

CHAPTER-III

PERFORMANCE AUDITS

This Chapter contains four Performance Audits on 'Corridor Scheme', 'National Programme of Nutritional Support to Primary Education (Mid- Day Meal Scheme)', 'Accelerated Rural Water Supply Programme' and 'IT Audit of online treasury computerisation system (e-KOSH)'.

PUBLIC WORKS DEPARTMENT

3.1 Corridor Scheme

Highlights

The Government of Chhattisgarh (GOCG) invested Rs 266.21 crore during 2002-07 to develop six corridors. No definite time frame was fixed for completion of the scheme. Tenders were floated after framing of Detailed Project Reports but did not conform to them and were issued prior to Administrative Approval and Technical Sanction. There was high shortfall in conducting quality tests for different items of works in prescribed frequency which assured appropriate road quality. There were instances of contract mismanagement and faulty execution of works. Some important findings of the review are given below:

Undue financial aid to contractors of Rs 3.06 crore.

(Paragraphs 3.1.8.1, 3.1.8.2 & 3.1.8.4)

Extra cost of Rs 4.15 crore not recovered from the defaulting contractors who had left the work incomplete and works were retendered.

(Paragraph 3.1.8.3)

Avoidable expenditure of Rs 7.58 crore was incurred on earthwork for unnecessary widening of formation width without widening of carriageway.

(Paragraph 3.1.8.5)

Excess payment of Rs 44.71 lakh to contractors was made due to incorrect application of rates.

(Paragraphs 3.1.8.6 & 3.1.8.7)

Earthwork of Rs 1.56 crore was executed without approval of competent authority.

(Paragraph 3.1.8.9)

Acceptance of sub standard work of Rs 10.65 crore due to use of lower density mix in execution of DBM and SDBC works.

(Paragraphs 3.1.9.2 & 3.1.9.3)

3.1.1 Introduction

Government of Chhattisgarh decided (July 2002) to connect all the four corners of the state through two North-South (NS) and four East-West (EW) Corridors with total length of 2,716.55 km. This corridor scheme sought to upgrade existing roads falling in these six corridors with better riding quality to facilitate easy and swift transportation. No definite time frame was proposed for completion of the scheme and 2,147.40 km of roads were completed upto March 2007 (79 per cent).

3.1.2 Organizational Setup

The Public Works Department (PWD), the executing agency for the project, is headed by the Principal Secretary (PS), PWD. Four Chief Engineers (CE) working under Engineer-in-Chief (E-in-C) are responsible for implementation of the scheme. The Public Works (PW) Divisions headed by the Executive Engineers (EE) were executing the scheme under the direction and control of Superintending Engineers (SE) of the circles.

3.1.3 Audit Objectives

The performance audit of the corridor scheme was conducted to assess:

- whether the works were taken up in a planned manner;
- whether the tendering process was carried out according to prescribed rules;
- whether the works contracts were managed properly;
- whether works were executed economically and according to specifications; and
- whether road quality was monitored to achieve better riding quality.

3.1.4 Audit Criteria

The audit criteria used for assessing the performance of the scheme were taken from the specifications and provisions available in:

- Indian Road Congress (IRC) specifications;
- Specifications for Road & Bridge works issued by the Ministry of Road Transport & Highway (MORT & H);
- Works Department (WD) Manual, Central Public Works Accounts (CPWA) Code and Schedule of Rates (SOR);
- Administrative Approval (AA), Technical Sanction (TS), Notice Inviting Tenders (NIT), Agreements executed with contractors and work orders issued for execution of works.

3.1.5 Audit coverage and methodology

The review was conducted during March 2007 to June 2007 through test check of records in the office of the E-in-C and five PW Divisions¹ selected out of twenty four divisions on the basis of Simple Random Sample Without Replacement (SRSWOR). The period covered in audit is from 2002-03 to

¹ *Public Works Divisions Raipur III, Korba, Ambikapur, Pendra Road & Jashpur.*

2006-07. Relevant information was also collected from Principal Secretary (PWD), PWD (Bridge) Division and SE, PWD Circle, Raipur. The audit methodology adopted was examination of documentary evidence supplemented by site visits with Sub Engineers and interviews at various levels in PWD. Audit findings were discussed with the Government in exit conference held in September 2007.

Audit Findings

3.1.6 Planning

The project was not included in the annual plan of the department for 2002-03 as it was not included in the original budget estimates and was taken up in the first year through provision in the supplementary budget. The detailed feasibility study by the PWD for the project was not made available to audit and the scheme had not been referred to the State Planning Board for techno-economic feasibility and approval. No time frame was fixed for completion of the scheme. Scrutiny of AA and TS issued for various works also showed that neither did they indicate the time within which the works were to be awarded after the TS nor did they specify the total time period for the execution of the works.

The subsequent stages leading to issue of work orders were also not followed in prescribed sequence as brought out in the subsequent paragraphs. Thus the project was not taken up in a planned manner as prescribed in Rules of Business of the Executive Government of Madhya Pradesh as adopted by the Government of Chhattisgarh and the WD manual.

