Informatics

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Happenings

E-Workshop for E-Governance through CICs

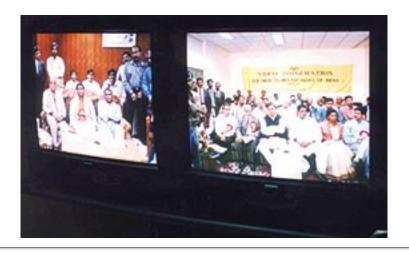
From Nandita Kapila, NIC HQ

• Under the Community Information Centre (CIC) project, computer-communication infrastructure is being established at 487 blocks covering the entire North-Eastern region of the country. Amongst other services, these centres will provide Internet based services for E-Governance to the local populace. On 7-8 Jan, 2002 and on 14-15 March, 2002, the CIC group, NIC organized a workshop over Video Conference (VC) in which several state units/ groups of NIC from different regions of the country showcased applications in the area of E-Governance which they have developed and deployed. The E-Governance areas covered included Treasury, Vehicle Registration, Citizencentric services, Land Records, Rural Bazaar. Arunachal Pradesh, Manipur, Mizoram and Nagaland participated in the first part of the E-Workshop. The remaining four states viz. Assam, Meghalaya, Sikkim and Tripura were covered in the second part.

VC Facility inaugurated at Chhattisgarh

From Y V Shreenivas Rao, our Chhattisgarh Correspondent

The inauguration of all the three divisional NIC video conferencing centres of Chhattisgarh state viz. Raipur, Bilaspur and Bastar was done by the Hon'ble Chief Minister Sh. Ajit Jogi from NIC VC studio, Bilaspur. Later that evening the Chief Minister also inaugurated from his Raipur office the Software Technology Parks of India (STPI) in Bhilai using point to point video conferencing at 384 Kbps. For this purpose 3 ISDN lines based VC system was installed by NIC at STPI,Bhillai and the entire process of its installation and operation was coordinated by the NIC District Centre, Durg. While talking to the press, the Chief Minister stated that his aim is to get in direct touch with the people of Chhattisgarh, through the excellent VC technology provided by NIC.



Laurels for IndMed Website From Naina Pandita, NIC HQ The Indian Medlars Centre's website (http://indmed.nic.in) managed by NIC has recently won the "Superior Resource Community Site Award" from Nu-Horizons Design Studio for its unique content and ease of navigation. The site provides details of NIC's biomedical information services and also gives links to over 100 biomedical websites and e-journals. The IndMED database is searchable free of cost from Internet. The website has also been nominated as a project for the Stockholm Exchange award for IT and has got an award for the best "Education site" from Site Design, USA.

NICNET Based Animal Production and Health Informatics (APHNET) From M. Moni, NIC HQ

Databases and Information systems are essential to provide decision support for livestock development in the country as the existing livestock information system is of poor quality. The ninth plan sub committee report has therefore envisaged building up reliable databases and network based information for all activities of the Animal Husbandry and Dairying Sector, at district, state and national level, using NICNET facilities, to strengthen "Animal Production and Health Information Systems Network (APHNET)". In view of the importance to reach technology to the small holders through Information Technology, APHNET nodes are also suggested to be established at about 42374 Veterinary Institutions in the country, comprising about 5990 veterinary polyclinics, 16020 hospitals and dispensaries, and 20364 veterinary aid centres, to strengthen Animal Disease Surveillance & Advisories System in the country. The IT plan suggests an outlay of about Rs.262.37 crores as non-recurring cost and Rs.38.89 crores as recurring cost.

Inauguration of LRC Centre

From NK Prasad, our Bihar Correspondent

A Land Records Computerisation Centre was recently inaugurated at Saran District in Bihar by Shri Pancham Lal, IAS, the Divisional Commissioner. Many dignitaries including District Magistrate of Saran, Shri Pankaj Kumar, IAS and SP were also present on the occasion. The LRC Software '*Bhu-Abhilekh*' designed and developed by NIC Bihar State Unit was also demonstrated by Shri Sanjay Kumar, SA, NIC. Technical Director & SIO Dr. Saurabh Gupta briefed the press on the importance of the LRC Project.



MoU signed with BIS

From Ranjana Nagpal, NIC HQ

NIC has signed a Memorandum of Understanding with **Bureau of Indian Standards (BIS)** for a project on "Integrated Computerisation of BIS activities". The BIS has its Headquarters and one Regional office in Delhi, 4 Regional Offices at **Chandigarh**, **Kolkatta, Chennai and Mumbai** and **21 branch offices** spread all over India, along with **5 BIS Laboratories**. As per terms of reference under the MoU, signed by Sh K M Sahni, DG (BIS) and Dr. N Vijayaditya, DG (NIC), NIC is to take up integrated paid projects relating to application development, hardware / software requirement analysis, procurement and implementation of the same, networking, training of BIS manpower etc.



E-Gov Seminar at Purulia

From M. Rahman, our West Bengal Correspondent

A seminar on E-Governance was jointly organised by the District Administration and NIC, Purulia District Unit (West Bengal) recently. Mr. D.P.Jana, IAS ,District Magistrate, Purulia delivered the key-note address highlighting the role of NIC in promoting the extensive use of Information Technology and describing why E-Governance is important to the public service. Dr. Subir Roy, Senior Technical Director & SIO, West Bengal delivered the inaugural speech and made a lucid presentation on "Technical aspects of E-Governance".



NIC at Women Scientist Conference

From Mala Mittal, NIC HQ

NIC recently participated in a conference cum exhibition on 'Women Scientists and Technologists: Role in National Development' held at Vigyan Bhawan, New Delhi. The NIC stall at the exhibition highlighted activities in the areas of Bio-Medical Databases, Bio-Technology Projects, GIS & Remote Sensing, Rural Bazaar, Training, Community Information Centres (CIC) and generated a lot of interest among the visitors who appreciated NIC's services in these areas.



