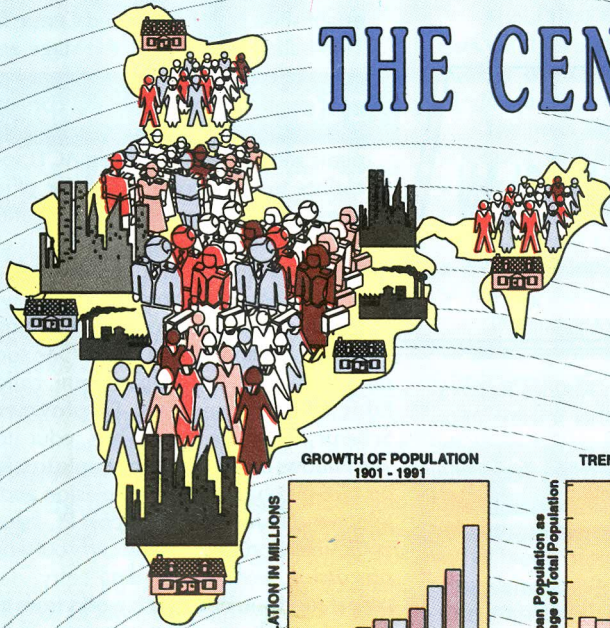


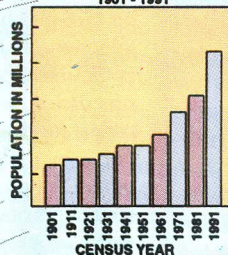
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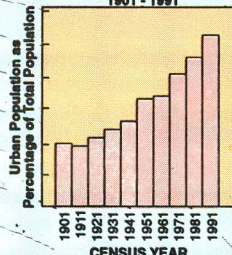
THE CENSUS



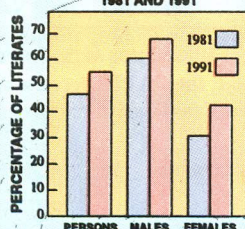
GROWTH OF POPULATION
1901 - 1991



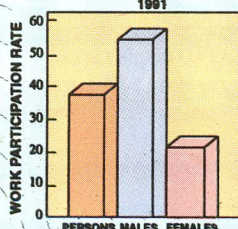
TREND OF URBANIZATION
1901 - 1991



LITERACY RATE
1981 AND 1991

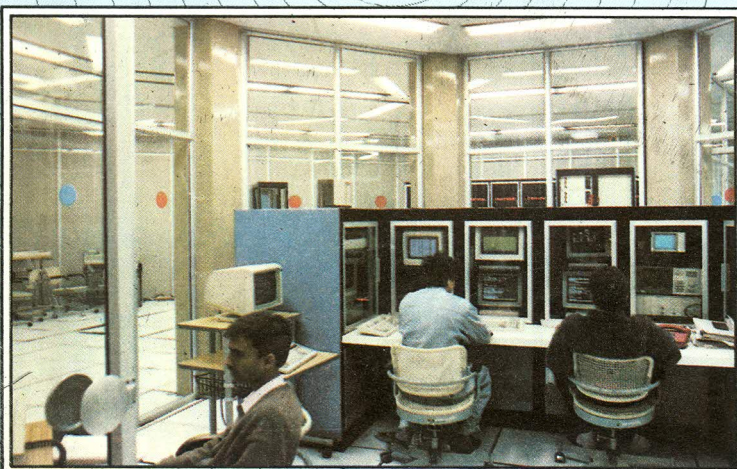


WORK PARTICIPATION RATE
1991



SOURCE : RGI

AND NIC



THIS ISSUE BRINGS TO YOU:

A LEAF OF NICPLAN Page - 2

The tele-informatics Programme

AROUND THE NIC WORLD Page - 3

The news section

FEATURE Page - 4

Computerization of Census 1991

PRODUCTS 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 the Leh District Centre

••• and all our regular columns.

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Tele-Informatics Development and Promotion Programme (TDPP)

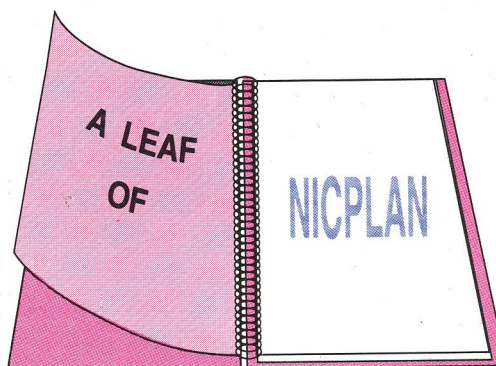
The Eighth Five Year Plan of the National Informatics Centre is a blue print of action for the Organization. Each Leaf of NICPLAN presents an extract from the Plan to provide the Reader with an insight into just how the Organization visualizes the future. Today, three years since the plan was formulated, Readers will also be able to judge for themselves whether NIC is maintaining its course on time. In this issue we present the Tele-Informatics Development and Promotion Programme (TDPP).