3.1.6.1 Detailed Project Report (DPR) not used for executing the project

An amount of Rs 3.14 crore was spent (2002-03) on preparation of 10 Detailed Project Reports (DPRs) under the scheme. It was ascertained that DPRs were not used for framing estimates as they were not received in four divisions² upto March 2007 and in one division³, it was not available. Three of these DPRs were collected by audit from the E-in-C. A comparison with the approved estimates showed variation with the DPRs. In two roads, the estimate provided higher specifications and in the third, the estimate had lower specifications than the DPR (*Appendix-3.1*). It was evident that DPRs were not used in any way for the actual execution of the project. This pointed to weaknesses in planning and project formulation. Either the DPRs should have been used or they should not have been prepared at all.

Government stated (November 2007) that the detailed estimates with reference to DPRs were not supplied timely by the consultants and as such estimates were prepared by different divisions on the basis of SOR and site conditions which had been compiled and submitted for approval and works got executed according to sanctions. Reply was not acceptable because DPRs were prepared in August 2002 and NITs were issued from October-December 2002. Therefore, it was possible to base the project on DPRs. They were not used in any way for the actual execution of the scheme which pointed to weaknesses in planning and project formulation as narrated above.

DPRs were not received or received late and were not followed in execution of work.

² Public Works Divisions Raipur III, Korba, Ambikapur & Jashpur.

³ Public Works Division, Pendra Road.

3.1.6.2 Tenders floated prior to AA and TS

Tenders were floated before approval of works and framing of detailed estimate in 11 cases.

Para 2.003 of WD Manual and instructions in AA by the Government for the scheme provided that tendering was to be done after obtaining TS. Test check of 16 tenders in five divisions revealed that 11 tenders (**Appendix-3.2**) were floated by the EEs prior to AA and TS. EEs stated that it was done to save time and safeguard interest of the Government. Reply is not acceptable as interest of the Government is safeguarded by framework of rules and regulations which were grossly violated in these high value contracts.

Government stated (November 2007) that the tenders were floated to save time in the interest of work and agreements were executed with the agencies after AA. The sanctions, AA and tenders were all issued by the Government. Reply was not acceptable. The entire control structure provided through provisions of the manual was totally vitiated thereby weakening the entire process. Floating of tenders before TS resulted in overstating of Probable Amount of Contract (PAC) in two tenders and higher cost in another as detailed below :-

Non inclusion of 8.40 km in the tender accepted in October 2002 resulted in avoidable extra cost of Rs 40.99 lakh

3.1.6.3 Tenders were invited for Charaidand to Orissa Border (EW corridor No.4) for 21 km in October 2002 and accepted 4.4 *per cent* above SOR whereas TS was given by the CE, Bilaspur (May 2003) for 29.4 Km. Tenders for the remaining 8.4 Km were floated (December 2006) after three and a half years of TS for PAC of Rs 97.77 lakh at 46.32 *per cent* above SOR (June 2000). Thus, there was avoidable extra cost of Rs 40.99 lakh⁴ as the tendering was done in two parts. Government accepted (November 2007) the facts of the case in its reply. It was therefore, evident that had the codal provisions of inviting tenders after AA and TS been adhered to, there would have been a single tender and extra cost could have been avoided.

Entire length of road not included in tender issued with inflated PAC.

3.1.6.4 Estimate for improvement of Bagicha-Charaidand (BC) Road (EW Corridor No.4) for total road length of 56 Km. was sanctioned for Rs 12.55 crore in May 2003 but tender was floated in November 2002 (i.e. 7 Months before the sanction of estimate) for shorter length (47 km.) at almost same PAC (Rs 12.22 crore). Therefore, the PAC was inflated. Payment of Rs 7.60 crore (17th RA bill) had been made till February 2007. The remaining 9 Kms, as in the sanctioned estimate, remains outside the scope of agreement.

Government stated (November 2007) that though the tenders were invited (November 2002) for 47 Km yet the work was actually getting executed in 56 Km. Reply is not acceptable at this juncture as magnitude of the work executed would be verifiable only on completion of the work.

PAC was higher than sanction by Rs 6.37 crore as tender was issued before sanction.

3.1.6.5 Audit scrutiny revealed that the PAC for Kotmi-Katghora (KK) Road 80 km (EW Corridor No.3) under Korba Division was Rs 26.04 crore whereas TS accorded (May 2003) by CE Bilaspur was for Rs 19.67 crore. Tenders were however, floated in December 2002 i.e. before according TS. There was a difference of Rs 6.37 crore between PAC and TS. Had the tenders been floated after obtaining TS the amount of PAC would have been equal to TS. Therefore, PAC was inflated to the extent of Rs 6.37 crore. This could have

⁴ Rs 97.77 Lakh x (46.32 % - 4.40 %) = Rs 40.99 Lakh

been avoided had the process of obtaining TS before floating of tenders been adhered to.

