broadly composed of the following three components:

- 1. Dashboard Server Connector (DSC):** Dashboard Server Connector (DSC) runs as a service on Central Server of eTaal with inherent pulling engine mechanism to pull the e-Transaction count from various servers located at state and centre.
- 2. Dashboard Client Connector (DCC):** Dashboard Client Connector (DCC) runs as a service on the servers which are providing the e-Transaction count.
- 3. eTaal Portal:** eTaal Portal is a web portal to give view of dashboard.

IMPACT OF eTAAL ON SOCIETY

eTaal has been in nation-wide operation since 2012 and 2035 e-Services from 21 Central Ministries and all 35 states and UTs have been linked to the dashboard with over 208 crore e-Transactions recorded as on December 31, 2013. This reflects the Government-wide acceptability of the initiative in terms of its utility and importance.



e-Taal team with the Award



WORKSHOP ORGANIZED ON INTEGRATION OF SERVICES WITH eTAAL, E GOV APP STORE AND MEGHRAJ (CLOUD INFRASTRUCTURE) AT RANCHI, JHARKHAND

A day long workshop was organized at Ranchi on 20th Nov'13 for integration of services with eTaal, eGov app store and Meghraj. The workshop was attended by Shri J Satyanarayana, Secretary DeitY, Shri R S Sharma, Chief Secretary, Jharkhand, Shri Rajiv Gauba, Addl. Secretary, Shri N N Sinha, Principal Secretary, IT Jharkhand, Dr. Shefali Dash, DG NIC and many senior officials from Govt. of Jharkhand, NIC and media.

Shri I P S Sethi, STD, NIC gave a detail presentation on eTaal which gives a national count of e-transactions done in the country. Ms. Renu Budhiraja, Sr. Director, DeitY dealt in depth about the facilities available over Meghraj – the cloud services of the Govt. of India. During the workshop the 'Mobile Apps' developed under e-Nagrik sewa for application status updation and 'Employee Portal' - Govt. of Jharkhand was also inaugurated by the Secretary, DeitY.

RECOGNITION & AWARDS

eTaal has won recognition at National level with Platinum Award and Order of

Merit at Skoch Digital Inclusion Awards 2013. It has been appreciated by Minister (Communications & IT), GoI, Secretaries to Govt of India, and the State Governments. Exclusive state-specific views have been developed on demand by the states. It has been observed that introduction of eTaal has led to a significant degree of healthy competition among states and departments in providing more services online. Thus, the application is turning out to be instrumental in promoting outcome-oriented implementation of e-Governance projects in the country.

FOR FURTHER INFORMATION:

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e-Hospital@NIC:

Simplifying Health Care Delivery

Tucked away at the southernmost tip of the Northeast, the state of Tripura has made significant contribution to public health care by pioneering e-Hospital@NIC – an integrated Hospital Management Information System (HMIS) which now runs in almost 30 major public hospitals across the country, including premier institutions such as AIIMS and RML in Delhi and NIMHANS in Bangalore. It is an HL7 Development Framework (HDF) compliant and ISO/IEC 9126 certified end-to-end solution for managing processes and services in hospitals including providing tele-medicine services.



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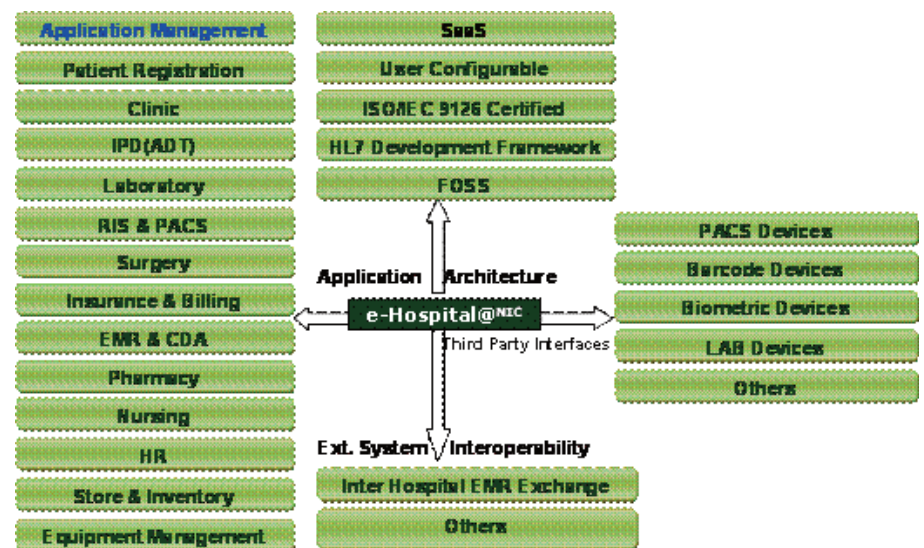
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RUBAIYAT ALI

The genesis of e-Hospital@NIC lies in a project conceived, developed and implemented in the Agartala Government Medical College and GBP Teaching Hospital in Tripura by the NIC Tripura State Centre in 2009. Thereafter, a core group in NIC was assigned the task of providing a one-stop ICT solution targeting government hospitals, embracing healthcare and e-Governance standards, at an affordable cost free from proprietary, vendor-locked know-how and license fees etc. e-Hospital@NIC took shape in response to the exponentially increasing work load on government hospitals due to rapid increase in population. e-Hospital@NIC adopts an overall two-pronged approach: it aims to facilitate hospital management by computerizing and

streamlining all aspects of the hospital workflow, and thereby facilitates easy access to health care to people at large. e-Hospital@NIC assumes added significance in view of the high priority that every government accords to the sector. It is a G2C, G2G, G2E and G2S application all rolled into one.

An Open Source Software (OSS) stack-based HMIS, e-Hospital@NIC is a generic application, which addresses all the major functional areas of a hospital. It is more of a patient-centric system rather than a series of add-ons to a financial system. Being a workflow-based application, it deals with the complete treatment cycle of OPD/IPD patients, and integrates various functions in the areas of clinical treatment, administration and billing/ insurance making it an integrated HMIS suite consisting of Hospital Information System (HIS), Laboratory Information System (LIS), Radiology Information System (RIS),



Workflow diagram of e-Hospital@NIC



Picture Archiving and Communication System (PACS), Application Programming Interfaces (APIs), and Blood Bank and Telemedicine Information Systems.

FUNCTIONAL FEATURES OF e-HOSPITAL@NIC

- Registration
- Billing and Patient Registration
- Clinics
- Emergency Accounts
- Path Lab (LIS)
- Radiology /Imaging (RIS)
- PACS Interface
- Blood Bank Management
- IPD(ADT)
- OT Management
- Pharmacy Management
- Electronic Medical Records (EMR)
- Telemedicine Suite
- Birth & Death Registration
- Care Provision
- Stores & Inventory
- Dietary Services
- Laundry Services
- Personnel Management
- Student Management System (For Teaching Hospital)

TANGIBLE BENEFITS OF e-HOSPITAL@NIC

Tangible benefits of e-Hospital@NIC include drastic reduction in patient “waiting time”; overall streamlining of all hospital processes, easy access for doctors to relevant information on

patients, diseases, investigations, diagnoses, prescribed medicines, past history, etc.; better control over the stock maintenance resulting in possible inventory reduction and proper billing and up-to-date accounts

maintenance.

Registration of patients is an area in which e-Hospital@NIC lends complete control. It keeps track of all registered patients through Unique Permanent Health Identification Numbers. Returning patients are therefore not treated as new patients.

e-Hospital@NIC provides various MIS reports related to billing, MRD, consultants, inventory, etc., which helps management in better monitoring and planning. It also

Service/Facilities	In Manual System	Using e-Hospital@NIC
Patient Registration	1 Minute 15 seconds per new patient	35 seconds per new patient
Follow-Up (Re-Registration with UHID)	15 - 30 minutes per patient	15 seconds per patient
Billing & Cash Collection	2 – 4 hours per patient	30 seconds
Laboratory Investigation report for OPD patient	1 day to 2days	Same day in most cases
Radiology Investigation Report for OPD Patient	1 day to 2 days	Same day in most cases
Emergency Services such as Ambulance, Blood Bank, OT etc	Unmanaged and available only at specific service delivery counters.	Managed and available at all care points
Dietary Service	Unmanaged diet distribution among patient as per diet scale	Managed diet distribution among patient as per diet scale & linked with inventory system of raw materials
Inventory Service	Unmanaged with wastage of valuable stocks	Reduced waste – no stockpiling or expired products
Blood Bank	Manual- inefficient	Increase in blood utilization, specially on the high cost products - wastage avoided <ul style="list-style-type: none"> • Donor's information shared and disseminated helping Donor deferral process and avoiding repeat of expensive tests. • Centralize Blood inventory information -saves time, cost and makes blood banking productive.
Care Planning by Physicians	Care planning is event based and time consuming	EMR of a patient helps physician in better care planning and monitoring

provides statistical reports which give information on common diseases prevalent in the catchment areas of the hospital.

A comparative study of services/facilities delivery status before and after implementation of e-Hospital@NIC makes its impact obvious:

HOSPITALS RUNNING ON e-HOSPITAL@NIC

At present 25 hospitals including the most premier institutions in India such as AIIMS, New Delhi and NIMHANS, Bangalore are using e-Hospital@NIC.

TECHNOLOGY & ROLLOUT

e-Hospital@NIC is built over HL7 Development Framework (HDF) – a standard framework for hospital processes and services. It is ISO/IEC 9126 certified and fulfills minimum dataset requirements of EMR/EHR Standards prescribed by the Ministry

Free Open Source Software tools
Operating System: LINUX
Framework : JSP, Servlet, Struts, JSF, Ajax & Hibernate
Application Server : JBOSS
Backend RDBMS : PostgreSQL 8.4

of Health and Family Welfare beside fulfilling requirements of HL7 Dataset parameters. ISO/IEC 25051 –COTS certification is in progress.

e-Hospital@NIC is fully web enabled and is made available on Open Source Software and Standards:

A minimum of two 4GB RAM/RAID-based servers are required along with requisite number 2 GB RAM client PC systems depending on the size of the hospital.

e-Hospital@NIC is free from proprietary software/technology and therefore comes with a low overall cost of ownership of the HMIS and is free from vendor-lock issues. It has been


designed for cloud infrastructure; its multi-tenancy feature is the key which makes it possible for multiple hospitals to use the same instance of e-Hospital@NIC

The high configurability of e-Hospital@NIC makes rollout and deployment easy and fast. Most of the User Interfaces (UIs) and Report Formats are configurable. Template based diagnostic and laboratory reports are configurable by doctors/para-medical staffs to suit their own localized requirements and choices without compromising standards and inter-operability. Easily customizable and configurable User Interfaces (UIs) and template based-reports also makes it easy for users to adapt very fast to the system.

The project is scalable and a small data setup in a hospital can be upgraded to act as a mini-data center and can push data in regular intervals to State Data Centres (SDCs) to act as data repository for Electronic Medical Records (EMRs), research activities as well as Disaster Recovery (DR) services. The software is scalable enough to be used by different hospitals as Software As A Service (SaaS) over private cloud infrastructure being created under NeGP (SDCs and NIC DCs) using the cloud technology.

e-Hospital@NIC simplifies health care delivery in the Government sector like never before. By doing so it looks at a future of organized and readily accessible and available health care in the country – especially for the multitudes who cannot afford costly health care facilities. The application has already made its mark. The initiative has been awarded the CSI-Nihilent Award of Excellence 2013.

FOR FURTHER INFORMATION:
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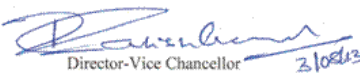
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STAKEHOLDER CERTIFICATE
 TO WHOM IT MAY CONCERN



National Institute of Mental Health and Neuro Sciences, Bangalore always strives to excel in patient care and academic pursuit in the area of Mental Health and Neurosciences. As an Information Communication Technology initiative and with an objective to improve quality & efficiency in healthcare delivery, we are using eHospital@NIC, a hospital management system from National Informatics Centre, since we could achieve significant operational efficiency by implementing Patient Management, Administrative Operations, Billing & Accounts, Clinical Processes, Lab, Auto Analyser, Interface and PACS gateway of e-Hospital@NIC.



Director-Vice Chancellor 3/10/13

Dated: 3rd August 2013

MANAV SAMPADA:

A Green Governance tool for Human Resource and Financial Management in Himachal Pradesh

Manav Sampada is a work flow based product to eliminate paper usage in the State Government at various levels. It assists in faster yet paperless disposal of service matters, thereby improving the Carbon Credit Rating of the state. The main beneficiaries of the project are the Department of Personnel, Administrative Secretaries, Heads of the Departments, AG office and all government officials for effective planning, deployment, financial cost savings, transfer and recruitment of manpower.



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OBJECTIVE & SCOPE

Manav Sampada (<http://admis.hp.nic.in/genpmis>) has been developed with the objective of providing good and green governance. The application is a complete HR solution for the management of massive manpower resource of the Government of Himachal Pradesh and provides integration with various other applications such as e-Salary, e-Gatg, e-Samadhan, e-Sameesha, e-Attendance, e-Sanchalan, e-PDS along with user authentication and master data. This application provides features like Online ACR, APR, Salary and Compensation Management to the departments. It creates HR related databases for analyzing the skill set of each employee by collecting information on salary, skill sets, compensations, personal details, demographic information etc. The online e-Service book supports government's effort to bring transparency through a user-friendly interface for the departments and the Government employees.



S.K.B.S. NEGI, IAS
Principal Secretary (Personnel)

The Manav Sampada initiative is one of its kind and has been a massive exercise in human resource planning, on the part of the Government of Himachal Pradesh, in fully implementing it in all Departments and Public Sector undertakings covering 100% state employees. The NIC State Centre has done a great job in developing and implementing the Manav Sampada software.

STRATEGY

After thorough analysis of all manual processes and discussions with higher and middle level State Government officials, the information present in



Process Re-engineering through Manav Sampada

service book was standardized. The system records basic demographic and address data, service history, training and development, capabilities and skills management, loan and ACR records and other related activities. It encompasses the entire process of public administration, the process underlying the formulation of policies, the HRD efforts required for re-skilling the government machinery, prioritization and efficient management of public resources etc.

SERVICES

G2E Services

- e-Service Book viewing and verification
- Grievance Monitoring on e-Samadhan
- Employee personal and address information
- Transfer/Promotion orders
- Annual Property Return and ACRs
- Employee training and qualification details
- SMS based information dissemination to employees

G2G Services

- Manpower planning–recruitment, deployment, retirement and posting details
- Tracking of employee transfer requests
- Sharing of master data (office, designation, retirees, vacancy, strength etc.)
- Sanction and In Position strength, vacancy position
- Online Transfer/Promotion/ Appointment Orders, Joining and Relieving letters
- Online Submission APRs, ACRs
- Yearly Retirement Status

- GIS mapping for health institution up to CHC level
- Manpower planning using dashboard and transaction monitoring using graphs

PROCESS RE-ENGINEERING

Non-ICT Process Re-engineering

- Standardization of forms and procedures
- Improvement in Carbon-Credit rating by reducing the paper usage
- All departmental establishments were linked together with the centralized solution concept
- Discontinuation of Manual ACR/APR, orders and reports

- Discontinuation of the practice of gathering information regarding staff strength, service books and vacancy from field offices

ICT Process Re-engineering

- Integrates 17 different e-Governance applications for menus, roles, access control and user-authentication
- Online delivery of services to all stakeholders
- Integrated dashboard of employees to view attendance, salary, service record, APR and ACR
- Employee ID based user-authentication for multiple e-Governance applications - Single Sign In
- Manpower planning, employment, placement, training, appraisal and compensation of employees.
- SMS based information dissemination (service transactions, APR, ACR) to employees

COST EFFECTIVENESS

The initiative has resulted in a direct cost savings of around ₹ 500 crores a year in terms of paper, postage, time & fuel. Besides this, there have been other indirect cost savings too. Information is now readily available at the Secretariat and



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The Department of Health & Family is probably the first Government organisation in the country to switch over to electronic ACRs for Medical Officers. We are also the pioneers in using e-Service Books to issue online transfer orders.

Directorates level for analyzing and planning the human resources. Surplus manpower has been redeployed in productive and revenue generating jobs.

STATUS OF IMPLEMENTATION

Manav Sampada initiative has been implemented in total 146 departments/boards/corporations covering 27,918 office locations.

AWARDS & RECOGNITION

Manav Sampada initiative has been awarded the Award of Excellence under G2G category in the CSI Convention held at Kolkata in December 2012. The Software has been operational since 2008 and has also been selected as standard product for rapid replication. The implementation of the project will soon be initiated in the state of Jharkhand.