E - Governance : Success story

WebCITI (Web based Citizen-IT Interface) From Vikram Jeet Grover, our Punjab Correspondent

Perspective

Introduction of E-Governance is the key to making information technology (IT) relevant to ordinary citizens. E-Governance is a culture, which changes how citizens relate to governments as much as it changes how citizens relate to each other. It brings forth re-definition of needs and responsibilities. Though computerization introduced successfully by NIC in different sectors in the districts has yielded fruitful results, the concept of introducing E-Governance to implement citizen-IT based applications in the district is the next logical step. WebCITI (Web based Citizen-IT Interface) is an E-Governance project for building citizen-IT interface for services offered by district administration at Fatehgarh Sahib in Punjab as a pilot project. Sponsored by the Department of Information Technology (DoIT) [Earlier MIT (Ministry of Information Technology)], WebCITI provides web based interface to citizens seeking services from district administration. These include issuance of certificates such as death/birth, caste, rural area etc; licenses such as arms license, permission for conferences/rallies etc and benefits from socio-economic schemes. The Project has been appropriately funded by Govt of Punjab and has been executed through NICSI/NIC-Punjab State Unit. Department of Information Systems & Administrative Reforms (DISAR), Govt of Punjab is the nodal office involved in WebCITI. WebCITI has been augmented with DialCITI (Dialup based Citizen-IT Interface) to provide status as well as procedural information through telephone. It further extends the cause of providing efficient, transparent & quick information to the citizens. One can have information on any services or status of his case or application on phone. DialCITI was necessitated by the fact that Internet has not yet penetrated the villages. However, the phone access is available at this level. One can also find information about various schemes and procedures, status of one's application etc. through web Interface available through select intranet counters at developmental block / revenue tehsil and kiosks.

The set of software developed can be implemented as stand-alone versions as well as on client/server.It facilitates the citizens in interacting with the government.

Mission and Objectives

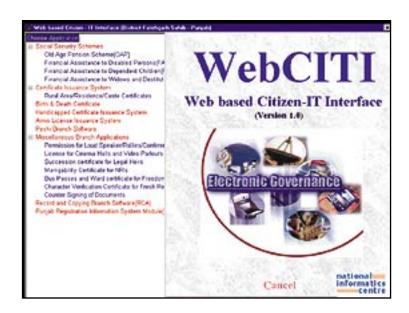
With the sole mission of bringing district administration closer to the common people thus offering efficient and effective services, WebCITI is evolved with the following objectives.

- To provide a friendly, affordable, speedier and efficient interface between the government and the public.
- To ensure greater transparency, efficiency, objectivity, accountability and speed that can help tackle most of the maladies of the government by providing efficient services to the public.
- To provide responsive and transparent services to the citizens of the state.
- To provide cost effective service and at the same time improving the quality of service.
- To provide a single window for govt services at district level.

NIC's Contribution

NIC Punjab / NICSI is the sole executing agency of the project. NIC has been involved in detailed study of activities of various branches of Deputy Commissioner Office to have complete understanding of working of the prevailing system

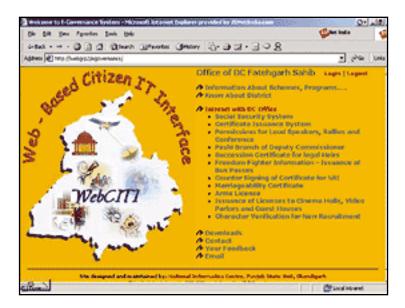
for introduction of E-Governance, identification of user requirements for creating Citizen-IT interface at DC office, Identification of required infrastructure details such as site preparation, telephone lines etc to be provided by district administration, providing training to the users and giving implementation support.



Application Areas

The following key services are available in WebCITI. These have been identified on the basis of interactions required by citizens with the district administration.

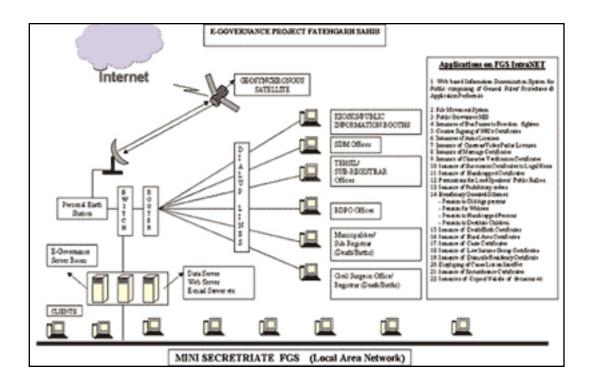
- Property Registration Information System Module (PRISM)
- Web based Information Dissemination System for the Public
- Arms License
- Peshi (Court) Branch of Deputy commissioner
- Financial Assistance Schemes of the State Govt
- Old Age Pension
- Financial Assistance to Widows and Destitute Women
- Financial Assistance to Dependent Children
- Financial Assistance to Disabled Person
- Issue of Rural Area certificates
- Issue of Caste certificates
- Issue of Domicile certificates
- Issuance of Death & Birth Certificate
- Record and Copying Branch
- Freedom Fighter Information Issuance of Bus Passes
- Issuance of Licenses to Cinema Halls, Video Parlours & Guest Houses
- Character Verification for New Recruitment
- Succession Certificate for Legal Heirs
- Certificate to Handicapped persons
- Permission for Loud Speaker, Rallies, Conference
- Issuance of Marriageability Certificate
- Prohibitory Order regarding Liquor, Meat Shop, Processions, imposition of Sec144, Curfew etc.



Highlights

- MIT sponsored; Also funded by Punjab Govt
- Members from MIT, IT department-Govt of Punjab, district administration, NICSI & NIC Punjab to review the project
- Technical Execution by NICSI and NIC Punjab State Unit
- Dialup connectivity from Tehsils / Blocks / Villages to district servers
- Use existing databases as verification of identity of citizen and property
- Query through Interactive Voice Response System
- LAN in Mini Secretariat
- Public Information Kiosk in the City
- Local language (Gurumukhi)

E-Governance Architecture



- Making information on Schemes, Forms, Procedures available from remote locations and on Internet
- Workflow like systems instead of input/output to facilitate tracking of progress Elimination of verification and on the spot issue of certificates
- Use of Citizen ID to provide unique identification
- Linkages with Land Records, Census, BPL, Licenses, Ration Cards, Death and Birth database

Salient Features

- Single window system
- On Line verification
- On the spot delivery, wherever possible
- Information/Status on Intranet/ Web
- Generation of internal notes & verification forms to minimize delay
- Based on Highly specific parametres to facilitate future changes
- Business rules in database rather than hard-coded
- Provision for entry of old records
- Local Language (Gurumukhi)
- Computerized acceptance-cum-fees receipt for Applications
- Generation of Identity Card/ Passes/ Permissions/ Licenses / Certificates
- User administration for each module
- Audit of critical activities
- MIS Reports

Technologies Used

All the modules of WebCITI have been developed using Visual Basic with SqlServer at the backend. The web components are hosted on Apache web server and use Java Servlets.