Government stated (November 2007) that while preparing estimate for AA and TS, the road length was inadvertently taken as 71.80 km instead of actual length of 80.20 Km taken in NIT. Therefore the TS was given for lower amount. The reply was an acceptance that estimates were not prepared properly which pointed to faulty planning.

3.1.7 Financial Management

3.1.7.1 Funding Arrangement

Funds were provided by the State Government under Grant No. 42, Public Works-Roads & Bridges relating to Tribal Area Sub Plan Major Head 5054-03-337-0102 Tribal Area Sub Plan 5418 Construction of Corridor for connecting four directions. The budget provision, expenditure, savings and excess during last five years are mentioned below:

<i>(Rupees in crore)</i>								
Year	Budget provision (original)	Supplementary-I	Reappropriation	Final Budget Provision	Expenditure as per AG's accounts	Excess(+) Saving (-) with reference to final budget provision	Percentage of Excess/ Saving	Departmental expenditure figure
2002-03	-	80.00	(-) 22.58	57.42	19.74	(-) 37.68	66	51.46
2003-04	100.00	-	(-) 07.70	92.30	68.45	(-) 23.85	26	69.62
2004-05	50.00	-	7.45	57.45	63.10	(+) 05.65	10	62.73
2005-06	70.00	-	(-) 13.37	56.63	60.33	(+) 03.70	7	60.24
2006-07	61.82	-	5.50	67.32	54.59	(-) 12.73	19	54.75
TOTAL	281.82	80.00	(-) 30.70	331.12	266.21	(-) 64.91	20	298.80

The above figures indicated that while re-appropriations were done every year, they were inadequate in view of excesses in two years and savings in three years and overall saving of 20 per cent. Further, there were differences between the departmental expenditure figures and those reported to the Accountant General (AG) which was not reconciled resulting in a difference of Rs 32.59 crore (12 per cent) from the accounts figure. This indicated that the budgeting and control of expenditure was required to be strengthened.

The matter was reported to Government (August 2007) and it was stated (November 2007) that the reconciliation of expenditure figures with the figures of AG's books had been done regularly and the difference in figures was duly transferred to the respective head of account through transfer Entry (TE). The progress of works was affected in naxalite affected areas, some times due to natural calamity and delayed payments of pending bills of contractors of the previous years the expenditure was incurred in excess of allotment/ estimate. Further, allotment/Letter of Credit (LOC) had been issued according to estimate keeping in view time limits prescribed in agreements. Reply was not acceptable. The difference of Rs 32.59 crore remained even after the transfers were effected. No specific reply was given about inadequate re-appropriations. Further, it did not explain reasons for savings in execution of works in non naxalite affected areas. It also did not specifically state the nature and amount of bills pending for payment from previous years.

3.1.7.2 Diversion of funds

Rupees 42.79 lakh were diverted to other works

According to Para 2.1.1(12) of CPWA Code, the works contingencies can only be utilized on the unclassified items relating to the concerned work as a whole. In Korba division, Rs 31.19 lakh (2002-03/2003-04) were diverted for construction of other works like Divisional office building and quarters. In Raipur PWD Dn. No.III, audit observed that two vehicles amounting to Rs 11.60 lakh were purchased in February 2005 under work contingency of corridor scheme which was irregular.

Government stated in reply (November 2007) that the PWD Division, Korba being newly opened, the sanction was accorded by the competent authority in December 2003 under paragraph 2.027 of WD manual which is as per rules. Two vehicles were purchased for supervision of Corridor works.

Reply was not acceptable as the sanction given for construction of PW division was in contravention of Paragraph 2.027 which provided that out of provision for contingency, amount exceeding Rs 10,000 should not be diverted to new work. Further, in respect of purchase of vehicles, these were neither recorded in Tools & Plants register nor any log book was maintained and it was not possible to verify whether they were used exclusively for supervision in this project.

3.1.8 Programme Implementation

Contract Management

Undue financial aid to contractors

Penalty of Rs 40 lakh not imposed on the contractor for delay

3.1.8.1 According to clause 2 of the contract agreement (Dudhawa bifurcation at Kanker to Devbhog Road - EW Corridor No.1; PAC : Rs 20 crore) if the contractor failed to complete the work within the stipulated period (June 2004) including the authorized period of extension then in respect of work costing above Rs 25 lakh compensation at the rate of $\frac{1}{16}$ per cent of the value of work per week should be levied on the contractor. Audit noticed that the contractor was given extension of time for eight months under penal clause but recovery amounting to Rs 40 lakh⁵ was not effected as of May 2007. EE stated that under clause 2 a sum of more than Rs 25 lakh was kept in deposit till the decision was taken for liquidated damages.

In the same contract, EE sanctioned and paid Rs 1.14 crore towards secured advance on small size metal, bitumen and RCC Hume pipes to the contractor between May 2003 and March 2004 in contravention of codal provisions. This resulted in unauthorized financial aid for period upto 236 days (as detailed in **Appendix-3.3**).

Government admitted the observations (November 2007) and stated that the amount would be adjusted from final bill of the contractor.

Advance payment of Rs 70 lakh made without execution of work.