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POWERING GIGW COMPLIANCE

In the last decade or so, India has metaphorically witnessed a lot of water surge & not just meekly flow under the bridge. Technology has played an increasingly prominent role as enabler and leveller.

Enabler: Technology continues to bring a flood of opportunities to lead lives very differently from how we've lived in the past. Even those who currently exist in the margins of society are being empowered to lift the quality of life. **Leveler:** the growing reach of technology inundates so overwhelmingly that it can submerge into insignificance all factors that were once deemed to be insurmountable constraints, for example differences in economic ability, physical ability, access to devices, and bandwidth.



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Technology keeps bringing to the surface unprecedented opportunities, and simultaneously wiping out obstacles that may hold India back from effective e-Governance, Government departments are empowered to ensure their websites become and remain User-Centric, User-friendly, and Universally Accessible.

To make the most of technology that can uplift all & drown disparities, Government of India has devised Guidelines for Indian Government Websites (GIGW). Compliance with GIGW helps government departments to harness its machinery to benefit not only the governed but also those who govern.

GIGW guidelines are technology neutral, so can be adhered to by websites built using any technology. These guidelines deal with not only the entire lifecycle of websites, but also backend processes such as the policies

& workflows that should be in place for smooth operations.

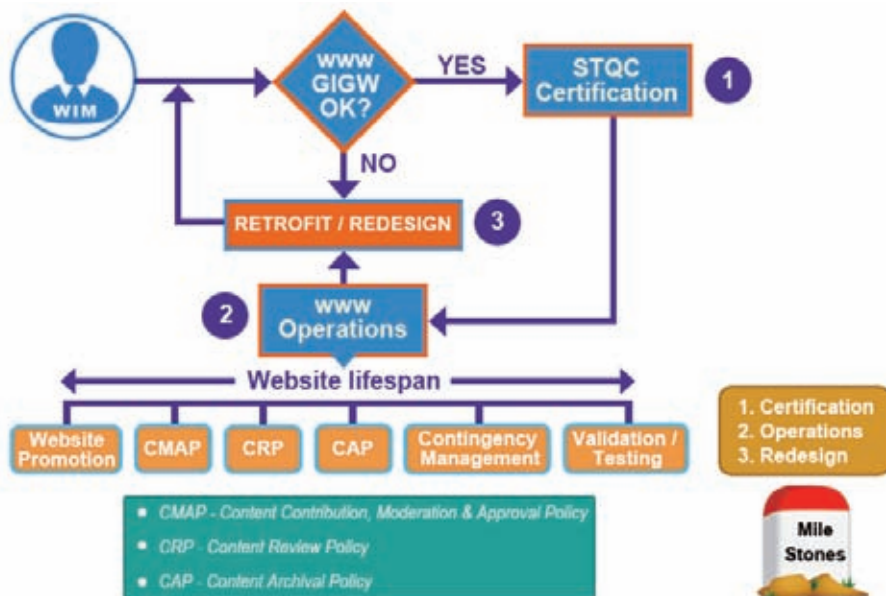
Here's a recipe of how GIGW compliance may be achieved:

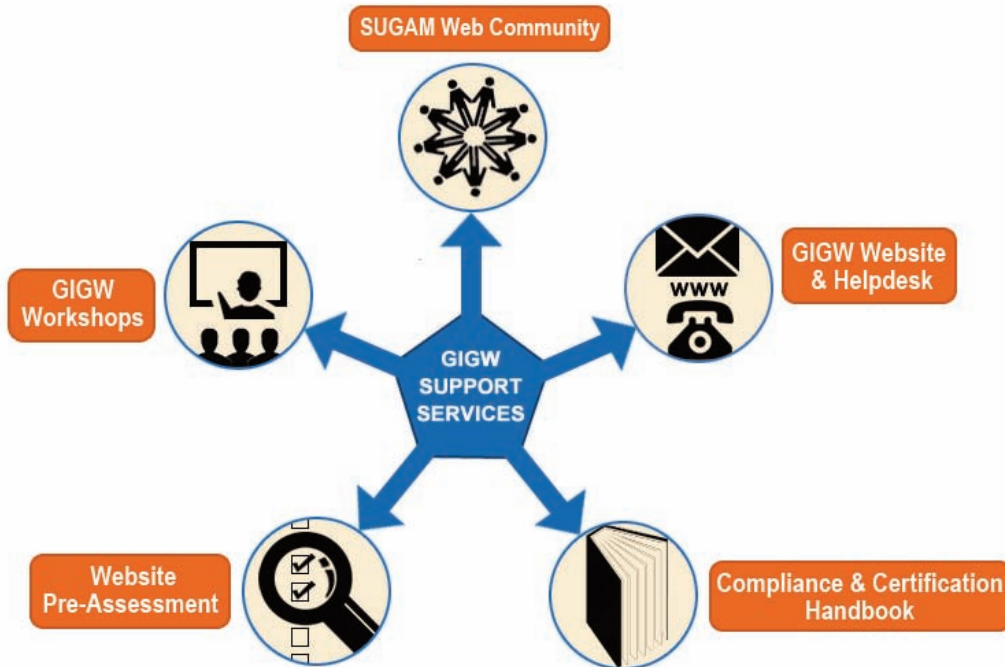
A. Each Government department designates a Web Information Manager (WIM) to meet a desired objective - the (re)design & continual operations of its websites that must offer citizen-centric services on a non-discriminatory basis

B. Lead by the WIM, department identifies constraints that may be preventing or delaying success in achieving its priority objective stated above

C. Department mobilizes resources to eliminate or overcome any constraints

NIC being Indian Government's premier Information Technology agency offers following services under the ambit of SUGAM Web initiative whose objective is to facilitate Sustainable User-centric





Governance through Accessible & Managed Websites.

I. WORKSHOPS

To sensitize audience from government departments, 3 types of sessions are offered:-

a. Leadership: Members of top management attend. Duration is half day. Objective is to understand overview and be sensitized to GIGW

b. Intermediate: Middle management or team leads are the target attendees. Duration can be up to one day. Focus in addition to understanding the basics of GIGW, is to understand elements of effective website design and development

c. Execution: Implementation teams, including technical managers & developers attend. Duration is two days. Aim is to create awareness for implementing teams about design, development, promotion, management, and specific compliance inputs along with hands-on training on use of testing tools etc

II. HELPDESK

To help departments with queries about website design, development, certification for compliance with GIGW etc. Available Monday to Friday (working days)

10 am to 5 pm IST through

phone - 01124305374,

email – webguidelines@nic.in, and

website – www.guidelines.gov.in.

III. PRE-ASSESSMENT CHECKS

To help identify issues that may be affecting a department website. 38 key checkpoints are manually checked for the Home page and select pages, and a report is shared with the department. These checkpoints cover all aspects of GIGW compliance and any issues found in the select pages may actually be representative of similar issues with the rest of the website. This service helps departments to fix any issues before submitting the website to STQC for compliance certification

IV. COMPLIANCE & CERTIFICATION HANDBOOK

To serve as compact overview of the need to adopt standards, along with ready policy templates and focused tips for enabling successful completion of the certification process of GIGW compliance. The handbook augments the GIGW manual available at www.guidelines.gov.in and serves as a ready reference of all relevant information in one place, for all government stakeholders

V. COMMUNITY

To serve as a platform for professionals who are engaged in the mission of empowering citizens through effective eGovernance. SUGAM Web helps each department gear itself up to overcome constraints and ride the technology waves to deliver effective eGovernance, thus serving as an equal opportunity leveler.

Monthly editions of SUGAM Web news letter share with the community of professionals the opportunities and challenges in the Government webspace and how to make the most of them

To accomplish the task of effective website design and development in compliance with GIGW, departments can engage the services of 9 vendors empanelled in three tiers, based on the scope of work handled. A list of the NICS I empanelled vendors can be found on www.guidelines.gov.in

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COMBATING MALNUTRITION & UNDER-5 MORTALITY IN NAGAON DISTRICT OF ASSAM THROUGH ICT

Launched on October 2, 1975, the Integrated Child Development Service (ICDS) Scheme today represents one of the world's largest and most unique programmes for early childhood development. In the case of Nagaon District, the mortality rate of children below 5 years has been higher than the average for Assam. To deal with the situation, Dr. P. Ashok Babu, IAS, Deputy Commissioner, Nagaon, envisioned a plan to introduce systematic monitoring. His idea has been given a concrete shape by the NIC Nagaon team, and the project has been running successfully for almost one-and-a-half years now. The State Government of Assam and UNICEF have supported this program. After successful implementation, the Social Welfare Department of Assam has replicated it in four more districts in the current year.



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FUNCTIONS & OBJECTIVES

The main objective of the system is to decrease and combat under-5 mortality. Striving towards this goal, the system aims to:

- Combat the malnutrition problem effectively and to reduce resultant Under-5 mortality in the district
- To make Anganwadi Centers oriented towards a working system that addresses the malnutrition problem rather than simply providing some nutrition in the centre
- Establish synchronized effort between the Social Welfare Department and the Health Department wherein a malnourished child is acknowledged immediately by ground level health workers, ensuring medical advice either through a Primary Health Centre (PHC) or Nutrition Counseling and Management Centre (NCMC) or Nutrition Rehabilitation Centre (NRC)
- Initiate and expand model Anganwadi Centers in each CDPO Block which serve to stand as models for other Anganwadi Centers both in work environment and work culture, and
- Involve mothers and the society as a whole in the efforts to combat malnutrition as mothers have to take care of the nutrition of the child beyond Anganwadi Centers.

THE SOFTWARE WORKFLOW

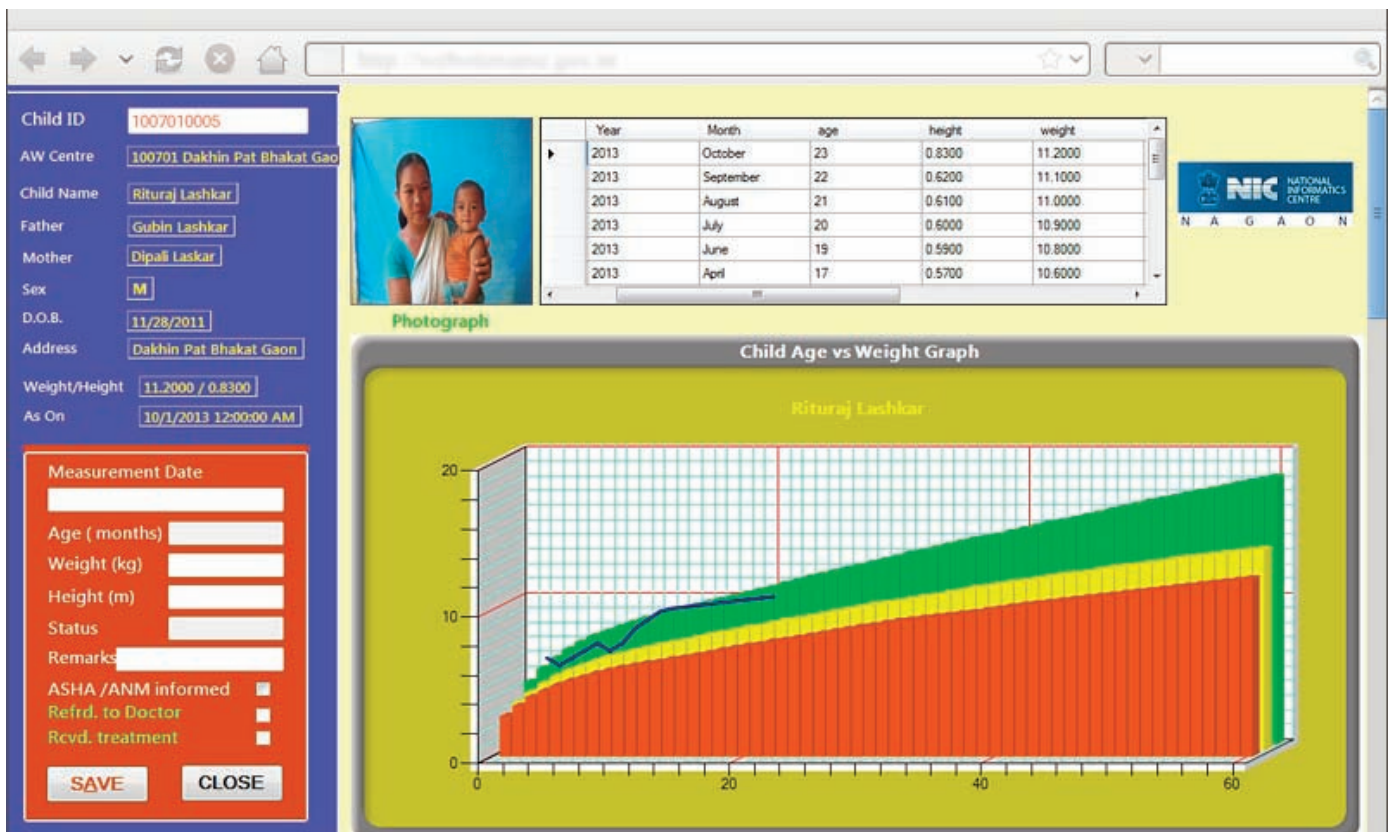
• Registration

Initially, the details of all the CDPO



Dr. P. ASHOK BABU, IAS
Deputy Commissioner, Nagaon

Monitoring a scheme and its benefits is best possible when each and every beneficiary is monitored. It is a Herculean task in a district like Nagaon with a population of about 3 millions. Implementation errors in the ICDS program implementation, if not closely monitored, may lead to child malnutrition, morbidity and mortality. The existing sampling systems just provide the severity of the problem of malnutrition but does not pin point the suffering children. NIC Nagaon, Assam made this possible by devising a system which can provide auto Generated WHO Standard growth charts for each child, pie diagrams of performance of each field level functionary and auto alerts to mothers concerned. Thus, it is possible to plot malnutrition geographically in a live' manner in the District and integrate it with the Health Department work system to address the problem. The active role played by the Mothers Societies and Anganwadi Workers contributed significantly to the success of the project.



Monthly Update Module showing Growth Chart of each child. Red zone is severely malnourished, yellow is moderate and green is normal.

Blocks, Supervisors, Anganwadi Centers and individual child is entered into the system. Each child is assigned a 10-digit code number. The first 6 digits of this code correspond to the code of the Anganwadi Center. The first 4 digits of these 6 digits are the Supervisor code. The remaining 2 digits represent the Blocks. This way, each child can be tracked from the Block level to the Center, just by deciphering the child's code. After the initial registration, when a new child is born or moves into the district, he or she is registered in the system every month.

• Updating

Once registered, the growth of each child is monitored monthly in terms of height and weight and is classified into 3 categories:

- a) Normal
- b) Moderately Malnourished
- c) Severely Malnourished

This classification is done based on the lines of Growth Charts provided by the World Health Organization. The growth of the child is plotted against age and is shown as a graph (Figure 1).

• Intimation and Action taken

Children who are severely malnourished are marked, and their parents are intimated by a letter about the criticality of their child's health. These children are then taken to the Counseling Centers and Rehabilitation Centers for proper medical treatment.

Thus, mapping of malnutrition on a live manner, pinpointing each and every child, is made possible. The data is dynamic and changes every month.

MODULES

The system is broadly divided into three functional modules:

• Data Entry

This is the basic foundation of the

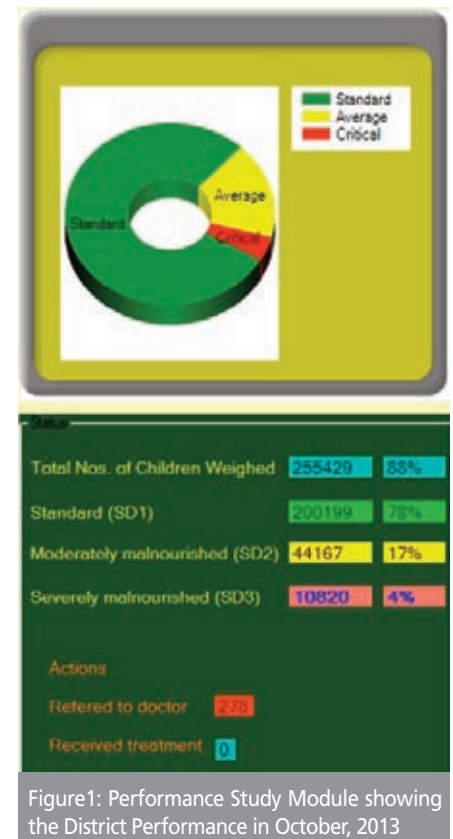


Figure1: Performance Study Module showing the District Performance in October, 2013

whole project. It has two main sub parts:

- a) Registration of new children.
- b) Monthly updating of the data of existing children.