Impact

The project was triggered by successful implementation of PRISM (Property Registration Information System Module) in the sub-registrar offices, which is a living example of how to deploy simple innovative ideas using IT tools to automate the procedures and enforcing rules to avoid scope of misuse and at the same time provide better services to the citizens. On the other hand it resulted in big jump in revenue collection. Such a large-scale acceptance created scope for marching ahead to cover more govt services for e-governance. All the modules adhere to single window concept in workflow and provide unique application identification. Currently the access points are at Fateh Garh Sahib-intranet and once data builds up, it will be thrown open to public through web. In the words of Sh Nirmal Jit Singh Kalsi, IAS, Director cum Secy(IT), Govt of Punjab, "The main emphasis of WebCITI is on web enabled citizen centric services coupled with the necessary administrative reforms. For the first time the State Government decided to provide the government services on the basis of authentication through a Citizen Data bases to be created on the basis of a house to house survey. The attempt is to bring the services closer to common people"

For further information, please contact

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Email: punjab@chd.nic.in

State in focus

Uttar Pradesh

From Vinod Taneja, our Uttar Pradesh Correspondent

Garlanded by Ganga and Yamuna, the two pious rivers of Indian mythology, Uttar Pradesh is a rainbow land where multi-hued Indian culture has blossomed from time immemorial. U.P. is the most populous and area wise, the fourth largest state of India. Its administration requires managing 17 Divisions, 73 revenue Districts, 140 tehsils, 98,153 villages and a vast population of over 166 million spread over diverse geographical regions. The complexity of administering the state presents equally challenging opportunities for NIC in U.P. Since its inception in 1988, NIC UP State Unit has worked tirelessly behind the scenes to introduce IT culture & Internet services in the state, and is credited with pioneering many IT activities in the government departments.

NIC's Major Achievements in U.P

- **UPNICNET**: UP-NICNET is one of the ambitious MAN implementation by NIC UP State Unit over NICNET, consisting of approx. 1000 nodes in the state capital Lucknow. It uses Hybrid technology e.g., VSAT, RF, OFC, ISDN and POTS connecting 13 important buildings including Governor House, Assembly House, all the secretariat buildings & other state-owned Government buildings. UP-NICNET is a resource-shared project on a 50:50 basis between NIC and Govt. of U.P. The State Government is using all the important services i.e. Internet, FTP, Desktop VC, e-mail services to make its functions e-enabled. UP-NICNET is running smoothly since 1999, and is ever expanding.
- Shri. Rajnath Singh, Chief Minister to the Hon'ble Prime Minister of India during the inaugural Videoconferencing session in the state on 2nd October'2001. NIC UP State Unit earned wide applause from all quarters & the distinction of inter-connecting all the districts of the state within two and a half months by the given deadline. The State Government is actively using NIC's 73-node state-of-the-art DAMA based VC network in the state, right from day one. The usage of the facility got another shot in the arm, when Hon'ble PM on 2nd January'2002, visited NIC's VC Studio at 5 Kalidas Marg, the official residence of Chief Minister of Uttar Pradesh It was indeed a proud moment for NIC. Present on the occasion were H.E. the Governor and the Hon'ble CM of the state. NIC's technical capabilities and services were fully demonstrated when the V.V.I.P. dignitaries interacted over VC with few district officials, selected at random.



■ **IT Vision Group**: The Government of U.P. is making a paradigm shift: from e-government to e-governance. Director General (DG, NIC) and State Informatics Officer (SIO, UP) represent NIC in the IT Vision Group of the state headed by Chief Minister, UP. IT Vision Group has been setup to shape and review IT related policies and issues in the state of U.P.



Judiciary: NIC has taken steps towards making the judiciary of U.P. into *e-judiciary* in the state. NIC U.P. State Unit has laboured hard to introduce full automation at Allahabad High Court, its Lucknow bench and the district courts covering almost all facets of legal activity in the state. Apart from the dissemination of information through the web site http://allahabadhighcourt.nic.in, a computerized "*Public Judicial Enquiry Counter*" at Allahabad High Court & its Lucknow bench caters to the information needs of the litigants coming from far away places in the state. NIC UP State Unit is now focusing all its strengths towards speedy computerization of 54 district courts in the state.

E-Governance Initiatives

• Automation of Government Treasuries: ITSANIC (Integrated Treasury System Application of NIC) in Oracle RDBMS on Linux platform evolved as the most economical possible IT solution for the Treasuries Department by NIC UP State Unit. The project running since 1994 has seen many technological innovations and is a successful implementation at 90 sites in both the states of Uttar Pradesh & Uttaranchal. The basic objective of ITSANIC is to

facilitate online voucher acceptance, its validation, checking of budget classification, bill passing, unit level budget checking, online cheque printing, accounts preparation for UP's Accountant General (A.G.) etc. The web-site http://upgov.up.nic.in/uptreasuries linking the data from all the treasuries in the state makes the U.P. Treasuries to have a web presence, the first of its kind in the country.

