

Informatics



PREFACE

The pervasive support of NICNET to the Government at all levels has begun the process of reducing the communication gap between the Central Government and the State Government on one hand; and the State Government and their district administrations on the other. The time is now appropriate for giving information on information.

Informatics Newsletter of the National Informatics Centre (NIC) fulfils this necessity.

The changing priorities of the Planning Commission are progressively emphasising the important role played by indicative planning. Indicative planning requires analysis on social, economic and organizational matters which has now become the primary concern of National Informatics Centre after it moved to the Planning Commission. Planning also requires the monitoring of Plan projects which NIC has speeded up by receiving the required information over NICNET from the project sites. Extensive use of NIC infrastructure including NICNET was made by the Planning Commission and the State Planning bodies during the preparation of the Report of the Eighth Five Year Plan. NIC got printed in English, Hindi and other Regional Languages a proforma for information collection pertaining to the decentralized district level planning.

Exciting technological developments are taking place in the field of informatics. The implication of these technologies as they emerge, has to be well understood by all the users of computers and computer-communication in the Government and in the public domain.

With NIC poised to expand NICNET upto the Tehsil level during the Eighth Five Year period, the possibility of communication gap further increases unless it is consciously planned otherwise. The fact that NIC has succeeded in linking all the State/UT Government Secretariats to NICNET after signing a standard Memorandum of Understanding with all of them, almost all the State Governments have set up NIC State Coordination Committees mostly under the chairmanship of the Chief Secretary, is indicative of the a-priori demand of the responsibility and enthusiasm shown by them.

I am confident that the launching of the quarterly Newsletter of the National Informatics Centre, **Informatics** and its country-wide distribution will be followed by the Newsletter itself being put in computerized form for general access from all the terminals of NICNET.

Dr N. Seshagiri
Additional Secretary &
Director General,
National Informatics Centre.

EDITOR'S COMMENT

The goal is to strike a common chord. For ours is an organization with such a vast repertoire of human resource that needs and outlooks tend to vary at different levels. Our man in the district may appreciate material which would not find favour with those in the regional or even in the state centres and vice versa. The endeavour is to have something for all our Readers --- those at the district, state, regional and national levels, our end users and still others who are interested in what we are doing.

This inaugural issue of **Informatics** defines the broad outlines along which we intend to develop. The rest is up to our Readers. It is their involvement which will make, or the lack of it which will mar. On our part we stand resolved to spare no effort. Looking forward to a future full of excitement and challenge.

Rubaiyat Ali.

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FROM YOU TO US

This column has come blank because it is exclusively reserved for YOU.

Feedback from our Readers is invaluable for us. That is how we know where we scored and where we missed. Anything under the "NIC-Sun" is worthy of this column. Your comments, suggestions and criticisms are all welcome.

Contributions to "From You to Us" should be marked "From You to Us" and sent to : "INFORMATICS", National Informatics Centre, CGO Complex, Block-A, Lodhi Road, New Delhi - 110003. Or to the NICMAIL address : NEWSLET!ROOT.

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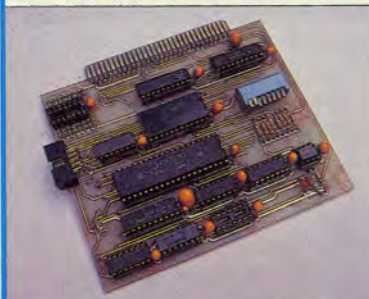
Rubaiyat Ali

ART & DESIGN:

Subhash Kapoor

WHAT IS NEW ?

The inauguration of a multimedia-based computer training facility at its Headquarters on June 29, 1992 brought into focus the efforts of the National Informatics Centre (NIC) at multimedia technology development. "Multimedia is a frontier area in information technology, and the NIC workstation is expected to provide a major impetus to the spread of multimedia in India," reported the August 17, 1992 issue of the Deccan Herald.



PC-VCR CONTROLLER CARD

environment with a centrally controlled video-based instruction system.