There is also a module for correction of registered data such as name, parents' name and date of birth. It is a massive task considering the huge inflow of data (roughly 2.8 lakhs every month). To accomplish the task, eight data entry operators have been engaged on contractual basis initially funded by UNICEF.

PERFORMANCE MONITORING

This module shows the performance at each level viz. District, Block, Supervisor and Center in terms of actual numbers and percentage of children registered – normal, moderate and severely malnourished. This helps in evaluating the performance of every CDPO, Supervisor and Worker. Also, from this module, it is possible to pin-point the areas with higher concentration of malnourished children which eventually leads to proper action.

• Report

The report module generates various reports such as list of severely malnourished children in a Block in a month or children referred to doctor in any Block for any given month.

Letter to Parents

This module generates the letters to inform the parents of the severely malnourished children.

RESULTS

From its inception in April, 2012, this project has yielded great results, both tangible and intangible.

• THE TANGIBLE

Among the effects of the project that can be readily quantified are:

- a) Accurate plotting and monitoring



of weight of 90% of the children of the district using WHO Growth chart of WHO-Anthro 2011 package.

- b) Reduction of about 43,000 beneficiaries through the inbuilt duplicates checking system of the software.

- c) The count of severely malnourished children has decreased from 10% to 4% in the whole District.

- d) More than 50% of the Anganwadi Centers in each block have been converted to Model Centers.

• THE INTANGIBLE

Besides the above measurable results, there are other effects of the project which are nonetheless very important. Some of them are:

- a) Betterment of service delivery quality of the ICDS scheme as a result of regular monitoring and review.

- b) Creation of a huge and accurate database which will help in the study of different factors affecting nutrition of children below five years of age. We are proud to announce that, according to representatives from

UNICEF, “The data generated so far through the individualized child-centered tracking system shows significant improvement in growth monitoring and promotion activities at the Anganwadi level, leading to better identification of at risk children and action to address malnutrition at family and community level”.

THE NEXT STEP

After its phenomenal success in Nagaon district, the Government has decided to implement this system in other districts in Assam. Requests are also coming in from other states for the software.

However, these are only the first steps. With the available datasets and the data collection system firmly in place, it is now possible to include parameters besides just height and weight to monitor the nutrition level of each child. This will open up a new direction in combating malnutrition.

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ICT ENABLED IMPLEMENTATION OF FOREST RIGHTS ACT 2006 IN MAHARASHTRA

Today, Information and Communication Technology has infiltrated the remotest corners of the Earth. The Government of Maharashtra came up with an ICT based innovation to preserve the forests and the rights of those who live in these remote forest areas. Implementation of GIS and other ICT based tools played an important role in effectively tackling the most persistent problem of illegal encroachments on the forest land.



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INTRODUCTION

The Government of India enacted the Forest Rights Act in 2006 to preserve the rights of forest-dwelling communities of land and other resources, denied to them over decades as a result of the continuance of colonial forest laws in India. However, identifying these lands and specifying the communities living in these areas was a cumbersome task for any central or state government.

It's only when the Maharashtra Government displayed the resoluteness to preserve and protect the forest land and the rights of the claimants, affected population took an easy breath. In order to simplify the process of identifying and classifying the forest land and dedicating them to the particular community, ICT innovation came to the rescue of the Maharashtra Government. Web technologies bundled with Geographical Information Systems (GIS) & Global Positioning System

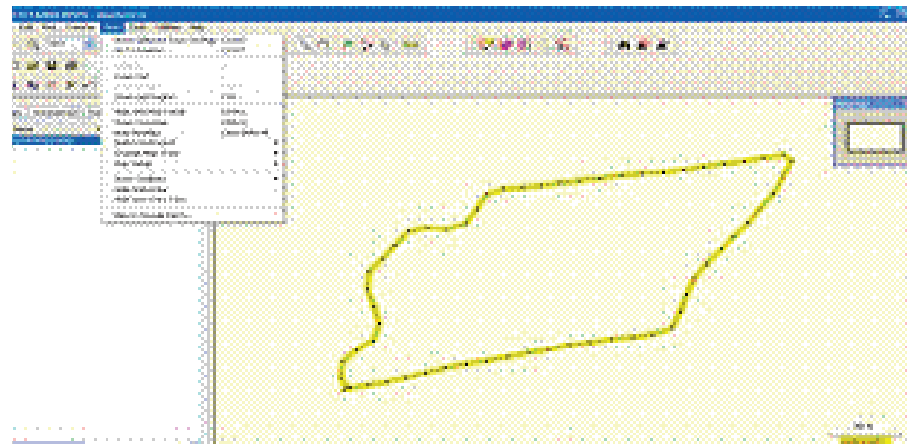
(GPS) were used extensively to enable government to reach out to the real beneficiaries in order to provide them the much needed entitlement over their land.

INNOVATION

To start with, there were a little over 3.3 lakh plots to be measured in 14,000 far flung villages and over 300 government offices were involved in the project. GPS devices were used for measurement of the plot and the data, in xml format, was uploaded from 110 Sub Divisional Offices (SDO) on to the centralized server located at Pune. The team of experts downloaded these xml file and analysis was done by matching them with the satellite map of the period before implementation of the Act. This resulted in elimination of fraudulent claims and in taking appropriate decision thereby saving the forest land from illegal encroachments.

PROCESS

The process starts as soon as the Gram Sabha receives an application



Details of a plot in Garmin software

from the claimant, who can either be an individual villager or a community. The Gram Sabha then gets the plot identified and measured through GPS technology and the details along with claimant information are stored in a card. The cards are then submitted to the SDO office, which in turn converts the plot details into XML data and uploads the same on the centralized server at Pune. The conversion into XML is done with the help of propriety software (Garmin) which also assigns 13 digit unique numbers to each claim stored in GPS device card containing these details. A team of experts at the central site downloads these files and map the fresh data to the previously produced data using satellite map to verify the claim.

This process of scrutinizing the claims is essential in order to preserve the forest and to ensure the occupancy of plots for deserving and the right individual or community. The use of the GIS technology has resulted in taking appropriate decisions thereby saving the forest land from illegal encroachments. Prior to 2006, such



The team receiving e-Governance award from Hon'ble Governor and Chief Minister of Maharashtra. Team members (Dr. A.K. Jha, Commissioner TRTI, Ms P.V. Kamat, Sr. TD, Shri Avachat(TRTI), Shri Praveen Rao, PSA and Shri Sanjay Kulkarni, PSA)

documented evidences were not available to the government. The satellite images were procured from NRSA (prior to January 2006), which are compared with the fresh satellite images devised through TVGIS software by overlapping the images to analyze the claimants and occupants to avoid any mis-governance in allotting the plots to the right claimants.

As soon as the SDO uploads data on the server located in Pune, the software generates the acknowledgement slip along with a digitized map of the plots.

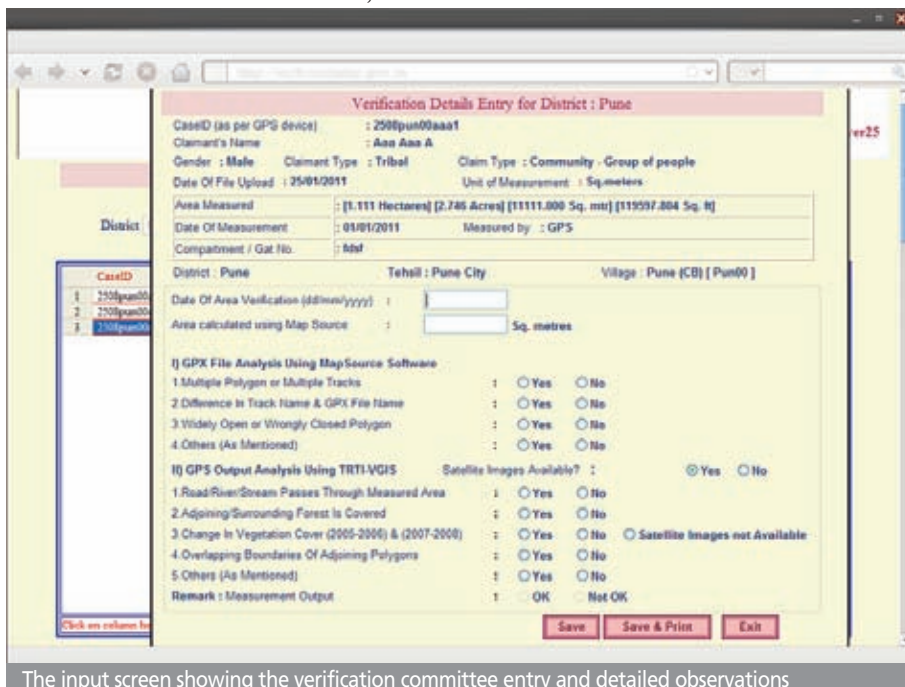
Once the scrutiny and analysis gets over, the SDO sends the same documents to the district headquarters for the clearance. The verification committee at the district collectorate downloads these files, scrutinizes them further and prepares the report to be submitted to the district headquarters for decision making process. The district level committee takes the final decision on the claim based on the facts and observations from verification committee.

SYSTEM ARCHITECTURE

The data is transferred into the system at the SDO office from GPS device. The SDO office uploads the .gpx files with the claimant details. The verification committee verifies the information after overlaying the .gpx file over the map. The District Level Committee takes decisions based on these observations.

RECOGNITION & AWARDS

The project received prestigious National e-Governance Award 2010-11 (Silver Icon) under the Exemplary Reuse of ICT based solutions category.



The input screen showing the verification committee entry and detailed observations

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LEVERAGING INTEGRATED NPR & SECC-2011 FOR ESTABLISHING NFSA 2013 DATABASE & SRDB IN HARYANA

On July 9, 2013, Government of Haryana announced implementation of National Food Security Act 2013 (NFSA 2013) from 20 August 2013 and decided to utilize provisional data of Socio Economic and Caste Survey (SECC-2011) and National Population Register (NPR-2011) on as-is-where-is basis for identification of nearly 126.49 lac eligible beneficiaries from the state population of 2.53 crore.



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APPROACH

Decision to apply inclusion/exclusion criteria on SECC-NPR merged data has been taken separately for urban and rural areas. NIC Haryana was given the challenging time bound task to process the provisional data sets & to generate village/ward wise provisional lists of the priority households.

METHODOLOGY

Bharat Electronics Ltd. (BEL) conducted the SECC-2011 survey in Haryana. After completion of SECC-2011 the provisional data was loaded on National Data Centre at Delhi, along with the image files of NPR-2011. There was a requirement of merging the SECC digitized data with NPR images after converting them into digital format.

Correctness of basic NPR data was to be verified by DCO Haryana, office of RGI.

The digitized NPR-2011 data was merged with SECC-2011, by BEL, using a 29 character AHL-TIN (Abridged Household List - Transaction Identification Number) as common key. AHL-TIN composed of concatenated values of code for Schedule, State, District, Tehsil, Town, Ward, Block/Sub Block, HH # and Member #.

The merged data was uploaded on NDC server in Delhi on 7 August 2013, by BEL from NIC-Bangalore office. The processing/compilation was done at NDC and the merged provisional data was received on as-is-where-is basis for processing and applying criteria. NIC-Haryana, designed & developed necessary queries & reporting modules to generate the provisional lists.



Shri Bhupinder Singh Hooda, Hon'ble CM Haryana during launch of NFSA-2013 in Panipat

S.No.	Parameters	Rural	Urban
1	Type of House Hold	Y	Y
2	Name of Person	Y	Y
3	Relationship with Head of Family (Un-codified)	Y	Y
4	Gender	Y	Y
5	DoB	Y	Y
6	Marital Status	Y	Y
7	Father Name	Y	Y
8	Mother Name	Y	Y
9	Occupation	Y	N (Highest Education Level-codified)
10	Disability (codified)	Y	Y
11	House ownership/Material/ No. of rooms (codified)	Y	Y
12	Employment Type/Income/Tax status	Y	N
13	Monthly income of highest earning member	Y	N
14	Main source of HH income (codified)	Y	Y
15	Assets Ownership	Y	N
	1. Refrigerator	(1,2,3)	(1,2,3,4,5,6,7)
	2. Telephone		
	3. 2/3/4 Wheeler		
	4. Computer/laptop		
	5. Mobile		
	6. Air Conditioner		
	7. Washing Machine		
16	Land Ownership (Un-irrigated/ irrigated)	Y	N
17	Other Assets	Y	N (Amenities-codified)
	1. Mech. 3/4 wheeler agri equipment		
	2. Irrigation equipment		
	3. Kisan Credit Card		

The criteria for urban and rural population were finalized on 10th August 2013. The voluminous data was processed, checklists were generated and ported into pdf format. Printable lists were handed over to district administration on 12th August 2013 in a meeting presided over by Chief Secretary, Haryana. The scheme was successfully launched by Hon'ble Chief Minister of Haryana on 20th August 2013 at Panipat with simultaneous launch functions held in the rest of the state.

CRITERIA APPLIED

1. **Rural:** Firstly, households satisfying any of following criteria were included:

- houseless HH or
- HoF disabled or
- landless agricultural labour or
- small and marginal farmers or
- headed by widow or single woman or
- occupationally vulnerable.

Then on above list, following exclusion criteria was applied:

- Income tax payee or
- own land > 5 acres or
- salaried Govt./PSU job or

- own/operate an enterprise registered with Govt. or

- own a four wheeler.

2. **Urban:** Only exclusion criteria were applied. Households having a four-wheeler or A/C were excluded.

Print files were displayed in all Panchayats and Wards. Claims and objections were called from residents. Additionally, an undertaking was taken from the prospective beneficiaries.

FUTURE PROSPECTS

In order to facilitate the field officials in processing of claims, a web-enabled module has been hosted. It allows quick search on various parameters and reconciles claims received. Further, software modules are under development to bridge gaps of missing mandatory Ration Cards attributes in the database. The provision of capturing UID/Aadhaar has been made in s/w modules under development. Once, Aadhaar numbers are seeded & the data attributes are verified & validated, the finalized database can be easily integrated with SRDH, leading to establishment of SRDB.

TEAM

NIC Haryana Project Team: Ghan Shyam Bansal DDG & SIO; Dilip Goyal TD; Sundeep Moudgil TD; Amit Mittal PSA; Neeraj Singhal SSA; Ramandeep SSA; Ashish Dhingra, Programmer; Sunil Kumar, Programmer

Supported by NIC-HQ & NIC-KSU: Ms. Rama Nangpal, DDG, Varinder Seth TD, Dr. Pramod Sharma PSA, NDC, Shastri IT Park, & NIC-Bangalore N/W Team.

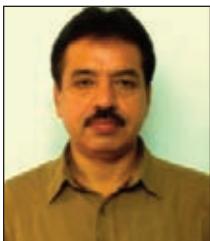
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EASYGAS, KISAN:

Citizen-Centric IT Innovations from Gonda, Uttar Pradesh

Achieving milestone is not an everyday business. Claiming appreciation for achievement is even tougher. The feeling goes beyond the expected elation, when endeavour, designed and perspired for common good catches people's eyes to attain recognition. Project EASYGAS and project KISAN, the two exemplary web based applications developed by the NIC, Gonda, have been streamlined in order to address the needs of sections of the society in rural areas - household section and agriculture sector. The two initiatives provide booking and delivery services of essential commercial goods like LPG cylinders and fertilizers along with other essential agricultural inputs like seeds, implement subsidies, agriculture loans, soil testing etc.



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EASYGAS

EASYGAS is a G2C & B2C application designed to induce accessibility and answerability into the company-consumer interface. It arises from the need to build a transparent system for an accurate statement of LPG stock position with the various distribution agencies, and its distribution in the district.

The consumers can now book their LPG cylinders at the Common Service Centres (CSC), in the villages without the need to travel to the office of the agency. The CSC issues a receipt against each such booking, which entitles the customer to get a home delivery of the cylinder on a particular due date facilitated by the agency. This due date is defined by the administration in consultation with the Gas Agencies taking into account all government holidays and other requisitions.

The monitoring mechanism for the district administration has been strengthened too, with the generation of pendency reports that reflects the status of cylinders delivered within time and after the due date. Various reports such as customer-wise pendency reports, date-wise delivery and default reports, agency wise delivery/default reports and CSC delivery report allows the monitoring at stakeholder level and gives an insight to the administration to plug leakages.



Dr. ROSHAN JACOB, IAS
District Magistrate, Gonda

As people managers, our constant strive is to reduce the opacity and human error in public service delivery mechanisms and to make the citizen to government interface as accessible as possible - literally, to carry government to people's doorstep. KISAN and EASY GAS are both attempts in that direction, addressing two massive consumer base, viz; farmers and LPG consumers respectively. This was possible through collaborative efforts of district administration and NIC.