3.1.8.2 According to provision of CPWA Code, advance payment is made to a contractor for work done but not measured, with the sanction of SE. It was observed that in the same contract an advance of Rs 70 lakh was paid to contractor (26 April 2003) without any work done and without permission of SE which was recovered on 4 August 2003. This irregularity resulted in

⁵ 8 months 4 weeks x $\frac{1}{16}$ % of Rs 2,000.00 lakh = Rs 40.00 lakh

unauthorized financial aid to the contractor for a period of 100 days. EE stated that actual work was done but not measured, hence payment was made to the contractor as advance with approval of SE. After making advance payment contractor was not interested for detailed measurement, hence advance payment was recovered. Reply was not acceptable because in the measurement book the concerned Sub Divisional Officer (SDO) did not give the requisite certificate regarding work done but not measured.

Government verified these facts (November 2007). The reply did not indicate whether any action was taken for extending undue benefits.

Extra cost of Rs 4.15 crore not recovered from defaulting contractors

3.1.8.3 Clause 3(C) of contract agreement (Form-A-percentage rate tender) provides that in cases where the progress of work is slow or the contractors have defaulted or abandoned the works, the balance work could be got completed through other agencies at the risk and cost of the defaulting contractor. Audit scrutiny revealed that three road works⁶ under Korba and Jashpur divisions were left incomplete (January 2004, October 2006 & December 2003). These were to be executed through other contractors at the risk and cost of the defaulting contractors but Rs 4.15 crore as extra cost were not recovered from the defaulting contractors (June 2007).

In reply, Government stated (November 2007) that the Revenue Recovery Certificate (RRC) of Rs 16.14 lakh was issued in April 2006 to the Sub Collector, Bhuvaneshwar (Orissa) in respect of defaulting contractor 'A' while action was being taken to issue RRC of Rs 1.78 crore in respect of contractor 'B'. The case of contractor 'C' was subjudice. Action to recover the extra cost amounting to Rs 2.17 crore would be taken after decision of the court.

SD and PS amounting to Rs 81.59 lakh were not deducted.

3.1.8.4 Security Deposit (SD) @ 5 per cent and Performance Security (PS) @ 15 per cent as prescribed in special conditions of contract amounting to Rs 81.59 lakh⁷ were not recovered from the contractor's RA Bills of Dudhawa Bifurcation at Kanker to Devbhog Road (EW Corridor No.1) and KK Road (EW Corridor No.3). This irregularity resulted in unauthorized financial aid to contractors.

In reply, Government admitted the fact and stated (November 2007) that the amount would be adjusted from final bill of the contractors.

Execution

Extra cost in execution of Dudhawa bifurcation at Kanker to Devbhog Road

Avoidable expenditure of Rs 7.58 crore.

3.1.8.5 The Government accorded AA of Rs 28.92 crore for upgradation of existing single lane (length 219.10 Kms) Manpur-Devbhog road under EW Corridor No. 1. It was observed that the total expenditure incurred was Rs 56.62 crore resulting in excess of Rs 27.70 crore (95.7 per cent). The tender for execution of 169 Kms of this road, Dudhawa bifurcation at Kanker to Devbhog, was issued by the Raipur Division No.III with an estimate of

⁶ (i) Kunkuri-Tapkara Road length 21 km. (EW corridor No 4) , (ii) Ludeg-Tapkara-Lawakera Road -length 55.60 km (EW No.3) under Jashpur Division and (iii) Kotmi-Katghora Road - Length 80 km. (EW No.3).

⁷ Raipur Dn. No.III PS: Rs 20.68 lakh, SD : Rs 47.00 lakh Total : Rs 67.68 lakh
Korba Dn. PS : Rs 11.81 lakh, SD : Rs 2.10 lakh Total : Rs 13.91 lakh
Grand Total Rs 81.59 lakh

Rs 20 crore. It was observed during test check of this division that the formation width⁸ was increased from 7 metre to 10 metre, which was not provided in the estimate. Since the carriage width remained at the original 3.65 metre, this formation widening was totally unnecessary. Consequently against the estimated earthwork of Rs 0.52 crore, actual expenditure was Rs 8.10 crore resulting in avoidable expenditure of Rs 7.58 crore. It was also stated by the E-in-C (March 2007) that the formation width was increased from 7 metre to 10 metre during execution as it was declared as State Highway. The reply was not acceptable. The increase of formation width without any corresponding increase in carriage width had no utility and approval of the Government had not been obtained for its execution. It was also observed that the case was sent (December 2005) for revised AA to the Government but it directed (May 2007) the E-in-C to forward the names of officials responsible for ad-hoc changes in design and incurring excess expenditure over estimate.

Government stated (November 2007) that the orders to increase the formation width from 7 metre to 10 metre were given by the then CE at the time of site inspection during October 2003. The reply was not acceptable because prior approval of Government had not been obtained. Action taken against the CE was not intimated. Excess expenditure incurred had also not been regularised till date.

