

Informatics



THIS ISSUE BRINGS TO YOU

AROUND THE NIC WORLD Page - 3

The news section

COVER STORY Page - 4

Election 1996 : Computers Set the Pace

PRODUCTS/SERVICES Page - 6

How they are being utilized

PROJECTS Page - 7

A glimpse of some of NIC's projects

IN THE LIMELIGHT Page - 8

A profile of NIC Sonitpur District Centre

● ● ● *and all our regular columns.*

EDITORIAL BOARD

ADVISORY COMMITTEE

Dr. N Vijayaditya

Dr. B K Gairola

Dr. K K Bajaj

Dr. Y K Sharma

Shri M Moni

Mrs Neeta Verma

(CO-ORDINATOR & CONVENER)

EDITOR

Nidhi Verma

ART & DESIGN

Subhash Kapoor

Election 1996 : Computers Set the Pace

PHOTOTALK

The inaugural function of NICNET connectivity at Madras High Court. The function was graced by Justice A M Ahmadi, the Chief Justice of India, Justice Ranganath Misra, Chairman, Human Rights Commission, Justice K A Swamy, the Chief Justice of Madras High Court and other Judges of the Supreme court and Madras High Court



✧ EDITOR'S NOTE

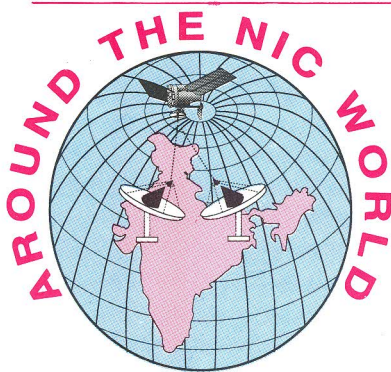


In this issue of Informatics I take the opportunity to express my heart-felt gratitude towards our Correspondents, our Readers and all those who have extended their whole-hearted co-operation and support in enabling me to keep track of all the NIC related activities taking place in different parts of the Country and making my work easier.

I am also very glad to inform you that we are putting our Quarterly Newsletter, Informatics on the very popular technological innovation, World Wide Web (WEB). The July 1996 issue of the Newsletter is available to the Internet Users on their computer terminals. The URL (Uniform Resource Locator) of this Home Page is:

<http://www.nic.in/Informatics>

Nidhi Verma



PAYROLL PACKAGE DEVELOPED & IMPLEMENTED

From our Lakshadweep Correspondent

Lakshadweep: The NIC Lakshadweep Union Territory Centre has developed and implemented Pay Roll package in all the departments of Lakshadweep Administration at Kavaratti.

The system is used to generate the pay bill and all related schedules of around 1800 em-

ployees who come under 32 drawing disbursing officers.

The Lakshadweep Pay and Accounts department has made it mandatory to submit the pay bills in the computer forms.

The system has also been successfully implemented in the Lakshadweep office at Kochi from July, 1996. ❧

COMPUTERIZED LAND RECORDS

From our Sikkim Correspondent

Sikkim: Sikkim is going to be the first state in our Country to successfully complete the mammoth task of computerizing the land records. The basic data entry work is over in all the four districts of Sikkim. This will be followed by subsequent updations in the land records called 'Mutation', in each district.

Till date more than six lakhs records of land holding documents 'Khasara' and 'Khatiyani' have been entered. The ultimate objective is to make the system on-line. ❧

WORKSHOP CONDUCTED

From our Haryana Correspondent

Haryana: A Training workshop on Computer Applications in Haryana Development Society (HUDS) for the staff members of Haryana Urban Development Society was held at Haryana recently.

The main emphasis of the workshop was to orient the HUDS staff towards the use of computers, computerization of various activities and the newly emerging computer technologies. The workshop also stressed on Computerized Rural Information System Project (CRISP) for the staff of District Rural Development Agencies from the state of Haryana.

The workshop was attended by the Project Director, Project Officer, Assistant Project Officer and the district level officials of HUDS. ❧

TRAINING PROGRAMME ON NICNET SERVICES

From our Orissa Correspondent

Bhubaneswar: A training programme on "NICNET Services" was held at NIC (ER), Bhubaneswar on May 15, 1996. The programme was attended by secretaries and senior officers of the Government of Orissa.

Addressing senior officials of Orissa Government, the Chief Justice of Orissa High Court, Mr S Chatterjee said that computers should be used

for increasing efficiency and productivity in work.