KISAN

KISAN is a G2C application envisaged as a dynamic interface providing a full spectrum of services to the farmers, right from the sowing of seeds to the sale of crops. The system also provides SMS/Voice SMS based alert services to the subscribed stakeholders.

• Registration

The registration process is mandatory for all farmers seeking benefits from the project. The process is simple, a farmer just needs to visit

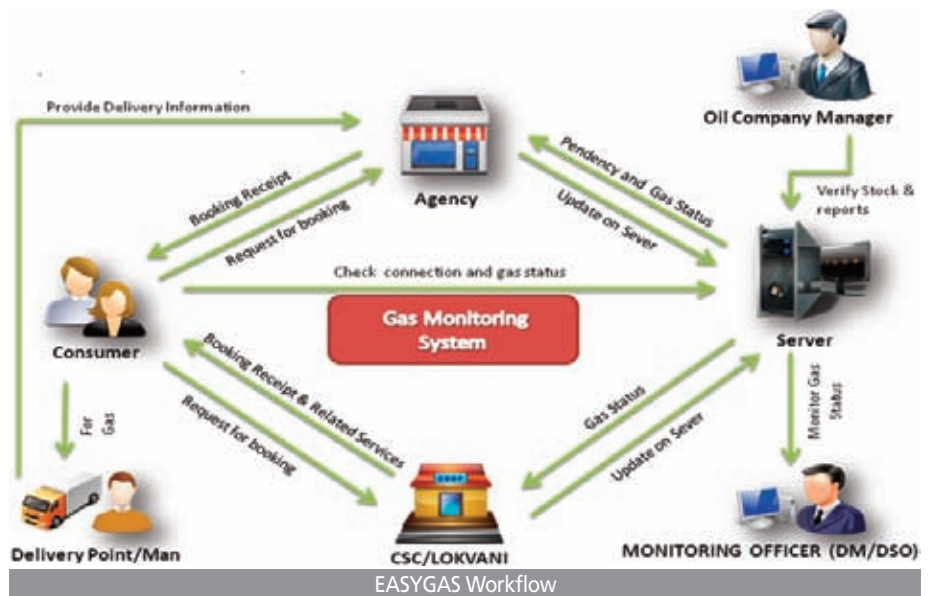
CSC/Lokvani kiosk and fill up the necessary details to get registered. After successful registration, a unique KISAN code is provided to the farmer by the CSC. The information is recorded in the database on a self-declaration basis.

• Soil Testing & Soil Health Card

Any farmer wanting to test his farm soil has to approach the nearest CSC with the soil sample. The CSC operator tests the sample with the help of soil testing kit. The values obtained are entered on the portal along with the details of crops for which fertilizer recommendation is sought. The system based on an analytical tool generates the Soil Health Card for the selected crop area with the fertilizer requirements.

• Fertilizer Booking & Monitoring

Farmers willing to book the fertilizers in advance have to provide a cropping pattern and choice of point-of-purchase to the CSC operator. KISAN software automatically calculates the necessary amount of each type of fertilizer. Thereafter, the Agriculture Department allots the fertilizer, subject to availability of stocks. The software informs the farmer - by means of Voice SMS/Text



SMS - of the allotment of stock so that they can collect the same.

• Agriculture Loan (Kisan Credit Card)

The farmer can apply for any type of agriculture loan through the CSC. The CSC operator enters all the information in prescribed format. The district coordinator of the concerned bank checks his account at the portal and after a preliminary scrutiny; forwards all the applications to the concerned branch for verification. After verification, he will update application status at portal as having

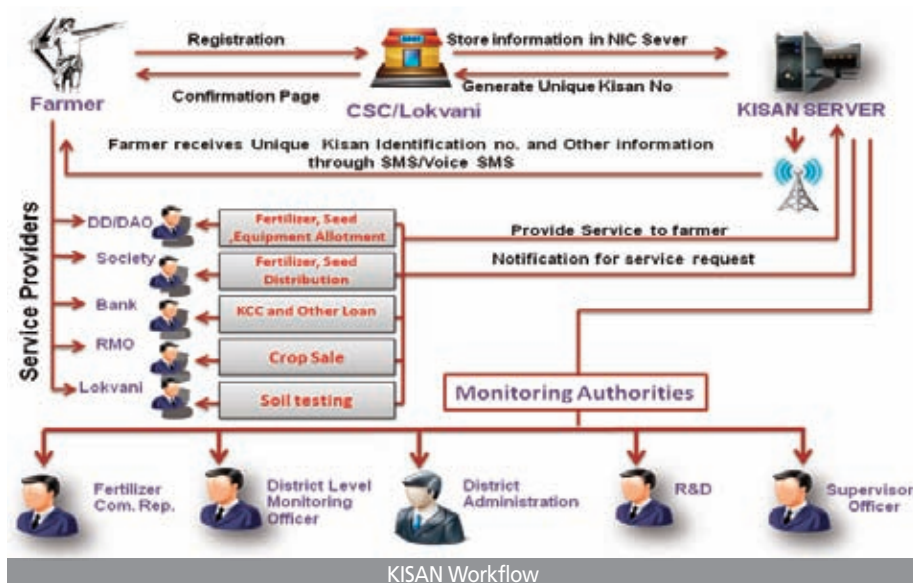
been sanctioned or rejected, and in case of rejection, elucidate reason for the same. The application will be marked as default after 30 days as per RBI guidelines.

• Agriculture Equipment Subsidy Disbursal Monitoring System

Any Farmer willing to get agriculture equipment subsidy can apply online through any of the CSCs without repeated visits to the Agriculture Department or persuasion/gratification of middle level functionaries. Farmers can track status of their respective applications and the district administration/departments can check the demand & monitor the disbursal system through the portal.

• e-Procurement

Farmers who want to sell their crop at Government Purchase Centres can now book the date and centre of their choice through any CSC using the Crop Procurement Management System. The farmer just needs to provide the quantity, date of sale & name of purchase centre to CSC. The availability for desired centre and time slot is checked online and informed to the farmer using SMS. Once the time



is allotted, the purchase centre is bound to purchase the booked quantity on the booked date and update the procurement details, which is monitored by the district administration.

MILESTONES

EASYGAS

- Vanishing queues – steep drop in ‘over-the-counter’ booking
- Transparent procedure and adequate supply, reduced possibility of black marketing and hoarding. System Alert on multiple bookings prevents diversion of domestic gas by commercial consumers.
- Both, the district administration & citizens get accurate information about stock position, supply and deficit of the essential commodity.
- Ensures delivery within stipulated time to urban and rural consumers from the pre-identified distribution points
- Generated employment for more than 260 technical persons

KISAN

- Empowering farmers with technology
- Bottom-up approach to collect, calculate and aggregate fertilizer/seed requirement with available data of crop pattern and fertility
- Networked supply chain of co-operative societies, fertilizer dealers, departments and farmers
- Ensures that Kisan Credit Card applications are processed within the time and in strict adherence to RBI norms
- Service-specific receipt generated by CSC allows farmers to track their request
- Provides transparent MIS for wheat/paddy procurement and various reports enable effective monitoring by the administration



Dr. Roshan Jacob, IAS & District Magistrate, Gonda with DIO Shri Hemant Arora & ADIO Shri Kamlesh Singh receiving the eIndia Award 2013 in Hyderabad

- In case of natural calamities like floods, droughts etc. relief can be directly transferred into the farmer’s bank A/C

IMPACT ON CSCs

While providing services to the citizens in a user-friendly and hassle-free manner, the system has also had tremendous impact on making CSC financially viable. To the CSC owner, the income from these two services has given them a much needed boost and now more and more CSCs are coming up in the district.

IMPROVED EFFICIENCY

By means of this initiative, there is a notable increase in the efficiency and effectiveness of delivery of gas cylinders in EASYGAS and allotment of agriculture inputs, disposal of applications for agriculture equipment subsidy, agriculture loan etc. in KISAN.

CONSUMER SATISFACTION

Both the packages offer a single-window solution through a friendly

approach. The consumer gets detailed information through the IVRS/SMS/voice call systems in his local language. Number of visits, uncertainty etc. have reduced and the project has helped transforming the villages into knowledge hubs. Plugging into global networks has brought heightened opportunities/prosperity to the people.

AWARDS & RECOGNITION

The EASYGAS initiative for its laudable efforts has won the eINDIA Award, 2013. Simultaneously, KISAN has received thumping applaud from the farmer community, and is appreciated by the State Administration, which is planning to replicate the same in other districts as well. Also, it has been recognized by the Ministry of Communication & IT to be dovetailed with CSC services.

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e-CCI: PROJECTS MANAGEMENT SYSTEM

With an objective to create an institutional mechanism for tracking the stalled investment projects, both in the public and private sectors, and to eradicate the implementation bottlenecks so faced on a fast track basis, a Cabinet Committee on Investment (CCI) Cell has been constituted in the Cabinet Secretariat. The committee carries out monitoring of all major projects besides pro-actively pursuing the stalled projects to ensure that these can be commissioned on time.



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e-CCI OVERVIEW

e-CCI is an Online Cabinet Committee on Investment Projects Management System which has been developed for tracking projects with investments of over Rs 1000 crores. e-CCI system assists in redefining processes for effective tracking and resolving issues using a central interface besides providing integrated services in a transparent manner. The system provides fast and accurate information to the Government for strategic decision-making besides eliminating duplicate and inconsistent records, thus facilitating easy discussion on issues along with brainstorming of ideas.

WORK FLOW

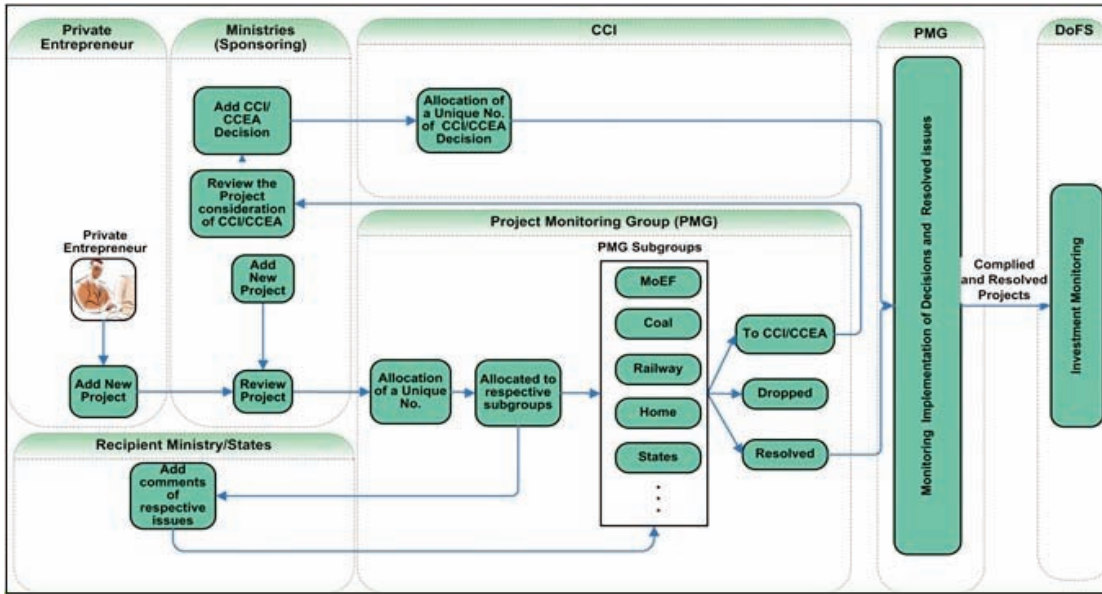
- Private entrepreneurs can register on <http://cabsec.gov.in> or <http://cabsec.nic.in>. to get their login credentials. Thereafter, project details can be submitted along with the bottlenecks/issues to the sponsoring Ministry/Department.
- Sponsoring Ministry can review the project details submitted by the private entrepreneurs and recommend it to the CCI Cell at the Cabinet Secretariat.
- Ministries/Departments can reject a project submitted by private entrepreneurs if it does not contain any valid information. These rejected projects will automatically come to the CCI Cell at Cabinet Secretariat for final decision. Sponsoring Ministries/States/Union Territories can also directly submit projects with bottlenecks/issues at CCI Cell. Once the Sponsoring Ministries/States/UTs recommend the projects, the issues/bottlenecks along with the project details will automatically go to the Recipient Ministry/ Departments / States/UTs for their comment/action.
- CCI Cell at Cabinet Secretariat reviews the projects recommended by the Sponsoring



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Additional Secretary
Cabinet Secretariat

Evolving a “paper-less” office in Government setup was never easy. e-CCI Project Monitoring System has come handy in this regard enabling the Project Monitoring Group (PMG) to evolve a paperless tracking of projects that facilitates all the stakeholders to track the developments in each project. It is a unique system developed by the NIC team in the Cabinet Secretariat. The initial results have been encouraging and the system has come to be appreciated all over. It could well become the forerunner for “paper-less” functioning in the Government.

Ministry /Department/States/ UTs. Once it is accepted by the CCI Cell, a unique Project ID is generated for further reference. Separate Tripartite Sub-Groups such as Environment and Forest, Coal, Mines, Railways, Petroleum and Natural Gas, Heavy Industries, Road Transport and Highways, Fertilizers, Chemicals and Petrochemicals, Financial Services, Home Affairs, etc., are constituted to consider issues/bottlenecks periodically in order to resolve them quickly. Decisions taken in the PMG Sub-Groups are



made available through e-CCI System.

- Automatic mailer notifications are triggered for each and every transaction made in the e-CCI System.

- Once the projects are resolved by the various PMG Sub-Groups at CCI setup, they are further moved to the Cabinet Committee on Economic Affairs (CCEA) or Cabinet Committee on Investment (CCI) module to monitor the decision. It also reviews whether projects falling under the purview of CCEA/CCI decision have been complied or not. Initiator Ministries or Sponsoring Ministries which have to submit the CCEA/CCI notes have to enter their details about the Cabinet decisions along with or without projects. Once the project is complied in CCEA/CCI and resolved in the PMG, it automatically flows to the Department of Financial Services to track the expenditure on implementation of such stalled project.

TECHNOLOGY USED

e-CCI was developed using the Open source technology which employs PHP and MySQL.

CAPACITY BUILDING INITIATIVES

- Training sessions were organized for concerned Ministries.
- A help desk has been established to handle private entrepreneurs, users from Sponsoring and Recipient Ministries.
- Nodal Officers of various sponsoring and Recipient Ministries have been sensitized about the e-CCI system at the

commencement of PMG meetings to ensure smooth implementation of the system.

STATISTICAL DATA

As on 11/12/2013, 395 projects have been accepted for monitoring worth of ₹ 17,68,059 crores.

OUTCOMES

e-CCI has added a new paradigm to the entire process of tracking the projects and removing the impeding bottlenecks. The CCI cell at Cabinet Secretariat has expressed its satisfaction with the implementation of the e-CCI system. At the same time, the NIC team has garnered wide term appreciation for its efforts.

The major outcomes of the project are:

1. Maintenance of separate project lists by the various Ministry(ies)/ Departments(s) has now been discontinued.
2. All projects are now submitted through a single window interface while service delivery time has reduced considerably.

Month-Year	Total No. of Projects
June 2013	62
July 2013	83
August 2013	175
September 2013	231
October 2013	263
November 2013	382
December 11, 2013	395

Table 1: Month-wise Projects accepted

3. Various types of reports in pdf and excel format have been generated to assist in the decision-making process.

4. e-CCI system has been customized for the Ministries, Departments, and States/UTs in accordance to their requirements.

5. Manual procedure for complaint registration/tracking has gone online, making the process swift and easy. The private entrepreneurs, Ministries/Departments, States/UTs can easily track the status/decisions taken

by the PMG Subgroups.

6. Another major re-engineering step is to track the actual expenditures on implementation of such projects. This has been accomplished by adding two different modules - The CCEA/CCI module monitors the decision involving investments; the Department of Financial Services (DoFS) module monitors the actual expenditure till the project is initiated or implemented.

7. Use of automatic mailer notifications has fostered quick implementation process.

8. The decisions made during the PMG Subgroup meetings are entered online to facilitate the private entrepreneurs. Even, Ministry(ies) and Departments can see the minutes of meetings, before the meeting gets over.

9. Due to centralized system, each user can view their status and submit their comments at the same time. The status/comments get reflected to all the other users

limiting third party intervention.

10. Till 11th of December, 2013, with the use of e-CCI, CCI has been able to resolve 120 stalled projects worth of Rs. 4 lakh crore. The same has been widely reported by all the leading newspapers.

e-CCI system has bolstered the ICT culture within the Government, paving way for paperless and fileless functioning.

