

# Informatics

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# Cover Story

## Wired Villages - Warana

- Why Warana ?
- Aiming High
- The Infrastructure
- The Software Applications

Agriculture Produce Market  
Information System for  
Warana

Agricultural Schemes and  
Crop Technology  
Information System

AUTNIC

Village Information System

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Villages are the life lines of India - and the concept of a fully automated Indian Village was like a dream till some time back. It turned into a reality on the initiative from the Prime Minister's Office, leading to the genesis of a unique 'Wired village Project' and its implementation at Warana Co-operative complex in Kolhapur District in the State of Maharashtra.

The primary objective of the project is to demonstrate the effective contribution of an IT infrastructure in the accelerated socio-economic development of a cluster of 70 contiguous villages around Warana in the Kolhapur and Sangli Districts. The Project is being jointly carried out by NIC(on behalf of the Central Government) , the Government of Maharashtra and the Warana Vibhag Shikshan Mandal. The estimated cost of the project is around Rs.2.5 Crores.

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## Why Warana ?

The Warana co-operative complex is one of the finest examples of successful integrated rural development resulting from co-operative movement through peoples' participation. It comprises of 25 co-operative societies in the field of sugar, milk, poultry, house construction etc. with a turnover of over Rs.600 crores. Needless to say, it offered a perfect set-up for initiating the Wired Village concept.

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## Aiming High

The Warana Wired Village Project Project aims to :

- Utilize IT to increase the efficiency / productivity of the existing co-operative societies.
- Provide greater transparency in the working of co-operative societies.
- Provide agricultural, medical and educational information to villagers by establishing networked 'Facilitation Booths' in all the 70 villages.
- Bring the world knowledge at the door-steps of Warana through INTERNET via NICNET.
- Provide Tele-education at both Primary and Higher level educational Institutes.
- Develop user-friendly Map based information systems for better administration.

In all, the project aims at the higher goals of achieving computer literacy, generating employment, improving agricultural output and ensuring greater transparency in the administration of villages.

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## The Infrastructure

As a part of the project, state-of-the-art infrastructure has been established at Warana . Some of the highlights include:

- High Speed VSATs at Warana to allow Internet access for Business Centres and Educational Institutes.
- Data transmission through high speed wireless LAN being provided to main Business Centres.
- 64 kbps bandwidth VSAT connection established as a gateway WAN link to NIC Pune
- High Speed "Receive-only" VSATs (Direc PC) at IT centres, in addition to dial-up facility for fast data transfer, as required in tele education.
- Facilitation booths connected to business centres through dial-up connection.
- State-of-the-art servers at each Business Centre.

- LAN with 6-8 Multimedia Clients at IT Centres.
  - Multimedia workstations at facilitation booths.
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## **The Software Applications**

A requirement analysis carried out by NIC amongst the Warana users revealed certain key application areas where the implementation of the project would give immensely beneficial results. These applications include both Web based and Intranet-based applications.

### **Agriculture Produce Market Information System for Warana**

The scope of this application is to display the most recent market arrivals and rates of various regulated commodities for all the major Agriculture Produce Marketing Committees (APMC) in Maharashtra. The data covers the quantity of arrivals, the minimum/maximum/median rates for different commodities on daily basis which will be stored on a server in Warana and will be accessible from any Village Booth in Warana. This information is made available to all villagers in Marathi through the Village Booths. This System intends to bring complete agricultural marketing information at the door-steps of agriculturists in Warana.

### **Agricultural Schemes and Crop Technology Information System**

Nearly eighty percent of the population of the Maharashtra State is directly or indirectly dependent on Agriculture. The State Government is implementing several schemes for the overall development of the farmers as well as for increasing their income. Through this System, the villagers can get a variety of information in the local language on agricultural schemes and crop technology such as new techniques, improved implements, new crop varieties, integrated pest management, etc.

## **AUTNIC**

This application is designed as a 'Computer based Self-Learning Aid' on topics such as Computer Science, English (grammar and vocabulary), History, Geography, General Awareness, Test of Reasoning, or any other subject where meaningful multiple choice quizzes can be set-up.