Participants of the programme were familiarized with network services such as E-mail, remote login (telnet), Web site access etc.

The training programme was followed by a demonstration of the various NICNET services available to the User and how one can fully utilize them according to their needs. ❧

MPs ON INTERNET

From our Local Correspondent

New Delhi: The National Informatics Centre has taken up the responsibility of putting and maintaining the details of the members of the Eleventh LoK Sabha on Internet (Network of Computer Worldwide).

The information will consist of the biodatas of Members of Parliament along with their photographs. This facility will enable the people across the globe to have free access to the information on the functioning of the parliament also. ❧

TRAINING FOR COURTS

From our Gujarat Correspondent

Gujarat: The NIC Gujarat State Unit has recently conducted a training programme during July 1 - 5, 1996 for the employees of eight district courts of Ahmedabad (rural), Ahmedabad (city civil), Bharuch, Sundarnagar, Surat, Baroda, Kheda and Mehsana.

NIC, Gujarat also has plans for conducting training programme for the remaining eleven district courts by October this year. ❧

NICNET FOR GRIEVANCES CELL

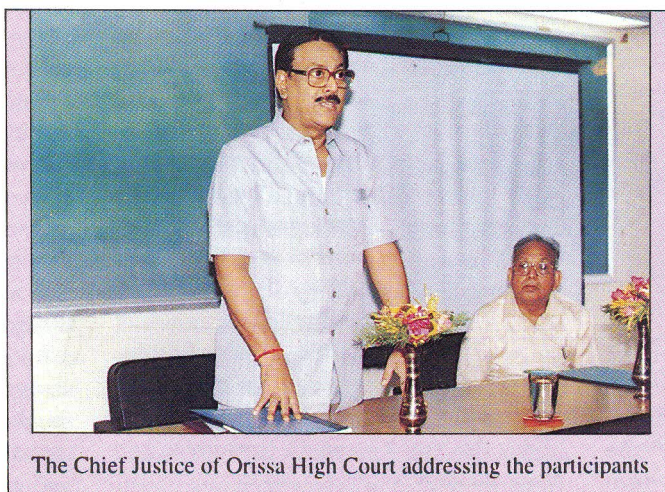
From our Madras Correspondent

Tamilnadu: The computer system at the Tamilnadu Chief Minister Special Cell for redressal of public grievances at Madras is linked to the districts through NICNET.

The list of petitions giving details of nature of grievances, address of petitioner etc, is

transmitted to the concerned districts on the first of every month and the replies for the same are also received through NICNET.

The NICNET connectivity has brought about tremendous improvement in the quality of redressal process. ❧



The Chief Justice of Orissa High Court addressing the participants

TRAINING PROGRAMME

From our Local Correspondent

Nagaland: The NIC, Nagaland State Unit, Kohima has recently conducted a training programme for the staff of medical department of the State Government.

In the training programme stress was laid on the use of computers for office automation and basic database management along with the use of software such as Lyrix and Professional.

Training has also been imparted to the staff of Khadi and Village Industry Board, Kohima on the aforementioned topics. ❧

Election 1996 : Computers set the Pace

The Tenth Lok Sabha Elections in 1991 heralded for the first time the large-scale use of computers and satellite-based

speedy reporting system which enables the citizens to view immediate round-by-round results from each constituency.

Such a reporting system was developed by the National

Informatics Centre for the Tenth Lok Sabha Elections. The solution was to couple the television network as an output channel for NICNET, thus combining the information collecting power with the nation-wide broadcasting capability of Doordarshan. The coupled networks achieved a tremendous throughput of public information that sustained public interest in, and monitoring of, the results counting process. But being the first introductory effort of its kind in India, the system of 1991 had certain drawbacks. Basic information enumerating the candidates name and party affiliations was sent in over NICMAIL, and had to be typed in again at Headquarters. Besides

no spelling errors and wrong party allocations were detected. One was also saved from the drudgery of re-typing the list of candidates again, at the Headquarters.

There was a big difference in speed also. While in the 1991 elections data was fed to NDTV through a single communication outline, this time round NDTV had four NIC output lines catering to its need for information. This speeded up things to a great extent.

Earlier, NICNET connectivity was made available only to Doordarshan and PIB, but in the 1996 elections the connectivity was extended to All India Radio also, for the benefit of the common man.