The Tele-Informatics Development and Promotion Programme will implement the following four projects:

- Teletext Project
- NICNET-based Videotex Project
- NICNET-based ISDN Project
- Communication Promotion Project

To give an identity to the Tele-Informatics Development and Promotion Programme (TDPP), the existing project group is proposed to be organized into an Advanced Centre for Tele-Informatics which will be continued to be located in Delhi.

NIC is already implementing a UNDP-supported teletext project which aims to promote mass dissemination of information using tele-informatics technology. NIC has developed and implemented the teletext software which provides, through *Doordarshan*, information on a large number of aspects relating to important news items, Indian Airlines departure/arrival, train departure/arrival, tourist information, railway reservation information etc.



During 1990-91, Indian Airlines Reservation Information and other teletext information will be available anywhere in the Country, using NICNET. This will logically lead to NICNET-based Videotex project which will give videotex service to a number of important Users who can afford to buy their videotex terminals. For enhancing the capability of NICNET to data communication, limited voice mail communication and fax between important nodes, videotex special purpose ISDN features will be introduced on NICNET.

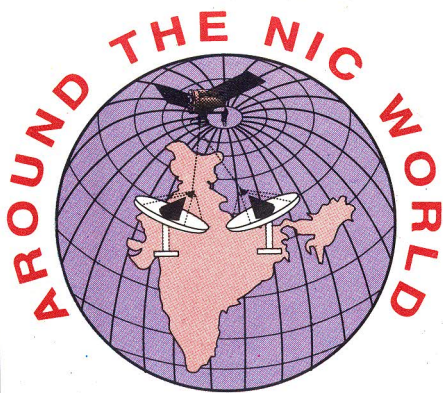
With such facilities and capabilities

established in the Advanced Centre for Tele-Informatics (ACTI), the stage gets automatically set for promoting synergistic merger of computer and communication into a single subject of communication. This will enable ACTI specialists to offer consultancy for office communication, factory communication and home communication which is expected to develop around the world in the 90s. Some pilot projects in this will be set up by ACTI to prove the technology in real-life application areas. One such pilot project will be set up in Delhi, called Educated Housewives Employment Scheme, to enable housewives, educated war widows and other such people to take, on hire-purchase basis, a television and a telephone linked by a low-cost PC-based communication terminal and carry out word processing, text editing, data entry, data preparation and other such works from the home by dialling up the computer in the office. The pilot project will aim at utilizing the talents of women for data preparation, word processing etc. sub-contracted by the NIC.

PHOTOTALK

People checking RAPID display screens of reservation status at the Indian Railways Reservation Centre in New Delhi. Here, around 5,000 persons consult the RAPID screens daily.





NIC MEN AWARDED

UTTAR PRADESH; January: The Adviser to the Governor, Uttar Pradesh, Mr RD Sonker, gave away the "Certificate of Honour" and the "President Census Silver Medal" to eight personnel from the National Informatics Centre, on January 30, 1993, for their meritorious contribution in computerization of the Uttar Pradesh Primary Census Abstract (PCA) for Census 1991. The PCA was released on the same day by the Adviser, said a report from our Uttar Pradesh State Unit.

The recipients of the Certificate and the Medal are Dr Rakesh Goel, PSA and SIO ; Dr LR Yadav, SSA and Project Co-ordinator; Mr Man Mohan Singh Rauthan, SA; Mr M Amir, Programmer; Mr RS Singh, Programmer Assistant; Mr Vinay Kumar Singh, Programmer Assistant; Mr Rajeev Rastogi, Computer Operator and Mr RAjendra Gupta, Programmer Assistant.

Two more officers, who were not present on that day, Mr AK Sinha, District Informatics Officer, Azamgarh and Mr Parveen Singh, District Informatics Officer, Varanasi, have also been honoured with the certificate and medal.

TAKING EXAMS WITHOUT PAPER

NEW DELHI; April: The National Informatics Centre (NIC) has created a national facility for Computer-aided Paperless Examination System (CAPES). Using CAPES, any objective type examination can be conducted paperless on computer terminals. The application has already been tested at NIC Headquarters in New Delhi for the promotion reviews of NIC Programmers/District Informatics Officers (DIO) this year.