AUTNIC is menu driven and easy to operate. It provides an environment for self-learning through quizzes and inculcates the ability to administer a self-test after learning a lesson. The system permits the user to learn at his/her own pace and at a time convenient to him.

### **Village Information System**

This system provides the user with the details about the amenities and other facilities that are available at his/her village or near by villages such as the transport facilities (Bus/Railway), Medical facilities, Health Services, Postal Services, Banks, Co-operative Departments/Stores. All this is available at the press of a button in the local language in the Village Information Booths.

### **Educational and Vocational Guidance Information System**

The Educational and Vocational guidance centres are located in the regional offices of the Maharashtra State Council of Educational Research and Training (MSCERT). They provide information to the students regarding different courses and careers through monographs. This information is now made available on the Internet. In the manual system booklets and monographs are printed on various types of courses and careers and given to students visiting the centre. Each monograph contains a whole lot of information covering all the branches of chosen area whereas a student needs the information pertaining to only one or two branches in which he is interested. Also updation of monograph is not frequent. This new system will provide the latest information from any node of the network without actually visiting the centre and it is possible to give printouts of only those details which are required and of direct interest to the students, thus saving their valuable time.

### **Procedural Information System**

The common man needs various types of government certificates and licenses like Ration Card, Kerosene/Gas licenses, etc. Instead of approaching a number of different desks for getting them, this system facilitates the user to submit the requests at a 'single window' i.e. at one counter from where it is processed internally. It enables the user to save precious time and efforts and to overcome cumbersome processes. Further, the villager can obtain the application form and a list of the documents that are to be submitted along with the application.

**Computerization of Warana Bazaar** Warana Grahak Mandal (Waran Bazaar) is the largest bazaar in Warana with the annual turnover of Rs. 31 Crores. It has an inventory of over 40,000 items. The items are not only sold at the Bazaar but are also sent to 29 outlets. Keeping track of this large inventory manually is a cumbersome process. This application aims to maintain the inventory through the Bar-Code technology. Bar code technology ensures error free data entry using a hand held bar-code scanner. The application is expected to prove very beneficial to the management of Warana Bazaar in keeping track of the goods.



### **Wired Management of Sugarcane Cultivation**

Sugar factory is the first and the largest co-operative business institution of the Warana Complex. The sugarcane cultivators require information from the sugar factory for planning their schedules for sugarcane harvesting. The objective of this system is to facilitate the information entry at the village level and to automate sending and receiving of information and instructions from the sugar factory administration to the sugar cane growers in the village and vice versa. This would be effectively achieved by computerizing the entire information and using the computer network of 'Wired Village Project'.

### **Land Records Computerization (LRC)**

This main objective of this project is to provide 7/12 extracts using the data on Compact Discs (CDs) at the Village Booths. The system also generates data from the village forms which provide details of ownership and crops. It further accepts additional data to generate eight different village forms. More transparency in land ownership and transactions can thus be achieved by the State Government and the concerned officials which can go a long way in ensuring efficient administration.



## Computerization of Warana Milk Dairy

This project covers the computerization of all the milk collection centres in the area. The system will enable to monitor collection of milk and its grade and facilitate comparison of this information with the analysis figures at the dairy. It will further enable planning of routes for effective collection and will also provide information about the cattle feed provided to the society and study its relationship with milk production.

## Grievance Registration and Redressal System

This system enables the users to register their grievances and check the status of redressal. The grievance registration module uses the concept of Multiple Identity Number (MIN) to register the grievances. This MIN uniquely identifies the villager. The concept of MIN card has been used in the Country for the first time.