It is recommended that Government should consider introduction of a mid-term system of appraisal after execution of specified percentage of work. In case it is observed that the work is likely to exceed the approved cost due to change in scope, delay, escalation etc., revised estimates should be submitted at the stage itself and got approved so that by the time it becomes necessary to incur the extra expenditure, the prior approval is already available.

Excess payment of Rs 24.30 lakh due to incorrect application of rate of BM

3.1.8.6 SOR (Roads) effective from 1 June 2000 (General note No. 31) provided for reduction of three *per cent* of rate in case of non-utilization of Sensor Paver Finisher⁹ (SPF) for laying of Lean Bituminous Macadam (LBM) & Bituminous Macadam (BM), but full rates for the items of LBM & BM were paid to the contractor without any evidence for use of SPF. This resulted in an excess payment of Rs 24.30 lakh besides compromising the road quality.

Government stated (November 2007) that deductions were not effected where the SPF had been used by the contractor in conformity with the provision of agreement. Reply was not acceptable as the contractor had failed to produce any documentary proof of ownership of the equipment which was mandatory as per condition of NIT.

Excess payment of Rs 20.41 lakh due to incorrect application of rates

3.1.8.7 In the SOR (Bridge) effective from 15 June 1992, the rates for item of providing Cement Concrete (CC) (clause 1701 to 1715) excluding form work M-15 & M-10 were Rs 1,183 per cum and Rs 829 per cum respectively whereas payment was made (July 2005) for this road @ Rs 1,573.93 per cum (3,170.40 Cum) and Rs 1,102 per cum (172.38 Cum) resulting in an excess payment of Rs 15.30 lakh.

⁸ Total width of earthwork includes carriage way and shoulders.

⁹ An equipment using for paving width of road hydraulically from 2.5 to 4.5 mt. as per MORT&H specification and automatically controls the required thickness.

For the same road, an amount of Rs 5.11 lakh¹⁰ was paid in excess to contractor due to incorrect calculation of item 'providing, laying and compacting of well graded Granular Sub Base (GSB) in 25th Running Account Bill paid in July 2005.

In reply, Government stated (November 2007) that the verification was being done with the records of the division executing the allotted work of corridor. If necessary, the recovery of said overpayment would be adjusted from the final bill of the contractor which was pending.

3.1.8.8 Avoidable extra cost due to application of superior specification

Execution of DBM instead of BM resulted in avoidable extra cost of Rs 1.54 crore.

Audit scrutiny revealed that in the approved estimates of balance work of widening, renewal and strengthening at Kotmi-Katghora road-Length 80 Km. (EW corridor No.3) under Korba Division, provided for BM work of 50-75 mm of 29,246 cum costing Rs 6.4 crore. However, Dense Bituminous Macadam (DBM) work 80-100 mm & 50-75 mm of 32,958.782 cum costing Rs 8.87 crore was executed. This resulted in avoidable extra cost of Rs 1.54 crore¹¹.

Government stated in reply (November 2007) that the provision of DBM was made in the schedule of approved NIT whereas in the sanctioned estimate provision of BM was made. The first contractor left the work incomplete and tenders were invited at his risk and cost. Therefore, no change could be made in the conditions of the NIT which contained provision of DBM as it was floated under debitable clause. The reply again underlined the risk of inviting tenders before AA and TS which led to a situation of executing work at extra cost of Rs 1.54 crore.

Irregular expenditure due to deviation from approved estimates

Irregular execution of work of Rs 1.56 crore was done without sanction by competent authority.

3.1.8.9 It was observed that though there was no provision for construction of embankment in the approved estimates of Ambikapur-Ramanujganj (AR) and Bilaspur-Katghora-Ambikapur (BKA) Roads under Ambikapur PW Division (NS Corridor No.1-A & B) yet earthwork was executed (March 2004) for construction of embankment without sanction of competent authority. This resulted in irregular execution of work Rs 1.56 crore. EE stated (November 2007) that the supplementary schedule for the additional work are yet to be prepared. Government stated (November 2007) that the embankment work was done on State Highway where width of road was not available according to specification/provisions. Reply was not acceptable. There was no provision for construction of embankment in the approved estimate of the road and the extra work should not have been executed without sanction of supplementary schedules by competent authority which was not done upto November 2007.

3.1.8.10 Work orders for widening of 26.60 km of BKA Road were issued to a contractor under three agreements in February 2004¹². Work¹³ valuing

¹⁰ Quantity	Rate	Payment	Admissible	Excess Payment
39,298.063 cum	Rs 215 per cum	Rs 88,79,111	Rs 84,49,084.00	Rs 4,30,027
	Add 18.93 per cent	Rs 5,11,431	Say Rs 5.11 lakh	

¹¹ 32,958.782 cum @ (Rs 2,690 per cum - Rs 2,192 per cum) = Rs 1,64,13,473
(Less 5.94 per cent) Rs 1,54,38,513.00 Say Rs 1.54 crore

¹² vide Agreement Nos. 87,88 & 89 DL of 2003-04 for 12.4, 8.10 & 6 km. respectively.