As a medium-level pilot implementation of CAPES, NIC shall conduct aptitude tests for the recruitment of 100 posts of programmers of NIC; and for the posts of Assistant Provident Fund Commissioners of the Union Public Service Commission (UPSC).

About 10,000 candidates are expected to appear for each of the examinations. These tests will be conducted in 18 State Centres of NIC covering 35 examination sites. The number of examination sites in each city has been fixed based on the number of candidates appearing from that city.

The main objectives of CAPES include:

- Coping with the increasing number of candidates
- Conducting paperless examinations
- Doing away with confidentiality constraints
- Establishing a scientific and rational method for screening candidates
- Providing intrinsic security
- Making the applications user-friendly so that candidates can handle them with ease

The success of CAPES in these pilot projects will open the doors for computerization of other examinations of universities, education boards and institutions, government departments, state public service commissions and the UPSC.

SPONSORED TRAINING PROGRAMMES

PUNE, January: The Western Regional Centre of the National Informatics Centre (NIC-WR), Pune, has successfully conducted its first sponsored training programme on **Programming in COBOL** for the office of the Controller General of Defence Accounts (CGDA). Employees of the CGDA, from all over the Country, attended this three-week training programme, informs a report from NIC-WR.

Throughout the training programme, quizzes were conducted regularly, and a test was taken on the final day. The performance of each participant was carefully graded by observing various components such as motivation, problem solving, programming skills, interaction with the faculty and ability to grasp new ideas.

Subsequently, a second commercial training programme was conducted on **Computer Awareness, UNIX and SQL** for the Accounts Officers of the group of ammunition factories controlled by the Controller of Accounts (FYS), Kirkee. At the end of the training programme, the participants were capable of writing simple shell programmes, concluded the report.

UNIDO-NIC WORKSHOP ON INFORMATION TECHNOLOGY

NEW DELHI; March: A week-long workshop on **State-of-the-Art Information Technology, including the Indian Experience** was jointly organized by the United

Nations Industrial Development Organization (UNIDO) and the National Informatics Centre (NIC) from March 29, 1993.

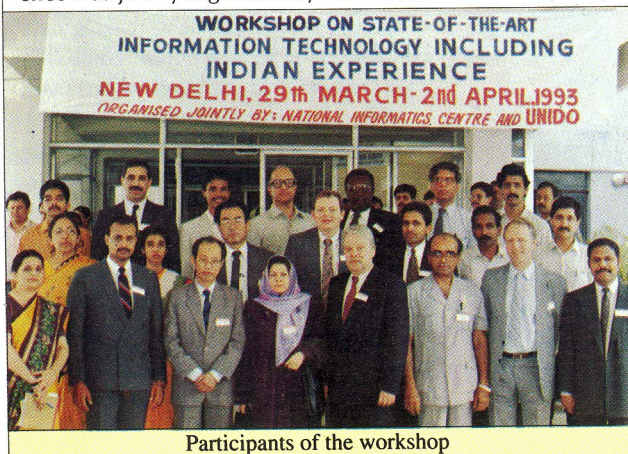
The Workshop was attended by Heads of organizations from 11 Asian, African and European Countries.

The objective of the workshop was to upgrade the knowledge of the participants on low-cost Information Technology-based networks, with NICNET of NIC as the example.

Promotion of application of advanced informatics technologies in Developing Countries is one of the priority areas

of UNIDO activities. The UNIDO-NIC Workshop was one of a series of workshops sponsored by UNIDO in the field of hardware and software development and use of Industrial and Technological Information Bank (INTIB) databases and networking, for exchange of information and transfer of technology between member countries.

The workshop was attended by Mr V Podshibyakin, Chief and Mr O Padichakudi, of INTIB, UNIDO, along with two international experts from the area of Information Technology, Dr Upendra Sahu, Managing Partner, United Research, USA, and Mr Thomas K Duncan, Managing Partner, Parsec Systems, USA. These experts presented papers on their fields and also took part in the discussions between NIC members and the Delegates.



Participants of the workshop

Computerization : A new Era in Census History

The Indian Census operation is not merely a head count, nor is it a game of numbers or an aimless ritual repeated every ten years. It is a definite measure of regional growth in terms of dwelling units, population, economy, literacy and fertility. Information, on each parameter, collected during the Census, has some socio-economic relevance. For example, the population-density reflects the pressure on cities and new towns formed; the sex-ratio indicates the increase or decrease in the number of females per 1,000 males. Information on women literacy and women work participation rate provide a measure of women's welfare. Regional variations in educational attainment, child population and working population give an insight into the uniformity and success of government-implemented schemes, from time to time. The importance of the data is also enhanced to a great extent because of its range and enormity: the Indian Census provides information on 6.27 lakh villages and 4,615 towns along with their outgrowths. This data can be further upwardly aggregated to give block, tehsil, district and state totals.