***The first phase of the Warana Project has been completed successfully. The foundation has been laid and it is upto the Warana Cooperative Society to sustain the Project and realise the dreams associated with its conceptualization. The success of Warana Project would no doubt set an example for others to follow and would herald a new beginning for the IT revolution to reach the real heart of India - the Villages !!.***

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# Around the NIC world

- [Workshop on Bio-Medical Research](#)
- [Inauguration of Taluk Level Computerization](#)
- [DirecPC Broadcast During Training](#)
- [Haldia Dock Complex goes Electronic with NIC](#)
- [Laurels for NIC Sikkim](#)
- [Conference on Trends in Information Technology](#)
- [Treasury Computerization Launched](#)
- [New Web Sites on "India Image"](#)
- [VC Service during US President's Visit](#)



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# Products/Services

- High Court Computerization
  - Millennium Budget on Compact Disc
  - IT Boom in Rewari Administration
  - Computerization of Food and Drug Administration
  - IT Survey Conducted in MP
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## High Court Computerization

With the active support of NIC West Bengal State Unit, the historical Calcutta highcourt has gone for computerization in a vary big way during the recent years. In addition to implementation of the computerized system management of cases already filed, the court has gone one step ahead by installing multiple case filling counters for online filling of cases.

Another important output of computerized system is the generation of weekly and daily cause-list of the High Court. Judgements which are already officially released are also put into the computer linking with the corresponding database. Such judgements could be referenced and retrieved, as and when required, based on selective keywords.

Last but not the least, many of the general administrative works of the highcourt are also carried out through computers. On the whole, the Calcutta Highcourt is committed to go high-tech for ensuring better public service.

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## Millennium Budget on Compact Disc

For the first time, the State Budget of Haryana was recently released on a Compact Disc. The

Web-enabled CD contains the complete Annual Budget for 2000-2001 and Haryana Economic Survey data for 1999-2000.

NIC Haryana State Unit has been successfully computerizing the Annual Budget of Haryana Government since 1993 using bilingual GIST Technology. It went a step further this year by bringing out the entire budget on the CD so that interested users may conveniently use it. The CD was released by the State Finance Minister Sh. Sampat Lal at a special function. After inauguration, the CD was presented to the Chief Minister of the State. The efforts put in by NIC Haryana State Unit in completing the mission in a record time were highly appreciated the State Authorities.

The Budget was also released on the Internet simulatenously.

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### **IT Boom in Rewari Administration**

The NIC-Haryana State Unit has developed a CD based Query System on Land Records of Haryana and live data of Rewari District has been placed on CD for online access. Also a special web site on the Rewari District ( <http://districts.nic.in/rewari> ) has been developed by NIC HSU . Both were recently inaugurated at a special function by Sh. S L M Salins, IAS, Commissioner, Gurgaon. The web site provides information on District at a glance, description of modern and conventional industries, major activities like welfare, development, special projects and Land Records Computerization and Vision-2000 of the district. The CD contains the complete Query System on Land Records Data. Mr. Salins described both the above efforts as Path Breaking Steps and stressed on the availability of Land Records on Web so that they are available to all.



**The web site of Distt Rewari being inaugurated**

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## **Computerization of Food and Drug Administration**

NIC Madhya Pradesh State Unit have designed and developed some important MIS modules for the Food & Drug Administration (FDA), Govt. of Madhya Pradesh

### **🌟 Drug Licences Processing and Information System**

The system receives inputs directly from licensee's application and facilitates the generation of check list, Inspection orders, refusal/grant/renewal/cancellation of licences and maintenance of various registers; thereby facilitating an efficient maintenance and monitoring of drug licences.

### **🌟 Sample Management System**

The sample management system helps in managing the analysis of food samples. The system helps to monitor analyst-wise progress & performance against the target during each month and also a given period by generating various pendency reports.

### **🌟 Court Case Monitoring System**

The system serves as a valuable tool for monitoring of pending court cases relating to the Department. It facilitates input as well as generation of reports in Hindi.

