CHAPTER III Performance Audit

This Chapter contains performance audits on Information Technology Audit of Computerisation of Treasuries, Implementation of Forest (Conservation) Act, 1980 in Madhya Pradesh, National Rural Employment Guarantee Scheme, Accelerated Rural Water Supply Programme, Educational Development of SCs and STs and one long paragraph on Working of Nurseries.

Finance Department

3.1 Information Technology Audit of Computerisation of Treasuries

Highlights

Integrated Treasury Computerisation Project (ITCP) was taken up in October 2001 at an estimated cost of Rs.8.91 crore, which was revised in October 2002 to Rs.28.02 crore. The project was implemented in 53 district treasuries and 159 sub-treasuries of the State. Information Technology Audit of the project revealed that the software package State Finance Monitoring System (SFMS), developed and implemented under the project, was unable to serve the desired purpose even after incurring an expenditure Rs.23.60 crore. Some important findings of the audit are given below:

Due to inadequate validation, 1,403 Drawing and Disbursing Officers were allotted more than one code and some of them operated both the codes to draw and encash bills. Further, the data contained in DDO master table was incomplete and incorrect.

(Paragraph 3.1.4.1)

There were no validation checks in the software to flag excess expenditure on account of discount allowed/ commission paid to stamp vendors over and above the budget allotment.

(*Paragraph 3.1.4.2*)

Deficiencies in the design of the software led double drawal of Rs. 10.55 lakh on duplicate bills. DDOs could draw and encash bills through the system in contravention of Treasury Rules.

(Paragraph 3.1.5.3)

Analysis of MIS reports generated by the system revealed huge mismatch between RBD figures and other figures generated by the SFMS package and those prepared manually, which seriously undermined the reliability of the data generated by the package.

(*Paragraph 3.1.6*)

Inadequate password controls rendered the data vulnerable to unauthorized access/modifications.

(Paragraph 3.1.8.2)

Disaster Recovery Plan was not formulated and Rs.1.30 crore meant for this purpose was diverted for making other expenditure.

(*Paragraph 3.1.10.3*)

3.1.1 Introduction

- **3.1.1.1** Treasuries are the nodal offices for carrying out all financial transactions of the State Government in a district. There are 53 treasuries and 159 sub-treasuries in the state. Some of the major functions that a treasury performs are as follows:
- Making payments on behalf of the Government including payment of pension to State Government employees.
- Accepting receipts for the Government.
- Safe custody of valuables and
- Preparation of 'Receipt & Payment Account' and its submission to the Accountant General (AG) each month.

There are seven divisional offices looking after pay fixation, audit, letters of credit etc. and monitoring of the subordinate treasuries.

The Directorate of Treasury & Accounts (DTA), Finance Department, Bhopal is responsible for administering and controlling all operations of all the treasuries of the state. It consolidates data from all treasuries and is also responsible for reconciliation of total receipt and expenditure figures of all Government departments with the figures as depicted in the accounts compiled by the Accountant General (AG).

In October 2001, 'Integrated Treasury Computerisation Project' (ITCP) was sanctioned by the State Government at an initial cost of Rs.8.91 crore which was later revised to Rs.28.02 crore in October 2002. The DTA was designated as the nodal agency for implementing this project. The main components of the project were:

- Development of bilingual application software for computerising the entire operations of all treasuries and the DTA. The software was to be compatible with the software being used by the AG.
- Establishment of a VSAT based network for connecting all treasuries with the DTA.
- Acquisition and Installation of requisite hardware for computerisation and networking.

The objectives of ITCP were:

- ☑ Better Financial Management and Control
- Monitoring of state revenue and expenditure
- ≥ Effective Management Information System

3.1.1.2 .State Finance Monitoring System – The Application Software

Under ITCP, the work of development of bilingual application software for automating the operations of treasuries and DTA was outsourced to M/s CMC Ltd., New Delhi (CMC) in March 2002. Accordingly, application software called 'State Finance Monitoring System' (SFMS) was developed in Oracle 9i with 'Linux' as the operating system and 'Developer 2000' as the front-end browser. The SFMS package has the following four sub systems:

Treasury Sub-system: It has seven modules that take care of automation of all operations of Treasuries.

Divisional Sub-system : It has two modules that take care of automation of all operations of the offices of the divisional offices.