NIC has indigenously developed a range of low cost products to make multimedia-based workstations feasible. Among these, the DUO Switch, PC-VCR Controller and the Software for Analog Video Interactive Application (SAVIA) deserve special mention.

The DUO Switch is an analog device which takes computer output from a CGA card and Video output from a VCR and displays the output on the monitor.

The PC-VCR Controller Card is an add-on card which can be used with XTs and ATs along with a VHS VCR. This controller card is a VCR under software control.

SAVIA is a Microsoft Windows-based software to operate a VCR through an XT/AT or the PC-VCR Controller Card. This package can index any VHS cassette and video clippings which can be viewed on the monitor with the help of a mouse.

These products, along with a few others such as the RGB decoder to enable the colour monitor to accept video signals from the VCR and the MultiBase add-on to dBase III, have made the first Multimedia-based training facility in the Country a practical reality.

(For further information, please contact Training Division, National Informatics Centre, A-Block, CGO Complex, Lodhi Road, New Delhi - 110 003.)



THE WORK STATION

DO YOU KNOW?

National Informatics Centre's achievements during the year 1991-1992 include:

- NICNET services to 60 government departments, 32 states / Union Territories and 450 district centres.
- provision of a separate NICNET node at NIHMANS to enlarge the scope of MEDLARS.
- growing popularity of GISTNIC inducing the decision to increase its cover by installing an additional 100 GISTNIC booths at different locations and strategic points.
- 160 training courses attended by 10,989 participants as a part of the Government Informatics Training (GIT) programme.
- introduction of electronic bulletin board facility in NICNET.



"QUICKER WAY OF DOING THINGS"

CHANDIGARH, NOVEMBER: A state-level workshop on Information Technology was inaugurated by the Punjab Governor, Mr Surendra Nath on November 11, 1991.

The workshop was organized jointly by the Punjab State Government and the Punjab State Centre, NIC, to discuss a policy for computerization proposed by the State Government.

In his presidential address, the Governor emphasized the utility of computers, and urged decision makers to take to computers shedding any inhibition whatsoever. Computers is a quicker way of doing things, he said.

Delivering the keynote address, the Director General of NIC, Dr N Seshagiri appreciated the efforts of the State Government in evolving a policy for computerization in the State, and assured full support from NIC. ♣

COMPUTERIZATION OF TREASURIES

MAHARASHTRA; NOVEMBER: Use of computers in district treasury offices throughout the State of Maharashtra has increased the accuracy and efficiency of their operation, reports NIC(WR) from Pune. Computerization of treasuries is a project being monitored at the national level, and Maharashtra has earned the distinction of being the first state to fully implement the project.

Formerly, all the vouchers and challans were manually compiled at every district treasury office before the compiled accounts were sent to the directorate at Bombay or to the Accountant General's offices at Bombay and Nagpur every month. Compilation of the payment majorheads were computerized in December 1989, and the receipt majorheads in June 1990, said the report.

Computerization now enables the district treasury offices to capture the data from the vouchers / challans directly in the computers in which extensive on-line validation and consistency checks are carried out, added the report. ♣

TRAINING THROUGH GAMES

For the unacquainted, computer terminology is at once without logical meaning and puzzling. What when you have to "cat" a file to make it appear on the screen or work in "Foxplus" to build your database. The first task in any computer course is thus to make the new User familiar with all the terms used in the field. To this end the Training Division at NIC's Western Regional Centre has come out with a software named **CROSSWORD** which combines the pleasure of solving a crossword puzzle with the process of learning.

Developed under the Xenix operating system, **CROSSWORD** is a training aid designed to test and increase the computer vocabulary of the User. **CROSSWORD** consists of two components --- the **Crossword Player** and the **Crossword Database Manager**.

The **Crossword Player** generates a crossword puzzle on the screen which the User then tries to solve on the screen itself. Succinct clues are given for each word. Moreover, if the clues are not sufficient for the User, he can invoke **CROSSWORD**'s help facility at any point to get a few additional characters of the required word. The **Crossword Player** allows the User to to redraw the screen, save the game and print the game with or without answers.