### **🌟 Personnel Information System**

The system helps maintain personnel detail of employees to provide a basis a decision making in areas such as promotion, transfer, education, training, Posting department enquiry, etc

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## **IT Survey Conducted in MP**

A Survey of IT infrastructure, as well as a detailed survey of computer-related manpower was conducted by M.P. Government in association with NIC, MP State Unit (MPSU). The prime aim of the survey was to provide certain base level data/status on the computerization in the departments of state government to the State Task Force on IT. The survey data has been computerized by NIC, MPSU to create various databases pertaining to computer related manpower & other resources used to establish an appropriate MIS for providing the inventory of hardware, application software & manpower resource for planning and development.

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# Projects

## Pension Department Computerization in Rajasthan : Reaching New Horizons

● NIC-  
Pension  
Project

● Pension  
Information  
System  
(PIS)

● Pension  
Monitoring  
System  
(PMS)

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## **Pension Department Computerization in Rajasthan : Reaching New Horizons**

All the pension related matters of the civil servants are settled through the Pension Department of a State. Pension department is not only responsible for deciding pension cases and issuing authorities like PPO, GPO, CPO, FPPO etc but is responsible also for revising pension cases due to variety of reasons. Needless to say, the proper functioning of Pension System and timely settlement of pension cases is obligatory for Government as well as pensioners due to it's various

socio-economic impacts.

The Directorate of Pension & Pensioners' Welfare, Jaipur with its five Joint Directorates at Ajmer, Bikaner, Jodhpur, Kota and Udaipur is serving the aforesaid cause for approx. 1,50,000 existing pensioners and average 20,000 new pensioners per annum. Over the years, the workload at these pension offices had increased manyfolds not only due to the increase in new pensioners but also due to the rapid change in pension rules. As a result the timely settlement of pension cases was becoming more and more difficult.

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### **NIC-Pension Project**

To overcome these problems, Directorate of Pension and NIC Rajasthan State unit joined hands for computerization of the pension cases settlement process. The following major areas were identified for computerisation :

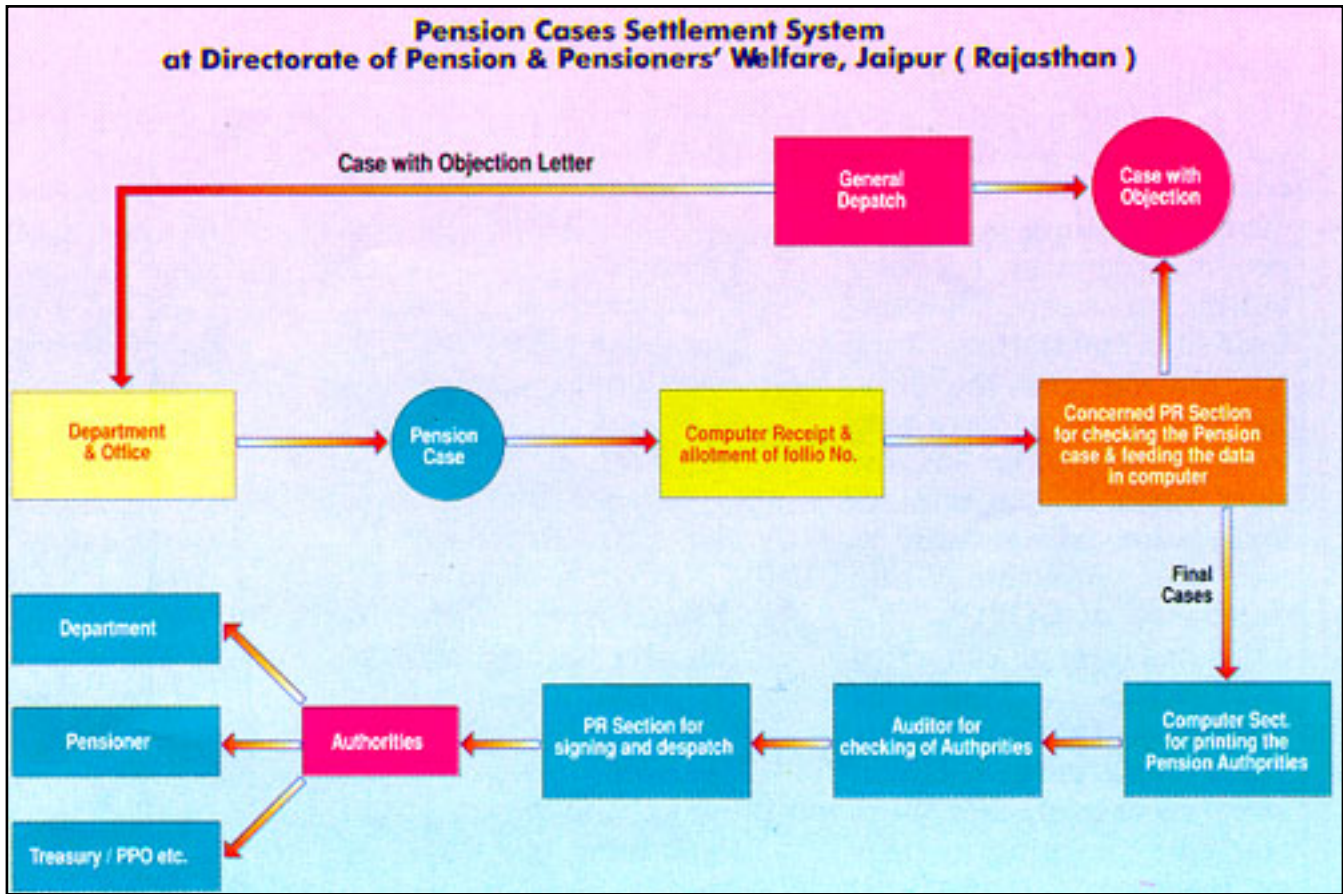
- Settlement of New Pension cases.
- Revising the old pension cases.
- Monitoring the settlement of pension cases to avoid delays and irregularities in this process.
- Creating a general purpose pensioners database.
- Setting up an online enquiry system about the status of a pension case.