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LINKED DATA: Road to Intelligent Web

Linked data is emerging as a new paradigm for publishing and interlinking data from different data sources and evolving web from “Web of linked documents” into the “Web of linked data”. The global database created by ‘linked data’ provides flexible inter-organizational collaboration and dynamic data integration.



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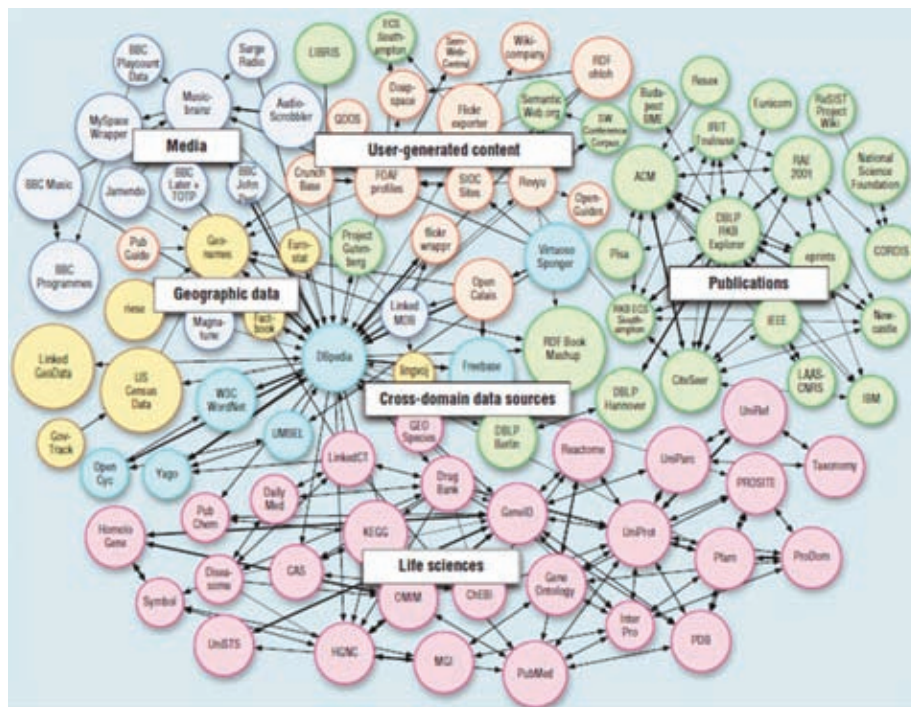
SEMANTIC WEB

Rapid advancements in Information Technology have enabled to connect people, places and information in the remotest part of the world over the World Wide Web, in a manner, which was never visualized earlier. These web technologies have benefited the masses, simultaneously creating an enormous volume of data in the public domain. The real challenge now is to make the process intelligent enough so that the data available on the web is linkable, useful, easy to sort and

interoperable. Web 3.0 or the Semantic web is emerging as the next phase of technological development which enables people to share content beyond boundaries of application and websites, enabling machines to do work in an intelligent manner. However, this requires the data on the web to be made available in a standard format so that it is easily reachable and manageable by Semantic web tools. Making web of linked data a reality requires a relationship among data on the web as a pre-requisite.

LINKED DATA

The collection of interrelated



Source: 'The Emerging Web of Linked Data' Published by IEEE Computer Society

datasets on the web is called Linked Data. Wikipedia defines it as "a term used to describe a recommended best practice for exposing, sharing, and connecting pieces of data, information, and knowledge on the Semantic Web using Uniform Resource Identifiers (URIs) and Resource Description Framework (RDF)".

Linked Data can be better understood as using the web for creating typed links between data from different sources. It uses RDF as a standardized data model and provides a mechanism for dynamic data integration originating from multiple sources across the web. It is different from conventional data formatting and publication approaches and may be as diverse as databases of two organisations from geographically different locations, or heterogeneous systems within one organisation, that have not interoperated at the data level. Technically speaking, Linked Data refers to data published on the web in machine-readable format, with meaning explicitly defined and linked to, as well as from, external data sets. Linked data can discover new data sources by following data-level links and deliver a more complete answer in a dynamic environment. It enables users to start with one data source and then move through a potentially endless web of data sources connected by RDF links. Linking of different pieces of information published, with direct reference to a specific piece of information on the web, reduces the data redundancy along with easy verification of the authenticity of published data. Linked data explicitly published under an open license is called linked Open Data.

Web of Linked Data is based on

standards for identification, retrieval, and representation of data. Sir Tim Berners-Lee, the inventor of the web has defined four design principles for linked data.

1. Use URIs to uniquely identify things (data entities)
2. Use HTTP URI, so that people can look up those names and information can be retrieved.
3. When someone looks up a URI, provide useful information, using the open standards like RDF, SPARQL.
4. Include links to other URIs, so that people can discover more things.

Linked data require identification of those items of interest, which are called resources, whose properties and relationships need to be described in the data. The information about the resource is represented using RDF. The RDF model encodes data in the form of triples, called subject, predicate, and object. The subject of a triple is the URI identifying described resource. The object can either be a simple literal value, like a string, number, or date; or the URI of another resource that is somehow related to the subject. The predicate indicates what kind of relation exists between subject and object. Triple's subject and object can be defined and described in different datasets. These cross-linked datasets lead to an endless data graph that describes resources in terms of their properties and connections, spanning datasets from countless sources, thereby creating a true web of data.

LINKED OPEN DATA (LOD) PROJECT

Linked Open Data project was initiated in 2007 by World Wide Web Consortium's Semantic Web

Education and Outreach (SWEO) Interest Group. The goal of this project is to make common data by converting various open data sources available, as RDF, and setting RDF links between data items from different data sources. The project has evolved from a small team of researchers during the initial stages, to the involvement of large organizations such as Wikipedia, BBC, Thomson Reuters, New York Times etc. The size of this web of data is growing rapidly, having billions of RDFs from datasets in diverse domains such as census information, geographic information, people, online communities, companies, human languages, films, music, scientific publications and books etc. This growth is due to the open nature of the project, where anyone can participate by publishing a data set according to the Linked Data principles, and interlinking it with existing data sets.

FUTURE OPPORTUNITIES

Existence of large amounts of meaningfully interlinked data on Web is a fundamental requirement for the Semantic Web. Linked Data is a promising candidate for addressing challenges in the area of Intelligent Information Management. In coming years, we can expect more and more data to be available as linked data. It can be an enabler to smarter, more efficient services and applications, and fostering creativity & innovation in the area of web technology.

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NODE.JS:

Lightweight, Event driven I/O web development

As number of internet users is rising steadily, the servers are getting flooded with their requests and responses. To avert this situation, the servers are highly equipped with the high-end hardware like maximum number of core/processor, memory, enhanced I/O devices etc. But, these arrangements are not quite enough to handle the increasing active real-time communication even with the traditional web development platforms like ASP.Net, Java, Python, Ruby & etc. Node.js is the new platform developed to address all these issues with less and concise coding for light-weight, highly scalable, I/O non-blocking web apps development.



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WHAT IS NODE.JS?

Node.js is a software platform that is built on Chrome's V8 JavaScript runtime for building scalable network applications effortlessly. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices. Node.js, initially developed by Ryan Dahl, also provides an REPL (Read-Eval-Print-Loop) environment for interactive testing.

WHY JAVASCRIPT INCLUDED IN NODE.JS?

- Asynchronous - JavaScript is naturally asynchronous with event model well suited for building highly scalable web applications through callbacks.
- Less Learning curve - A huge base of developers is already familiar with both JavaScript and asynchronous programming from years, developing JavaScript in web browsers.

- Lighting Fast Script engine – Huge advances in execution speed has made it practical to write server side software entirely in JavaScript.

- Code Sharing - Developers can write web applications in one language, which helps by reducing the "context" switch between client and server development, allowing code sharing between client and server.

- Code Transformation - JavaScript is a compilation target and there are a number of languages that have compiled to it already.

- Support for NoSQL - JavaScript is the language used in various NoSQL databases (e.g. CouchDB / MongoDB) so interfacing with them is a natural fit.

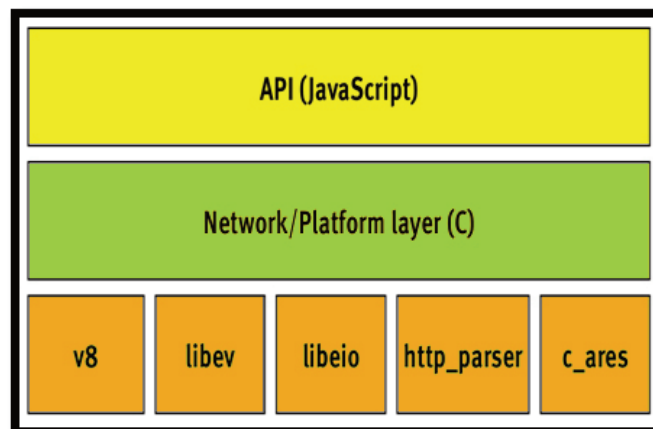
- JSON - It is a very popular data interchange format today and it is native JavaScript.

NODE.JS ARCHITECTURE

Node.js platform consists of three layers. The base layer contains all the core components, middle layer acts as a middle-ware by establishing communication from lower to top layer.

The final top layer consists of all JavaScript API. The core components are as follows:

- V8 - Open source JavaScript engine developed by Google
- Libev – Implements event loop and abstracts the underlying specific technologies use (such as select, epoll, etc)



Node.js Architecture

```
var http = require("http");
http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type': 'text/html'});
  var buffer = '<html>\n<head>\n<title>Speed
test</title>\n</head>\n<body>\n';
  for (var i = 0; i < 10000; i++)
    buffer += '<p>Hello world</p>\n';
  buffer += '</body>\n</html>';
  res.end(buffer);
}).listen(8080);          test.js
```

```
<?php
echo "<html>\n<head>\n<title>Speed test</title>\n</head>\n<body>\n";
for ($i = 0; $i < 10000; $i++) {
  echo "<p>Hello world</p>\n";
}
echo "</body>\n</html>";?>
```

The Scripts

- libeio - Asynchronous I/O library uses a thread pool to execute blocking calls in the background.
- c_ares - A non-blocking/asynchronous DNS resolution library
- http_parser - Parser for HTTP messages

NPM: NODE PACKAGE MANAGER

The Node Package Manager (npm) is a utility bundled with Node.js that offers a set of publicly available, reusable components, available through easy installation via an online repository, with version and dependency management. A full list of packaged modules can be found on the NPM website <https://npmjs.org/>, or accessed using the NPM CLI tool. The module ecosystem is open to all and anyone can publish their own module that will be listed in the NPM repository.

WHERE DOES NODE.JS FIT?

Node.js is best suited for data-intensive real-time (DIRT) applications. Since Node itself is very light weight on I/O, it is good at shuffling/ proxying data from one pipe to another, data streaming, push notification. The single threaded event model of Node doesn't fit for heavy computation process. CPU intensive application will block the node responsiveness with current connection, meanwhile rest of the connection kept in the queue to serve later. Real time applications are best use cases for Node. Areas where we can utilize the Node capabilities for implementation are:

- Real time communication systems like CHAT, MAIL, Quick SMS, Team collaboration application etc.
- Data streaming & proxy
- Used to enable real time communication

to current web viewers for further discussing the service. May be used in dial.gov.in like sites.

- Result publication sites using redis/memcache(NoSQL) database as backend
- Train ticket booking system
- Stock brokerage systems
- System & Application Monitoring Dashboards
- Active real time Dashboards of several web service/REST

NODE.JS VS PHP BENCHMARKING

The Testing box used:

- Intel(R) Core(TM) i5-2300 CPU @ 2.80GHz (4 cores)
- 4GB DDR3 RAM
- Linux Mint 14 Nadia
- Nodejs – v0.10.22
- Apache/2.2.22
- PHP 5.4.6

The Scripts:

To know, how our application may perform during peak load occasions, we tested our scripts with 100 simultaneous active connections over 10 seconds using siege tool (http/https regression testing and benchmarking utility). The performance reports indicates how efficient Node.js is during higher load.

Node.js is not a silver bullet that will dominate the web development world. Instead, it is a platform that fills a particular void between the needs and the technology. Node.js was never created to solve the compute scaling problems, instead it was genesis was based on resolving the I/O scaling problems, which it does really well with its built-in filesystem (fs) module. If the use case neither contains CPU intensive operations nor access any blocking resources, one can exploit the benefits of Node.js and enjoy fast and scalable network applications.

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```
Terminal
Nodejs # siege -c 100 -b -t 105 localhost/test.php
** SIEGE 2.70
** Preparing 100 concurrent users for battle.
The server is now under siege...
Lifting the server siege...      done.
Transactions:      8707 hits
Availability:      100.00 %
Elapsed time:      9.46 secs
Data transferred: 4.70 MB
Response time:     0.11 secs
Transaction rate: 920.40 trans/sec
Throughput:        0.50 MB/sec
Concurrency:       99.31
Successful transactions: 8707
Failed transactions: 0
Longest transaction: 0.14
Shortest transaction: 0.01
Performance Report