DTA Sub-system : It has six modules that take care of automation of all operations of the DTA.

FMIS Sub-system : It has nine modules that take care of automation of all operations of the Directorate of Financial Management & Information System (DFMIS), Finance Department, Bhopal. DFMIS, like DTA, reports to Secretary (Finance) and is chiefly responsible for implementation of expenditure control measures and monitoring of loans, guarantees, follow up action on Audit Reports and recommendations of the Public Accounts Committee.

The SFMS package became operational with effect from April 2004.

3.1.2. Audit objectives

3.1.2.1 To assess whether -

IT controls in place were adequate and effective thereby ensuring data completeness, accuracy and reliability;

- Business rules, as stipulated by the Madhya Pradesh Treasury Code (MPTC), Madhya Pradesh Financial Code (MPFC) and other relevant rules and orders were correctly mapped on to the computerized system; and
- U Objectives of computerisation were achieved.
- **3.1.2.2** Examination of Planning, Implementation and Monitoring stages of the ITCP and the procedures involved therein.

3.1.3 Audit scope and methodology

- **3.1.3.1** Data generated by 'Treasury Sub-system' of the SFMS package was analysed (April 2007 to October 2007) in 11 treasuries using 'Computer Assisted Audit Techniques'. Similar data analysis of DTA Sub-system and Divisional sub-system was carried out in the same period at DTA and Divisional Office, Bhopal respectively. The processes involved in the computerized operations were evaluated to ascertain compliance with the provisions of Madhya Pradesh Treasury Code and Madhya Pradesh Financial Rules. An entry conference was held with the auditee to discuss the audit plan and the audit criteria.
- **3.1.3.2** Records maintained at DTA were scrutinized to evaluate the procedures followed by the DTA in carrying out the ITCP against best practices of 'IT Governance' and various rules, regulations and guidelines framed by the Government in this regard.

Audit Findings

3.1.4 Inadequacy of input controls & validation checks

Input Controls ensure that the data received for processing is genuine, complete, valid, accurate and properly authorised and the data entry is done accurately and without duplication. Analysis of data of SFMS package revealed various instances of failure of Input Controls and absence of validation checks as discussed in succeeding paragraphs.

3.1.4.1 Incomplete and incorrect data in the database

- In absence of proper input and validation controls, data was found to be incomplete, incorrect and unreliable.
- Analysis of DDO master table of the DTA sub-system revealed that there were 13,698 DDOs as per the system whereas only 9164 DDOs existed in the records of the Accountant General. No documents were found maintained at DTA by means of which the correctness of these figures could be ascertained.
- Temporary DDOs (numbering 37) were found active despite lapse of their authorisation period, which indicated that the DDO master was not updated regularly. The complete information in respect of DDOs

such as address, pin codes, phone numbers, Fax etc were also not found recorded. In 26 cases, junk characters were noticed in master table and in 522 cases, date of creation of DDO codes was not found recorded.

- DDOs (numbering 1,403) relating to various treasuries were found allotted more than one DDO codes and some of them operated both the codes during the period from 2003 to 2007. Thus, due to incomplete, invalid and inaccurate data entry in this critical field, the system is fraught with the risk of possible fraudulent payments. The risk was accentuated due to the fact that audit found little or no input controls to ensure that data entry was done accurately, without duplication and with proper authorisation. There was no system for authorisation of data of master tables against an authenticated document maintained for this purpose.
- Data analysis revealed that there were 63 Personal/Educational Deposit Account holders at City Treasury, Indore and in 19 cases, the field 'Name of Account Holder' contained meaningless data although they were 'permanent' account holders.
- The Employees Database Master contained two categories of employees viz. authenticated and unauthenticated. As per rule, salary should be drawn only for authenticated employees. However, data analysis revealed that salaries of 196 unauthenticated employees were drawn by various Treasuries.
- Data analysis of 1,05,770 records relating to GPF withdrawal by the Government employees revealed that 'Voucher number' was not fed in 48,555 cases and 'DDO codes' were not fed in 48,166 cases. In 26,181 cases, 'reason' for which the GPF withdrawal was made, was not mentioned. Instead of voucher numbers, vague characters were found recorded in 197 cases. Meaningless data were found fed in the 'Year' field such as 9999, 2808, 2022, 4997, 3000 etc. in 54 cases. It was also noticed that in the 'Voucher date' field, the date was fed as 00/00/0000 in 44,912 cases.
- Data analysis of 15,67,937 records relating to budget allotment revealed that 'Sanction number' and 'Date' in 34,230 cases were not recorded. It was found in 22,073 cases that the budget provision was shown as '0' while there was some amount provided in the budget.
- Analysis of 31,17,708 challans revealed that in 10,784 cases, 'Depositor's Name' was not recorded. In 20,17,250 cases, 'Challan type' was not found mentioned. In 29 cases, gross and net amount was shown as 0. In 4,65,363 cases, 'Bank scroll number' was not shown and it was also noticed that meaningless numbers such as "/", "00/.00" "00/0.0" etc. were found fed in 5,23,080 cases. In 11,60,564 cases, 'Purpose' for which the challans were deposited was not mentioned.