The Operations

The Census 1991 was conducted in two phases by the Office of the Registrar General and Census Commissioner of India (RGI). During the first phase; from April, 1990 to September, 1990; the Houselist schedule was canvassed. This consisted of identifying information on each household and its usage. The Household schedule and Individual slip were canvassed in the second phase; from February, 1991 to March, 1991; popularly dubbed Census Time. As implied by the

names, the Individual Slip is a statement of an individual's social, demographic and economic characteristics, whereas the Household schedule is an abstract of individuals in a household. The Primary Census Abstract (PCA) is a sub-set of the Household schedule data consolidated at the village level for rural areas and at the ward level for urban areas.

The Role of Computers

In the making of the Census 1991, the advantages of computerization, more so of distributed processing, were fully harnessed by processing the PCA data on NIC's computer-based satellite communication network, NICNET. Decentralized processing at locations, where the data was compiled, not only resulted in its efficient release, but also brought about a qualitative improvement in the data itself. This was possible due to reconciliation of data errors reflected by validation checks used in computer processing. NIC State Units, in close co-operation with the Director, Census Operations, worked round the clock for the release of this data on NICNET. Availability of the PCA data on NICNET permits any authorized User to access this data through the district/state computers of the National Informatics Centre and through terminals installed at the Government Bhawans in New Delhi. This has opened up a new chapter in the openness of data. Dissemination of this data on floppies, apart from the usual publications, is now possible for the first time in the history of the Indian Census.

Inaugurating the Primary Census Abstract, the Deputy Chairman, Planning Commission, Mr Pranab Mukherjee, summed up the advantages of computeri-

zation thus:

"The Census 1991, data was computerized and validated using NICNET facilities, as a result of which the final release of PCA data has been expedited. The User can now access PCA data on NICNET terminals throughout the Country, close to his place of work, and selectively according to his needs. The data can now be made available to the national and international agencies on computer media."

In his presidential speech, on the same occasion, Mr MM Jacob, the then Minister of State for Home Affairs, Government of India, spoke on similar lines:

"The computerization of census data on such a big scale has been a major innovation of the 1991 Census and is a significant step towards timely and easy accessibility of data."

Hand-in-hand

Computerization of data contained in the Household schedules, Individual slips and Village/Town directory is in progress at the Office of the RGI. Our User is keen to integrate these data with the PCA data for dissemination through NICNET.

The close co-operation between the Office of the Registrar General of India and the National Informatics Centre, amply demonstrates the value of openness and efficiency when it comes to making data available to the general public. Emphasizing this point, Mr Pranab Mukherjee noted:

"By releasing the PCA data on NICNET, NIC and the office of the RGI have set a fine example of co-operation producing synergistic effect. Collection of data for 6.3 lakh villages and about 4,615 towns, its compilation, computerization and preparation for final release was a mammoth task."

In data collection and granting permission for its dissemination over NICNET, the Registrar General of India enabled NIC to render a great service to the Nation --- the "NICNET CENSUS SERVICE."

Above all, by making this data available on NICNET, NIC and RGI have worked towards openness of information. I congratulate both the organizations for their sustained co-ordinated efforts in achieving this.

Mr Pranab Mukherjee



Mr Pranab Mukherjee, Deputy Chairman, Planning Commission, Inaugurating the PCA, 1991, on NICNET

FROM YOU TO US

I went through the July and October issues of Informatics. It was really nice reading through all the items --- very nicely compiled and laid out. Congratulations for bringing out a very good newsletter.

I would like to know the exact meaning of the word "Informatics" --- it is not listed in the dictionary. Are Informatics and Information Science the same or is there something more to it?

Srinivas, from Agriculture Information System Division, NIC.

In Reply . . .

The basic definition of the term "informatics" as given by **Mikhailov, Chernyi and Giliarevski** in their original Russian publication "*Osnovi Informatiki*", (*Foundation of Informatics*) 1968, and translated by **NJ Belkin** in his paper on *Information for Informatics* presented at a conference held by the Aslib Co-ordinate Indexing Group during March 25-27, 1974, at New College, Oxford, is:

"Informatics is the learned discipline which studies the structure and properties (but not the actual contents) of scholarly information, and the laws governing scholarly information activity, its theory, history, methodology and organization. The goal of informatics is the discovery of the optimum methods and means of representation, collection, storage, retrieval and dissemination of scholarly information. Informatics has to do with meaningful (semantic) information, but not with qualitative appraisal of that information. Such appraisals can be carried out only by specialists in the particular scholarly discipline or particular activity."