For this purpose various software systems have been developed by NIC (All have been developed in ORACLE\*RDBMS under UNIX OS) and at present, Pension Directorate & its Joint Directorates are fully operational with on-line computerised pension systems. The following software are currently running in the pension department :

### **Pension Information System (PIS)**

The Pension Information System is aimed at computerizing the core work areas of the Directorate of Pension & Pensioner's welfare Jaipur and its regional offices. The major objectives of this system are to remove delays, inadequacies, tossing of files and other problems related to manual work in calculation and authorization of the various types of pension cases.

The PIS is a large system involving significant efforts in its design and development. Its design follows menu, sub-menu driven structured approach. At the top lies a security menu limiting access to authorised users only. The main menu prompts for selection of case type and pension type, Queries, reports statistical reports and system administration & maintenance modules. The overall process of the settlement of a pension case has undergone a sea change after the implementation of this system. Now a pension case takes an average of 10 days in its finalisation against 30 days taken by the previous manual system.



## Pension Monitoring System (PMS)

The pension monitoring system(PMS) has been designed to monitor the delays/Pendencies in the disposal of pension cases, generation of monthly progress reports and status reports and also to provide a online enquiry system to the pensioners.

The PMS is a very user friendly and effective file movement progress monitoring system. It has enhanced security features limiting access to authorised users only. Each step in the settlement of the pension case is recorded in the system from receipt of a pension case to final despatch of the case and the persons responsible in the settlement of pension case at different levels also enters their id on each entry. Therefore, it not only gives correct status of the pension case at a particular point of time but also the responsibility of the delay can be fixed effectively.

For further Details, please contact : [\\_ raghu@rajsu.raj.nic.in](mailto:raghu@rajsu.raj.nic.in)



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# In the Limelight

## NIC at the Commercial Tax Centre Indore : Towards a Bright Future

- The Beginning
  - Current Scenario
  - The Future
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Situated in western Madhya Pradesh (M.P.) and at about 180 kms. from the capital city of Bhopal, Indore has won a definite recognition for itself as the Commercial Capital of M.P. also known as "Mini Bombay", it is the hub of all commercial activities of the state. Being the most important business center of the state, Indore is the largest revenue generating city of M.P. from the point of view of commercial taxes. The Head Office of the Commercial Taxes Department is based in Indore because of its prominence in commercial activities. The Department is responsible for collection of city commercial taxes, prevention of tax evasion and administration of taxation policies. The NIC Sub center at the office of the Commissioner, Commercial Taxes, started in 1989.

