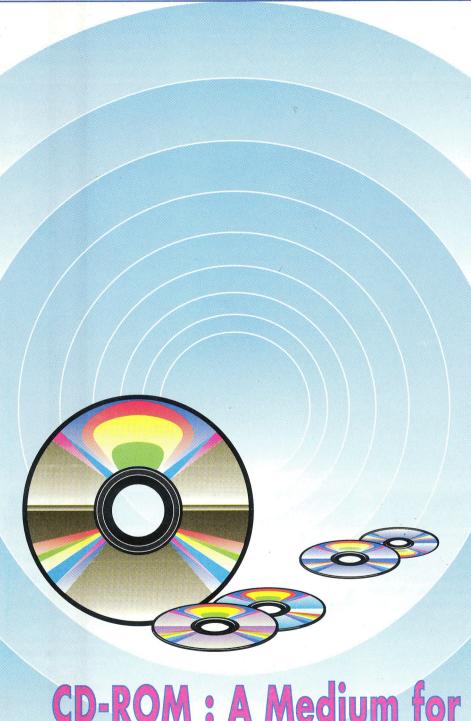
Quarterly Newsletter from National Informatics Centre

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# nformatics





CD-ROM: A Medium for Information Dissemination

#### THIS ISSUE BRINGS TO YOU

#### AROUND THE NIC WORLD Page - 2

The news section

#### COVER STORY

Page - 4

CD ROM : A Medium for Information Dissemination

#### 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 Palamu District Centre

• • and all our regular columns.

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#### **SURVEY DATA COMPUTERIZED**

From our Sikkim Correspondent

Sikkim: The Department of SC/ST Welfare, Government of Sikkim, is conducting a comprehensive socio-economic survey to cover the SC and ST families in the state of Sikkim. The Department of SC/ST Welfare has approached the National Informatics Centre, Sikkim State Unit, for the computerization of the survey data. The NIC Sikkim State Unit has developed a software for this purpose.

The survey will be able to give an insight of the socioeconomic status of SC/ST in the State and will also provide valuable input about the validity of the various schemes made for the SC/ST community in the State. 🗷

#### MEDLARS: USER AWARENESS PROGRAMME

From our Local Correspondent

New Delhi: Towards a sustained promotional agenda **MEDLARS** (Medical for Literature Analysis and Retrieval Systems) services, the National Informatics District Centre, Allappuzha, (Kerala) organized a User Awareness Programme on August 12, 1996 at Thirumala Devasom

(TD) Medical College.

The Awareness Programme was inaugurated by the District Collector, Mr Kshatrapati Shivaji. The principal of TD Medical College Ms Molly Abraham showed keen interest in the programme. programme evoked a sizeable response. It was attended by

medical around 175 professionals.

addition to In demonstration of on-line access to the MEDLINE database, the participants were also given the opportunity to explore the techniques of searching the database for literature on topics of their interest. 🗷



The District Collector, Mr Kshatrapati Shivaji inaugurating the Programme

#### SECTION-WISE COMPUTERIZATION OF COLLECTORATE

#### From our Ernakulam Correspondent

Kerala: The Kerala Revenue Minister, Mr K E Ismail recently inaugurated the function for the Section-Wise Computerization Programme of Ernakulam Collectorate.

The Ernakulam District is the first one in the State of Kerala to have this facility.

The National Informatics District Centre, Ernakulam has taken up the responsibility of providing as well as installing computer terminals in all the important sections in the Collectorate.

This will also enable the staff to generate acknowledgements of the complaints received from the public, making it easier to trace the complaints later.

The Collector will be able to monitor the disposal of complaints more effectively with the help of computers.

section computerization will not only be of great help to the Collectorate but will also provide lot of respite to the general public.

The District Collector, Mr K M Abraham appreciated the initiation taken by the Centre, District Ernakulam . 🗷

#### SC/ST CERTIFICATE ISSUING SYSTEM

#### From our Shillong Correspondent

East Khasi Hills: In East Khasi Hills District, Shillong, around 80 percent of the population comprises of the Schedule Caste (SC) and Schedule Tribe (ST) community.