¹³ Excavation of earth work, GSB, WBM I & II.

Work lying incomplete without any protection layer resulted in wasteful expenditure of Rs 25.26 lakh.

Rs 25.26 lakh was done till June 2004 and subsequently foreclosed due to transfer of above road in National Highway (NH) wef 30 June 2004. This road was again transferred back to PWD in December 2004 but the work was lying incomplete and protection of BT work had not been done. This resulted in wasteful expenditure of Rs 25.26 lakh as this stretch had not been completed as of September 2007.

Government stated (November 2007) that since the work had been executed, the payments could not be termed wasteful. The reply was not acceptable. Since the partial work was lying without any BT cover, therefore the wear and tear would lead to deterioration of the work done.

3.1.9 Quality control/ assurance

3.1.9.1 High shortfall in frequency of tests conducted for ascertaining quality of different items of work

Road quality could not be assured due to high shortfall in frequency of prescribed tests

MORT&H specifications prescribed minimum number of tests for different items to ascertain the quality of work. As per clause 901.3 of MORT&H specifications, the contractor shall carry out quality tests on the material and work to the stipulated frequency and clause 901.4 provides that quality control tests will also be conducted by the Engineer to satisfy himself about quality of material and work. General note-9 of SOR (Roads) with effect from 1 June 2000 stipulates that before making any payment, it will be responsibility of the officer making payment to ensure that all tests as per prescribed frequencies have been carried out.

On compiling 1,610 test reports relating to 26 parameters of all the five divisions test-checked (*Appendix-3.4*), showed that the tests conducted by the contractors were below the prescribed frequencies. For the works of embankment, sub base (sand) and Open Graded Premix Carpet (OGPC), not a single test had been conducted. For works of moorum sub base and Water Bound Macadam (WBM), tests were conducted up to 25 per cent of the prescribed number of tests. For works of DBM and Semi Dense Bituminous Concrete (SDBC) upto 68 per cent of the prescribed number of tests were conducted. It was further observed that no tests were conducted by the divisions.

Government stated (November 2007) that most of the materials used in construction of works had been tested. In addition, testing laboratories were also established by the contractors for testing the material. Moreover, contractors were responsible for repairs and maintenance of road upto three years for which PS had been obtained. The reply did not address the shortfall in the prescribed tests without which quality of roads could not be assured.

3.1.9.2 DBM work executed with lower density

DBM work executed with binder density of 2 gm/cc instead of 2.3 gm/cc leading to substandard work of Rs 9.38 crore.

As per standard data book of MORT&H, density of DBM should be 2.3 gm/cc. It was noticed in audit that DBM work was executed with lower density of 2 gm/cc in the execution of KK Road (EW Corridor No.3) resulting in substandard work. The job mix formula was not approved as prescribed. The DBM quality was compromised as lesser quantity of bitumen (497.85 MT) was used. EE stated (April, 2007) that the binder content of DBM was used at the rate of 4.5 per cent of total mix of weight whereas in BM only 3.4 per cent of binder is normally used. The reply is not acceptable because

4.5 per cent binder was used in 2 gm/cc mix instead of 2.3 gm/cc leading to substandard quality of DBM work worth Rs 9.38 crore.

Government stated in reply (November 2007) that the determination of job mix formula in the construction of road was done on the basis of available material. Reply was not acceptable as the job mix formula was not approved in the execution of this work.

3.1.9.3 SDBC work executed with lower density

Execution with 2 gm/cc density instead of 2.25 gm/cc lead to substandard SDBC work amounting to Rs 1.27 crore.

In execution of Ludeg-Tapkara-Lawakera (LTL) Road (EW Corridor No.3), Bagich-Batouli (BB) and BC Roads (EW Corridor No. 4) under Jashpur Division. PWD (NH) Bilaspur approved job mix formula with bulk density of 2.25 gm/cc for SDBC whereas execution was done with density of 2 gm/cc therefore SDBC work of Rs 1.27 crore.¹⁴ was below specification.

In reply, Government stated (November 2007) that the SDBC work had actually been executed on the basis of job mix formula and density of 2 gm/cc was used only for calculating consumption of bitumen. Reply was not acceptable as using 2 gm/cc for calculation implied that consumption of bitumen was lower than the requirement as per job mix formula, therefore, the work was below the specified standard.

3.1.9.4 Sinking of road due to faulty execution

Substandard work Rs 1.13 crore due to faulty execution.

According to the Indian Practical Civil Engineer's Hand Book, proper drainage along road sides must be constructed to prevent corrugation. The DPR of Dudhawa Bifurcation at Kanker to Devbhog Road (EW Corridor 1) recommended construction of side drains having depth of 0.60 metre on both sides of road but this was not provided in the estimate and side drains were not constructed. It was observed that 19 km of this road had sunk due to water logging and improper bonding between WBM and bituminous course. This resulted in substandard work amounting to Rs 1.13 crore (*Appendix-3.5*).