Belkin clarifies that the term "scholarly" in the definition, is taken in a wide enough sense to include practical administrative activities, for instance. This point is important because it implies that, for example, genetic information or the information of statistical communication theory, are not the sort of information with which informatics deals, Belkin deduces.

Belkin however differentiates between

ACCOLADES



U.P. Scientific Literacy Programme

When we say "informatics services" we seldom realize how vast a scope we cover in a multi-dimension canvas such as India. Only when the User utilizes our services fruitfully and expresses his satisfaction are we able to gauge just where and how we stand. The work done by the Uttar Pradesh State Unit of NIC in monitoring the Bharat Gyan Vigyan Jatha - 92 elicited appreciative response.

Bharat Jan Gyan Vigyan Jatha (BJGVJ-92) was launched as a Mass Action for National Regeneration (MANAR) in order to alleviate the basic problems in General and Scientific Literacy among the people of the Country. With the involvement of millions of individuals from voluntary agencies, schools, colleges, research laboratories, artists and thinkers, an attempt was made to inculcate a scientific approach in the people to solve their basic problems. The National Informatics Centre was entrusted with the responsibility of monitoring this massive programme. **Mr Harish Chandra, Secretary, Science and Technology, Government of Uttar Pradesh**, elaborates on why exactly NIC was chosen for the task:

"Since there exists a lot of information associated with each activity (of the Programme); it was decided to use modern "Information Technology", available with National Informatics Centre, for the development and implementation of MIS for the creation of databases of Science and Technology and inventory of persons along with details of resource material and associated institutes."

The Bharat Gyan Vigyan Jatha - 92, with 50,000 Local Organizing Councils (LOCs), 500 District Organizing Councils (DOCs), State Organizing Councils (SOCs) for all the states and union territories and a National

Organizing Council (NOC) at the apex, touched the largest number of habitation in the history of the Jathas. NIC undertook the task of maintaining all information flow between all the Councils of the Jatha. How it was done is best said in the words of Mr Harish Chandra:

"In this regard, the nationwide satellite-based computer-communication Network NICNET, was extensively used to monitor the whole programme, and a lot of data has been communicated through this network, from districts of U.P. and vice versa."

The hard work put in by NIC did win the deserved appreciation. In an expressive note, Mr Harish Chandra lets us know that we have delivered once again:

"I express my heartiest congratulations and appreciation (to all NIC personnel involved in the Programme) ... for providing very useful support during the execution of this programme..."

We hope that we will get similar support and co-operation in the future for the MIS development and implementation of S&T Programme in U.P. using services of NICNET."

But for the help and support from Mr Harish Chandra and all the other officials of the State Administration, the National Informatics Center could hardly have hoped to achieve what it did. That we bear in mind.

Information Science and Informatics purely on the ground that informatics was yet to attain the status of a science (that was way back in 1974) and hence could not be termed as Information Science. However, in the last two decades, with the great advances in computer and communication technology, Informatics has come of its own and can safely be considered a science by itself.

A new approach has however been adopted in defining "Informatics". This is in terms of the concept of Information Technology. The National Informatics Centre's information handbook on DISNIC defines Information Technology as "*a science of collecting, storing,*

processing and transmitting information". Informatics is then defined as "the combination of Information Technology (IT) and applications coupled with Telecommunication".

Maria Giaoutzi and Peter Nijkamp, in Informatics and Regional Development, come out with a clearer definition combining all the above elements:

"The scientific and commercial use and management of modern information systems (in terms of hardware, software and orgware) requires a systematic and coherent collection, storage and transmission of new knowledge (based on integrated network patterns) and will be called here (in the book) Informatics."

SELECTED EDUCATIONAL STATISTICS ON NICNET

S elected statistical data on education, covering a period of five years, has been put in NICNET. This data can now be accessed through all terminals connected to NICNET. The educational statistics data covers a wide range of information in the field of education.

Projected population of school-going children of the age group of 0-6 years, the number of educational institutions, enrolment by stages/classes in schools and colleges, number of teachers and enrolment by type of institution, schedule castes/schedule tribes studying in various schools and colleges and in which stage, enrolment ratio of students belonging to schedule castes/schedule tribes and budgeted expenditure (Reserve Account) of the Education and other departments are some of the information parameters available. The information is also available on a state/union territory basis.

This database can be invoked by giving the command "ED" at the **SYSTEM?** prompt of the NEC S-1000 at Delhi, from any user-id.

MIS TO MONITOR CAG LEGAL CASES

T he National Informatics Centre has successfully developed and implemented a computerized information system for monitoring the pending legal cases of the office of the Comptroller and Auditor General (CAG) of India. The system was implemented in August, 1992.