Monitoring and issuing of SC/ ST Certificates is one of the major job done by the staff of the Establishment Branch in the office the Deputy Commissioner. Daily about 80 certificates are issued. In some cases, that is after the declaration of High School Result there is a heavy rush for issue of SC/ST certificates, and the number increases to about 500. Also whenever there is a vacancy for a new post where there is reservation for SC/ST, the number of people applying for the certificate increases.

Therefore the work of issuing certificates is very tedious and also there is no system to check the duplication of applications.

NIC East Khasi Hills District has therefore taken up the responsibility of developing a Computerized System for issuing of SC/ST certificates.

The computerized system will not only speed-up the certificate issuing process, but will also provide a systematic solution to check the repetition of applications.

#### **ICDS WORKSHOP**

From our Punjab Correspondent

Punjab: Two one day workshops on computerization of Integrated Child Development Services (ICDS) were organized by the Punjab State Unit of the National Informatics Centre on July 1, 1996 and July 5, 1996 for the officials of Department of Social Welfare. The Additional Director and Deputy Directors of the concerned departments also attended the workshops.

objective of the workshops was to appraise the officials about implementation of the software developed for ICDS and its impact on effective monitoring of the scheme. The State Informatics Officer, Punjab stressed upon the need of computerization of ICDS as it shall be beneficial in monitoring of the scheme and shall help in taking proper actions for better implementation of scheme. He also assured the Department of full support from NIC Punjab State Unit in terms of technical and communication assistance.

The Additional Director, ICDS in her inaugural speech said that computerization of ICDS shall help in taking the benefit of the services to the most vulnerable sections of the society.

Participants were also given demonstration of ICDS Software and method of transfer of monthly and half-yearly progress reports through NICNET. The participants found the workshops beneficial and were impressed by the Software Package, as it enables faster generation and transfer of reports. Deputy Director, Pensions praised NIC Punjab State Unit for successfully implementing the Software.

#### **COMPUTERIZED FILING COUNTER**

#### From our Haryana Correspondent

Haryana: A computerized filing counter for on-line institution of cases has started functioning at the Punjab and Haryana High Court located at Chandigarh with effect from May 24, 1996.

The Software was developed by the Haryana State Unit of the National Informatics Centre. The NIC Haryana State Unit is looking after the activities of Punjab and Haryana High Court.

With the establishment of the on-line facility, all types of cases such as urgent, regular and ordinary; pertaining to various branches such as Writ, Criminal, Civil Revision etc are now filed only at one place and the diary number with other relevant details are printed by computer and given to the advocate of the person filing the case. An enquiry counter with a computer terminal has also been established for giving the status of the case.

Earlier, in the manual system, the case underwent various stages such as filing, scrutiny, registration, binding etc. During this process the receipt/diary number is not given and advocates had to face difficulties in locating the case

in the event of any discrepancy/objection in filing of the case. All this was very tedious and inconvenient and led to delay in the proceedings of the case. Now the computerized facility has provided great convenience to public as the receipt of the case is given right at the time of filing and all the enquiries can be made by referring to the computer diary number. Hence making things easier and handy.

A list containing the type of discrepancy is also put up in the Bar Room daily and the person concerned can directly contact the computerized enquiry counter for further details.

The daily listing and allocation of cases have already been computerized at the High Court. With the on-line filing, the linkage with the listing will be established further helping the reduction in time to generate the daily lists. All this has been possible because of the High Court's zealous attitude to bring more efficiency in operations with technical support of the NIC Haryana State Unit.

#### **GIS SOFTWARE**

From our Local Correspondent

**New Delhi:** The National Informatics Centre has released version 2.0 of state -of-the-art Geographic Information System (GIS) Software called GISNIC.

The Software is capable of permeating spatial thinking into the natural thought process at all levels, and can also make attribute data, such as socioeconomic, geographic, natural resources etc. on a common hase

The Software in its current form is designed to provide the User with a set of tools for retrieval, transformation and analysis of both spatial and non-spatial data. Thus enabling the User to manipulate and manage co-ordinate (locational) and attribute (thematic) data.

The features of the Software include:

- transform co-ordinates between two projections.
- □ capable of changing coordinates using transform.
- capable of performing geographic analysis such as Union, Intersection, Clip etc.
- powerful scripting language for customization.
- □ library of spatial databases, national, state and district boundaries, *tallukas*, towns etc. ∠

#### **DAILY NEWS THROUGH INTERNET**

#### From our Lakshadweep Correspondent

Lakshadweep: The remote islands of Lakshadweep in the Arabian Sea are not having the facility of a daily news paper. The news paper from mainland reaches these islands only once in two weeks.