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### The Beginning

Initially the use of computer was restricted to preparation of some formats, which only served the purpose of taking computer printout of otherwise typed reports. The NIC Centre faced the enormous task of spreading computer literacy and computer culture in a set of people, who were not very willing to accept changes. Ever since the starting of the NIC Sub Center in the office, the NIC personnel have been working tirelessly on this. The start was a tedious one, for there were old hardware as well as programs and databases in COBOL. The databases were all converted to Foxplus, and all the program had to be rewritten. These efforts of the NIC staff were



successful, and work started gaining pace gradually.

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## **Current Scenario**

The Commercial Tax Department has huge setup of 15 divisional Offices and 93 Circle Offices spread up all over the state. Since the circle offices are not computerized, all work of preparation and consolidation of circles' data is done in the Head Office only. The department administers the Madhya Pradesh Commercial Tax Act, Entry Tax Act, Central Sales Tax Act, Professional Tax and Hotel Tax. The nature of data provides ideal opportunity for computerization, which NIC Center has utilized to inculcate the usage of computers in daily working. The initial days of convincing the employees about the use of computer, have now transformed into busy days of catering to their requests to computerize every possible reports format.

A small glimpse of the scenario can be obtained by taking a look at a few of the projects going on in the NIC Sub Centre of the Office of Commissioner, Commercial Taxes, M.P. :

🌀 **Dealers Database Computerization** : It is a Database of all the registered dealers of M.P., and maintains their registration no, date of registration, name, address etc.

🌀 **Progressive Collection Register Generation** : This is the database of all revenue information deposited in the various banks, used for various monitoring purposes, and the preparation of Progressive Collection Registers for the Circles.

🌀 **Raids Monitoring System** : This is a monitoring system for the raids carried out by the Dept. on dealers. This System is used for monitoring the post-raid progress of such cases.

🌀 **Revenue Monitoring System** : This System is used to capture the dealer wise, commodity wise revenue figures of the dealers having more than Rs. 48,000/- turnover, of all the circles of M. P. This covers more than 80% of the revenue of the state. The reports based on this data are used to project the revenue status of the state, for the financial year. Also, it generates commodity wise reports, which are used to take important policy decisions, such as to estimate the amount of tax to be levied.

🌀 **Exempted Industrial Units' Database** : This is a database having data of all the Industrial Units claiming exemption under various provisions of the Acts.

🌀 **Dealer Code Generation** : This is a software for generating the Registration numbers to be allotted to new dealers at the time of registration.

🌀 **Payroll** : This has the master database of all the employees of the Commercial Tax Head Office. It captures details like designation, salary, provident fund, loans, advances, etc. and outputs playbills, schedules, pay slip annual income tax and GPF statements, etc.



**A busy day in NIC Sub Centre at Indore**

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### **The Future**

The greatest achievement of the efforts so far has been the breaking of the myth that computers are useful for only selected type of jobs. The staff who had been shying away from computers are now ready to learn it as they have overcome the fear of the unknown. The divisional offices are getting connected through e-mail, and each day finds a new addition to the list. NIC has facilitated the divisions which do not have computers, to use its own facilities at the District Centre for sending and receiving emails.

More hectic activities are expected due to the proposed implementation of value add tax in the State, which require complete computerization of the department, right from the circle level offices. But now it is going to be a more welcome change, for every employee.

***The emergence of the Office from one dependent on manually prepared reports and figures, to one utilizing every possible opportunity to computerize, and gradually computerizing all documents- with NIC's help, is a classic example of how two institutions can work together to achieve a common goal : Technology for Effective Management.***

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