Terminal
Nodejs # siege -c 100 -b -t 105 localhost:8080
** SIEGE 2.70
** Preparing 100 concurrent users for battle.
The server is now under siege...
Lifting the server siege...      done.
Transactions:      17500 hits
Availability:      100.00 %
Elapsed time:      9.36 secs
Data transferred: 3172.14 MB
Response time:     0.05 secs
Transaction rate: 1869.66 trans/sec
Throughput:        338.90 MB/sec
Concurrency:       99.85
Successful transactions: 17500
Failed transactions: 0
Longest transaction: 0.09
Shortest transaction: 0.04
Performance Report
```

BIG DATA ANALYTICS

The phenomenal growth in data and the endless possibilities that it promises in all spheres of life has led to the coining of the term Big Data. Gartner defines Big Data as "high volume, velocity and variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making". Big Data is not merely about the size of data; it embodies a whole new concept of opportunities waiting to be unveiled with the right tools, algorithms and techniques. In short, it represents the astronomical volume of both structured and unstructured data that is not attuned to process using the traditional database and software techniques.

Trends and Studies have shown the inroads that big data have made into almost all sectors, the consequences of which are most predominant in the domains of business, advertising, government, health care, social sector.



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The big data analytics is all about the techniques used for putting to use the large Volume of data and make cost effective analysis and prediction. Here it not only the sheer volume of data that need to be reconciled but also the different Varieties of structured data in traditional databases and unstructured data from sources like XML, JSON, eMails, Organizational Intranets and Enterprise Social networks. This data is coming at a very fast rate(Velocity). The characteristics of Big Data are now known popularly as the three Vs: Volume, Variety and Velocity. A fourth V has also been added which is Veracity. Veracity is the quality and authenticity of received data.

HOW BIG DATA ANALYSIS WORKS?

Data Preparation and Cleaning: The extracted data is subjected to statistical analysis for cleansing & verification and

identifying outliers and applying appropriate treatment.

Transformation: Advanced algorithms or approaches are applied that extract information from a data sets both structured and unstructured and transform it into an understandable structure for further use.

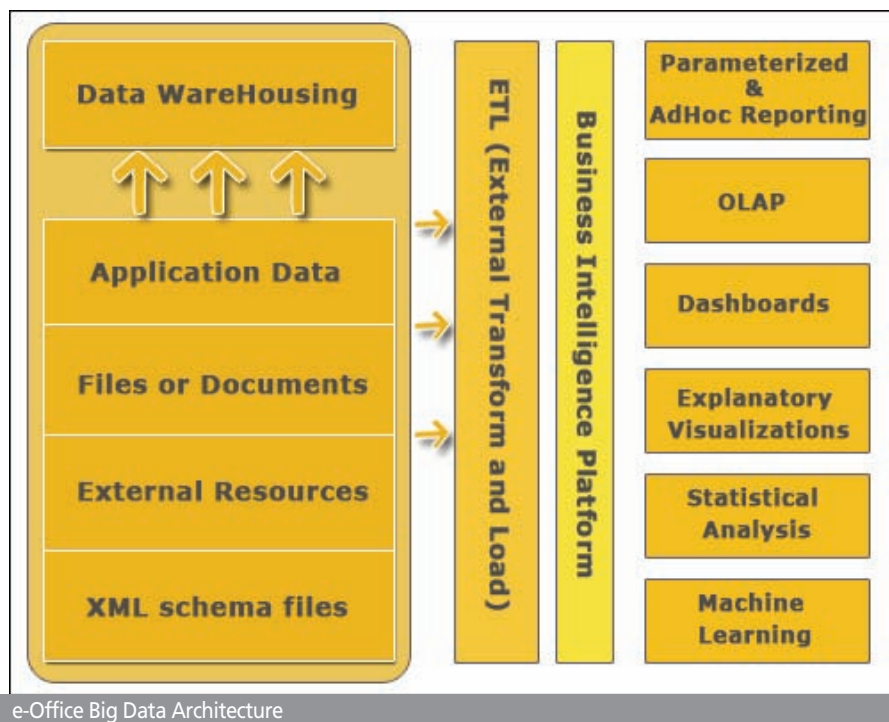
Business Intelligence (BI): Various BI tools for analyzing structure data and tools, Hadoop being one of the most popular among them, for unstructured data are applied for predictive analysis.

Visualization: A vast numbers of visuals/graphs/dashboards are generated that provide insights into the data. These are very exhausted visualizations and actually very complex (but quick) processing at the backend. Some really complex statistical analysis can be done quickly that till now was not achievable.

It may be mentioned that at each and every step a domain expert is required to support the accuracy of the analysis.

TECHNICAL ASPECTS

A template into which the extracted



e-Office Big Data Architecture

information should be contained has to be defined. Patterns are then defined on the transactional history. After identifying patterns we fit/find the models in the patterns. For various mathematical operations we may use numPy, R, python etc for calculations. We use predictions wherever required, using probability for getting most probable chances of an action, defining simple mathematical formula for making decisions.

Data Warehousing, Machine learning, Pattern recognition etc. play a major role in Big Data analysis. Predictive Analysis is one of the areas which analyze the current and historical facts to make predictions about future or otherwise unknown events. Models capture relationships among many factors to allow assessment of risk or potential associated with a particular set of conditions.

APPLICATION OF BIG DATA ANALYSIS IN THE GOVERNMENT: FEW SCENARIOS

1. "Aadhaar" Cards in India: Based on the data transformed, it is possible to project the total number of people below poverty line, average economy of a person etc. Based on the findings government may take a decision to improve the life of poor people, take women and child care schemes to enhance woman population etc. It may be correlated with rural health statistical parameters to predict onset of a disease.

2. Analysis of National health records for identifying the spread of epidemic or efficacy of clinical trials, with respect to region, gender age etc.

3. Employment exchanges may help unemployed job seekers find jobs by combining their job qualifications, place of residence, age etc. with an analysis of available job opportunities.

4. Data forensics of Logs or other data, logs data play a major role in understanding the customer demand and his usage of the applications. Based on the clicks that the user makes, the points through which he navigates provide us information that helps in enhancing the usability of the web pages and the application access.

BIG DATA: IMPROVING GOVERNMENT FUNCTIONING

Much emphasis is being laid by the Government on transparency and accountability in its internal functioning. e-Office, a Mission Mode Project is being implemented in the Government. In e-Office, the data of Ministries and Departments stored is vast enough to derive the decision making ability through analysis of transaction patterns.

- Turnaround times for decision making and pattern of decision making.

- Efficiency on the response to Citizen Centric case processing matters of Grievances, RTI and related heads.

Such a analysis may be used at some point to open such file for public viewing for openness and transparency.

- Based on the transaction history from e-Connect or e-Talk the social medium tools within eOffice, the Government user behavior and interests may be analyzed. Analysis may be made as to why some users log less frequently than others.

- Based on the books taken from Library, titles searched, trainings attended, projects worked and qualifications of employee, we identify their area or interest of the user and we may suggest books and training programs/seminars to the employee.

- The data from Personnel Information management Systems (PIMS) may be analysed for training requirements, resource allocation for various projects, future vacancies in the Government.

- The analysis of Personnel data can be extremely useful to the government for estimating the expenditure when declaring the Dearness Allowance(DA) for serving and retired government employees.

- The Personnel Information can be used for analysis to predict the posts getting vacant in near future, the government can make decisions about allotting these locations to the most suitable employees. These analysis may further be worked for understanding/analyzing the employee motivation needs (for eg. Maslow's Hierarchy)

PRIVACY AND SECURITY CONCERNS

Examples given above are subjected to privacy and security concerns and data is to be made available subject to the existing rule and regulations.

BIG DATA SKILL SETS

The Big data analytics require various skill sets like statistics, operational research mathematics, Programming, machine learning etc. The combined skill sets is being now called as Data Science and anyone possessing these skills sets, the term Data Scientist is being increasingly used. However, even if these skill sets are possessed, the big data analytics is incomplete without domain expertise. Some of the technologies / languages / methodology used in Big Data analysis are Hadoop, Map Reduce, Machine learning, SAS, R, Python etc.

BIG DATA: AS A CHANGE AGENT

Government with its huge repository of data needs to devise and effective strategy framework and appropriate governance mechanisms for integrating with BIG data in terms of technology and skill sets. Followings Steps that can be considered in the overall move:

1. Formulate a scheme for common metadata management;
2. Policy on privacy and security for Big Data solutions;
3. Enabling deployment of required infrastructure for supporting the initiative;

The possibilities with Big Data within the Government structure are waiting to be unfolded and with the right strategy, policies and procedures combined with effective implementation, it can mark a whole new era of Governance.

FOR FURTHER INFORMATION:

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JIND:

Providing Innovative Technology Solutions for People

The district Jind derives its name from Jaintapuri, a town that grew around the temple of Jainti Devi (the goddess of victory) where Pandavas offered prayers for their success in their battle against Kauravas. It is one of the oldest districts of Haryana, comprising of 3 sub-divisions, 4 tehsils, 3 sub-tehsils, 7 blocks and 307 villages.



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Edited by
VIVEK VERMA

Since the establishment of NIC District Centre in the year 1988, tremendous growth has been witnessed in the field of Information Technology thereby improving the accessibility and delivery of various government services to the citizens. In the last 25 years, apart from dedicated ICT support, the centre has pioneered many successful ICT initiatives and implemented various e-governance projects. The centre is equipped with state-of-the-art NICNET infrastructure having 34 Mbps redundant leased line connectivity with NIC Chandigarh and 100 Mbps connectivity for NKN to NIC Hisar. The facility is currently being used by more than 100 nodes 24x7x365. A dedicated VC studio and a separate training/data entry lab has also been established.

1. WEBSITE

The district website <http://jind.nic.in> designed and developed by NIC District Centre is a repository of important information related to the district.

2. E-DISHA EKAL SEVA KENDRA

Various citizen centric services are provided in a transparent way from the district and tehsil/sub tehsil centres. The major G2C services being delivered in self sustainable mode are:

- Record of Right/Copies of Nakal (HALRIS)
- Property Registration through HARIS
- Registration of vehicles using VAHAN software
- Issue of driving & conductor license using SARATHI software
- Issuance of all certificates viz: SC, BC, OBC, Residence, Income etc. through HRICIS
- e-Aadhar printing

3. NATIONAL LAND RECORDS MODERNIZATION PROGRAM (NLRMP)

A complete Integrated Workflow



RAJIV RATTAN, IAS
Deputy Commissioner

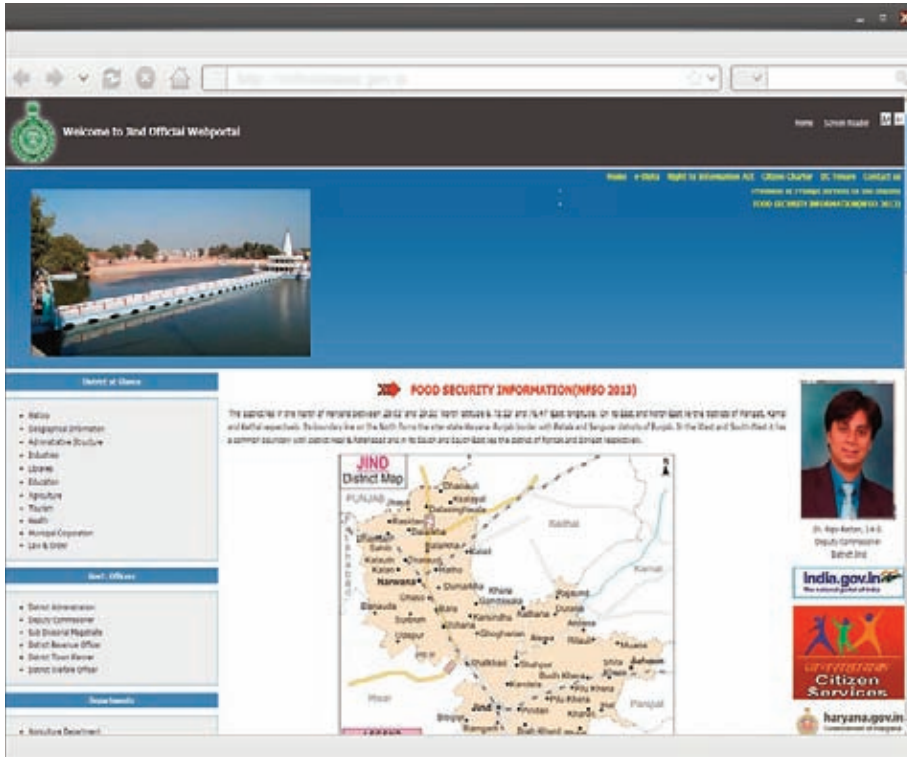
NIC District Centre, Jind is playing a pivotal role in promoting the ICT culture by providing accurate, transparent and responsive informatics services to the district. This has radically changed the delivery of citizen-centric services and improvement in overall working. I appreciate the efforts made by DIO, NIC Jind and his team for their active participation and regular contributions towards the promotion of ICT culture in district and in making e-governance a true success in the district.

Automation System, which is implemented at all tehsils & sub tehsils provides the integration of Land Records Data in HALRIS with Land Registration Data in HARIS to enable delivery of services related to Registration, Mutation, Jamabandi (RoR), Roznamcha.

As a step further towards integrating non-spatial data with spatial data, HARIS and HALRIS software applications are being linked with Bhū-Naksha under NLRMP.

4. APPOINTMENT MANAGEMENT SYSTEM (AMS) FOR PROPERTY REGISTRATION

To enhance the transparency in HARIS software, a new system for giving



appointment with Sub Registrar to public i.e. AMS, has been launched at District Headquarter on 14th Nov. 2013. The system is functioning successfully.

5. INVENTORY AND ACCOUNTS MANAGEMENT SYSTEM (IAMS)

IAMS is a complete web based solution for Inventory, Accounts and Personnel information management. This software keeps track of the inventory and accounts of District IT-cum- E-Governance Society and

statistics of citizen services provided in the district.

6. ICT SUPPORT IN ELECTIONS

Comprehensive ICT support is provided for Lok Sabha, Vidhan Sabha, Panchayat and MC Elections encompassing preparation of electoral rolls, voter helpline, accepting claims and objections, duty assignments, randomization of polling booths, polling parties, EVMs etc.

7. NATIONAL AND STATE LEVEL E-GOVERNANCE PROJECTS

Various national and state level e-Governance projects are being implemented and supported by NIC District Centre. Some of the successfully implemented projects are as follows:

- HARSAMADHAN (Public Grievances Monitoring System)
- e-Record (Revenue

- Court Cases Monitoring System)
- HaPPIS (Haryana Pension Processing & Information System)
- AGMARKNET, m-fms
- NADRS (National Animal Disease Reporting System)
- NDAL (National Database of Arm Licenses)
- e-Salary, e-Budget
- C.M. Announcement Monitoring etc.

8. SOFTWARE DEVELOPMENT AND MOBILE GOVERNANCE INITIATIVES

Agriculture Related License Issuance System and Animal Insurance System under e-District Project were developed in coordination with Haryana State Unit. Keeping in mind the growing trend of mobile technology, few mobile apps for Android based phones have been developed.

9. SANITATION MONITORING MOBILE CLIENT

For monitoring of sanitation programs conducted by various Municipal Councils/Committees, an Android based mobile client was developed and installed in the mobile devices for Sanitation Supervisors. This mobile application provides the functionality to capture images live from the field and upload it on the web server in real time, which can be viewed by the administration for progress monitoring.

10. VAHAN ENQUIRY APP

This app fetches the information details related to the vehicle and national permit validity. One has to type in the vehicle number and touch the button on the screen to receive the information related message in their mail inbox.

11. HALRIS MOBILE DASHBOARD

HALRIS Mobile Dashboard application provides the features to view the tehsil-wise & district-wise status of total villages, total online villages, new Jamabandi dues, deeds registered, mutations pending with Tehsildar/Patwari and nakals issued.



Citizen Services counters at Sub division e-disha Narwana

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MALKANGIRI:

e-Governance in the land of Primitive Tribes

Malkangiri district came into existence after the reorganization of Odisha state on 2nd October 1992. Covering an area of 5,791 sq. kms, almost the whole of district is covered with vast dense jungles, with tribal population comprising of primitive tribes notable among them are Bondas, Koyas, Porajas and Didayis. Some of the most beautiful locations are the back waters of Balimela Dam, Satiguda Dam and Bonda Ghati.



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Edited by
PRASHANT BELAWARIAR

Information & Communication Technology (ICT) has played an instrumental role in day to day activities of the district administration through easy delivery of e-services to the citizens and by improving the process and effective management through e-Governance.

NIC - District Unit provides ICT support to the administration and its various departments and contributes towards citizen-centric project development and implementation.

KEY ICT INITIATIVES:-

- **Standardized District Portal (<http://malkangiri.nic.in>)**

The standardized district portal of the district is based on the content architecture of the National Portal of India. It is citizen-centric and disseminates information about the district and sub-district level. It acts as a single window platform for all categories of information for G2C, G2B, G2E and G2G services.



Dr. M. MUTHUKUMAR, IAS
District Officer, Malkangiri

Information & Communications Technologies (ICTs) have revolutionized the governance process and transformed relationship with citizen. Efforts made by NIC Malkangiri in adopting use of ICT in the District Administration & spreading ICT culture are praiseworthy.

I appreciate Shri Tapan Kumar Behera, DIO, NIC Malkangiri for his contribution and pro-active support to the District Administration to make e-Governance a true success in the district.



Inauguration of Standardized District Portal by Shri Arun Kumar Sahu, Hon'ble Minister of State (Ind.) Energy, I & PR, Odisha

• Project Monitoring System

The government has taken up various projects at Panchayat, Block, NAC and ITDA level comprising of schemes for the development of the district. The Project Monitoring System facilitates the district administration to successfully track & monitor the different projects and its physical and financial progress. The system comprises of three major modules namely Project Details, Billing Details and Advance Details. It generates different reports like Scheme Wise Abstract, Project Status, Detail Billing Information, Advances taken against work, Scheme wise, Financial Year wise and Gram Panchayat wise Project Details, Lists of Ongoing and Completed Projects. It also keeps track of beneficiaries under Indira Awas Yojana (IAY).

• Family Survey Analysis System

Many schemes for the benefit of tribal/BPL families have been launched. But due to lack of information, it gets difficult to ensure that the benefits of these schemes reach at the grass-root level. Family Survey Analysis System facilitates the district administration to enter the individual family survey data, cross check them with eligibility criteria of various schemes and easily identify tribal family members as beneficiaries to avail the facility provided under different schemes like Distributing Titles in Forest Right Act, Financial Assistance in IAY, Mo-kudia Yojana, Old Age Pension, Widow Pension & Disability Pension etc.

• PRERANA: e-Scholarship System (<http://www.ori.nic.in/odishapms>)

“Post-metric Scholarship Registration Release and Network Automation” or PRERANA has been launched to ensure the automation, streamlining & effective management of processes for faster and efficient



PRERANA Workshop by DIO

disposal of scholarship applications along with ensuring timely payment to the ST/SC/OBC/Minority students directly into their bank accounts. Approximately, 1977 number of SC/ST students of 23 institutes in the Malkangiri district have availed the scholarships during academic year 2012-13.

• e-Procurement System

The e-Procurement System of NIC was successfully implemented in the district by ITDA, NACs, RWSS, RD etc. NIC district unit extends technical support and organizes workshops and trainings for the different departments for smooth implementation of e-Procurement system.

• e-Abhijoga

The system enables citizens to directly send their grievances directly to District Administration/Hon'ble Chief Minister. The initiative has achieved a uniform and systematic approach towards monitoring of grievances.

• Paddy Procurement System