The INTERNET facility provided by the National Informatics Centre, at Kavaratti has proved to be very helpful in such a situation. NIC Lakshadweep Union Territory Unit is accessing the daily news from INTERNET and transfer-

ring the same to the Department of Information and Publicity, Lakshadweep for providing it to the people of Lakshadweep. The news downloaded at Kavaratti is also being transmitted to the ten remotest islands of Lakshadweep.

The Lakshadweep Administration praised this effort of NIC and is also planning to publish a daily news paper from Kavaratti with NIC's assistance.

#### **VEHICLE REGISTRATION**

From our Sikkim Correspondent Sikkim: The National

Informatics Centre, Sikkim State Unit has successfully developed and implemented a Motor Vehicle Registration Software, for the Motor Vehicle Department, Government of Sikkim.

The off-line data-entry work for over 10,000 registrations has been completed. The Department is now planning to implement the on-line system for the same. 🗷



## **CD-ROM: A Medium for Information Dissemination**

The dramatic excursion of CD-ROM (Compact Disc Read Only Memory) technology, in the last decade, from the peripheries of the computer industry to its mainstream has seen it universally invade corporate environs and homes, with a spell-binding zeal matched only by the impetus of the PC 'wave' which swept captivated Users off their feet, in the preceding years.

D-ROM is a medium for storage and distribution of volumes computerized information. It is known as 'Read Only Memory' because information stored on a CD-ROM disc, by the publisher cannot be erased or rewritten. A single CD, 12 centimetres in diameter and 1.2 millimetres thick can accommodate an enormous 650 MB of information, the equivalent of about 300,000 A4 typewritten pages of text or 450 high-density floppies. It can house the entire Encyclopedia Britanica, along with its diagrams and images. Considering that a disc can hold the images of 12,000 pages of text, this accounts for an amazingly low cost per page, of less than a rupee. Its value is enhanced by a shelf-life of 25 years or even more. Information stored on a CD-ROM disc can be read by mounting the disc in a CD-ROM drive or player, attached to a computer. CD-ROM uses the power of laser and optical techniques. The retrieval speeds of CD-ROM are lower than those for magnetic hard disks, CD-ROM numerous has compensating benefits which have served to make it the most widely used medium for information interchange.

#### THE ADVENT OF CD RECORDABLE

The later phase of CD-ROM evolution heralded a revolution which brought to desktop a simple, affordable and time-effective technique for the production of CD-ROMs which till 1989 had been the exclusive preserve of moneyed service providers and their highly trained teams of production specialists working in massive capital-devouring environment-controlled factories.

The Desktop CD-ROM production technology viz. CD Recordable (CD-R) enables PC Users to publish database and applications on CD, in-house. The information published can range from the internal corporate information such as sales and marketing; to interactive multimedia instructional packages for students on any conceivable subject; to locally produced databases, to any kind

of information the imagination of humans can conjure up for communication to fellow beings. Today, entire books with limited printed copies, are being distributed on CD-ROM .This enables an astonishing saving in time and money besides evoking the wholehearted approval of environmentalists.

#### THE TECHNOLOGY

CD-ROM technology emerged as a derivative of CD-Audio (music CD) technology also known as CD-A. The physical characteristics of CD-ROM discs are dictated by standards stipulated in the Yellow Book and the logical characteristics by ISO 9660. ISO 9660 describes a unique file system which provides a common meeting ground for DOS, Windows, Mac and Unix operating systems that is a disc recorded in adherence to 9660 can be used under any of these Operating Systems (OSs). This includes the data files, different programme files required for each individual OS.

In its most basic configuration, a CD-R production unit comprises of an external or internal CD-R Recorder linked by a SCSI (Small Computer Systems Interface) cable to a SCSI adapter fitted in a 'host' PC. The information to be recorded on a CD-R disc is created on or transferred to the hard disk of the 'host'. Using special Pre-mastering Software, the information is then organized in a logical format conforming with the ISO 9660 CD-ROM standard for data documentation. In other words an 'image' of the data as it would reside on CD is developed on the host's hard disk. Another facility provided by the Pre-mastering Software enables the 'image' to then be downloaded onto a blank CD-R disc loaded in the Recorder, which 'burns' or 'cuts' the disc, using a laser beam. The blank disc consists of plastic substrata, a reflective layer of gold and a green organic dye layer into which the laser 'melts' the information.