- Data Analysis at City Treasury, Indore and Bhopal revealed that in 141 cases such medical bills were passed for payment where the field 'Doctor's Name' contained meaningless data such as "ABC". In place of employee's unique code, a dummy code e.g. "171000001" was found fed. In 35 cases, the field 'Medical Store's Name' contained meaningless data such as "abc", "bc" and "¿¿¿¿¿;" etc. These were serious irregularities, which could lead to fraudulent payment of bills.
- The fields in the master tables and working tables relating to audit trails viz. 'Created time and date stamp', 'Modified time and date stamp' and 'User ID' were lying blank. Non existence of audit trail in regard to deletion of data increases the risk of unauthorized changes in the master files, which could result in misuse of database and in that eventuality it would be extremely difficult to fix responsibility.

3.1.4.2 Failure of the system to highlight excess expenditure on discount allowed/commission paid to stamp vendors over budget provision

Excess expenditure over budget during 2004-07 was shown due to absence of validation checks.

Rules provide that the discount/commission allowed to vendors for sale of revenue stamps in a financial year should be booked against the budget allotment made for this purpose under Major Head 2030. Data Analysis at District Treasury, Gorkhi, Gwalior revealed that the software in this particular Major Head did not validate the expenditure entries with reference to the budget allotment and highlighted cases as excess expenditure. Consequently, apparent excess expenditure was shown over and above the budget provision under the head during the financial years 2004-05, 2005-06 and 2006-07 was forwarded by the treasury to the DTA for regularization. Similar excess over budget allotment was noticed in Ujjain and Sagar District treasuries under the Major Head 2030.

3.1.5 System design deficiencies

The objective of computerisation was to properly implement the Treasury Rules and to bring the entire operations of the Treasury and DTA under the ambit of SFMS software. However, data analysis revealed instances of non-adherence to Treasury Rules by the software. Absence of many key features in SFMS package resulted in treasuries resorting to manual interventions in certain cases as brought out in the succeeding paragraphs.

3.1.5.1 No provision for automatic lapse of certain Deposit Accounts

Non-adherence to treasury rules by the software used resulted in manual intervention at the treasuries.

The Treasury Rules provide that deposit balances exceeding twenty five rupees remaining unclaimed for more than three complete accounting years shall at the close of financial year (March) be credited to the Government Accounts through Accountant General. It was noticed that there was no provision in the system to take care of this requirement. Rs.49.73 crore were found lying in various PD accounts for more than three years which should have lapsed to Government Account.

The department replied that the matter was being brought to the notice of the software vendor and DTA for necessary modifications in the software. However, compliance report had not been received (November 2007).

3.1.5.2 No provision for checking irregular drawal on AC Bills

In absence of the feature of capturing details of certificate, Rs.11.59 crore was drawn irregularly.

Financial Rules provide that a certificate shall be attached to every Abstract Contingent Bill (AC Bill) to the effect that the Detailed Contingent Bills (DC Bills) have been submitted to the controlling officer in respect of AC Bills drawn more than a month before the date of the bill being presented. However, it was noticed that the system accepted all AC bills without checking any details related to pending DC bills. DC bills were required to be submitted to AG and certificate to this effect was to be attached with AC bills. Infact, a separate provision for capturing details of this certificate did not exist in the system. It was further noticed that, The Protocol Officer, Government of Madhya Pradesh drew an amount of Rs.11.59 crore on AC bills during the period 2003-04 to 2005-06 without submitting DC bills to the Accountant General.