In reply, Government stated (November 2007) that there was no provision for construction of side drains in the estimate. Moreover, road passes through forest reserve area where permission was not granted by the Forest Department. The reply underlined that DPRs were not followed and did not indicate what measures would be taken to prevent water logging and further damage in future.

3.1.9.5 Substandard work due to non use of SPF in execution of BM

Below specification work due to non usage of SPF in execution of BM

As per general note No.31 of SOR effective from 1 June 2000, BM should be executed with SPF to achieve better riding quality. Audit observed that in two divisions¹⁵ SPFs were not used for items of LBM & BM which compromised the riding quality.

¹⁴ (i) LTL Road : SDBC 118376.50 sqm @ 69.50 per sqm = Rs 82.27 lakh + 1.80 %
= **Rs 83.75 lakh**
(ii) BB&BC Road : SDBC 61895.80 sqm @ 69.50 per sqm = Rs 43.02 lakh + 1.54 %
= **Rs 43.68 lakh**
Grand Total : Rs 1.27 crore

¹⁵ Raipur Division No. III and Jashpur executing Dudhawa Bifurcation at Kanker to Devbhog Road (EW Corridor No.1) & LTL Road (EW Corridor No.3) respectively.

Government stated in reply (November 2007) that the deduction of three *per cent* in item of work was made and as such there was no compromise on quality of work. Reply was not acceptable because notwithstanding the recovery, the expected quality was not achieved as SPF were not used.

3.1.9.6 Execution of poor quality work

Certain stretches of road damaged due to less consumption of bitumen

It was observed that BKA Road (NS Corridor No.1A) had been damaged in a number of stretches during the first rains after completion of improvement works at a cost of Rs four crore. It was further observed that the work was completed in February 2007 with less quantity of bitumen as accepted (June 2006) by the contractor.

Government replied (November 2007) that the bitumen used by the contractor was of correct specification and he had rectified the damaged portion at his own cost. Therefore, the question of use of less bitumen did not arise. Reply did not address the audit comment. The work was completed with less quantity (not quality) of bitumen as accepted by the contractor in June 2006. This indicated that the contractor had used less bitumen in the entire stretch of road affecting the quality.

3.1.9.7 Substandard work of Granular Sub Base

Acceptance of substandard work

According to test norms of California Bearing Ratio (CBR), one test on every 500 cum should be conducted and CBR value should not be less than 20 *per cent*. In execution of KK Road (EW Corridor No.3) under Korba Division, out of required 36 tests, only 14 tests were actually conducted. Out of these 14, in 12 tests, CBR value was found less than 20 *per cent*, indicating substandard graded material in Granular Sub Base (GSB). Moreover, it was observed from the MB that neither proper rolling nor sufficient compaction was done. This resulted in execution of entire work with substandard moorum affecting the road quality adversely. EE did not furnish any reply about below graded material of GSB.

Government stated in reply (November 2007) that the CBR was found less in testing of used moorum at some sites of work and had been increased by mixing sand in moorum before using the material with prescribed rolling and compaction. The reply was not acceptable as there was no evidence of these procedures in the records and relevant test reports of improved CBR were not available.

3.1.10 Conclusion

Tenders were floated before AA and TS leading to inflated tenders and there were deficiencies in tendering and cases of undue benefit to contractors. DPRs were not followed and there were instances of excess payment, incorrect application of rates, wasteful expenditure and execution of higher specifications and additional items without authorization. There were high shortfalls in prescribed frequencies for conducting tests for different items of works and instances of works executed below prescribed standards.

3.1.11 Recommendations

In view of the various deficiencies noticed in audit following recommendations are made:-

- The DPRs should be used as the basis for preparing estimates and time frame for completion of the scheme should also be fixed. The projects should be planned in detail with the approval of the State Planning Board.
- Justification for changes made in estimates should be on record and approved by the appropriate authority before adopting changes.
- Quality should be ensured by closely monitoring prescribed quality control measures

These recommendations were discussed with the Government in the exit conference (September 2007) and accepted.

**SCHOOL EDUCATION AND TRIBAL DEVELOPMENT
DEPARTMENT**

**3.2 National Programme of Nutritional Support to Primary Education
(Mid-Day Meal Scheme)**

Highlights

The National Programme of Nutritional Support to Primary Education popularly known as 'Mid Day Meal' Programme was launched in 1995 and covers all 146 blocks in the State. It was aimed at boosting universalisation of primary education by improving enrolment, attendance, retention and learning levels of children and simultaneously improving nutritional status of students in the age group of 6-11 years. Review of implementation of mid day meal scheme in the state revealed several deficiencies. There were savings against budget provision, diversion of funds and the department was not able to utilise the Central Assistance under Management, Monitoring and Evaluation. The nodal department could not furnish details of the amount of rice utilised under the scheme during last five years.

There was discrepancy in the figures of rice lifted/ provided by Nagrik Apurti Nigam (NAN) and the nodal department. Thus, the risk of pilferage of rice cannot be ruled out. The average attendance rate claimed by the Department appeared to be inflated. There was disruption in providing cooked meal to children in the test-checked districts.