- Online Transport System: The project running successfully at Regional Transport Office (RTO), Lucknow is ready to be launched at twenty-five other sites of the state in a phased manner. Except for issuing driving licenses, the project has automated all major activities of the Transport Department of Uttar Pradesh, viz., vehicle's registration, permit, enforcement and taxation activities. Automation at the office of State Transport Authority (STA) at the state transport department's headquarters in Lucknow, where inter-state & inter-region road permits are issued, as well as computerization at the office of Transport Commissioner, have also been initiated. In the words of Raja Mahendra Aridaman Singh, the state's Transport Minister: "Automation of Transport Department in U.P. is the first of its kind among State Government's citizen-interface departments, where an ordinary citizen through computerized services at the counters, is the direct beneficiary of the State Government's I.T. initiatives",
- Land Records Computerization: NIC has successfully tested in district Etawah, dissemination of land records information through the net. Another pilot project of integrating "Record of Right" and cadastral village map is underway and very soon the farmers can access village maps as well as the related land records data on the net. Board of Revenue of Uttar Pradesh also has plans to distribute copies of Khatauni (Record of Right) to the farmers through the computers being installed at tehsil headquarters in the state. NIC UP State Unit and its District centres are providing total IT solutions for the project.
- **Pensioners Information System :** Running in all the 73 treasuries of U.P. and 17 treasuries of Uttaranchal, this software is used for pensioner database, calculation of first pension, monthly pension etc. Through the website of the treasuries http://upgov.up.nic.in/uptreasuries, our respected senior citizens as pensioners of Government of U.P. are now able to see their payment details right from their homes.
- Lucknow Nagar Nigam : NIC UP has taken up pilot project implementation for Lucknow Nagar Nigam (Municipal Corporation). Its objective is to build a database on houses located under municipal area, tax liabilities due to the corporation and defaulters, deaths and births registrations, generation of instantaneous reports etc., as well as web-enabling some of its activities
- **Land Registry**: NIC UP State Unit made a thorough study of the software being implemented by NIC State Units of Punjab and Haryana, and owes lots of gratitude for their support. The software received from them has been tuned to the needs of the Govt. of U.P and efforts are being made to implement it in the five pilot districts of the state as a citizen interface project.
- Chief Minister's Grievance Monitoring System: The grievances received from general public are monitored through NIC's File Monitoring Software throughout the state, including the office of Hon'ble Chief Minister of U.P. The system generates timely reminders and keeps track of file movement and action taken upon.
- **Chief Minister's Ghoshna(Announcement) System :** This unique project helps the Chief Minister's Office and his secretariat in monitoring the progress of CM's announcements regarding welfare and development schemes for the state.
- **District Statistical Handbook (***Sankhiyikiya Patrika***)** : NIC UP State Unit has created a database of District Statistical Handbooks of all the districts of the state, which has a wealth of data on important economic

parameters of the respective districts for the last 10 years. NIC UP State Unit has implemented data mining using OLAP.

Other Significant Projects

- Election Management System
- Uniform Payroll System, compulsory for all the State Government departments
- Budget Computerization, and its availability on the web
- MIS for monitoring 20-point programmes and District Plan
- Allotment of State Government accommodation
- Vidhan Sabha Library Computerization
- Computerization of Department of Rural Development
- Revenue Cases disposal system
- Online Sugar Sale system

Web Services

The Government of U.P. has come out with its website policy through a G.O. (Government Order) making http://upgov.nic.in as the official web site of Uttar Pradesh on NIC domain, for all of its 114 departments and 70 districts. As on date, a total of 108 web sites pertaining to 30 state Government departments, 64 districts and 14 other departments/ corporations have been put on the web. For the purpose, total IT support, including development, hosting and maintenance of respective websites has been provided by NIC UP State Unit. A mega portal http://uponline.nic.in/ has also been developed for complete integration of all web sites in Uttar Pradesh with a search engine facility. Recently, teachers' recruitment results on net through http://upgov.nic.in/ gave statewide recognition to NIC among the general public.

NIC District Units

The district units of NIC in U.P.have been providing major I.T. support to the district administration & other district level offices of both the central & state government departments. Providing reliable IT consultancy & IT solutions by NIC District Units even in remote areas has proved to be a major help to the Government machinery. The experience

gained by the U.P. Government's officers practically using the skills available with NIC in their field operations, makes them exude confidence in NIC's capabilities during their state & directorate level postings.

Training

Regular training and re-training programmes for the personnel of the both the State and Central Government departments, as well as Technology update programmes for NIC officers is a routine exercise at all NIC centers in U. P., which has been appreciated by various beneficiary departments & participants. NIC UP State Unit's well-equipped training labs ensures 1:1 man-to-machine ratio, during all of its training programmes.

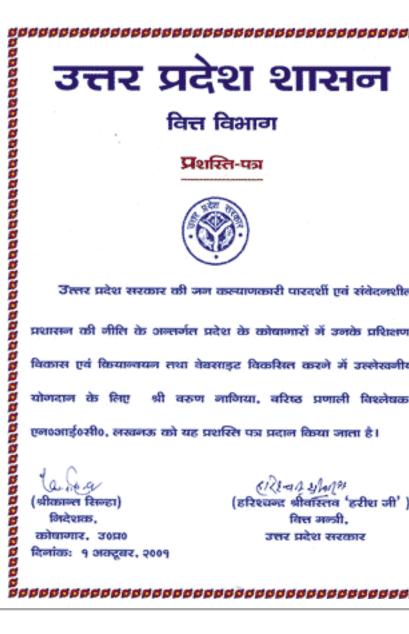
National level Project

NIC is also providing I.T. support and implementing National level computerization projects in the following offices in the state of Uttar Pradesh:

- Passport Offices at Bareilly & Lucknow
- Registrar of Companies at Kanpur
- Central Excise Offices at Meerut, Kanpur, Lucknow & Allahabad
- High Court at Allahabad & its Lucknow bench
- Postal Life Insurance (PLI) for the Department of Posts
- Press Information Bureau

Awards of Excellence

The efforts of NIC UP State Unit and its officers have been appreciated right since the inception of NIC in U.P. The President of India's medals were awarded to six NIC officers in 1992 for their contributions towards successful computerization of "Census of India, 1991". Recently, the Government of U.P. awarded three NIC officers, for their contribution towards Treasury computerization process. Recognition of contributions of NIC UP officers by the current National Executive of Computer Society of India also demonstrates NIC's dedication to further the cause of I.T. in U.P.





उत्तर प्रदेश सरकार की जन कल्याणकारी पारदर्शी एवं संवेदनशील

प्रशासन की नीति के अन्तर्गत प्रदेश के कोबानारों में उनके प्रशिक्षण,

विकास एवं कियान्वयन तथा वेबसाइट विकसित करने में उल्लेखनीय

श्री वरुण गणिया, वरिस्ठ प्रणाली विश्लेषक.

एन०आई०सी०, लखनऊ को यह प्रशस्ति पत्र प्रदान किया जाता है।

्रिचा श्रीजा^छ (हरिश्चन्द्र श्रीवस्तिव 'हरीश जी')

For further information, please contact

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E - Governance Products and Services

Prime Minister Applauds NIC's VC Service

From Manoj PA, our Gujarat Correspondent

Hon'ble Prime Minister of India, Shri Atal Bihari Vajpayee recently interacted from his New Delhi residence with residents of Chapredi village in Bhuj and Bhuj Civil hospital over video conferencing to enquire about the progress made in rehabilitation and reconstruction work following last year's earthquake. Hon'ble Chief Minister of Gujarat, Shri Narendra Modi and Hon'ble Minister of Industries and IT, Government of Gujarat, Shri Suresh Mehta also participated in the event. This was the fourth video conference which was held by the Prime Minister during last 4 months using NICNET. Hon'ble PM showed his appreciation for NIC's services by writing the following letter to DG, NIC.