The **Crossword Database Manager** is used to build databases with words and clues. Being menu driven, the Database Manager enables guided execution of operations such as adding and deleting words and clues to and from a database, changing and listing subjects and changing words. ♣

COMPUTERS IN COURT

PATNA;BIHAR;NOV: Computerization of court management in the Patna High Court is providing an effective answer to the administrative crisis which had almost engulfed the Judiciary System, said a report from our Bihar State Unit.

Computerization has not only accelerated the pace of disposal of cases, but has also proved its utility by eradicating corruption and manipulations. Introduction of computers for high court management has fully automated registration of new cases and subject-wise allotment of cases for different benches which is an inseparable attribute of the Indian Judiciary System, adds the report. The project was started a year back when a team of scientists from the Bihar State Unit of NIC began work on the conceptualization of the High Court Management System.

An AT-486 system with ten terminals has been installed in the Patna High Court with funds sanctioned by the Bihar Government. NIC is providing full software and operational support for the High Court Management System, concluded the report. ♣



A MATTER OF BUSINESS

NEW DELHI, JANUARY: In what was described by the Deputy Chairman, Planning Commission Mr Pranab Kumar Mukherjee as a milestone in the joint efforts of government-business relationships, the Federation of the Indian Chambers of Commerce and Industry (FICCI) and NIC signed a Memorandum of Understanding for long term co-operation in the field of business informatics on January 3, 1992.

On the occasion, the Deputy Chairman pointed out that 80 per cent of the information available with the Government could be declassified and released for dissemination. For this purpose, NIC and FICCI will set up terminals in regional and local chambers of commerce and industrial associations so that the data available could be shared, and businessmen even in the remotest areas could take advantage of this

facility. These terminals will be hooked up with NICNET. The 500 and odd affiliated chambers and industrial associations will be the nodal points in disseminating the information to the interested parties. The cost of sharing information through NIC-FICCI terminals will work out to be very economical, and will be within the reach of small scale industries. Information-based monitoring will cut down time and cost over-runs to a considerable extent.

Primary information available through NICNET could be then processed and passed over to the public as value-added information. This could be in the form of analyses, tables and statements which are industry specific. ♣

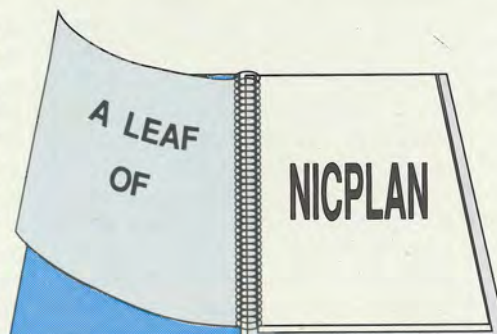
Grass Root-level Informatics Development

The Eighth Five Year Plan of the National Informatics Centre is a blue print of action of the Organization. Each 'Leaf of NICPLAN' presents an extract from the Plan to provide the Reader with an insight of just how the Organization visualizes the future. We take off with the Grass Root-level Information Development (GRID) Programme.

With the implementation of DISNIC, the National Informatics Centre has already initiated an information revolution at the district level through its various databases to provide demographic, socio-economic and development indicators. With the quick availability of information, the administrators can now devote more time to actual planning and decision-making. As the next important step, the Grass Root Level Informatics Development (GRID) programme has been initiated with the following sub-projects:

- i. Tehsil/Block level database project.
- ii. Land Records Informatics project.
- iii. Panchayatiraj Informatics project.
- iv. Nagarpalika Informatics project.

As the Block is the smallest developmental unit, especially in implementing development programmes, and the Block generates basic information, the development of block level information system will go a long way in increasing the availability of information for decision-making, monitoring, evaluation and planning. Therefore, in



1990-91, a pilot project was taken up for computerized information at the block level in certain pilot districts. With the Packet Radio Network extension to NICNET, the first step in the investment required for implementing the GRID programme would be covered.