The individually produced or one-off CD-R disc can now be read in a standard ISO 9660 CD-ROM drive. Though a given area of a disc once burned or written cannot be rewritten or the data on it erased, however data can be appended to un-burned portions of the disc by a process called Multisession

Recording

Most Pre-mastering Software packages offer a feature whereby the CD image on the hard disc can be tested for integrity and compatibility with appropriate search engines, before burning the CD-R disc. This is done by simulation of CD playback that is by creating an environment on the hard disc which emulates CD conditions, including the slower CD access times and data transfer rates that is search and retrieval speeds.

The Pre-mastering Software also provides the ability to test-burn the disc to avoid indeterminable errors at the time of actual burning. Recorders can write at different speeds controlled by the software, designated 1X for single-speed and further 2X, 4X and 6X for double, quad and six speeds respectively. They have internal cache buffers ranging from 512 KB to 4 MB.

Till the advent of CD-R technology, CD-ROM discs were produced in gigantic, environment-tuned factories. A glass master was first created from data usually supplied by User on magnetic tape. Then a metal stamper was developed and large numbers of copies made of a given title by embossing the data pattern on cooling plastic, using the stamper, at the rate of a few seconds per copy. The factories were phenomenally expensive and the process extremely complex.

#### THE CD-R ADVANTAGE

Recorded CD-R discs can be read on any of the millions of standard CD-ROM drives the world over. 60% of all  $\beta$  in the United States are shipped with CD-ROM drives fitted and the existing installed base tops 75 million units worldwide. This is a reflection of the spiralling acceptance and popularity of CD-ROM and the consequent potential of CD-R.

CD-R disc can be used as input to 'traditional' factory-based production bureaus for large-scale replication in thousands or millions. Thus, the production of 'prototypes' or 'proofs' of titles destined for mass scale reproduction is a natural and hugely viable application for CD-R. Once copies of a disc are

produced or 'pressed' by conventional process they cannot be altered, thus being able to fully test the prototype is critical.

The unique advantage of CD-R will gain a further edge as the installed base of CD-ROM drives touches the expected 250 million units by the end of 1997. Compared to 5.25" WORM (Write Once Read Many), CD-R provides the added benefit of superior standardization and a larger installed base of play back drives.

#### BEYOND CD-ROM

In addition to the more common CD-ROM, several other formats for CD have evolved mainly to meet insatiable User demands for multimedia applications. CD-XA or Extended Architecture enables the interweaving of data and audio and is used in most of the popular commercial titles. In order to be compatible with the older single-speed drives, a disc with data and audio combined would have to adhere to Yellow Book or CD-ROM standards, but CD-XA offers a more effective solution. CD-I or CD-Interactive is targeted towards instructional and educational packages for home entertainment and calls for propriety software and player, the player hooked up to a Television set. CD-Plus or Enhanced CD was a specification designed to enable music CD producers to include data and graphics on conventional audio CDs. White Book or Video CD caters to full-motion MPEG (Motion Picture Experts Group) video. Photo-CD was designed to be able to store photographic images on CD, using multi-session recording.

The quality of functionality provided by a Pre-mastering software package is gauged, inter-alia, by which and how many of these CD formats it supports.

#### SERVICES OFFERED BY NIC

The National Informatics Centre pioneered the use of Desktop CD-ROM production technology in India with the acquisition of one of the earliest Recorders in the year 1991. NIC has capitalized on the benefit of its unique experience in setting up a superbly equipped state-of-the-art CD-R Lab at its Headquarters (New Delhi). Professional services are available to external Users from the government, public and private sectors, for an eminently affordable fee. In addition to publishing CD-R discs, NIC also offers a disc-to-disc duplication service.