प्रधान मंत्री Prime Minister

New Delhi January 29, 2002

Dear Dr. Vijayaditya,

I write this letter to convey my sincere appreciation of the efforts put in by NIC in arranging a four-location video conference between New Delhi, Gandhinagar Sachivalaya, Bhuj Hospital and a remote village - Chapredi, in Bhuj Taluka, on 25th January, 2002 morning.

I place on record that the NIC Team in PMO and the Video Conferencing Unit in NIC Headquarters have worked in tandem on all such occasions for the success of such events. I am sure NIC will continue to do so in future also.

With regards,

Yours sincerely, APN appropriate (A.B. Vajpayee)

Dr. N. Vijayaditya
Director General
National Informatics Centre
Department of Information Technology

National Informatics Centre
Department of Information Technology
Ministry of Communications & IT
CGO Complex, Lodi Road
New Delhi.

Computerization of Minor Irrigation Census

From Kishore Kumar, NIC HQ

The Water Resources Informatics Division of NIC recently accomplished the computerization of second census of minor irrigation schemes run by the Ministry of Water Resources. The census covered approximately 12 million minor irrigation structures classified under five types of minor irrigation schemes, namely dugwell, shallow tubewell, deep tubewell, surface lift schemes and surface flow schemes. NIC had compiled and processed the census data for 21 states and 4 union territories. A CD-ROM containing the reports was recently released by the Secretary (WR) and DG, NIC. The reports are also available at http://wrmin.nic.in. In view of the successful computerization of the 2nd Minor Irrigation census, the Ministry has now entrusted the computerization of 3rd minor irrigation census also to NIC through an MoU signed by Sh M Moni, Deputy Director General, NIC and Sh M K Sharma, Commissioner (WM & MI), Ministry of Water Resources.

Pustakalaya - Library Management System

From Ranjana Nagpal, NIC HQ

A LAN based GUI Library Management System aptly titled 'Pustakalaya' has been developed by the Food and Consumer Affairs Infosys Division of NIC and implemented at the Ministry . The system is a workflow application that automates all library management activities such as members' registration, accession, cataloguing, book issue and return , new book purchasing etc. A highlight of the software is the extensive search facility over the LAN which allows the users to search through publisher's name, author, title and keywords etc.

Computerization in Cuttack Municipal Corporation

From AK Hota, our Orissa Correspondent

With the implementation of computerized Birth & Death Registration System and Holding Tax Collection Monitoring System by NIC Orissa State Unit, the Cuttack Municipal Corporation became the first corporation in Orissa to go for automation. The Tax Collection Monitoring System facilitates the creation of database of assessees, calculation of different taxes, generation of tax collection register and various important reports. The Birth and Death computerization system concentrates on issue of certificates, monitoring birth, still birth and death records and generating reports. The system was inaugurated by Shri Ashirbad Behara, Chairman, Cuttack Municipal Corporation.

From Manivannan M, SIO Pondicherry

The Social Welfare Department of Govt of Pondicherry celebrated the World Disabled day on 3rd December 2001 to honour the disabled persons. In this context, NIC, Pondicherry has developed the necessary software to computerize the Identity cards and passbooks distributed to the disabled persons. The ID cards have been prepared bilingually (both English and local language) using GIST technology. The information is stored in the database along with the photo and signature of the individuals. In the first phase, 200 ID cards and passbooks were generated using this software and distributed to the individuals, by the Hon'ble, Lt. Governor of Pondicherry, Smt Rajani Rai.

SC/ST Issuance Information System

From Sumpan Bakshi, NIC Delhi

Monitoring and issuing of SC/ST certificate is one of the major tasks carried out by the staff of the Deputy Commissioner South West, Kapashera, New Delhi. Every month, about 300 certificates are issued to the public. Sometimes, especially after the declaration of academic results, there is a heavy rush for issue of SC/ST certificates, and the number increases to about 600. Therefore, under the pre-computerization phase, work of certificates had been time consuming, unsystematic and difficult to monitor.

The NIC South West District Centre therefore took up the responsibility of finding a faster and better solution and has developed a computerized system for issuing of SC/ST Certificates. This Software has been developed on Windows 2000 Server, Access 2000, Lipi Software (Hindi Version) on Server side and Windows 2000 Professional & VBA on the client end. The software was formally inaugurated by the Deputy Commissioner (South-West) Shri Ashwani Kumar, IAS at Kapashera, New Delhi.



Technology update

Secure Sockets Layer (SSL) for Causelists Application From CLM Reddy, NIC HQ

The Courts Informatics Division is maintaining Causelists of 18 High Courts and 10 Benches on Internet for providing easy and timely access to the advocates and litigant public. Causelists are scheduling of cases to be heard by the courts on the following day. It is a must for every High Court to generate causelists by the evening of the day before. Size of each High Courts' Causelist vary from hundred to two hundred printed pages. Ever since the 'Causelists on Internet' has been made available, the popularity of Causelist site has been growing regularly. The site receives about 25,000 hits per day. This is very sought after application by the advocates The Causelists are generated from NIC Servers installed in each High Court using the List of Business Information System (LOBIS) Software. As per the usual practice, once a Causelist is generated from the computer system, the High Court either cuts stencils for each page of the causelist and cyclostyle to generate thousands of copies to distribute among the advocates or sends a printed copy for photo-offset printers. As the generation and distribution of causelist copies usually takes four to five hours, the advocates receive printed copies of the causelists only late night at their offices/residences. With the availability of causelists on Internet, the advocates are in a position to view and download their High Court's Causelist as soon as they are generated by the LOBIS Software i.e. about 6.00 P.M. everyday.

Procedure

As a file of Causelist of each High Court is about 5 to 7 MB in size, NIC High Court Computer Cells send the ASCII file of the causelist through 'ftp' to the server at the NIC-Headquarters. After the files are transeferred through FTP, they 'telnet' to the server to run the software script which converts the ASCII file into a structured format and uploads on the web. The process of ftp and telnet to run the script usually take less than 3 to 4 minutes depending on the network speed. As the ASCII files are to be sent through ftp and telnet to the server, the server side ftp port and telnet port have to be opened, thus making it a soft target to the potential hackers. Unless these two ports are opened throughout, no High Court can upload their data file and run the script. As the High Courts generate causelists at their own convenience without any fixed time frame, it is not possible for anyone at the server level to upload the causelist by a special service. In order to sort out the potential problem of getting hacked, the COURTIS Division has effectively employed Secure Sockets Layer (SSL) for this web-enabled application. The SSL, which has been in use by many of the Banks for their on-line financial transactions, is a well proven security technology.

