

~~The matter was referred to the Collector, Osmanabad in June 2001 and to the Secretary to the Government in June 2001 and followed up with reminder in September 2001. However, no reply has been received (December 2001).~~

### **3.7 Management Information System in the Forests Department**

In order to replace the time consuming, inefficient and manual method of updating the information in the Forests Department, a computer based Management Information System (MIS) was developed under the World Bank funded Maharashtra Forestry Project. In July 1997, the Department appointed Swed Forest International AB, Sweden as consultant at a contract price of Rs 31.27 lakh for the purpose. The work was to be completed within 13 months commencing from July 1997.

As at the end of March 2000, the department could complete the MIS relating to only 7 activities by April 2000. An amount of Rs 19.88 lakh was paid to the Consultant between March 1998 and March 2000. Besides this, the department procured 171 personal computers and accessories in March 1999 at a cost of Rs 2.46 crore and 289 personal computers in March 2000 at a cost of Rs 5.45 crore. Thus, the project planned to be completed within 13 months from July 1997 remained incomplete even after a period of 33 months (August 1998 to April 2001) and an expenditure of Rs 8.11 crore.

The Principal Chief Conservator of Forests (PCCF), Nagpur did not furnish the exact reasons for the delay.

#### **3.7.1 Implementation of the Management Information System**

A test-check of records in 28 offices revealed that even though an amount of Rs 19.28 lakh was spent on development of the infrastructure required for computerisation, the MIS was not installed in 10 offices and in 15 offices where the MIS had been installed (June 2000 to March 2001), no data entry could be done at all due to inherent problems in the MIS (Software).

Standard software engineering practices require that the software should be thoroughly tested before its acceptance and implementation. Test-check of the records of the 28 offices revealed that the Department accepted the MIS of seven activities without testing and ruling out the shortcomings in the software. As the Department was not operating the system, no reports could also be generated from the system. However, on testing the MIS with test data, Audit noticed the following deficiencies:

### **3.7.1.1            *Production and Sales Modules***

The production module has provision to enter the data relating to ‘Marking’, ‘Felling’ and ‘Logging’ of trees. However, it was observed that actual data entry for ‘Logging’ was not possible as the data under ‘Marking’ was not linked to ‘Logging’ in the system. Further, consolidation of the data received from the subordinate offices was not possible due to errors in the software. The Conservator of Forests (CF), Nagpur confirmed the facts. Since the Sales module had a link with the Production module, the Sales module could not be used due to the above mentioned problems in the production module.

### **3.7.1.2            *Plantation Module***

The data entry was not possible in this module due to defect in the software. When data entry was attempted, the system displayed a message “Data element missing from data dictionary”.

### **3.7.1.3            *Other deficiencies***

(i) There were no prescribed data entry sheets for facilitating the collection of data, its validation, authentication and subsequent entry into the system, (ii) The Backup menu was not working and as such no backup of the data was possible. All the data was lost on reinstallation of the software. (iii) Data entry in Marathi was not possible and (iv) No on line help was provided. As such the software was not user friendly.

The above mentioned deficiencies are illustrative to show that the MIS had programming defects, which hampered the data entry itself. Thus, the expenditure of Rs 7.27 crore on procurement of the personal computers and expenditure of Rs 19.88 lakh on development of the MIS remained unfruitful. This was in addition to the infrastructure created at a cost of Rs 19.28 lakh at the locations test-checked.

### **3.7.2                *Computerisation at the Range offices***

The MIS was designed to be installed in the offices of the Deputy Conservators of Forests and the PCCF and was not designed to use at the Range Offices. The Department, however, procured 289 personal computers costing Rs 5.45 crore for deployment at the Range Offices on 30 March 2000 viz at the fag end of closing date for the World Bank fund (31 March 2000). Scrutiny of records of eight Range offices revealed that the MIS was not installed in five Ranges and no data entry was made at all in the remaining three Ranges.

### **3.7.3                *Geographical Information System***

With a view to manage the forests through acquisition, analysis and distribution of geographical information, the Department procured 15 copies

of the GIS software “*Geomedia Professional*” costing Rs 63.90 lakh in March 2000. This software was to be utilised in the working plan divisions for preparation of the working plans.

Audit scrutiny in four working plan divisions revealed that though the GIS was installed between April 2000 and January 2001 in all the four divisions, only some initial work had been started in two divisions and using the GIS no report was generated (March 2001) by any of the working plan divisions.

#### **3.7.4 Procurement of colour monitors**

The department procured one colour laser printer and 17" colour monitor for each of the 450 personal computers procured in March 1999 and March 2000 at an additional cost of Rs 26.77 lakh though it was possible to operate the MIS with the use of ordinary 14" colour monitor.

Further, GIS software was procured for 15 working plan divisions only whereas the 17" monitors had been procured for all the 450 computers.

#### **3.7.5 Security Policy**

No security policy was framed and documented by the Department. The only security available in the MIS software was the log in password. Audit scrutiny revealed that the software allowed any person to create a new user ID with System Administrator rights. This amounted to serious shortcoming in the software and this would affect the confidentiality and security of data.

#### **3.7.6 Documentation Policy**

Apart from the User Requirement Specification, System Requirement Specification and User Manuals, the consultant had supplied only a) Guideline for implementation, b) Database Strategy, c) Output-Input cross-reference and d) Output Tables Cross Reference to the department. The existing documentation was not sufficient to carry out modifications and enhancements to the existing system.

The matter was referred to the PCCF, Nagpur and to the Secretary to the Government in May 2001. No reply has been received from the Secretary (December 2001).