The legal cell at the office of the CAG deals with legal cases of the headquarters and all the field offices of the Indian Audit and Accounts Department. An effective computerized monitoring system acquired importance in view of the large number of pending cases at various Central Administrative Tribunals and the Supreme Court. The current status of implementation of the legal cases requires close monitoring in order to maintain the sanctity of the courts. The manual system of monitoring was proving to be increasingly difficult to cope with the workload.

The Computerized Legal Cases Information System allows the User to generate various managerial reports to support decision making. Reports are generated on cases for which hearing is due in the coming

months and on counter replies. The System generates statistical progress reports which give a clear picture of the legal cases accepted and settled during a particular period for different offices.

For generating reports, the User can make a combination of queries for court, field office, designation and subject, both on pending and decided legal cases. For utilizing set precedents in defending cases, the System provides an option to generate various reports according to the subject, court and year of decision of decided cases.

Any major central or state government department which handles a large number of legal cases of its employees, would find the Computerized Legal Cases Information System very effective.

(For further information, please contact: The Audit Information System Group, National Informatics Centre, A-Block, CGO Complex, Lodhi Road, New Delhi - 110 003.)

TWO NEW DATABASES FOR PUBLIC ACCESS

The public will now have access to two more databases — the UN-Energy Database and the Polytechnics Information Database — through the, now familiar, General Information System Terminals of the National Informatics Centre (GISTNIC).

The UN-Energy Database

The United Nations Statistical Office (UNSO), New York, compiles information in statistical form on various important sectors such as energy, industry, national accounts etc. Data tapes of these information are released annually through subscribers. The National Informatics Centre recently acquired the status of a subscriber and, with the information procured from UNSO, has built up the UN-Energy database and incorporated it in GISTNIC.

The UN-Energy database consists of generation, consumption and other vital details pertaining to the energy sector for all the member countries of the United Nations. The data is in time series originating from 1950 and has proved to be extremely useful for various activities such as energy modelling, comparative generation analyses on an international basis and forecasting of energy consumption trends. This database holds high potential for the User Community, specially for the Energy Sector comprising the Central Ministry of Power, state ministries of power and electricity; and other related organizations of the Government of India, state governments, local bodies, scientific laboratories and economic institutions (such as the Tata Energy Research Institute). Academicians and research scholars could also find the database very useful for their work.

The UN-Energy database can be invoked by typing in 'UNER' in the system prompt 'SYSTEM?' of NEC, from any User-id.

Polytechnics Information

Though polytechnic education has gained tremendous popularity in the Country, the dearth of comprehensive and up-to-date information on various courses available in different polytechnics, has been a major obstacle for prospective candidates of polytechnic education. It is noteworthy that there has been no source of information, whatsoever, either in printed form or in the computer media, which could help aspiring candidates in locating a course and institute of choice.

In this connection the **World Bank Sponsored Project on Polytechnics** came forward with a proposal for the National Informatics Centre to take up the task of creating a database on polytechnics information under its GISTNIC project. The responsibility of compiling the information from the respective polytechnics, based on the format designed by NIC, was undertaken by the World Bank Project. The information was computerized into a form of public database and released for use by the public as the Polytechnics Information Guide under the Education Guide of GISTNIC.

The Polytechnics Information Guide can be accessed through the main menu of GISTNIC. For a given polytechnic institute, all details such as address, facilities available, courses offered, admission procedures, last date of admission, fees etc. are provided. Alternatively, for a specified course, all the polytechnic institutes offering the course are identified and the respective details displayed on the screen.

FORECASTING THE GROWTH RATE OF INDUSTRIES

The Analytics and Modelling Division of NIC recently carried out a study to forecast, on a monthly basis, the industrial growth rate for the current financial year.

The forecast will be of immense help to various industrial policy makers and planners in the Government.

The methodology of Univariate Auto Regressive Integrated Moving Average (UBJ-ARIMA), based on the monthly time series data on IPP released by CSO (up to September, 1992), will be adopted for the purpose.

H.P. STATE BUDGET COMPUTERIZED

The Himachal Pradesh State Unit of the National Informatics Centre has successfully computerized the State Budget for Himachal Pradesh for the year 1993-94.

The Budget Processing System

The budget presented in the State Legislature contains the following documents which are now being generated in the computer :

- Demand for grants in five parts
- Annual Financial Statement
- Budget in brief
- Schedules of new expenditure (Plan and Non Plan)
- List of works

is not only generating the routine budget documents, but is also attempting to systematize, reduce the volume of and standardize the presentation, making it useful for further reference and analyses. The System is also generating the *estimates of receipts, budget posts and explanatory memorandum*.