Technical Brief

SSL server certificates satisfy the need for confidentiality, integrity, authentication, and nonrepudiation. Basically SSL is used to encrypt and decrypt messages sent between the browser and the server. By encrypting the data, it is protected from being read while they are transferred across the Internet. SSL encrypts the data from the browser, then sends it to the server. When the server side SSL receives the message, it decrypts it and verifies that it came from the correct sender (authentication). SSL Software needs to be installed on both the browser and server. Usually most of the recent browsers support SSL. The SSL comes in 40 bit and 128 bit encryption.

The process begins by establishing an SSL "handshake" — allowing the server to authenticate itself to the browser user, and then permitting the server and browser to cooperate in the creation of the symmetric keys used for encryption, decryption, and tamper detection:

- 1. A customer contacts a site and accesses a secured URL: a page secured by a Server ID (indicated by a URL that begins with "https:" instead of just "http:" or by a message from the browser).
- 2. The customer's browser automatically sends the server, the browser's SSL version number, cipher settings, randomly generated data, and other information the server needs to communicate with the client using SSL.
- 3. The server responds, automatically sending the customer's browser, the site's digital certificate, along with the server's SSL version number, cipher settings, etc.
- 4. The customer's browser examines the information contained in the server's certificate, and verifies that:
 - (a.) The server certificate is valid and has a valid date.
 - (b.) The CA that has issued the server been signed by a trusted CA whose certificate is built into the browser
 - (c.) The issuing CA's public key, built into the browser, validates the issuer's digital signature
 - (d.) The domain name specified by the server certificate matches the server's actual domain name If the server cannot be authenticated, the user is warned that an encrypted, authenticated connection cannot be established.
- 5. If the server can be successfully authenticated, the customer's Web browser generates a unique "session key" to encrypt all communications with the site using asymmetric encryption.
- **6**. The user's browser encrypts the session key itself with the site's public key so that only the site can read the session key, and sends it to the server.
- 7. The server decrypts the session key using its own private key.
- 8. The browser sends a message to the server informing it that future messages from the client will be encrypted with the session key.
- **9.** The server then sends a message to the client informing it that future messages from the server will be encrypted with the session key.
- 10. An SSL-secured session is now established. SSL then uses symmetric encryption, (which is much faster than asymmetric PKI encryption) to encrypt and decrypt messages within the SSL-secured "pipeline."
- 11. Once the session is complete, the session key is eliminated.

It all takes only seconds and requires no action by the user.

At present the COURTIS Division is using a Digital Certificate that is available for free for one year. The users of the High Courts, use the SSL facility by https://164.100..... Once authenticity of the user is confirmed by the server's decryption mechanism, the user is allowed to ftp the files and run the script through a special module written in PHP. By a click of a button, the end user is able to send the file to the Server and run the script for up loading the data in a highly secured manner. SSL allows the Server to be brought under Firewall, thus providing full security for the Server from any potential hackers.

For further information, please contact

Courts Informatics Division,
NIC Headquarters
A-Block, CGO Complex,Lodi Road,New Delhi-110003

Email: clist@hub.nic.in

District Informatics

South Tripura

From C. K. Dhar, our Tripura Correspondent

South Tripura District, Udaipur is located 55 Kms from Agartala, the State capital. Udaipur is famous in hindu mythology and it is said that when Lord Vishnu had cut off the body of Mata Sati into 51 pieces by Sudarshana Chakra, the 'right foot' of Mata Sati fell at Matabari, Udaipur in Tripura.NIC-South Tripura District Unit was formally setup in the year 1990 and the road ahead was not smooth by any standards. The topmost priority before the District Unit was to initiate a 'computer culture' among various government departments and their employees. The intense efforts by NIC backed by the wholehearted cooperation from District administration finally bore fruit with time and now the centre has been rendering effective IT services in different sectors of the district administration. Ever since the inception of the Centre, many projects have been accomplished successfully for facilitating E-Governance in the region.

Service Facilitation Centre (SFC)A single window to extend services to citizens

In order to realize the goals of responsive administration in true sense, the district administration, South Tripura and NIC South Tripura District Unit took up an IT enabled 'Service Facilitation Centre' project during 2000-01 which aims to provide a single window service to citizens which would help the common people directly and enhance transparency in Government procedures. In Tripura, SDO's offices are the main front-end interface with the citizens for a range of services like issuance of different certificates, certified copies of documents, various types of licenses etc.



NIC-South Tripura District Unit conducted a detailed study of the requirements. Accordingly a few citizens centric services were identified and prioritized which are at the District or Sub-divisional level. The study identified the sub-processes to be followed for each such service and the number of days required for sending reports from sub-ordinate offices was also taken into account.

On the basis of the study, the SFC application software has been developed by NIC South Tripura District Unit using MS Win 9x/Jet DB4.0 using VBA for catering front-end activities relating to citizens centric services. Presently the software caters to 26 services in two operational levels viz. the District level and the Sub-Divisional level. The software

is user friendly, menu driven and works under network environment.

SFC application software ensures that the applicant is able to get his/ her service within the stipulated time. The software has an inbuilt effective mechanism of performance monitoring by the SDOs and also by the District Magistrate & Collector.

The application software generates a two-part 'Receipt Slip' against each service sought at the SFC. The first-part is clipped with the original application for internal processing and the second-part is given to the applicant, mentioning the next probable day of his/her visit. The application software also generates a number of reports like progress-cum pendency report for monitoring of performance by the District Magistrate & Collector, service-wise delay report for monitoring of performance by the SDOs and checklist, which is used by the staff running the SFCs.

The facilitation centre was inaugurated by the Hon'ble Governor of Tripura and has been running successfully in the SDO's Office, Udaipur since 14th July 2000 and in the SDO's office Belonia since 27th June 2001.

The district administration has drawn a plan to extend the project to cover all the Sub-divisions in the District to bring transparency into government services being provided to the citizens. This plan covers full computerization of backend processing activities of these services with a web interface for citizens.