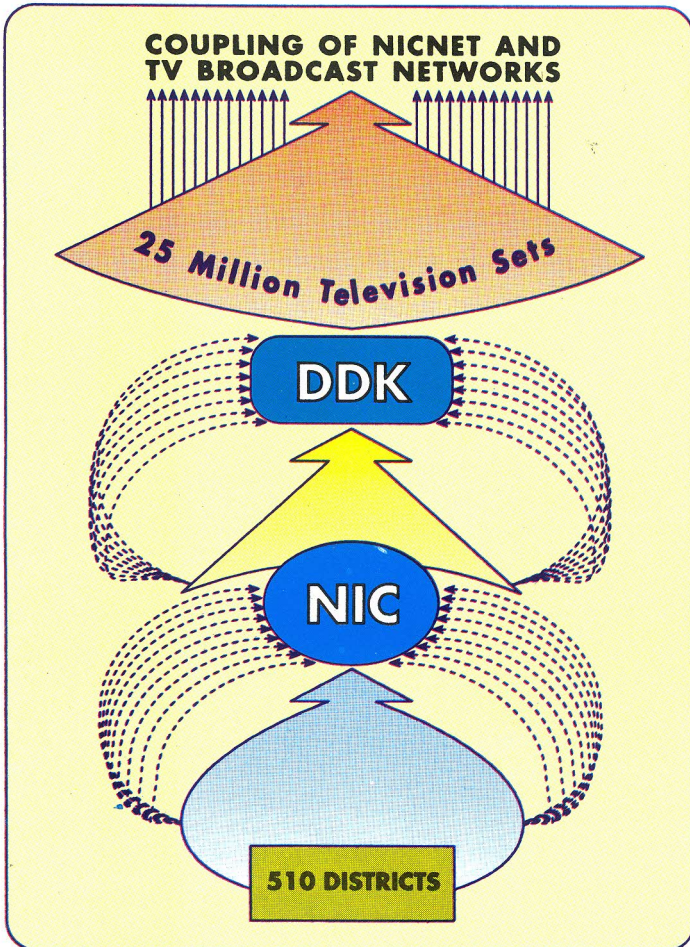
FROM THE STATES

All the State Units of NIC participated with great zeal and enthusiasm in providing necessary and authentic information to facilitate timely and correct announcement of the Eleventh Lok Sabha election results across the Country.

Fully utilizing the ELECON package facility, the NIC Jamshedpur District Centre successfully carried out the task of data entry, processing and party details. Data giving details of personnel on deputation was prepared and checklisted. A software was also generated for cross checking the different categories of personnel.

Besides preparing the code list issued to state development officers indicating call numbers printed on the call letter and their respective booth names, place of reporting and constituency number; the number of vehicles required for movement from various blocks to the place of reporting for collection of polling material was also estimated and final appointment orders issued through the computers.

Computer systems were used for various printing jobs such as printing of pre-appointment letters/call letters with call ID numbers suppressing the constituency and booth numbers and mentioning the date of reporting to the material collection cell. The same were then sent to all the



computer networks in a wide variety of electronic related work including results processing. By the year 1996, time for the Eleventh Lok Sabha Elections, the computer culture had established a firm footage. In the 1996 elections an enhanced computer system not only provided faster communication but also had an element of excitement in the form of the much-talked-about Exit Polls.

The Indian Government is a government "of the people, by the people and for the people". In a democratic set-up like ours credibility is a vital factor and depends largely on the fairness of both the vote-casting and vote-counting processes. And this calls for an effective, efficient and

this information also had lot of spelling errors and wrong party assignments. Rectifying this was a very time consuming and hectic process.

THE ENHANCED SYSTEM

The flaws were overcome through sustained efforts. An error-free system of collecting varied information related to candidates was developed. Collection of candidates name in a systematic manner along with party affiliations and official serial number was done through an automated form named LSCAND-96. The work load was reduced to a large extent as

presiding officers, polling officers of all categories, magistrates, counting supervisors, counting assistants and personnel assisting the Area Returning Officer. Final appointment orders according to the formats of the Election Commission, along with route charts were printed. TA forms and contingency forms for payment of TA to polling and patrolling parties were also printed. List of voting percentage figures at different booths, compiled reports of results was transmitted through NICNET to New Delhi. Form no-21 for results declaration was generated.

In Assam also, the State Unit provided MIS support to the Chief Electoral Officer (CEO) during pre-election, and post-election phases. MIS support played a vital role during counting. The processed results were then made available on-line at the Media Centre in the Directorate of Information & Public Relations (DIRP) through a dial-up line.