The DTA stated that it was not possible to exercise checks on drawal of AC bills through the system. However, the Treasury Officers are responsible to check the provisions of the rules provided in the MPTC. Therefore the reply is not tenable and in the absence of requisite provisions in the software, Treasury Officers cannot exercise an effective check.

3.1.5.3 No provision for avoiding double payment on same Bill

In absence of the field for capturing the bill number, double payments of Rs. 10.55 lakh were made on duplicate bills. Each Treasury issues a Bill Transit Book (BTB) to all DDOs under its purview. A DDO attaches a leaf from the BTB with every bill that it presents for payment to the Treasury. This ensures that bills from only authenticated DDOs are received and paid at the Treasury. Further, every bill presented at the Treasury has a unique bill number, which was maintained by the concerned DDO in his bill register. However, at the time of data entry there was no field in the software to capture the bill number. Absence of this field indicated that the system did not check for duplicate bill numbers. Thus there was a risk of the same bill being drawn and paid more than once. In the absence of this feature in the system, double payments on duplicate bills amounting to Rs.10.55 lakh were fraudulently made from District Treasury, Barwani involving the office of the Civil Surgeon, Barwani during 2005-07.

The Treasury Officers replied that the matter was being brought to the notice of the software vendor and DTA for necessary provisions in the software. However, compliance report had not been received (November 2007).

3.1.5.4 No provision for reconciliation of Bank Receipts with Departments

One of the objectives of computerisation was to carry out reconciliation of receipts as depicted in the books of various departments with the bank scrolls received in the treasuries. However, no such provision existed in the SFMS package and the same was being done manually. In the case of Vindhyanchal

Treasury, Bhopal, reconciliation of receipts up to June 2003 only was done (April 2007).

3.1.6 Unreliable Management Information System

Huge mismatch between reports generated by the software and those maintained manually.

One of the objectives of computerisation was to provide effective Management Information System (MIS). It was observed in audit that manual corrections were being carried out in most of the reports generated by the SFMS package. The reports generated by the SFMS package were compared with that maintained/corrected manually and huge mismatch was observed in cases like 'Reserve Bank Deposit Figures', 'Balances of PD/ED Accounts' and 'Pending Pension Cases' as shown in **Appendix 3.1**. This seriously undermined the reliability of data generated by SFMS forcing the department to simultaneously maintain data manually.

3.1.7 Other points of interest

3.1.7.1 No provision for calculation of various components of Pay

Various functions of the treasuries could not be computerised due to which work was carried out manually.

One of the objectives of computerisation was generation of 'Pay Bill' of State Government employees at the Treasuries. The reports revealed that the 'Pay Bills' were still being prepared manually. Further, computation of various components of pay like HRA, CCA, DA, Annual Increments, Personal Pay, Arrears and Adjustment of Medical & Tour Advances etc. were being done manually due to non provision for these components of pay in the system.

The Treasury Officers replied that the matter was being brought to the notice of the software vendor and DTA for necessary provisions in the software. However, compliance report had not been received (November 2007).

3.1.7.2 No provision for calculation of Pension in cases of voluntary retirements

In cases of voluntary retirement, the qualifying service of the employee can be increased by a period not exceeding five years, subject to the condition that the total qualifying service does not exceed 33 years and it does not take him beyond the date of superannuation. It was observed in audit that this addition to qualifying service in cases of voluntary retirement was being done manually as there was no provision for the same in the SFMS package. The package also had no provision for calculating pension in cases where the age for superannuation had been revised to 62 or 65 as in the case of Professors of Technical Colleges. Thus, the objective of computerised calculation of pension of state employees could be achieved partially.

3.1.7.3 No provision for checking irregular drawals under Treasury Rule (TR) 27

In absence of checking Rs.530.42 crore were irregularly drawn on TR 27.

Rule 27 of MPTC (TR27) provides that a Collector may in circumstances of urgency by an order in writing authorize and require a Treasury Officer to make payment (not being of pension) without complying with the provisions of these rules. The rule provides that drawal (without budget provision) in cases of urgency i.e. floods, earthquake etc. should be allowed only under Major Head 2245 meant for natural calamities. The reports of four treasuries revealed that drawls pertaining to Major Heads like 2047, 2029 and 2220 etc., amounting to Rs.527.90 crore were made under TR27 during the period 2003-07. It was further noticed that Rs.2.52 crore was drawn under TR27 for payment of interest and repayment of principal of loans of Life Corporation of India during 2006-07. There was no feature in the system to check such drawals.