Interent Connectivity

NICNET connectivity for Internet access has been provided to the District Magistrate & Collector, Additional DM and few major wings of district administration via LAN. Dial-up NICNET connections have also been provided to few other NICNET domain users.

Other Projects

Land Records: Data entry work for Udaipur Sub-division has been successfully completed recently.

Dak Monitoring System: A customised software on the Dak Monitoring System, implemented by NIC District Unit, has been successfully running in the District.

Grass root level E-Governance: Feasibility cum SRS reports on Grass Root level E-governance with emphasis on the Panchayat Raj Institutions in general and the Panchayat Samiti in particular has been prepared and submitted by the NIC Centre to the district administration.

Revenue Cases Monitoring System: The NIC District Centre has developed a software for revenue cases monitoring that includes features like case filing, cause list, case updating and generating different MIS reports.

Sh Rakesh Ranjan, District Magistrate and Collector, South Tripura acknowledged NIC's contribution in the Service Facilitation Project with the following words :

"It gives me great pleasure to inform that software for 'Service Facilitation Centre' project which has been developed by NIC-South Tripura District Centre is running successfully at SDO Offices at Udaipur and Belonia in South Tripura District. It provides a single window

clearance service for different services given by SDO Offices and ensures that the applicant is able to get his service within the stipulated time. It also generates check-list, performance report, delay report etc for monitoring purposes at my level and SDOs level.

I would also like to say that NIC has been rendering useful services to the District Administration for the promotion of IT culture and towards the achievement of E- Governance"

Contact

District Informatics Officer Udaipur, South Tripura Tripura - 799120 Tel No. 03821-22533

Email: triudp@hub2.nic.in



Dynamic Web Pages

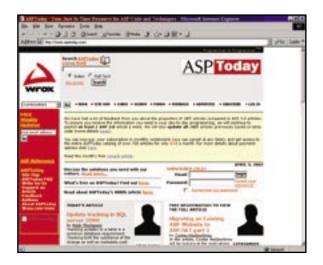
Compiled by Vinod Taneja, our UP Correspondent

Integrating enterprise database systems with the web and replacing static HTML with dynamic, database-driven web pages have become premier IT challenges in recent years. Out of the many technologies available for Database Web Integration, ASPs and JSPs are two of the most popular technologies for generating dynamic content for a web page.

Both Microsoft's Active Server Pages (ASP) and Sun's JavaServer Pages (JSP) are types of scripted web pages that can display dynamic content requested by a web browser. Both technologies use HTML for determining page layout. The primary difference between the two development methods is that ASPs generally interact with a back-end environment built with Microsoft technologies, while JSPs live in a Java-based environment. For generating content and querying databases or other applications, ASPs rely on programs written in embedded Microsoft scripting languages, while JSPs use Java programs. Following are some of the references that may be useful for developers and analysts, alike:

http://www.asptoday.com

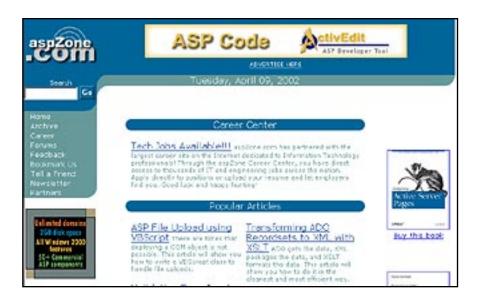
ASPToday is a vast storehouse of knowledge on ASP, with a new, in-depth ASP article every single day! The catch is that you must subscribe (\$99 for a year) to access this archive of over 500 articles. However, the site gives free access to the two most recent articles (yesterday's and today's), and lets you sign up to receive email summaries of new articles as they are published.



Active Server Pages (ASPs)

Many sites like, ASP ZONES at http://aspzone.com/ and Visual Basic Bookmark - ASP (Active Server Pages) resources at http://www.vb-bookmark.com/vbAsp.html provide a comprehensive list of ASP resources. Brief details of each site are explained that may provide the answer one is looking for. However, excerpts from an article "Top 3 Reference Sites For Your Favorite Server-Side Language" by Kevin Yank at http://www.webmasterbase.com suggest the following three best dedicated web sites for ASP. Browsing through these sites, one can hardly

disagree with the author of the article.



http://www.4GuysFromRolla.com

Articles on the Net vouch for the fact that this site has long been the resource of choice for ASP developers in the know. The only failing reported for this site is that it doesn't give a whole lot for beginners to go on. The expert articles, FAQs and advice on this site, are first-rate. 4GuysFromRolla is the best out of a number of ASP sites hosted by Internet.com. Its other ASP related sites viz., http://www.15seconds.com/ (for short, useful answers and code snippets) and http://www.asp101.com/ (for ASP beginners) are equally recommended.

http://msdn.microsoft.com/asp/

Microsoft themselves still have one of the best ASP sites out there at MSDN - Microsoft Developer Network! MSDN Library may be explored to know what's available - there's a lot to see. However, navigation in this vast sea of knowledge can sometimes be a bit tricky as familiarity is needed with the layout of the website.

Java Server Pages (JSPs) http://java.sun.com/products/jsp/

The official source of JavaServer Page™ Technology maintained by Sun Microsystems Inc. provides links to a host of JSP resources, which include Product Information, Technical Information, Dowloads, News and Articles, Success Stories, FAQs etc. Sun has made the JSP specification freely available to the development community, with the goal that every web server and application server will support the JSP interface.

http://www.onjava.com/onjava/jsp_servlets/

Hosted by O'Reilly and sponsored by BEA Systems, this site has a lot of industry muscle behind it, and may be considered a reliable independent source for Enterprise Java. Invaluable articles as well as links to the latest resources and events, 'onjava.com' should be among any Java developer's bookmarks.



Cyber Governance

Here is a brief introduction to some of the websites hosted on various NIC's web servers across the country under its "India Image" programme during the last quarter.

Gujarat Sales Tax

http://www.gujaratsalestax.gov.in

From Manoj PA, our Gujarat Correspondent

The website of the Sales Tax Department in Gujarat contains useful information such as Rules, Procedures and Downloadable forms for the State's Tax Payers. The website has been designed and hosted by the NIC Gujarat State Unit and shall soon provide a special facility for online filing of tax returns for certain categories of tax payers.