The Budget Posts and other documents generated through Lyrix will be incorporated in databases in the next budget, and the software will be improved upon to include more query generation facilities.

Taking advantage of Treasury computerization, work has been initiated for computerization of AG Compilation Accounts from April, 1993. This has been done using the already computerized budget data.

Efforts are also on to link the software developed with other financial packages of the State to develop an Integrated Financial Management Information System.

LAND RECORDS COMPUTERIZATION CATCHING ON

For effective implementation of the Land Reform Programme and all its related projects, availability of accurate and timely data on basic land records is a primary requisite. The Government of India has launched the programme for computerization of land records for the development of land records : database. This database is also very essential for the implementation of various developmental programmes.

The National Informatics Centre has implemented the Land Records Computerization Programme in most of the pilot districts specified by the Ministry of Rural Development. These districts are : Rewari of Haryana, Burdwan of West Bengal, Ropar of Punjab, Kangra of Himachal Pradesh, Salem of Tamil Nadu, Gulberga of Karnataka, Tiruvananthapuram of Kerela, the entire State of Sikkim, North District of Tripura, Jamshedpur of Bihar, many districts of Uttar Pradesh and Durgapur of Rajasthan. This programme has also been implemented in the Andaman and Nicobar Islands. Modalities for implementing

the programme in some other states such as Jammu & Kashmir and Manipur are being worked out.

In the second stage, two more districts in each of the States are being identified for implementing this programme. Further, modalities are being worked out to implement the Land Records Computerization

Programme in all the districts of some states such as Maharashtra.

A brainstorming session on land records computerization, organized jointly by the Ministry of Rural Development and the

National Informatics Centre, was conducted in Delhi. The experiences in implementing the project at the pilot stage was discussed in detail and a plan formulated to replicate the computerization of land records all over the Country.

The National Informatics Centre has conducted several training programmes on land records computerization for participants from Nepal. These training programmes were conducted under the United States Agency for International Development (USAID) programme.

The main objectives of the computerization of land records programme include:

- Issuing of copy of the record of rights to the owner instantaneously.
- Updating the data on basic land records on a regular basis and storing it on a magnetic media.
- developing a comprehensive land records information system for revenue administration.

KEEPING TRACK OF VOCATIONAL EDUCATION

The National Informatics Centre has been entrusted with the responsibility of developing a computerized monitoring system for the programme of vocational education launched by the Ministry of Human Resources Development (HRD). The programme covers 2,748 schools and 7,820 vocational sectors in 300 districts of the Country.

A monitoring system, to study the progress of newly introduced vocational courses, has been worked out by the School Education Bureau of the HRD Ministry. A quarterly report and an annual report are sent from each school to the respective District Education Office. The quarterly report covers information on infrastructural facilities such as sheds, equipment,

availability of raw material, text books and teachers and their training. The annual report gives information on enrolment for the current year and examination results of the previous years, economic and educational backgrounds of parents and follow-ups of students who have completed the course.

The Educational Informatics Unit of NIC has developed a software to computerize the entire process of the monitoring system. The software has been distributed in all NIC state and district centres for implementation.

Five workshops were organized at Delhi, Hyderabad, Bombay, Bhubaneswar and Guwahati to familiarize the officials of the State Governments with the software and train them in its use.

Newsletter Circulation

All distribution nodes of Informatics are requested to send in their feedback on the circulation of the newsletter.

Requests for additional number of copies and all feedbacks on circulation are to be sent to NICMAIL address, **NEWSLET!CIR.**

Leh: Conquering new Heights in Computerization

The district of Leh, situated towards the east of the Ladakh region in Jammu & Kashmir, is a picture of unique contrasting features. This sensitive border District, with an area of 44,000 sq km, is one of the largest districts in the Country. However, its population density at two persons per sq km is one of the lowest. Ninety-five percent of the total population of 88,000 (1981 census) belong to the schedule tribes.

The Himalayas exercises a dominating influence on Leh's meteorological conditions. Leh has a climate characterized by almost total lack of rainfall, extreme dryness and intense exposure to the sun's rays. It is the highest and the most coldest region in the Country. The temperature varies from 35 degree Celsius in the short summer to an extreme of minus 35 degree Celsius at the height of the winter. The District generally remains isolated between November and June every year as the Srinagar-leh and Manali-Leh highways, which connect Leh with the outside world, remain closed during this period.