Paddy procurement system monitors paddy procurement through Paddy Purchase Centres (PPCs) by various agencies like Civil Supplies Office, and Tribal Development Coordination Corporation (TDCC). In 2012-13, 86721 MT of paddy was procured through participation of 15016 farmers in 8 PPCs and around 88024 (MT) of

paddy was delivered to 79 millers.

• Land Record Computerization

The Bhulekh ver.3.02 application is operational at all the seven tehsils of the district. The application provides online up-to-date RORs to the citizens in regional language.

• e-MPR on Land Acquisition System

Online MPR on land acquisition system helps district administration to monitor land acquisitions proposals. It tracks proposals submitted to R&DM Department for notification and its compliance reports. It also monitors issue of orders and award disbursement of projects.

• Recruitment Automation System

The system, facilitates candidates to apply for various recruitments carried out by district administration, screen out eligible candidates, organize timely tests and make result available over the portal. This ensures speedy recruitment process ensuring transparency at the same time. The standardized recruitment automation system developed by NIC Malkangiri has achieved its objective and the unit provides all the necessary technical support.

FOR FURTHER INFORMATION:

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International e-Gov Update

COMMUNITY BROADBAND CENTRES LAUNCHED IN MALAYSIA TO CATER RURAL RESIDENTS

On a bid to provide collective community Internet access to remote areas identified under the Universal Service Provision (USP) program, the Government of Malaysia through Suruhanjaya Komunikasi Dan Multimedia Malaysia or SKMM has launched the Community Broadband Centre (CBC) in the state of Sabah. The CBC is equipped with personal computers connected to internet broadband access along with other IT equipments to facilitate rural communities to harvest the fruits of internet technology.

A joint effort by the Malaysian Communications and Multimedia Commission (MCMC) and South Korea's largest telecommunications company, SK Telecom (SKT), CBC is modeled on the lines of MCMC's successful national broadband initiative known as 1Malaysia Internet Centre (PIIM). PIIM aimed at expanding the outreach of broadband in chosen urban centers. It offers technology such as "Giga Wi-fi, M-caching server and self-switching controller" enabling residents even 40km away to gain access to fast internet.

CBC is conceptualized on the lines of the objectives laid down by the National Broadband Implementation Strategy and MyICMS 886 Technology Roadmap, which aims to bridge the digital divide between urban and rural



communities. Also, there are plans to impart software training to rural communities in order to strengthen their social and economic status. SKMM plans to set up a CBC in each remote area identified under the Universal Service Provision (USP) program.

For Further Information

<http://www.skmm.gov.my/Home.aspx>

DUBAI LAUNCHED SMART NOL SERVICE TO ENABLE PAYMENT THROUGH MOBILE DEVICE

On order to facilitate the commuters of public transport in Dubai, Dubai Roads and Transport Authority (RTA) has released its 'Smart Nol' service allowing users to pay for trips on the city's metro, buses and water buses through mobile phones. At present, a single smart card (or NOL Card) can



be used to pay for these various RTA transportation services. The all-new Smart Nol service now allows users possessing a special SIM card to swipe their near field communication (NFC) – enabled mobile phones to pay for public transport.

The NFC phone can be used to check in and check out at metro stations, public buses as well as water buses besides reloading and checking Nol balance. For using this card, commuters have to place their mobile devices against card readers at metro station gates or validator devices placed on public buses and water buses to pay for trips. NFC SIM cards can be obtained from Etisalat and du service centres.

The service has been launched by RTA in close collaboration with Emirates Integrated Telecom (du) and Emirates Telecommunications (Etisalat), the two United Arab Emirates (UAE) based telecommunications service providers. The Government of UAE has also envisioned for providing NFC-enabled mobile service for micropayments in the country.

For Further Information

<http://www.rta.ae/>

HEALTH ADVICE MOBILE APP LAUNCHED IN NEW ZEALAND

A new mobile app called Healthline symptom checker has been launched in New Zealand that allows people to enter their symptoms into an iPhone app and access health advice for free. This different and expedient channel to access health information is offered by the Ministry of Health, New Zealand to compliment its Healthline National telephone triage and health service.

The new apps works by people entering their symptoms and based on the input which includes the type of illness/injury and the severity of the symptoms, the app will provide a suggested course of action which range from seeing a doctor within 24 hours, managing the condition at home or calling an ambulance.

The mobile app was adapted from an Australian version of the app and was developed by Medibank, an Australian private health insurance provider. It can be downloaded free of cost onto Apple iPhones or iPads via a link from the Healthline website or directly from the Apple App store. The app is likely to be rolled out to other technology in the future.

Meanwhile, the Ministry of Health has envisioned that the



country will have a new national telehealth system by the end of 2014, thus striving for a more inclusive and an enhanced quality of service.

For Further Information

<http://www.health.govt.nz/>

ONLINE MAP OF EVACUATION CENTRES LAUNCHED IN THE PHILIPPINES

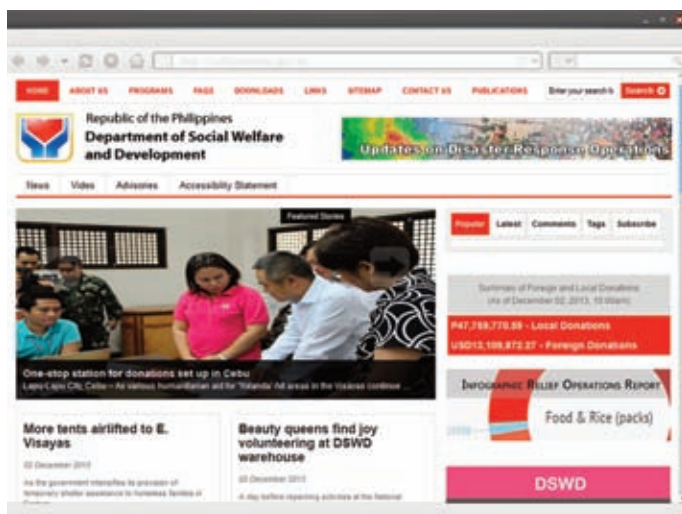
An online calamity map has been launched in the Philippines by the Department of Social Welfare and Development's ICT Management Service (DSWD-ICTMS). This map aims to strengthen the coordination

among various government and humanitarian agencies during relief efforts. The map provides decision makers a visualized report on the disaster-struck population and location of various evacuation centres. The reports generated by DSWD-Disaster Response Operations Monitoring and Information Office (DROMIO) on the population and location of provinces/municipalities/cities, and how many of them are affected by the disaster can also be obtained from the map. The map also provides information on the status of each evacuation centre, the number of occupants, and the number of people that can be accommodated in each of these centres.

Every time if there is a disaster, the map gets activated and sustains to be in the active state till all the evacuation centres have been filled. DSWD-ICTMS has envisioned to further strengthen the disaster reporting system by leveraging on social media applications to crowd source information vital for primary responders.

For Further Information

<http://www.dswd.gov.ph/>



Cyber Governance

MINISTRY OF EXTERNAL AFFAIRS, GOVERNMENT OF INDIA

The Ministry of External Affairs (MEA), or the Foreign Ministry is the Government of India agency that is directly related with India's relations with foreign nations. The Ministry represents the country in the United Nations and also directs other Ministries and State Governments when the latter have dealings with foreign governments/institutions/ establishments.

The visually appealing website of the Ministry comes with clutter free minimalistic design with clear identity elements. The rich content of the website is well placed and updated on regular basis. The website offers content related to Profile and Organizational Structure of MEA, Personnel deployed at Spokesperson's Office, various bilateral/ multilateral documents, outgoing and incoming visits, media briefings, press releases, interviews, publications, acts, legislations, rules, financials and tenders. The useful links to Indian Missions Abroad, Protocol Division, Foreign Service Institute etc are also featured.

The website has a well laid Site Map besides explicitly stated Terms & Conditions, Privacy Policy, Copyright Policy, Hyperlinking Policy and Accessibility Statement. The website provides screen reader access and can be viewed in multiple languages including English, Hindi, Arabic and Urdu. The feedback section of the website invites important comments and feedback from the users. The top right corner of the website also provides link to download application



<http://mea.gov.in/>

CONTENT: ★★★★★

NAVIGATION AND BROWSER COMPATIBILITY: ★★★★★

DESIGN: ★★★★★

INTERACTIVITY ELEMENTS: ★★★★★

called 'MEAIndia'. This is first of its kind Government department mobile app in India developed for mobile and other hand held devices and is available for download on App Store and Google Play Store. The app provides services related to passport, visas and consular assistance besides furnishing information on Kailash Mansarovar Yatra, Haj pilgrimage, and others.

The website offers quick and easy navigation between pages and is compatible with all major web browsers.

EMPLOYMENT NEWS

Employment News has played an instrumental role in assisting the students and job seekers by providing up-to-date information on job vacancies, job oriented training programmes, admission notices relating to job oriented courses and result of recruitment examinations. The weekly carries advertisement for job of Central, State Governments, Public Sector Undertakings, Autonomous Bodies, Universities, admission notices for professional courses,



<http://employmentnews.gov.in/>

CONTENT: ★★★★★

NAVIGATION AND BROWSER COMPATIBILITY: ★★★★★

DESIGN: ★★★

INTERACTIVITY ELEMENTS: ★★★★★

examination notices and results of organizations like UPSC, SSC and other general recruitment bodies and mid level career promotion opportunities. Besides furnishing information on job vacancies, Employment News also carries article on job opportunities in various sectors, including emerging sectors, qualifications required to enter the profession and the institute to avail essential education and training.

The information rich website of the Employment News has been conscientiously designed with clear identity elements; however the icons highlighting the new content are bit distractive on the homepage. In the header region, content related to Employment News, its agents, budget along with information on admissions and results, media, career links, RTI, contact details, archives and e-version of the paper have been provided. Important notices are featured in the form of a ticker while job highlights, related links, in depth job focus have been also provided to facilitate job-seekers. Users can also subscribe for SMS Job Alerts for getting the updates on their mobile phones. The footer region of the website contains Monthly Highlights, information related to Subscription, tenders, Advertisers corner etc.

The website provides screen reader access and can be viewed in Hindi and English languages. A search button has been provided for easy navigation. The website exhibits high compatibility with all major browsers.

ANTHROPOLOGICAL SURVEY OF INDIA

Anthropological Survey of India (An.S.I.) is a premier national institution of repute that has been mandated to carry out research in socio-cultural and biological aspects of the Peoples of India in a holistic perspective, underlining the matters of contemporary relevance and those of National significance. It upholds its uniqueness in being the only one of its kind anywhere in the world to pursue Anthropological research in a Governmental setup.

The website has been conscientiously designed using a harmonious mix of colours. A search button on the top right corner of the homepage along with navigation menus ensures quick and easy navigation between the pages. The website is available in both English and Hindi languages. The header region displays various images portrayed with the help of an image slider. However, the representation of national emblem on the website needs review.

The website is teeming with up-to-date content furnishing exhaustive information on the profile & principal objectives of An.S.I, important anthropological documentation and dissemination in Indian context, ongoing research & training, personnel, news & events, achievements and contacts. Important announcements are displayed on the homepage through ticker. The footer region of the website provides information related to Development Anthropology, DNA Studies, Paleo Anthropology, Growth Studies besides Important announcements, Newsletter,



<http://www.ansi.gov.in/>

CONTENT: ★★★★★

NAVIGATION AND BROWSER COMPATIBILITY: ★★★★★

DESIGN: ★★★

INTERACTIVITY ELEMENTS: ★★★★★

Recent Events, contact e-mails and Right to Information. Separate content boxes have been provided on the homepage projecting recent events & progress, information related to fellowship programme offered by An.S.I., online journals and photo gallery.

In terms of interactivity, the website features links to major Social Media websites such as Facebook & twitter along with Youtube. The site is compatible with all major browsers but can be best viewed at 1024 x 768 resolution.

DIRECTORATE OF INFORMATION TECHNOLOGY, GOVERNMENT OF MAHARASHTRA

Established in the year 1988, the Directorate of Information Technology (DIT) has been proactive in promulgating the ICT and e-Governance in the state of Maharashtra. DIT has been mandated for providing the policy framework, overseeing State's e-Governance program and ensuring inter-departmental coordination to achieve the



<http://www.policyholder.gov.in/>

CONTENT: ★★★★★

NAVIGATION AND BROWSER COMPATIBILITY: ★★★★★

DESIGN: ★★★★★

INTERACTIVITY ELEMENTS: ★★★★★

IT vision of Government of Maharashtra. The website of the directorate elucidates on the IT infrastructure present in the state along with various initiatives taken by various government departments in Maharashtra.

The header region of the homepage provides information on IT vision of the directorate, its funding framework, organizational structure, awards and recognitions, besides explicating on policies and GRs, capacity building and IT Act judgments. Contact us, feedback sections and intranet login section are also placed on the header region. The website is rich in content, which is well laid and regularly updated. Links to important government websites along with latest reports and news/ events have been prominently placed on the homepage. The footer region underlines disclaimer & policies and accessibility statement of the website.

The website is compliant to GIGW and W3C guidelines. The diligently designed website of the directorate has been provided with navigation menus for smooth and easy navigation between pages. An elaborative sitemap has also been provided to further facilitate navigation. The website is high in terms of interactivity and provides links to major social media websites such as Facebook, twitter, Google+ and YouTube.

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In the News

REGIONAL WORKSHOP ON PANCHAYAT ENTERPRISE SUITE ORGANIZED AT SHIMLA

A Regional Workshop on Panchayat Enterprise Suite (PES) was held at Shimla from 18th-20th September 2013 for the PRI and NIC officials of Himachal Pradesh, Haryana, Jammu & Kashmir, Punjab, Uttarakhand and Uttar Pradesh. The NIC team led by Shri D.C. Misra, Deputy Director General, NIC participated from New Delhi along with the Director, Ministry of Panchayati Raj, GoI.

The Regional Workshop was organized to attain the objectives of the e-Panchayat MMP and to delineate a course of action for adoption of all the PES applications that have been rolled out by the Ministry of Panchayati Raj.

Shri J.C. Chauhan, IAS, Special

Secretary and Director, Department of Panchayats, Government of Himachal Pradesh welcomed the faculty and participants from other states. He wished that the three-day workshop will result in fruitful discussions among the participating states for rolling out more PES applications in their respective states.

Shri D.C. Misra, DDG NIC informed the participants about all modules of the PES applications and how these can be helpful to the department as well as the citizens. He stressed upon the need for greater integration among various applications.

Ms. Rama Hariharan, Ms. Manie Khaneja, Ms. P. Lakshi, Shri Rajeev



Shri D.C. Misra, DDG NIC addressing the workshop

Goel and Shri Adesh Gupta interacted with the participants and sought state-wise clarifications on various areas of concern. The participants from various states put forth a number of suggestions for improving the adoption status of software applications.

Dr. Saurabh Gupta, SIO NIC Himachal Pradesh, Shri Lalit Kapoor and Shri Sajeew Gupta coordinated the workshop on behalf of NIC HP.

Ajay Singh Chahal,
Himachal Pradesh

AWARENESS PROGRAMME ON NATIONAL DATA SHARING & ACCESS POLICY (NDSAP) HELD AT BHUBANESWAR, ODISHA

NDSAP aims to provide an enabling provision and platform for proactive and open access to the data generated by various Government of India entities. The objective of this policy is to facilitate access to Government of India owned shareable data (along with its usage information) in machine readable form

through a wide area network all over the country in a periodically updatable manner, within the framework of various related policies, acts and rules of Government of India, thereby permitting a wider accessibility and usage by public.

Now, all State Governments are also joining in this Open Data movement by accepting the NDASP for state owned sharable data. On Saturday, the 26th October 2013, Government of Odisha organized an awareness session on the "NDSAP policy and the

concept of Open Data", at Gopabandhu Academy of Administration, Bhubaneswar.

Senior officers from the departments like Agriculture, ST & SC

Development and Backward Welfare, Revenue, Police, Health as well as few officers from District Administration participated in the programme.

On behalf of NIC Odisha, Shri A K Hota, Scientist-F and NDSAP Regional Coordinator (Eastern Region) along with Shri Malay Pattanayak, Scientist-D carried out the presentation followed by demo of the portal <http://data.gov.in>. The active interactions among participants clarified various queries raised by them.

All participants expressed that this policy will be very beneficial and articulated their willingness to proactively share the datasets once the policy is implemented by the Government of Odisha.

A.K. Hota, Odisha



Awareness Programme in progress

E-VISITOR FACILITY INAUGURATED AT HIGH COURT OF DELHI

e-Visitor software, developed by NHRC & e- Prisons Project Division at NIC, was inaugurated by the Hon'ble Justice Shri Madan B. Lokur, Judge, Supreme Court of India on 25/10/2013 in the auspicious presence of the Chief Justice of India.

Earlier, the visitors intending to visit the court complex find it quiet harrowing and hassled while issuance of the pass. But with launch of e-Visitor facility, the visitors can now register their requests for visiting High Court of Delhi online by clicking on the option for the "Registration" shown on the main page of the website. The registration number and approval status so generated is further communicated to the visitor through SMS/email. The