North Sikkim District

http://sikkim.nic.in/north

From L P Sharma, NIC Sikkim

The North Sikkim District recently went online with the launch of its website developed and hosted by NIC. The website contains detailed information about the statistics, flora and fauna, people, traditions and various facets of the district administration. It also contains beautiful pictures of the breath-taking natural scenery of snow-covered mountains, valleys and villages of North Sikkim. The website was formally inaugurated by Sh Hishey Lachungpa, Minister of Labour and Power, Government of Sikkim.

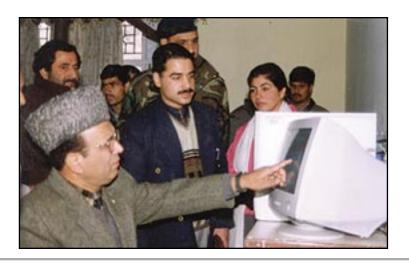


Distt Jammu & Distt Budgam , J&K

http://jammu.nic.in, http://budgam.nic.in

From Jit Raj, our J & K Correspondent

Jammu and Budgam Districts in the state of Jammu and Kashmir became the latest to launch their own websites recently on NIC's web server. The websites of the two districts carry comprehensive information about aspects such as administrative set-up, historical background, religious and tourist places etc. The Jammu District's website was inaugurated by Dr, Farooq Abdullah, Hon'ble Chief Minister of Jammu & Kashmir and the Budgam District's website was inaugurated at a special function by Sh. A.R Rather, Minister of Finance, Govt of Jammu & Kashmir.



ANIIDCO

http://www.aniidco.nic.in

From Anubha Goyal, SIO A & N Islands

The Website of Andaman & Nicobar Islands Integrated Development Corporation Ltd. (ANIIDCO Ltd.) was formally inaugurated by Sh. Balbir Singh, Chief Secretary, A & N Administration. The website consists of information about diversified activities of the Corporation and the active role being played by ANIIDCO in the development of these Islands. The website also has information about credit and finance by the Corporation under various schemes and the application forms for obtaining loans can also be downloaded.

Idukki Distt

http://idukki.nic.in

From George Eapen, NIC Kerala

The Official Website of the Idukki District of Kerala was launched by the Hon'ble Revenue & Law Minister of Kerala Shri K.M.Mani at a special function. The site has been designed and developed by the Idukki District Unit of NIC and presents comprehensive information about the Profile, History, Infrastructure, Administration, Economy, Tourism, Information Technology etc.

Guwahati High Court

http://ghconline.nic.in

From Tasiruddin Ahmed, our Assam Correspondent

The Guwahati High Court recently went online with the launch of its official website by the Hon'ble Chief Justice of Guwahati High Court Mr. Ravinder Singh Mongia at a special function. The website, designed by NIC Assam State Unit and hosted at NIC HQ includes information on Judges profile, District Judiciary, Benches, important judgements, contact details, Causelists, history etc.



Andaman and Nicobar Police

www.and.nic.in/police

From Anubha Goyal, SIO A & N

The official website of Andaman & Nicobar Police was formally inaugurated by the Chief Secretary, A & N Administration, Dr. R.Padmanabhan at Police Head Quareters, Port Blair. The website **www.and.nic.in/police** is hosted by NIC UT Unit, Port Blair. Shri. Manish Kumar Aggarwal, Superintendent of Police, Nicobar District gave a brief presentation highlighting the objectives, contents of the website and future plans of Police Department. He also thanked NIC for cooperation in launching the website.

LokMitra-Citizen Government Interface

http://himachal.nic.in/lokmitra_

From Ajay Chahal, our HP Correspondent

In its endeavour towards E-Governance, the Himachal Pradesh Government recently launched the "Citizen Government Interface of HP Government" on Internet. The services included on this website range from highly dynamic content covering tenders, vacancies, press releases, daily events to interactive redressal of public grievances at Deputy Commissioner level and interaction with the Chief Minister. The other services available on this website include the procedures, fees, contact offices, downloadable forms, notifications, official calendar, lists of holidays, weather details, helplines-for tourists, pensioners, Examination Results, handicraft & handloom products for sale, Census 2001 figures, Opinion Poll and Discussion Forum etc. This website is updated twice daily from over 14 locations spread throughout the State.

Karimganj Distt http://karimganj.nic.in

From Ajit Bhattacharyya, NIC Assam

Karimganj District of Assam was amongst the first few districts of Assam to have taken the initiative to launch their website. The site has been designed and developed by the NIC Karimganj District Unit and presents comprehensive information about the Profile, Demography, History, Communication, Administration, Economy etc.

<top>

From the Editor's Desk

The global economy is finally showing signs of a slow recovery from the recession and that's good news for everyone, especially for all of us in the IT sector. It is said that this recession has taught valuable lessons to people in all sectors of the economy and brought about a realization that fundamentally strong ventures with a solid foundation are the ones that ultimately survive the hardships. This issue's 'E-Governance Success Story' focusses on the 'WebCITI' Project, a true example of how the effective use of IT can re-define the govt-citizen relationship and prove immensely helpful to the common man....

Sonal Kalra

From You to Us

Readers are invited to send their comments/suggestions to the Editor through this column. Your letters may be sent through

email at

inform@hub.nic.in

or by post at the follwing address:

Room No. 379, 3rd Floor, NIC Headquarters, A-Block, CGO Complex, Lodhi Road, N.Delhi 110003

Dear Editor,

I have been regularly reading Informatics since 2000. The Informatics Newsletter is an important communication tool among the IT professionals of NIC and administrators and motivates us in the field to implement IT solutions in the organization. I appreciate the Editorial Team of Informatics.

Ashwani Kumar, IAS

Deputy Commissioner, South West District, NCT of Delhi

Dear Editor,

I am a regular reader of Informatics. I think a data base of stories on E-governance and other relevant stories can be made, which can set examples for others to follow. You can also give some tutorial on creative writing, technical writing etc in the newsletter.

Gurudas Nag NITPU, Kolkata

Dear Editor,

The recent changes in the presentation of Informatics has given it a more professional look covering a wide variety of subjects and happenings in and around NIC. Publishing the names and e-mail addresses of the correspondents has been quite encouraging. I believe that if the photographs in the magazine are captioned and due credit given to the photographer, it will make it even more interesting. It should enhance the professional outlook of the magazine and also encourage the in-house photographers.

Tasiruddin Ahmed

NIC Assam State Unit, Guwahati