A fascinating array of CD titles has been published mainly for in-house enthusiasts. An application for the Indian Parliament contains a rare compilation of the profiles of Lok Sabha Members of Parliament, the

Indian Constitution, the Constituent Assembly debates and the speeches of the Speakers of both houses since 1980 in a simple, browser-friendly format. Two multi-media packages for the Ministry of Agriculture and Ministry of Rural Areas & Employment offer a unique interactive learning experience. The Computer Aided Paperless Examination System (CAPES) CD encompasses an extraordinary, firsttime experience to hopefuls seeking employment in the form of a question/ answer databank for the paperless examinations and fresh updated CDs are periodically cut for this purpose. The ClassROM application is a remarkable interactive multimedia instructional package for the avid seekers of information on the use of the ubiquitous multimedia technology. CDs have been cut for distribution of special software. A CD was cut for the National Institute of Oceanography, Goa containing a huge database of Oceanographic data to facilitate its distribution to branch offices spread across the Country.

The facility at NIC is being upgraded as it keeps in stride with advancing technology and state-of-the-art recorders, a multi-disc duplicator in addition to feature-rich software will be added. The Pre-mastering Software currently in use supports a number of different formats including CD-ROM, CD-I and CD-Audio and multi-session recording. In the two years since its inception, the services have steadily geared up in response to expanding User demands.

#### **DEVELOPING THE APPLICATIONS**

To facilitate the process of multimedia applications development a plethora of multimedia Authouring Packages are

available along with several Database development, search and retrieval packages of all types those containing including structured data, text, video and audio clips, graphics, animation and images.

Bearing in mind CD-ROM's inherent speed limitation, special CD-optimized retrieval software been developed international software companies, which attempt to mitigate this disadvantage by judicious use of software mechanisms. The software are either prohibitively expensive with very high royalty charges or do not cater to the entire range of data types sought to be addressed, for example numeric, structured, textual, images etc. After focused

and exhaustive research, NIC has been successful in identifying a retrieval engine satisfying all desired criteria.

#### THE ECONOMICS

Purely in terms of financial viability, the production of CDs using CD-R proves advantages for upto 50 copies. For upto 100 copies, time-efficiency still tilts the balance in the favour of CD-R. For more than a hundred copies time and cost economics dictate the use of the traditional process.

#### IN THE NEAR FUTURE

The soon to be released DVD (Digital Video Disk or Digital Versatile Disk) or the high-density CDs will usher in a new era in the evolution of CD. A single-sided DVD disc would contain 4.7 GB of information especially suited for feature-length movies using MPEG 2 compression and extremely massive computerized data banks. The double-layered discs will accommodate 8.5 GB and the dual-sided double-layered disc 17 GB. CD-ROM drives will not play DVD but DVD drives will be backward compatible with CD-ROM and CD-R. DVD-R or Recordable DVD, of capacity 3.8 GB initially, is slated to be available by the end of 1997-1998.

For further information kindly contact: CD-ROM Database Production and Commercialization Unit Bibliographic Information Division **National Informatics Centre** A-Block, CGO Complex Lodi Road, New Delhi-110003 Phone: 4362369; 4361133 **NICMAIL: MEDLARS** 

E-mail: nandita@medlar0.delhi.nic.in





# **Entertainment Revenue Information System**

From our Uttar Pradesh Correspondent

he National Informatics Centre, Uttar Pradesh State Unit, at Lucknow has successfully computerized the Entertainment Tax Department's revenue handling procedure.

The software named as ERIS (Entertainment Revenue Information System) incorporates many essential features of quality software development techniques. The data from the district is transmitted through NICNET thereby eradicating bottlenecks such as loss of data, time-lag etc. The only manual activity involved is capturing of mail, rest is taken care by the software. It takes out relevant information from the mail captured, sorts it in a required format and prepares it for report generation.

Report generation is a very important process. Emphasis has been given to the report generation sequence which is totally menu driven. The various reports generated reflect:

- unterpreted the revenue collected in a district by means of entertainment tax (fortnightly, monthly, quarterly and annually).
- □ the percentage by which each district exceeds or falls short of its projected target every fortnight.
- growth or decay of tax collection
- monthly and annual comparisons of tax collection over the years.

The data which is transferred every fortnight is in a very compact form and is required by the Commissioner Entertainment for planning and framing of various policies.

Another important feature in the report generation sequence is the status information of defaulter districts. This indicates the districts which do not send the data .

On-line messages, prompts, error flashes guide the User throughout the software and whenever one needs associated or additional information about a particular aspect help is just a keystroke away. The framework of the software has been developed to facilitate smooth operations and no special training is required to run the software.