[The Plan describes the Packet Radio Network Project as follows:

It is proposed to enhance NICNET to Tehsil/Block level. For each of the 3,300 Tehsils with an AT-386 SX computer with 150 MB Disk, integrated AC Cabinet and four terminals costing Rs 1.2 lakh per Tehsil,

the total cost for all the Tehsils comes to about Rs 39.6 crore. A Packet Radio Master will be located in each of the 450 districts with a slave unit in each tehsil or important blocks. Typically, a Master would cost Rs 1 lakh and a slave unit will cost Rs 20,000. The total cost of the project would therefore come to Rs 50.7 crore.]

For taking up the above projects for the GRID programme on a nation-wide basis, the following additional manpower is required at the level of Programme Assistants in the scale of pay of Rs 1,640-2,900. In the first instance, the requirements would be confined to the level of tehsil, and gradually extended to all the blocks:

Tehsils	3300
Districts	450
State Hqs	375
Delhi	200
Total	4325

The additional salary budget will be Rs 50 crore during the Eighth Five Year Plan period. ▴

PHOTOTALK

Headquarters of the **National Informatics Centre** situated in the Central Government Offices Complex at Lodhi Road, New Delhi.





"QUOTABLE QUOTES"

For effective district planning, the first requirement would appear to be as detailed, comprehensive and easily retrievable data as necessary. Not too little; even more important: not too much. This would be the context in which the computer-based DISNIC system would prove its true worth. We must ensure the proper synchronization of computer hardware so that no difficulties arise later on this score.

--- late **Shri Rajiv Gandhi**, as the Prime Minister of India, in his inaugural speech in the workshop of District Magistrates/District Collectors on "Responsive Administration" organized by the Department of Administrative Reforms & Public Grievances, Government of India, at Jaipur on April 30, 1988.

Automation is the only way out of the present lag.

--- **The Finance Minister Dr Manmohan Singh** on the report of the Narasimhan Committee on the financial system of the Country which recommended sweeping changes in the banking structure.

Information should reach the public since it is one of their fundamental rights.

--- **Union Deputy Minister for Information and Broadcasting, Dr Girija Vyas**, inaugurating the first GISTNIC public terminal of NIC in Rajasthan.

Thanks to computers, justice may no longer be denied due to delay.

--- **Additional Registrar of the Supreme Court, Mr HL Chandramouli**, in November 1991, on the introduction of computers in the Supreme Court.

Information is integral to all living organisms. How we use that information determines how we live and function, and how our societies evolve. Information is essential to the operation and survival of national governments.

--- **Jacob, M.E.L.**, Rings, SL in 'National and International Information Policies'.

BUDGET PREPARATION IN KARNATAKA

A pat on the back feels great, especially when you know you deserve it fully. Let us share this sense of fulfilment in what Mr SK Aswathanarayana, Special Officer (Computerization) of the Finance Department, Government of Karnataka, has to say of the services rendered by the Karnataka Unit of NIC to his Department.

With the introduction of computer culture in the various departments of the Government of Karnataka, towards which the contribution of the National Informatics Centre, Bangalore, is immeasurable, the Finance Department decided to computerize its major activity viz. the preparation and publication of the Annual State Budget. A computer cell was set up in the Department on June 1, 1991. The necessary hardware was installed by the National Informatics Centre, Bangalore. The Centre also developed a comprehensive software package for the purpose of budget computerization. A massive database was created and the Government took a decision to computerize the budget for the financial year 1992-93 straight away without resorting to any parallel arrangement. All the major budget documents for 1992-93 were brought out in the computer for the first time with both Kannada and English descriptions side-by-side. The following advantages have been accrued as a result of budget computerization:

- i. values have been expressed in lakhs of rupees, thus enhancing the readability.
- ii. perfect alignment of descriptions in Kannada and English of the Heads of Account, thus eliminating errors due to parallax and proximity;
- iii. uniform pattern of exhibition of heads of account, and abstracts of provisions in all the documents;
- iv. splitting up of budget volumes into conveniently smaller volumes catering to allied departments;
- v. elimination of inoperative heads which were repeating year after year in the

manual system;

vi. considerable savings in the consumption of paper;

vii. total elimination of protracted movement of data from the Finance Department to the Government Press and back till the final proofs were ready, which was inherent in the manual system consuming considerable man-hours;

viii. facility for changes in the budget data even at the last stage, and ensuring automatic consequential changes at all levels;

ix. storage of budget data created year after year, and their preservation for future use in conducting all types of analyses involving budget provisions and outlays.

x. the State Government has also embarked on computerization of the accounts of all its treasuries. The account head codes available in the computerized documents will be of immense advantage in this regard. When the treasuries start rendering computerized accounts, it is proposed to link the treasury computer system with the budget computer system for purposes of efficient management of state finances.

The Government of Karnataka is indebted to the Karnataka Unit of the National Informatics Centre, Bangalore, without the dedicated involvement of which all these could not have been realized. During the peak budget period, the staff of NIC worked day and night with the staff of the Finance Department. The success achieved is thus a product of perfect team work between the staff of the Finance Department (Computer Cell) & the staff of NIC.

A REQUEST TO OUR USERS

INFORMATICS solicits contributions from the Users of NIC services. Much is to be learned from their experience with NIC. And who could say it better than the User himself?

Contributions can be sent through NICMAIL to NEWSLET!ROOT or through the post to:

The Editor, INFORMATICS (Newsletter),
National Informatics Centre,
Room No: 425, CGO Complex,
A-Block, Lodi Road,
New Delhi-110003.

NICMAIL : PICKING UP THE PACE

NICMAIL or electronic mail on NICNET, is a facility which enables all the Users in the network to send & receive messages and text files. NICMAIL links all the Xenix-based super-ATs with the NEC-S1000 at Delhi through satellite. This software package provides easy-to-use user interface to send and receive mail messages.

Apart from this, "Broadcasting" features, which allow the same mail to be sent to any number of NICNET Users at different geographical locations are also available.

The biggest advantage of NICMAIL is that the mail for a particular User is stored in an electronic mailbox. Thus an User can at any time log into the network and access the mail stored for him in his electronic mailbox.

NICMAIL is already proving to be indispensable for various government organizations. They are using NICMAIL not only for routine official instructions and mail, but also for transmitting urgent messages during emergencies. ♣

MEDLARS: DONNING THE WHITE COAT

In keeping with the ever increasing need for bio-medical information in India, the National Informatics Centre entered with an agreement with the National Library of Medicine (NLM), USA in 1987. This agreement was aimed at obtaining easy and ready access to the facilities of the Medical Literature Analysis and Retrieval System (MEDLARS) of NLM. NIC acts as a nodal agency for computerized MEDLARS services in India. It is one of the world's largest computer-based bibliographic systems comprising of over 28 databases. It covers subjects such as medicine/biomedicine, nursing, dentistry, veterinary medicine and pre-clinical sciences in 3,000 serials written in 70 different languages

from over 160 countries.

To enable faster access and speedier retrieval of information, NIC established a data network link with NLM's system through NICNET.

Relevant citations with author, title, journal and abstract are provided. If the number of citations retrieved is more than 20 then the abstracts are restricted to 20 citations from the recent two years. For the rest, only the author, title and source are provided. Abstracts of specific citations are provided on request.

Any medical person requiring information can contact the MEDLARS Centre at New Delhi from NIC offices located in all the state capitals & district headquarters. ♣

GISTNIC : INFORMATION MADE PUBLIC

Through its General Information Service Terminal (GISTNIC) programme, NIC lends a helping hand to the common man in his day-to-day activities.

In the course of its regular activities, NIC handles a lot of information which could be very useful for a wide range of Users such as farmers, tourists, students, researchers and foreigners. Utilizing this information, and expanding its scope to cover even a wider area of interests, NIC launched its GISTNIC programme under which specially designed terminal booths were set up at different places in the Country. These terminals can be used by the public to access the required information. GISTNIC has something for everyone.