Where Teamwork counts

It is in view of these extreme physical conditions that the Leh District Computer Centre of the National Informatics Centre acquires added significance. Thanks to the sincere and dedicated efforts of Mr Jamyang Namgia, the District Informatics Officer (DIO) of Leh, the NIC Leh District Centre today functions round the year in spite of such adverse conditions. The District Centre became operational from August 20, 1990, and was formally inaugurated by Mr Ved Merwah, the then Advisor to the Governor, Jammu & Kashmir, in October, 1990. Mr Sarbjeet Singh, the then DIO, along with Mr Jamyang Namgial (who was then a District Informatics Assistant) played key roles in getting the site prepared. The National Informatics Centre owes special gratitude to Mr Samuel Verghese, who was then the District Development Commissioner. He left no stones unturned to make the District Centre operational. His keen support motivated the NIC personnel to fight against all odds and achieve success.

After getting the computer systems installed, the next task was to create computer awareness among the officials of the District Administration and, more importantly, to cultivate a culture of computers. The DIO and DIA knew that as far as computer utilization was concerned, they would have to start right from square one. There could be no short-cuts, no compro-

mises. Drawing from the experience which NIC had garnered from its other similar projects, they went through the whole range of established procedures which begins with explaining just what a computer really is and what purposes it can serve, to conducting numerous training courses on the actual usage of the machines. It was when the ice broke, and the people lost their awe of the computer, that the real work started.

NICNET, which became operational in the meantime, was a boon for isolated Leh. Soon NICNET became a vital means of communication, especially when Leh remains cut off from the outside world.

Gathering Momentum

The various projects which have been undertaken by the Leh District Computer Centre include:

- computerization of village amenity data
- monitoring of village-level plan
- executing various computerization projects for the DDC's office
- monitoring the national project of drinking water supply in rural areas.

Other than these, a number of short term projects, especially in the field of recruitment, were undertaken and completed by the District Centre, thereby earning a lot of appreciation from the District Authorities.

Once a suitable atmosphere is created, and the people concerned realizes that the computer can be utilized extensively in all facets of their work, the overall process of computerization is set in motion. It is then the turn of the District Administration to specify the fields in which

computers can be used fruitfully. The National Informatics Centre, on its part, has a whole range of readymade application software packages to offer for use in the District. The District Information System of NIC (DISNIC) plays a central role at this stage. And Leh shows every sign of following the same path.

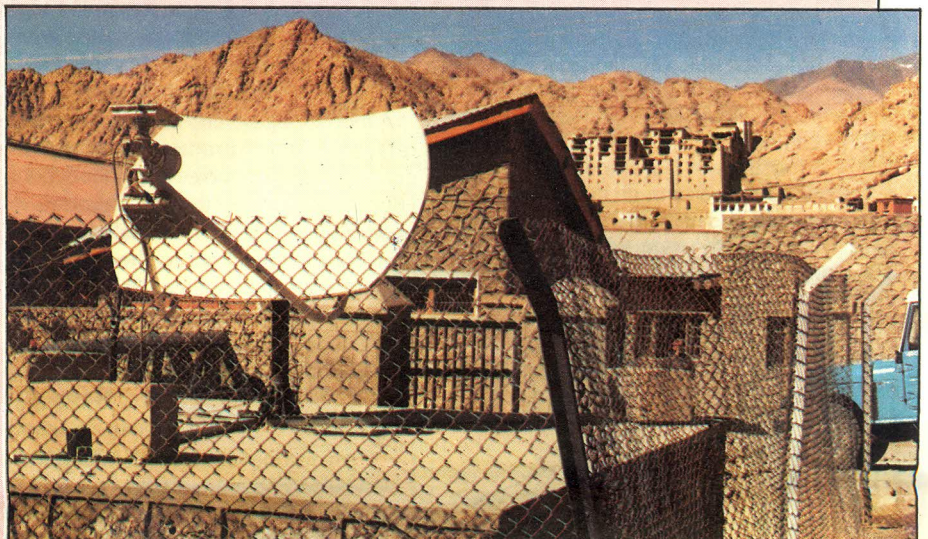
The March onwards

In an NIC District Co-ordination Committee (NDCC) meeting, held recently, it was stipulated that the major thrust area now would be the implementation of DISNIC-PLAN. The data-collection exercise for all 113 villages of the District is already over, and data entry will be completed shortly.

Another important area taken up for computerization is the sheep husbandry industry of Leh, for which the the system analysis phase is currently underway. It will not be long before the sheep husbandry department is brought under the framework of computerization.

We are there!

Leh is a symbol for NIC — a symbol of success. For it is in places such as Leh, where man has to carry on a continuous struggle against the forces of nature, that the advent of computers comes as a new glimmer of hope. That the National Informatics Centre has been able to conquer all the odds and provide its services to the weather-worn inhabitant of Leh is an achievement we all are proud of. It feels good just to say — "We are there."



NICNET Facilities at Leh District