## Water Cess Management Information System

From our Madhya Pradesh Correspondent

T

he Madhya Pradesh State Unit of National Informatics Centre has successfully developed and implemented a computer-based

Water Cess Management Information System for Madhya Pradesh Pollution Control Board (MPPCB).

The master data input comprises of information such as, categories of industries (mining industries, ore processing industries etc); region/districts (12 regions and 45 districts); water consumption rates; standard water parameters (temperature, appearance, colour etc); water consumption consent (date of consent, quality of water) and details of industries (name, type etc).

The computerized system is based on Water Cess Act 1997. It has been helping MPPCB towards an efficient and accurate assessment of Water Cess for over 600 industries, besides monitoring the quality and quantity of effluents being discharged into the water bodies by the industries. This has significantly contributed in improving the revenue

collection. Use of pre-printed stationary has enabled MPPCB in timely generation and dispatch of assessment order, receipts and interest assessment form to the concerned authorities. The system is highly portable and can be used in other pollution boards with necessary modification.

#### The system generates

- assessment orders
- interest receipts
- appeal
- list of orders
- monthly details of assessment
- cess reimbursement status
- cess collection & receipt details
- maintenance of cess ledger, cash & day book.

## **Public Distribution System Computerized**

From our Shillong Correspondent



llotment of the essential commodities is one of the important functions carried out by the Office of the Deputy

Commissioner, East Khasi Hills District.

The NIC East Khasi Hills District Unit has developed a computerized Public Distribution System (PDS) for the office of the Deputy Commissioner, so as to enable better and easier way of allotting the food and civil supplies such as rice, sugar, flour etc to the general public.

The computerization of the PDS was not an easy task as the parameters involved were large and the databank huge. It also involved a number of calculations and different types of report preparation on a monthly basis.

All these constraints were kept in mind while developing and implementing the system. The new computerized system replaced the old tedious and lengthy process of distribution.

Today the system is effectively used by the Supply Department. All the details of the fair price shops and wholesalers are recorded in the in-built database and every month data is processed and the monthly allotments are printed.



### Regional Transport Office goes On-line

From our Pune Correspondent

he National Informatics Centre (Western Region) has developed a Transport Office on-line System (TOOLS) for handling day-today work at Regional Transport Offices (RTO), Pune.

A transport office needs to maintain and handle variety of information concerning

vehicle registration; taxation; drivers licences; vehicle permits; prosecution; vehicle fitness etc. The TOOLS integrates all the information into one comprehensive system. This means that the data generated by an activity is easily available for the use of other activity.

One of the main function of TOOLS is to provide quick on-line information and its processing for giving various services to the public. For this purpose the public windows are equipped with a terminal Processing of forms at Registration Section and a printer. Most of the

manual procedures are replaced by computer based work flows and procedures. These procedures are designed so that the vehicle owner gets all the needed documents immediately at a counter.

NICNET connectivity of Transport Commissioner's Office with other RTOs has been established for NICMAIL service. The necessary hardware and software has already been installed at RTO Pune, Kolhapur and Nasik. NIC has also taken



up the responsibility of further implementation of the same at RTO Thane, Nagpur, Amrawati and Aurangabad, during the current financial year.

## Computerized Revenue Collection for **Excise Department**

From our Shillong Correspondent

he National Informatics Centre, East Khasi Hills District Unit has taken up the responsibility computerization monitoring of the revenue collection by the Excise Department in the office of the Deputy Commissioner, East Khasi Hills District.

A large part of the revenue in the State comes from the revenue collected by the Excise Department from various wine dealers in the District. Every month the wine sellers in the entire District submit the treasury challan (TC) in the Treasury Office and permits are issued by the Excise Department for lifting the Indian Made Foreign Liquor (IMFL) from the bonded warehouses. A large number of permits are issued every month by the District Excise Branch to the wine sellers. And the collection of revenue amount to several lakhs of rupees every month. Maintaining the daily records of treasury challans and permit issued, in the register, is a tedious job. Moreover their is time limitation as the amount collected is to be submitted to the Commissioner of Excise by the first week of every month. Another major problem faced by the Excise Department is in various calculations, as every month the average number of challans issued by the Office is more than a thousand.

Keeping all these constraints in mind a software package is developed to eliminate the manual process of monitoring the excise revenue collection. Using the computerized system will reduce the time factor by more than 50 percent and work will be accomplished in a few days time. This will enable the staff members of the department to devote time for the other important services in the office.