The University Education Guide of India gives the student information on various universities of the Country. The courses available, the faculties, list of state-wise colleges under these universities etc. all feature in GISTNIC. The tourist finds information on communication links, accommodation facilities, tourist spots, shopping centres, rainfall and temperature etc. of the places he plans to visit. The farmer gets information on various agricultural products, the job-seeker on employment opportunities. Besides these, databases on mining and manufacture, world economy, all India hospital directory etc. provide some of the other information available through GISTNIC. ♣

BTNET ON NICNET

The growing importance of bio-informatics in the various disciplines of biotechnology led the Department of Biotechnology, Government of India, to establish a Biotechnology Information System network (BTNET). The National Informatics Centre has provided the computer communication facility to BTNET through its satellite-based computer communication network, NICNET.

BTNET is a closed-user group of NICNET and links nine Distributed Information Centres (DICs) and 16 sub-Distributed Information Centres (sub-DICs) with the apex centre known as the Biotechnology Information Centre (BTIC). Micro earth stations are installed at all the DICs. The sub-DICs are to be hooked up to the network through dial-up modems.

The nine Distributed information Centres, located at various premier institutes and universities of the Country have extensive databases in specialized areas of biotechnology (see box),

LIST OF DICs WITH AREAS OF SPECIALIZATION

1. **Genetic Engineering**
Indian Institute of Science (IISc), Bangalore
Madurai Kamraj University (MKU)
Bose Institute, Calcutta
Jawaharlal Nehru University (JNU), New Delhi
2. **Animal Cell Culture and Virology**
Poona University, Pune
3. **Plant Tissue Culture, Photosynthesis and Plant Molecular Biology**
Indian Agriculture Research Centre, New Delhi
4. **Oncogenes, Reproduction Physiology, Cell Transformation, Nucleic Acid and Protein Sequences**
Centre for Cellular and Molecular Biology, Hyderabad
5. **Immunology.**
National Institute of Immunology, New Delhi
6. **Enzyme Engineering, Immobilized Biocatalysts, Microbial Fermentation and Bioprocess Engineering**
Institute of Microbial Technology, Chandigarh.

and these can be accessed by Users to get the required information.

Through these nine DICs and 16 other sub-DICs, also located in premier institutes and universities, the scientific community has been using BTNET for information exchange since it became operational in 1991. ♣

APPLICATIONS OF CAD

The Computer Aided Design (CAD) Group has, over the past nine years, provided services to a wide range of government agencies such as the Central Water Commission, Central Electricity Authority, Rail Design and Standards Organization, Uttar Pradesh Irrigation Department etc., and to various public sector undertakings and autonomous institutions such as the Mazgaon Docks, Oil and Natural Gas Commission, Roorkee University, National Hydro-electric Power Corporation, International Airport Authority of India, Heavy Engineering Corporation etc. The group has the source code of SESAM finite element analysis software which has been enhanced to meet the requirements of the User.

Maintenance and conversion of SESAM software on UNIX-based machines, CYBER, Norsk Data and NEC machines; applications pertaining to civil, mechanical and offshore structural analysis; software development in the area of analysis and design; and graphics are the basic activities of the group.

The CAD Group's contribution to analysis of geotechnical earthquake engineering problems has also been significant. It has evaluated the stability of slopes under seismic conditions at Talcher (Orissa). The project was sponsored by NTPC, New Delhi. The Group has also

The CAD Group's contribution in the field of structural analysis has been noteworthy. It has successfully completed:

- Three dimensional analysis of the Hirakud dam for the Central Water Commission;
- Analysis of the Taj Mahal for the Department of Civil Engineering, Roorkee University;
- Analysis of the Kedla Coal Washery building for the Heavy Engineering Corporation;
- Launching of jacket structures for the Mazgaon Docks Ltd;
- Analysis of jacket structures for the Metallurgical and Engineering Consultants; and
- Analysis of rear suspension for the Maruti Udyog Ltd.