registration would be verified by the concerned advocate for the case mentioned by the proposed visitor through SMS/email. The current status of the visit can be ascertained from the menu "Status & Print" given above by entering the registration number. The status of the visitor approval can be ascertained from this link by entering the registration number.

In cases where the concerned advocate for some reason could not approve the proposed visit, the intending visitor can take a print-out of the request from the facility provided under the option "Status & Print" shown above and get the same approved at the Gate Pass Counter of the High Court of Delhi.

The registration number/print-out of the registration would have to be

presented by the intending visitor at the Gate Pass Counter of High Court of Delhi, along with the original proof of identity. After verifying the documents and after capturing the photograph of the intending visitor, visitor pass will be issued.

Another benefit of the facility is that on subsequent visits, the visitor can use the same registration number for the issuance of the visitor pass/gate pass for a different date. The key modules of the system include online registration facility for the general public; SMS and email integration; check current status of visit approval; real time status of visitors in the complex; barcode integration for security purpose, and tracking of all visitors' movements through gate management modules.

Rajiv Prakash Saxena, Delhi

MOBILE PHONE APPLICATION LAUNCHED IN HARYANA FOR ONLINE DISPLAY OF COURT CASES



onorable Chief Justice, Punjab & Haryana High Court, Shri Sanjay Kishan Kaul launched



Shri Sanjay Kishan Kaul, Hon'ble Chief Justice, Punjab & Haryana High Court launching the Online Citizen's Charter

the 'Mobile App' on 24th September 2013, which can be downloaded free for android or Java-based mobile phones. By using this app, one can watch the live display to know the status of their cases being taken up in the various courts. The Supreme

Court's e-Committee has developed a mobile application for online display-board, which has been customized for the High Court of Punjab & Haryana.

To ensure speedy justice and to enhance various facilities available in the premises of the Punjab and Haryana High Court for the litigants and general public,

Hon'ble Chief Justice also released "Citizen's Charter" of the High Court. The charter has been uploaded on the High Court's website - www.highcourtchd.gov.in/

Another application called Case Management Module, has also been released during the event. This application would facilitate advocates to maintain an "e-Diary" of their cases. It would further provide a complete status of a case by linking it to the "Case Status Module" giving complete details of the cases including complete judgments of the person's earlier decided cases. Advocates desirous to avail this facility would have to apply to the High Court; procedure regarding the same has been displayed on the website.

Poonam Gupta, Haryana

MINISTRY OF TRIBAL AFFAIRS WEBSITE BAGS NATIONAL AWARD FOR BEST ACCESSIBLE WEBSITE

Webbsite of Ministry of Tribal Affairs (<http://tribal.nic.in>) won National Award for the empowerment of persons with Disabilities, 2013 under the category – “Best Accessible Website” (Government Sector). The National Award (a Shield & a Certificate) was presented by the H.E. Shri Pranab Mukherjee, President of India in a function held in the Plenary (Main) Hall, Vigyan Bhawan, New Delhi, on 03rd December, 2013.

There were total 3 awards in this category. One award each was given to an eligible (i) Government Organization (ii) Public Sector Undertaking/Autonomous/Local Govt. Body and (iii) Private /Non-Governmental Organization, who was having their websites accessible to the persons with disabilities.

The website of the ministry is provided with Text Alternatives with all the moveable objects having Play and Stop options. The website is navigable, readable and compatible

with assistive technologies (Screen reader). It meets level AA of WCAG 2.0 guidelines. Persons with visual disability can use screen reader software while persons having difficulty in using mouse can use voice recognition software which enables working on computer with verbal commands. The website has facilities to change the size, colour and spacing of the text. The website can be accessed through mobile phone and easily accessible on all browsers (Internet Explorer, Mozilla Firefox, Google Chrome) and Disabled Specific Devices. The process flow in Content Management System (CMS) module facilitates Web Manager, Content Approver, Content Publisher responsible for their respective activities. The website has greater potential user-base which will include



(From Left : Shri Manikrao H Gavit, Minister of State (SJ&E), Shri Farrukh Abdullah, Kumari Shelja, Union Minister (SJ&E), H.E. President of India, Sh. H. S. Hora, TD-NIC-Tribal Affairs Informatics Division (Awardee), Sh. Ashok, Joint Secy, Ministry of Tribal Affairs, New Delhi (Awardee)

the disabled, elderly (having vision problems) and non-English speaking part of the population. State wise ST Population Map is made dynamic using population database. All ST population in India & Abroad, Research Scholars & other target population are benefited.

The regularly updated website is developed using Accessibility Compliant Content Management System and hence all the pages generated through the CMS will have provision for entering page title, meta keywords, meta description etc. With this, there is also provision for defining all tags for informative images.

H. S. Hora, Delhi

SHREE MAHAKALESHWAR TEMPLE MANAGEMENT (SMTM) SYSTEM RECEIVED SKOCH "ORDER OF MERIT" MEDAL

Shree Mahakaleshwar Temple Management (SMTM) system implemented by NIC



Shri D.S. Yadav, DIO, Ujjain receiving the award

Ujjain district of Madhya Pradesh facilitates virtual/live darshan of Shree Mahakaleswar via Internet across the globe on 24*7 basis. Some of the online features of the system include advance booking for Bhasma Aarti and printing of tickets, e-Dharmashala (for Dharmashala Booking), e-Complaint (to lodge a complaint) etc.

Entire system is role based as well as workflow based. The system also has facilities like Temple Resource Management, automation of

various day to day functions of temple and its services for stakeholders, e-Clock room (for putting luggage in Clock Room), e-Prashad, e-Donor List, and e-Inventory beside others.

Shri Mahakaleshwar Temple Management System aims to reduce the work burden of the employees besides bringing in transparency and safeguarding the pilgrims from the clutches of middlemen. Furthermore, the portal based feedback mechanism enhances process re-engineering, thus enabling better pilgrim management and efficient record keeping as well as retrieval system.

Santosh Shukla, Madhya Pradesh

RAJASTHAN STATE INNOVATION COUNCIL ORGANIZED 2 DAYS NATIONAL SEMINAR ON INNOVATIONS

A two day Rajasthan National Seminar on innovations has been organized by Rajasthan State Innovation Council (SInC) at Science Park, Jaipur on the 23rd-24th September 2013. The seminar was an effort to provide a platform for deliberation and dissemination of thoughts and ideas pertaining to innovations. Departmental representatives, NGOs and grass root innovators of state demonstrated & exhibited their innovations in the seminar. Students of various colleges also participated actively and demonstrated their innovative projects to the participants. The conference was addressed by many VIPs including Shri Sam Pitroda, Chairman National Innovation Council and Advisor to the Prime Minister, Shri B.K. Gairola, Mission Director (e-Governance), Shri Arun Maira, Member Planning Commission and Shri Kiran Karnik, Member National Innovation Council. Other key speakers in the seminar were Chief Secretary, Rajasthan Shri C.K. Mathew, Shri V.S. Vyas Chairman SInC and Deputy Chairman State Planning Board, ACS (RD & PR), Shri C.S. Rajan, Principal Secretary Planning, Shri Rakesh Verma, Principal Secretary, Horticulture, Shri Dinesh Kumar Goyal.

NIC has made elaborate arrangements

to make the event successful. Lease line has been arranged and live NICNET IPs was routed to the venue. Video conference facilities were established in the Science Park for important VC session of Shri Sam Pitroda live from California (US), Dr. B. K. Gairola and Shri Arun Maira from Planning Commission, New Delhi.

Live interaction of the dignitaries with Pilot Gram Panchayats of Ajmer was also organized. Session on live interaction with Pilot Gram Panchayats was taken by Smt. Indu Gupta, DDG & State Informatics Officer, NIC Rajasthan. Smt. Gupta briefed the panel and participants that 10 Gram Panchayats of Srinagar Block in Ajmer districts are connected through fiber as a Proof of Concept (POC). In addition to that 21 schools are also provided with Wi-Fi connectivity extended from the fiber terminated at Gram Panchayat. All the locations are strengthened by providing necessary computer accessories. Gram Panchayats are providing various e-governance services including Telemedicine to the rural citizens. Sarpanchs from Gram Panchayat Kanpura, Shrinagar and Tihari were present along



Seminar in Progress

with the some beneficiaries during the Video Conference session and answered the questions of panel guests and other participants attending the seminar. In the live Video Conference from Panchayats, Sarpanch spoke about the benefits of the fiber connectivity to the citizens.

Computerized Copies of Land Records, Birth & Death Certificates are being issued from Gram Panchayats. Telemedicine is being conducted from Gram Panchayat for Medical Consultation. IT-Manager posted at Panchayat is educating school's students and elders. Students are using internet for their studies, results and for getting news and information. Two days seminar was also hosted by NIC on <http://webcast.gov.in>. For transmission of the event to over 300 destinations across the state, NIC has also supported for Live Audio/Video feed to SATCOM.

CHANDAN SEN, Rajasthan

e-SAND PROJECT OF KASARAGOD BAGS CHIEF MINISTER'S AWARD FOR INNOVATION IN PUBLIC POLICY

The e-SAND project of Kasaragod District has received the Chief Minister's Award for Innovation in Public Policy-2012 under the category of "Procedural Interventions". The project called "Nirman@Kasaragod" is used for the transparent distribution of sand pass in the district. The award distribution ceremony was held at Institute of Management in Government (IMG), Thiruvananthapuram on 02/12/2013.

The e-SAND software of Kozhikode district has been customized and implemented by National Informatics

Centre, Kasaragod. Nirman@Kasaragod enables the public to book sand pass online through the district service portal www.gspeak.gov.in and obtain the sand pass by paying the required amount at sand counters functioning at Taluk offices. The procedure has been made very simple and transparent and has stopped illegal lifting and transportation of sand. More than 1 lakh sand passes have been distributed through this system.



Shri P.S.Mohammed Sagir IAS, District Collector, Kasaragod and Shri Anil.V.S, District Informatics Officer, NIC, Kasaragod receiving the award from Shri Oommen Chandy, Hon'ble Chief Minister of Kerala

The project has been implemented at Kasaragod district since March 2012.

Asha Verma, Kerala

HINDI PAKHWADA CELEBRATIONS AT NATIONAL INFORMATICS CENTRE

(14th- 28th September, 2013)

Hindi Pakhwada was observed at NIC Headquarters from 14th September 2013 to 28th September 2013. Hindi Pakhwada was also observed at NIC State Units. During the event, seven different competitions were organized in Hindi. Alike previous years, this year too, Hindi typing, dictation, essay-writing, speech, calligraphy, extempore etc were organized. Active participation from officials was observed for all the competitions.

Shri A. Mohan, then Director General of NIC, appealed to all officials of NIC Hqrs. and State units to carry out their maximum official work in Hindi language and urged them to continue with this effort. Inaugurating the competition, Hindi Officer Ms. Mridula Jain stated that she is overjoyed to find out that large number of officials are participating in the event.

During the closing ceremony, Dr. Vandana Sharma, DDG appreciated the efforts put forth by the employees and the way in which the Hindi Pakhwada was celebrated. She expressed her delight on seeing the

overwhelming response from the employees. She stressed on the need of paying more attention on the use of Hindi in day to day work as it is easy to work in Hindi. Moreover, working in Hindi language is everyone's constitutional duty, which should be followed religiously. She also informed that this time, instead of five, seven prize categories have been kept to encourage participation from employees and officials.

The Hindi Pakhwada concluded with a vote of thanks from Ms. Mridula Jain, Hindi Officer to Dr. Vandana Sharma DDG for participating in dictation competition and sparing some time from her busy schedule, thus encouraging other participants to work in Hindi.

GLIMPSES OF HINDI PAKHWADA CELEBRATIONS AT THE NIC STATE/UT UNITS

In the NIC State Units, Hindi Pakhwada has been celebrated with equal enthusiasm. During this period several competitions were organized and prizes were distributed to the winners.

In Kerala, Hindi Pakhwada (14th -

28th September, 2013) was marked by six competitions namely Translation, Memory Test, Picture Composition, debate on 'Internet ke fayade aur nuksaan', Elocution on 'Nari ka Samman' and Poem recitation. Total six prizes were given for each competition. State Informatics Officer delivered a message on the importance of use of Hindi for National integration and distributed the prizes and mementos.

In Andaman & Nicobar Islands, Hindi Pakhwada (14th - 28th September 2013) was inaugurated by Shri Mahadevya, Executive Engineer, Central Public Works Department, Port Blair. Hindi coordinator, Shri Gautam Gupta, PSA, gave a power-point presentation on the current scenario on the use of official language at NIC, Port Blair.

In Mizoram, Hindi Pakhwada was organized on 09 September, 2013 and commenced with the inaugural speech from State Informatics Officer. After that, quiz competition and debate were organized. Subsequently, the State Hindi Committee members- Shri Jayant Kumar Nath and Shri Praveen Kumar expressed their views.



Hindi Pakhwada celebrations at NIC Headquarters

Hindi Pakhwara in Madhya Pradesh (14th - 28th September 2013) was marked by Hindi essay-writing, Hindi Translation, noting & drafting and speech competitions and the winners were awarded with cash prizes and certificates by Shri M Vinayak Rao, State Informatics Officer.

In Lakshadweep Islands, the event (14th-28th September 2013) commenced with welcome address from Shri Syed Mohammad Nizar, DIO. Mrs. Shahina Begam, Systems Analyst and Hindi Coordinator conducted poetry recitations. Later, the employees participated in live webcasted Hindi Day celebrations at Delhi via video conferencing.

In Chandigarh, during the event (26th & 27th September, 2013), speech, essay-writing, dictation and calligraphy competitions were organized. Each competition had three categories and for each category, cash prizes and certificates were distributed.

In Meghalaya, Hindi Pakhwada (14th -28th September 2013) started with inaugural address from Shri Timothy Dkhar, SIO. During the event, speech, essay-writing, calligraphy and dictation competitions were organized.

Hindi Pakhwada in Jharkhand (1st - 14th September, 2013) was marked by various activities such as essay writing, extempore competitions etc. All district personnel were involved in the program through video conferencing and participated in the competitions.

In Gujarat (14th-28th September, 2013) calligraphy writing and speech

delivery contests were organized. The event ended with vote of thanks from Shri Rajneesh Mahajan, State Informatics Officer and DDG.

In Arunachal Pradesh (September 19, 2013), the event started with inaugural address from Shri Taso Habun, SIO. All employees were directed to use Hindi typing software and related information from <http://rajbhasha.nic.in/>. Shri Samir Rajan, DIO delivered a speech on “Manav Jeevan Mein Khelon Ka Mehatv”. Dictation competition was also organized during the event.

Hindi Pakhwada in Rajasthan (02/09/2013) was marked by competitions such as calligraphy in Hindi, Hindi quiz, Hindi extempore etc. Addressing the event, Ms. Indu Gupta, SIO congratulated the winners of various competitions and stressed on enhanced use of Hindi in everyday official work.

In Assam, Hindi Pakhwada (23rd – 27th September, 2013)b was inaugurated by Shri Deepak Goswami, SIO. Hindi Paragraph-writing & Hindi Poem Recitation competitions were held and were judged by Shri Badri Yadav, Inspection Officer (Implementation), Dept. of Official Language, Guwahati. Antakshri, solo song, duet song, drama and violin play were also organized during the event.

In Manipur, Hindi Pakhwada (21st - 28th September, 2013) was inaugurated by Prof. Dr. Hajarimayum Subdini Debi, Head, Department of Hindi, Manipur University. On this day, story and poetry reading

competitions were organized. Speech competition was organized on the closing day of the event followed by prize distribution.

Hindi Pakhwada was celebrated at NIC, State Centre, Lucknow on 19th and 20th September 2013. During this period, various Hindi competitions such as the essay-writing, dictation, drafting and calligraphy competitions were organized.

Hindi Pakhwada was observed in Punjab from 14th to 28th September, 2013 during which speech, essay, dictation and calligraphy competitions were organized. Prizes and certificates were distributed to the winners.

Hindi Pakhwada in Uttarakhand (14th to 28th September, 2013) was marked by essay-writing, question answer, quiz and dictation competitions. At price distribution ceremony, Dr. S.P. Kulshreshtha, SIO addressed all the participants on “Hindi Bhasha ka Mahatv”.

Hindi Pakhwada in West Bengal (27-09-2013) included programs in Hindi such as quiz, calligraphy, Hindi extempore etc.. Addressing the event, Shri Kamal Kumar Podhar, SIO encouraged the usage of Hindi language in day-to-day official work. Winners of various competitions were felicitated in the end.

Hindi Pakhwada was organized at NIC, Sikkim State Centre, Gangtok on 28-09-2013. The event was inaugurated by Shri Birendra Chhetri, SIO. The event was marked by various competitions such as calligraphy, drafting, dictation etc followed by prize distribution.



Kerala



A & N Islands



Mizoram



Madhya Pradesh



Lakshadweep Islands



Chandigarh



Meghalaya



Jharkhand



Gujarat



Arunachal Pradesh



Assam



Manipur



Uttar Pradesh



Punjab



Uttarakhand



West Bengal



Sikkim

*With Inputs from:
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