Almost all District Units in the State had provided some amount of MIS-support to the District Administration. The common services included building up and use of databases on polling stations; data containing details of candidates, polling personnel, counting personnel, was compiled and statutory reports for returning officers were also generated.

At the NIC Tamilnadu State Unit, NICNET connectivity was given to the Election Department of Government of Tamilnadu from the VSATPAD port of NIC Secretariat Centre. Messages were sent and received directly by the Election Department using this facility. Details of nominations filed were received in formatted form and the required report was generated. Computing facilities were also provided at the Election department during the counting process. For the first time, round-wise details were collected from all the counting centres for both Lok Sabha and Assembly constituencies.

The NIC Uttar Pradesh State Unit, besides providing detailed election result reports and detailed analytical reports to the CEO within 5 days of the declaration of election results also developed a software for the Home Secretary, to produce daily law and order data from all the districts of UP through NICNET. The UP State Unit generated daily consolidated

reports and handed them to the Home Secretary.

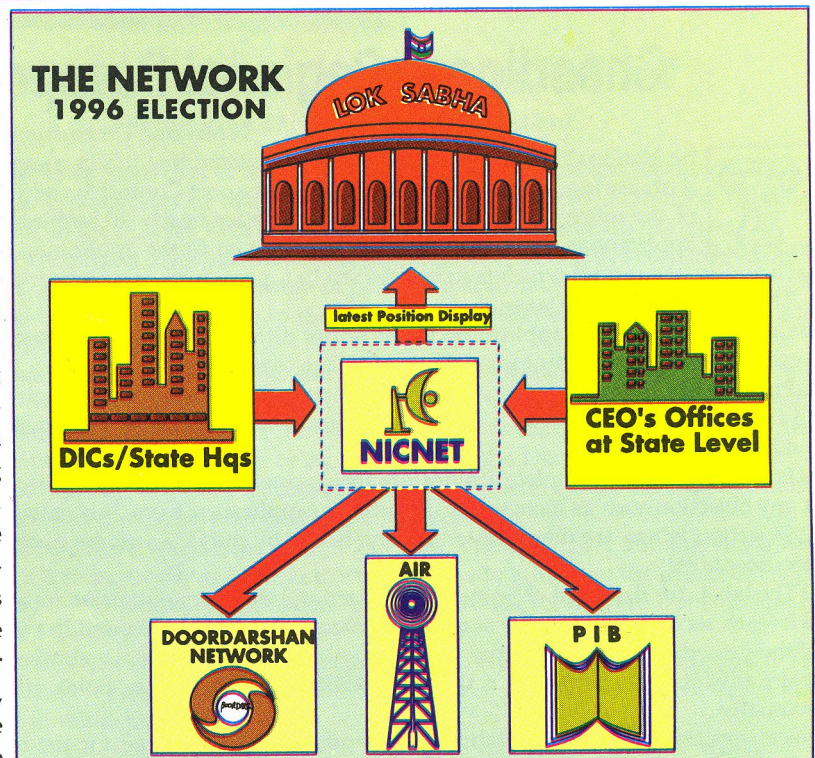
The NIC, Bellary District Centre, took up the challenging job of computerizing the tabulation work for counting of votes. Data of the latest information was fed into the computer table-wise, round-wise and the

same was used as a supporting aid for tabulation. All this information was made available to the Returning Officer, Police and District Information and Publicity Officer. After every ten minutes the information was updated. NIC, Bellary was the only source for the officer to get the latest information on candidates position, round position, and status of counting. This helped the Returning Officer to keep a check on any kind of delay, invalid votes, counting agents problem, mismatch in ballot account etc.

Like the NIC, State Units the NIC District Centres did not lack behind in any aspect in giving their contribution to the Nation in the 1996 Lok Sabha Election. They worked with complete earnestness and sincerity to meet with the information need from their end, during the elections. They were fully active in preparing for the elections, during the election and even in the result declaration process.

EXCITEMENT OF EXIT POLLS

India's first ever exit polls got underway with support from NIC's NICNET system. Every seventh voter emerging from the polling booths was asked to vote again on special ballots carrying symbols. Thus giving a general idea of the trend of voting



even before the results were declared. A special software was also developed to receive and transmit the data which is electrically encoded for secrecy.