successfully plotted the longitudinal and cross-sectional profiles for the Brahmi river in Kasipur, Uttar Pradesh, for the Inland Waterways Authority of India, Noida. Assessment of liquification potential, and generation of geotechnical hazard maps based on the liquification potential for the trans-Yamuna area of Delhi are amongst the other achievements of the Group. (Based on an official report from the CAD Group)

CENTRAL EXCISE TO BE COMPUTERIZED

The signing of a memorandum of Understanding between the National Informatics Centre and the Central Board of Excise and Customs (CBEC), Department of Revenue, Ministry of Finance in June, 1991 set the stage for the Central Excise Computerization Project of NIC.

The Project, entrusted on a turnkey basis to NIC, involves the design, development and implementation of the Central Excise Application software package; procurement of all necessary hardware; installation of the same in all the 29 Central Excise Collectorates and over 200 Divisions throughout the Country and training of Central Excise Officers and Staff.

The application software package --- System for Excise Revenue and Monitoring (SERMON) --- was developed and tested in NIC Headquarters with the help of domain knowledge provided by officials from CBEC. SERMON has been developed on a UNIX/ORACLE platform.

Simultaneously, the delivery of hardware to 18 collectorates was effected in two phases, and completed by the end of March, 1992. Training programmes were organized in all these Collectorates spreading over a period of five months.

The Project has been implemented adhering to the strict time schedule stipulated in the MOU. The remaining 11 collectorates will also be covered by the end of December, 1992 as desired by CBEC.

DISNIC : CATERING TO MICRO-LEVEL PLANNING

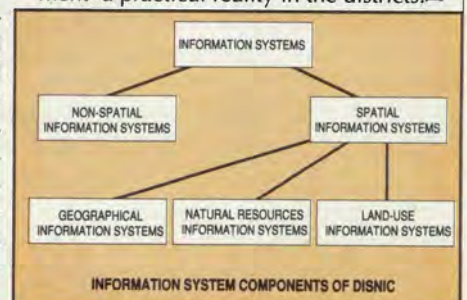
The District is the basic administrative unit in the Country, and is a very important link in the chain of the Indian System of governance. The actual implementation of all development projects and administrative tasks "starts from and is monitored" by the district authorities.

Having shifted the focus of planning from macro to micro level through decentralization, it has become necessary to improve planning at the district, sub-district (tehsil or block), panchayat and village levels. Socio-economic planning and plan management requires the availability of an extensive information system, based on reliable data, and employing modelling and forecasting techniques, to facilitate development and analyse policy options. Hence, the district administration needs effective use of information technology tools to develop a computer-based information system both at the macro and micro levels.

In view of this importance of information systems and databases, the National Informatics Centre launched its district level development programme DISNIC. Under this project, satellite-based computer communication (NICNET) facilities were established in nearly all the district collectorates of the Country with a view to develop databases in various sectors of the economy for planning and decision-making at the district level.

DISNIC sectors include agriculture, animal resources, irrigation, water resources, rural development, decentralized planning, fishery, industry, health, labour, social development, education, co-operation, civil supplies, forestry, revenue administration, calamity relief management etc.

The DISNIC programme is operational in all the 450 districts of the Country, and the various state governments and district authorities are participating whole-heartedly in this national endeavour of making information technology-based development a practical reality in the districts.





IN THE LIMELIGHT

CACHAR : TAKING A BYTE OF THE FUTURE

Set in the valley of the meandering Barak, against a backdrop of lofty mountains, Cachar is a district tucked away in the southernmost tip of the State of Assam. The District headquarters, Silchar, is at a distance of about 400 km from the State Capital, Guwahati. When Mr Deepankar Sengupta joined as the District Informatics Officer (DIO) at Silchar on March 9, 1990, he knew that his assignment of setting up and running a district computer centre of the National Informatics Centre would by no means be an easy one.