The Department replied that expenditure under TR27 in heads other than Major Head 2245 had been restricted up-to a great extent in the present. The reply was not tenable as drawals under TR27 should only be allowed under Major Head 2245.

3.1.8 General controls

General controls create the environment in which IT applications and related controls operate. Scrutiny of records of Treasuries, Divisional Offices and DTA revealed the following deficiencies due to weak General Controls.

3.1.8.1 Lack of Documentation

No IT security policy was formulated even after completion of project period. The DTA failed to formulate and document an IT security policy regarding the security of IT assets, software and data security even after lapse of project period. In absence of security policy possibility of security breaches, data loss, fraud and errors can not be ruled out. A written IT policy covering the department's objectives, the technological direction, and management of human resources etc. had also not been developed.

3.1.8.2 Physical and Logical Access Controls

The objective of physical and environmental controls is to prevent unauthorised access and interference to IT services. IT assets should be protected from environmental damage, caused by fire, water (either actual water or excess humidity), earthquakes, electrical power surges or power shortage. No separate Cell was available for IT operations in treasuries and physical access to non-IT staff was not found restricted. Proper arrangement for fire fighting was also not found in any Treasury.

The password policy was not formulated and normal password control procedures like restriction on unsuccessful login attempts by the users or automatic lapse of password after a predefined period and system enforced periodical change of passwords after certain period were not in existence. The

username and password allotted in each treasury to login in the Server were the same in every treasury. Moreover the system did not generate any logs to record the number of log in attempts.

3.1.8.3 Absence of Business Continuity and Disaster Recovery Controls

DTA had not formulated and documented any Disaster Recovery Policy or Business Continuity Plan. There were no documented procedures indicating frequency for taking back up of data, its storage and frequency of testing/checking. Scrutiny of records of Gwalior, Bhopal and Indore treasuries revealed that in the absence of laid down back up policy Treasury Officers were taking back up as per their convenience. Though daily and weekly backup are taken but no method was being used to test the back up data. The back up of data was not stored at a separate/remote location in fireproof cabinets and not tested regularly. The data back up was being stored on the same server and back up CDs stored in the same location, which defeats the very purpose of back up.

Business Continuity and Disaster Recovery Plans were not formulated.

3.1.8.4 Programme Change Controls

On the basis of requirements received from treasuries and sub-treasuries changes/ modifications were carried out in the form of patches, but these changes were not documented and authenticated by a competent authority. No such record was found maintained at DTA.

3.1.9 Irregularities in implementation of ITCP

3.1.9.1 Non preparation of Action Plan led to stoppage of Central Assistance

The project was started without preparation of Action Plan and Annual Plan.

The ITCP was to be financed from two sources viz., Financial Assistance from the Government of India awarded on the recommendation of the Eleventh Finance Commission for upgrading the functionality of Treasuries and from the funds provided by the State Government. The Central assistance was to be utilized within a year invariably. The Central Assistance was to be provided only if a detailed 'Action Plan', both in physical and financial terms for the entire award period (2000-2005) of the EFC, duly approved by a State Level Empowered Committee, was submitted to the Central Government. DTA was also required to furnish an Annual Plan and Utilisation Certificate for expenditure incurred in the year in order to get the Central Assistance.

DTA received Central Assistance worth Rs.88.99 lakh and Rs.7.96 crore in the years 2000-01 and 2001-02 respectively. However, DTA failed to prepare and furnish an Action Plan and an Annual Plan, the Utilisation Certificates were also not sent, therefore the Central Government did not release any grant after 2001-02.