NICNET provided its national information highway to avoid chances of a bottleneck situation. The data collected on two pages was rushed to NICNET centres where highly skilled operators would key in the coded data for dumping it into floppies for cold storage till the time they were needed for use. The resultant speed enhanced the credibility factor. For the 1996 elections speed and flexibility have been enhanced greatly by the 900 very small aperture terminals (VSAT) spread across the Country and linked to each other by satellite.

In the Eleventh Lok Sabha Elections speed and accuracy was the key word and computers proved to be the best modern technologies to set the pace.

(For further information please contact MR S Sarkar, Senior Technical Director, Teleinformatics Development Promotiom Project, National Informatics Centre, A-Block, CGO Complex, Lodi Road, New Delhi - 110003.)

Chandigarh Regional Passport Office goes On-line

From our Chandigarh Correspondent

The National informatics Centre did an outstanding job in computerization of the Regional Passport Office (RPO), Chandigarh during January 1996. The on-line Passport Control System (PCS) at the RPO, Chandigarh works to the mutual benefit of the office and its Users. In the first phase nearly 20 terminals were made on-line including five at the counters where applications are received and receipts given to the applicants. The PCS automatically allocates a file reference number to each applicant's receipt which is to be referred to for any further correspondence/enquiry regarding the file.

The PCS system facilitates:

- Categorization of the application forms under different heads on the basis of the district codes and the nature of the services such as fresh, renewal, official/diplomatic, loss/damage cases etc.
- Printing of CID covering letters at the counters where the applications are submitted. Thereafter district-wise CID enquiry letters of all the applicants along with a district-wise list of the applicants are forwarded to the respective police chiefs to enable them to carry out their enquiries.
- Reviewing of the complete application forms received after completion of CID enquiry. The files are put up for approval and if there is any objection such as incomplete documents/application form, it is noted in the computer through codes.
- Objection letters are then printed automatically by the PCS and are mailed to the respective applicant asking for more information/documents etc.
- The labels for despatch of granted passports and the journal register are also printed by PCS.
- In each section and at every stage, movement of the file is recorded in the computer. Thereby facilitating the applicants to keep track of the preceding of their cases by simply quoting their file reference number allotted to them at the time of application submission. The main advantage is retrieval of the status of application at any point of time, which was otherwise a tedious process when done manually.

Necessary training and orientation programmes were organized for the benefit of the RPO staff before the computerization of PCS. This was done to inculcate the needed computer culture in the officials and hence enable work efficiency. ↵

Computerization of Afro-Asian Rural Reconstruction Organization

From our Local Correspondent

The National Informatics Centre has been entrusted with the responsibility of providing network access to the Afro-Asian Rural Reconstruction Organization (AARRO). AARRO is an international, inter-governmental organization comprising of the governments of Africa and Asia. AARRO has also approached NIC for development of a Multimedia Information System and a Management Information System which could act as an "Information Clearing House", available on INTERNET for all the member countries of AARRO.

NIC has successfully coordinated the provision of NICNET connectivity to AARRO and is in the process of developing the multimedia information system with the theme of "Development of Rural Women". The development of Management Information System is on the cards. ↵

Ex-Gratia Scheme Computerized

From our Haryana Correspondent

The Haryana State Unit of the National Informatics Centre has recently developed a computerized Ex-gratia monitoring system. The Ex-gratia scheme of the State Government aims at providing employment to the dependants of government employees who expire during service. Such cases of government employees throughout the State are monitored, evaluated and settled by a committee at the State headquarters under the chairmanship of the Chief Secretary.

The database developed covers various information parameters of the deceased and dependants such as name of deceased, designation, pay, department, date of demise, name of dependent, relation with the deceased, qualification, post offered, pay offered, document completion status, eligible qualification, vacancy position, case status and other vital information needed for action to be taken for the dependent. The dependent list generated through the system helps the reviewing committee to put all the cases to the Chief Secretary as and when required.

The system helped in monitoring of pending cases thereby reducing the court cases. Moreover various reports such as department-wise status, cases settled, pending cases, cases with complete documents etc are also generated to help in better and faster management.

All the above work were done manually earlier and caused delays in timely monitoring and settlement of cases due to non-availability of complete information and delay in feedback from the departments concerned.

The computerized system helped in overcoming all the afore mentioned problems and saved a lot of time and labour. The work was done at a much faster pace thus extending timely help to the families of the deceased and lessening their problems. ↵

Computerization of CAPART

From our Local Correspondent

NIC has been entrusted with the responsibility of computerization of the Centre for Advancement of People's Action in Rural Technology (CAPART).