The software designed is entirely menudriven and extremely easy to use . A

## Computerization of **Opium and Alkaloid** Works

From our Madhya Pradesh Correspondent

he NIC Madhya Pradesh State Centre has taken up a turn key project for Madhya Pradesh State Government Opium Alkaloid Works (GOAW), Neemuch.

project involves design, development and implementation of Management Information System covering the following:

- Inventory Control
- Financial Accounting
- Personnel Information

The Inventory Control System helps in maintaining the indent, procurement, receipt, stock, issue and current stock position of over 8000 items pertaining to about 14 branches (viz electrical, mechanical, chemical etc). The system generates many MIS reports to facilitate planing and monitoring of material procurement, stocking and consumption.

The Financial Accounting System facilitates monitoring of budget, production of opium and alkaloid as well as revenue. It also helps in maintaining of various accounts. The computerized system generates ledger, trial balance, trading account profit and loss account, balance sheet etc.

In addition to this Payroll, Mail and file Monitoring System are also developed and implemented in order to facilitate smooth functioning. All these systems are modular in design and are fully menu driven, thus making them extremely easy to use.

The computerization has brought about both qualitative and quantitative improvement in the functioning of Government Opium and Alkaloid Works. Appropriate training has been imparted to the concerned officers/staff to enable them to operate the system efficiently and without any assistance.

The project also involves procurement, supply and commissioning of appropriate hardware and installation of terminals in various sections.

## MITTEL HIMELIGIE

## NIC Palamu - In Pursuit of Excellence

he district of Palamu stands on the bank of river Koyal in the historical state of Bihar. Palamu occupies a special place among the industrial township of Bihar. It boasts of its rich mineral resources and distinct culture. The district spreads over an area of 8363 square kilometre and has 19 blocks and 2100 villages.

The NIC Palamu District Unit came into existence soon after the setting up of the NIC Bihar State Unit in the year 1988.

#### The Beginning

In the early stages of its inception, the NIC Palamu District Centre successfully completed a number of tasks such as Election Counting Data

Transmission through NICNET; Census of State Government Staff; Village Camp Computerization and Officers Directory Preparation.

Gradually, with the passage of time, NIC Palamu moved ahead, with important projects in hand.

## On the Way of Achievements

NIC Palamu has undertaken many important projects and each and every work has rightly emerged as a milestone for future growth and has helped the centre to establish a firm footing.

Treasury Computerization is one of the major projects in which NIC Palamu has contributed significantly. The project involves maintaining an up-to -date computerized record of the District Treasury. The salient feature of the system is that it is based on an on-line system of data processing whereby all the bills are computerized before they are sent to the banks for payment. The system has made the whole process fast and accurate.

In view of the increasing crime rate in the State, NIC Palamu has extended help to the State Government by developing a Computerized Arms Information System (CAIS), that automatically validates the genuineness, renewal etc of arms licensing.

Palamu being a drought prone area, the drought relief work has been a priority with NIC, Palamu. Consequently a computerized Drought Relief Monitoring System has been developed. The system monitors the management of relief work and provides vital information to the authorities which is immensely helpful to the administration for taking corrective measures at the spur of moment.

Besides the aforementioned projects, NIC palamu has contributed significantly by providing information support in areas such as Correspondence Monitoring, General Provident Fund Records, Public Distribution System, Surface Transport, Education etc.

#### Training Programmes

With the aim of spreading the informatics culture and information processing facility at all levels of decision making, NIC Palamu conducts training programmes for the district, block and village officers so that their thinking process is integrated with the efficiency of IT tools.

#### Future Plans

In coming years NIC Palamu holds explicit plans to go for computerization in important areas such as Land Records, Natural Resources Information System, Death and birth Monitoring and so on.

The NIC Palamu Unit, since inception has meritoriously with its objectives, towards the accomplishment of the mission. Inspite of suffering from unmitigated natural crisis such as droughts, NIC Palamu District Centre has tried to build faith and in turn has proved to be a trustworthy organization in the administrative circle. The Unit has, in a very short span of time emerged as an integral part of the District administration. Email: dio.palamu@x400.nicgw.nic.in



Work in progress at the National Informatics Centre, Palamu District Unit, Bihar