3.1.10 Financial Management

3.1.10.1 A statement of source and application of funds is as follows:

(Rupees in lakh)

Year	Central Assistance	State Funding	Expenditure	Savings parked in Deposit Account
2000-01	88.99	12.21	45.12	56.08
2001-02	796.00		796.00	
2002-03		1357.01	924.42	432.59
2003-04		280.65	184.60	96.05
2004-05				
2005-06			410.19*	174.53
Total	884.99	1649.87	2360.33	174.53

Expenditure met from balance in Deposit Account

Analysis of the above data reveals that except for the year 2001-02, a substantial portion of released funds remained unutilised in each year during the period 2001 to 2006. This underlined the need for better estimation and utilisation of funds. Further, Financial Rules, provide that no amount should be withdrawn from treasuries unless it is required for immediate disbursement, these were also grossly violated by parking the funds under Deposit Accounts.

3.1.10.2 Utilisation Certificates not furnished

Scrutiny of records of DTA revealed that Utilisation Certificates in respect of expenditure of Rs.8.85 crore pertaining to the period 2000 to 2006 had not been furnished (April 2007) to the State/Central Government which not only showed lack of transparency in fund utilization procedures but also indicated lack of financial monitoring on the part of the State Government.

3.1.10.3 Diversion of funds meant for Disaster Recovery Plan

Out of Rs.28.02 crore sanctioned for ITCP by the State Government, Rs.1.30 crore was meant for 'Disaster Recovery Plan'. Scrutiny (April 2007) of records of DTA revealed that no amount could be spent on Disaster Recovery Plan and the amount allocated for this purpose was diverted for making other expenditures which was a violation of the financial rules. Moreover, the possibility of loss of data and IT assets in the event of any unforeseen disaster can not be ruled out.

Further, Scrutiny of records of DTA revealed that a loss of Rs.2.10 lakh occurred (2001-2006) due to theft of VSAT equipment in Shahdol, Dhar and Rewa districts which further drives in the point of formulating and implementing a 'Disaster Recovery Plan'.

3.1.10.4 Undue financial aid to M/s Wipro Limited, Bangalore

Undue financial aid of Rs.41.50 lakh to contractor was made by waiving off penalty.

Agreement was made (December 2002) between DTA and M/s Wipro Limited, Bangalore for supply and installation of servers, desktops, scanners, printers etc. The value of contract was Rs.8.54 crore.

Scrutiny of records revealed that DTA imposed a penalty of Rs.1.02 crore under General Condition of Contract (GCC) No.15.1 (Penalty Clause) for delay on the part of the contractor, of which Rs.41.50 lakh was waived off (October 2004) by the DTA although no clause regarding waiving off of penalty existed in the contract. The reply of DTA, that the decision was taken in consultation with Finance and Law Departments, was not tenable.

3.1.10.5 Inadequate Monitoring

Lack of monitoring and supervision was observed at District level. For effective implementation of ITCP, physical monitoring through Treasury Officers (TOs) should have been carried out who in turn should have periodically reported to the DTA about the progress of work and performance of the contractor. The officers dealing with ITCP at DTA should have regularly inspected various Treasuries as per a carefully drawn up schedule and the payments to various contractors should have been released only after physical verification and satisfactory reports regarding adherence to prescribed specifications. Scrutiny of records of DTA revealed that no schedule of field inspections by DTA officials and submission of performance reports by TOs were devised and no record of field visits by officers of DTA was maintained.

3.1.11 Conclusion

- An expenditure of Rs.23.60 crore has been incurred on the project and sufficient funds parked in Deposit Account are available. Yet, a significant amount of work like calculation of pension and pay and reconciliation of bank receipts with Departments etc. continues to be done manually even after lapse of more than 3 years since the date of commissioning of SFMS.
- Provisions for checking irregular drawals under TR 27 and passing of duplicate bills were absent.
- Repeated errors in various reports generated by SFMS were noticed forcing manual corrections, which defeat the objective of an effective Management Information System.
- There was no documented policy regarding IT Security, Updating of Master Data, Back Up, Disaster Recovery and Business Continuity, Change Management, Physical and Logical Access to IT Assets etc.

3.1.12 Recommendation

- Immediate steps should be taken to computerize the left out features in the software so that minimum manual intervention could be resorted to.
- Immediate steps like data input validation, correct mapping of rules as laid out in MPTC & MPFC etc. should be initiated so that instances of irregular drawals and erroneous passing of bills could be checked.
- Immediate formulation, documentation and implementation of a comprehensive IT Policy enumerating Security Controls, Physical and Logical Access Controls, Program Change Controls and Disaster Recovery and Business Continuity Plans etc is urgently required.