CAPART promotes voluntary movement and provides financial assistance to voluntary organizations to undertake projects in accordance with the specific needs of the local area in rural sector. Besides encouraging voluntary action in the implementation of projects for the enhancement of rural prosperity, evaluation of project proposals extended by various voluntary organizations is one of the major activities of CAPART.

The process generates a vast pool of information which calls for proper Information System Planning (ISP). The Computerized Rural Information Systems Project group (CRISP) of NIC prepared a feasibility study for possible enhancement of the operational ability of CAPART in the area of information processing. The study focused on the present manual operation and functioning of CAPART's Electronic Data Processing (EDP) Department. It further suggested possible solutions in the areas of operational alternatives, and Hardware and Software platforms.

It is envisaged that the data generated on various issues concerning NGO'S at CAPART headquarters in New Delhi and regional centres at Ahmedabad, Bhubaneswar, Guwahati, Hyderabad, Jaipur and Lucknow will be available in a distributed environment. Database will be developed on the aforementioned site and NICNET will establish the communication link between stated databases. This will enhance the existing information handling capability of CAPART.

In the initial stages, the project involves activities concerning selection of hardware and software and the installation of the same at CAPART's headquarters and regional centres. It also includes establishment of NICNET connectivity.

NIC has already initiated the project, and necessary system environment has been successfully established at CAPART headquarters and is in the process of being installed at other regional centres

With the completion of the project, CAPART will be able to organize NGO activities in a direction more beneficial to rural population. ❧

Computers in Flood Relief

From our Orissa Correspondent



The Orissa State Unit of the National Informatics Centre has recently taken up the responsibility of making available time critical flood situation information to the Special Relief Organization (SRO), Government of Orissa.

The project involves smooth and seamless intermixing between the NICNET and the Police Wireless System available in blocks for transmitting the flood data from Block Development Officers (BDOs) to the SRO at Bhubaneswar for effective monitoring and control of floods.

In close association with SRO, NIC has completed the detailed System design and development work. Detailed guidelines covering information requirements / formats, mode of transmission and responsibilities of District Informatics Officers of NIC and other State Government Officials are being issued to all the District Collectors of Orissa for compliance. Further, one pilot district each from the existing three revenue divisions have been identified for special attention in the first phase.

NIC plans to organize workshops in order to instruct and impart training at various levels. The BDOs in particular will be instructed on how to adhere to the designed block level data entry formats and prepare coded wireless message for onward transmission to the NIC District Centre.

Further, the BDOs will conduct workshops in their respective blocks to properly instruct and educate extension officers and village-level workers for collecting flood-situation data from the field.

Successful implementation of this project from the monsoons of 1996, will give a tremendous boost to the timely monitoring and control of relief activities during critical flood situations, and will also enable use of this system in the other flood-prone States of the Country. ❧

Zoning Atlas for Siting of Industries

From our Local Correspondent

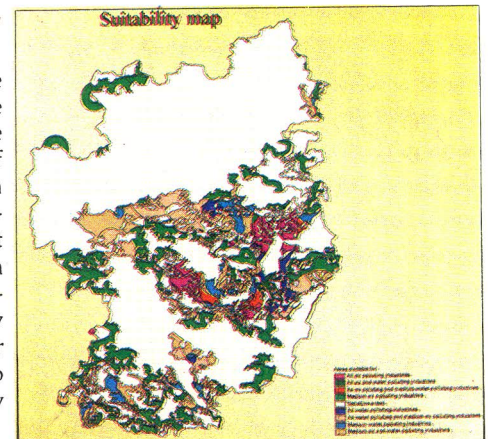


In a pioneering effort of its kind in the Country, the Central Pollution Control Board in collaboration with German Technical Cooperation (GTC) has taken initiatives to check environmental pollution in phases through environmental planning. NIC has undertaken the responsibility of simplification of the process of siting of industries on the basis of environmental consideration by providing its services to prepare 'Zoning Atlas for Siting of Industries'.

The project is divided into two parts. Part one includes collection of data and thematic maps, survey and monitoring. This has been executed by the State Pollution Control Board. Part two which includes Geographic Information and computer services, has been executed by the Geographic Information System (GIS) division of NIC.