RIGHT FROM SQUARE ONE

The first few days were hectic. The initial task was to literally sell the NIC concept. District officials had to be convinced of the utility of computers before they came forward to co-operate. And their co-operation was what the DIO needed most. But the response was good. The District Administration allotted a room for the computer centre, and site preparation work was taken up in right earnest. By March 31, 1990 the District Centre was ready for computers. However, at that time, since work was being taken up simultaneously in most of the districts of the State, computer systems and micro earth station equipments were not readily available for some districts. Unluckily enough, Cachar was one such district.

MAKING A DETOUR

Undaunted, the DIO decided that he would start work for DISNIC-PLAN implementation while waiting for the computer systems to arrive. Accordingly, an implementation team comprising of senior district officials along with the DIO was formed on May 2, 1990. The approach of the team is praiseworthy. Taking no chances, they started data collection only in one administrative block selected as the pilot block. Based on the experience in the pilot block, they then formulated a data collection procedure, and implemented it in the whole District. As the data from the entire District started flowing in, special care was taken to ensure authenticity through constant monitoring and random sample checks carried out by the implementation team from time to time. If it was a classic case of putting the cart before the horse, there could not have been a more practical decision.

Meanwhile, the computer systems had

arrived, and the Centre was hooked up with the satellite-based computer communication network of NIC, NICNET on May 10, 1990. Two data entry operators were subsequently trained for data entry work and data entry for DISNIC-PLAN was started on November 10, 1990.

Latest status reports say data collection has been completed for all the 1,057 villages of the District, and data entry work is also nearing completion.

ONGOING ACTIVITIES

A district centre can at no stage be idle. As people realize the utility of computers they ask for more and more service. The DIO is kept on his toes. The Cachar District Centre is presently engaged in :

- * Data entry for DISNIC-PLAN

- * System study for the District Agriculture Department.

- * Data updation for Elementary Education Information System (EEIS)

- * Transmission of the "Price Position of Essential Commodities" to the Ministry of Agriculture.

- * Transmission of the progress reports for the "National Watershed Development Programme for Rainfed Areas" to the state nodal centre.

- * System study of immunization monitoring for the office of the Chief Medical and Health Officer of the District.

TAKING THE NEXT STEP

Gaining confidence and momentum, the implementation of the Elementary Education Information System (EEIS), based on the DISNIC education package was taken up next. This was a state-level project. An implementation committee for the project was formed on July 27, 1990. Data entry forms were distributed in all the schools of the District, and data entry operators trained. Data entry for EEIS was finally started on October 15, 1990 and completed by April 26, 1991. A total computer time of about 1,250 hours in 145 working days was required to complete

the data entry for the 1,741 elementary education schools in the District.

ROLE DURING THE ELECTIONS

NICNET services for election work was made available to the District Administration from June 5, 1991 to June 15, 1991. Initially starting with a 12-hour a-day service schedule, the District Centre switched on to round-the-clock service from June 18, 1991 onwards. As in all over the Country, NICNET services were used for bidirectional message communication between the Returning Officer, Chief Election Officer and Chief Election Commissioner. Counting updates for the Lok Sabha seat were also regularly transmitted to the Doordarshan.

INFODESK : BREAKING NEW GROUNDS

Information into District Economics and Statistics Kernel (INFODESK) is a project taken up by the Cachar District Centre to provide ready information to decision makers for day-to-day administration. Taken up on the suggestion of the State Administration, the project envisages the creation of a data bank in every district of Assam for storing and processing block level data for different sectors of the economy. The data banks are to be maintained by the Directorate of Economics and Statistics. Cachar has been chosen as one of the pilot districts for the project. With the District Centre involved in feasibility study, the project is still in its infancy.

National Informatics Centre's Cachar District Centre is a typical example of how the Organization has built inroads into areas hitherto untouched by informatics culture. A new trend has been set. People even in the remotest of districts now know what the computer can do for them. The sense of awe has been broken. They have been familiarized with the so-say intricacies of information technology. These, thanks to people like Deepankar Sengupta and others who helped and guided him, are the first steps towards a better, brighter and more informed future.