Based on environmental considerations, the project will help in identifying suitable areas for planned industrial development. Five districts which have already been covered in the initial phase in the year 1995-96 are Chindwara (Madhya Pradesh), Udaipur (Rajasthan), Solan (Himachal Pradesh), Palakkad (Kerala), Sundergarh (Orissa).

The enormous multiple inputs needed are processed by NIC. Once compiled for the Zoning Atlas, these valuable data is available for other planning purposes also. This kind of mapping helps in reviewing and evaluating a site from the environmental angle for locating an industry. The Zoning Atlas will benefit the Government to develop policies and plan sustainable industrial development with better control and monitoring. Accordingly they will be able to frame proper guidelines for profit-seeking industrialists and speed up the process of sanctioning environmentally and economically suitable industrial sites. ❧





Sonitpur : With the Computer Age

Located at a distance of 181 km from the Assam State capital, Guwahati; Sonitpur is one of the historical Indian Towns. It houses some of the most important and historic monuments in Assam. In the abode of this picturesque town is located NIC's District Centre.

NIC, Sonitpur District Centre was established on March 14, 1990 and became a full fledged functional unit on October 26, 1993.

Presence Being Felt

No sooner was the computer culture introduced that NIC, Sonitpur took up the responsibility of spreading it. For this purpose it undertook a number of computerization projects.

One of the pilot projects was Computerization of Land Records for the Ministry of Rural Development, Government of India. Out of the six states selected for this project, Assam was one of them and in Assam Sonitpur was selected for Computerization of Land Records primarily because the District had already completed settlement operations.

The District Administration, Sonitpur along with NIC District centre took up the responsibility of computerization of the Public Distribution System (PDS). The move to computerize such a vast and extensive system as PDS was necessitated by the fact that the initially existing system was plagued by many anomalies. The anomalies such as issue of bogus cards and misappropriation of the supply by vested agents, were largely due to inefficient monitoring of the system. The new

computerized system not only uprooted all these shortcomings but also provided a smooth running, properly-allocated and monitored distribution system. This system was made transparent to the officials, employees as well as the concerned public.

NIC, Sonitpur District Unit also undertook the computeri-



Work in full swing at NIC, Sonitpur District Unit Tezpur, Assam

zation of the Pay Roll System for the District Administration, Sonitpur. The hectic and time-consuming manual system was replaced by a much faster and efficient computerized system. Today the District Administration is greatly benefited by the system and is able to prepare its pay roll for around 450 employees with ease.

Computerization of the Arms Licence Information System was yet another important project undertaken by the District Centre. The problems of the manually run system were many. There was no properly maintained chronological record of the Arms Licence issued to the customers. Moreover, because of ill-maintenance, accessibility of records regard-

ing licensing, cancellation or renewal was very difficult. The computerized system helped the administration in terms of easy accessibility for reference and monitoring of the system.

Establishing Links

By making available the NICNET connectivity, NIC, Sonitpur solved a lot of commu-

culture commodities; weekly price report of agriculture commodities; weekly fertilizer stock position; day-to-day weekly rainfall report and likewise. All these reports are processed and transmitted through NICNET to Krishi Bhawan, New Delhi and Guwahati.

For the Nation

At the National level NIC, Sonitpur in order to facilitate the electoral process manned its office round the clock. The manual deficiency of the earlier system was overcome by the use of computerized representations. It installed four computers at different counting centres at Sonitpur to give feedback and other related information. And the information was readily made available at a moments notice. The District Centre also participated in the exit poll and election result analysis.

Training for Awareness

Imparting training from time to time and as per requirement has been an integral part of NIC, Sonitpur's activities. Training programmes are organized for every level of Users as level as officials. Major among them are the courses for Computer Awareness and Application Training. Basic computer operation and NICNET operation courses are also conducted both for NIC and outside officials.

Today, NIC Sonitpur is one of the ever busy and indispensable NIC computer centres. It is equipped with the latest state-of-the-art technology. And its sincere efforts have awakened the people in this remote area with the use and importance of computers. ♪

nication problems and also speeded up various development projects.

NICNET connectivity was provided to fulfil the State Government Finance Officials urgent need for an up-to-date day-to-day weekly transition report of all treasuries and sub-treasuries of the different districts to monitor the revenue receipts and expenditure. The weekly revenue transaction reports of Sonitpur treasury and Biswanath sub-treasury were regularly processed and transmitted to Dispur through NICNET.

The District Agriculture Office, Sonitpur benefits from the NICNET link-up for numerous jobs, such as, daily price of agri-