Some of the important audit findings were as follows:

Despite incurring expenditure of Rs 419.95 crore by the State Government during 2002-07, the scheme contributed to a marginal increase in enrolment figures during 2006-07 as compared to the base year 2002-03.

(Paragraph 3.2.7.2 & 3.2.8.4)

Funds were not provided separately for kitchen sheds and cooking cost of Rs 39.73 crore was diverted for creation of infrastructure during 2004-05 and 2005-06.

(Paragraph 3.2.7.4)

Diversion of cooking cost of Rs seven lakh (November 2004) for payment of wages on construction work delayed disbursement of cooking cost to Gram Panchayats.

(Paragraph 3.2.7.4)

The actual Average Attendance Rate (AAR) was found to be 10-15 per cent lower than the figure used as the basis for distribution of foodgrains leading to a discrepancy in the range of 11,000 MT during 2005-07.

(Paragraph 3.2.8.2)

Proper monitoring and evaluation was not being done to assess the impact of implementation of the scheme.

(Paragraph 3.2.9.2)

3.2.1 Introduction

Government of India (GOI), Ministry of Human Resources Development Department (MHRD) launched the “National Programme of Nutritional Support to Primary Education (NP-NSPE)” (commonly known as the Mid Day Meal Scheme) on 15 August 1995, as a Centrally Sponsored Scheme for children of primary school (class I to V) in government, local body and government-aided schools. It was extended (October 2002) to children studying in Education Guarantee Scheme (EGS) and Alternative and Innovative Education (AIE) Centres also.

Mid Day Meal (MDM) Programme was started on 2 October 1995 in the undivided State of Madhya Pradesh in all primary schools. Chhattisgarh was created and came into existence as a state from 1 November 2000. Under the Scheme, cooked meal was served in primary schools of 61 community development blocks till April 1997 and thereafter foodgrain @ 100 grams per child per day for 20 days in a month was being given through fair price shops (FPS). In primary schools of 85 tribal development blocks in the State, cooked hot meals were regularly served.

Consequent to the orders¹ of Hon’ble Supreme Court of India (November 2001), GOCG started serving cooked hot meals in all the primary schools in 146 blocks (61 blocks under School Education Department and 85 blocks under Tribal Development Department) from 1 April 2002.

In the year 2006-07, the programme was implemented for 31.05 lakh children enrolled in 31,740 primary schools/centres run by the School Education and Tribal Development Departments.

3.2.2 Objectives of the Scheme

The objectives of the scheme were :-

- to boost universalisation of primary education by improving enrolment, attendance, retention and learning levels of children, especially those belonging to disadvantaged sections;
- to improve nutritional status of students of primary stage; and
- to provide nutritional support to students of primary stage in drought-affected areas during summer vacations.

3.2.3 Organisational Set-up

The Rural Development Department (RDD) was responsible for implementation of the scheme in the State till 31 March 2006. Development Commissioner (DC), Panchayat and RDD was the nodal officer at the State level. The State Government designated School Education Department as the ‘State Nodal Department’ for overall implementation of the Scheme from 1 April 2006 and Chhattisgarh Nagrik Apurti Nigam (NAN) as the ‘State

¹ *Hon’ble Supreme Court directed the State Governments /Union Territories to implement mid day meal scheme by providing every child in every Government and Government aided primary school with a prepared mid-day meal with a minimum content of 300 calories and 8-12 grams of protein each day of school for a minimum of 200 days.*

Nodal Transport Agency' w.e.f 1 April 2005 for transportation of foodgrains for Mid Day Meal scheme. Tribal Development Department looks after the implementation of the programme in the tribal blocks. The organizational structure for implementation of the programme in School Education and Tribal Development Department is shown in **Appendix-3.6**.

The actual implementation of the scheme at the school level is done by Gram Panchayats (GP) in rural areas and by Nagarpalikas in urban areas. Of late, Self-Help Groups (SHGs) are involved in running the programme in a few districts.

3.2.4 Audit Objectives

The main objectives of the performance audit were

- to assess whether funds provided were adequate and utilised;
- to assess whether the scheme achieved its principal objective of supporting the universalisation of primary education by improving enrolment, retention and attendance for children at primary education (class I to V) in primary schools/EGS and AIE centres;
- to assess whether enrolment, retention and attendance of children belonging to poor and disadvantaged sections increased;
- to assess whether the scheme achieved its secondary objective of improving the nutritional status of the children in the primary classes;
- to assess whether the scheme contributed to enhancement in the learning levels of the children in primary classes in the schools where the nutritional support was provided;
- to assess whether the requisition, allocation and utilization of food grains was done in an efficient manner;
- to assess whether children studying in primary schools/EGS & AIE centres were served cooked meal in terms of the quantities and the calorific value and nutritional levels prescribed in the scheme guidelines;
- to assess whether the implementation of the programme was being effectively monitored.

3.2.5 Audit Criteria

The audit criteria adopted were derived from the guidelines of the scheme issued by GOI, orders/instructions issued by the State Government and reports of the department.

3.2.6 Audit Coverage and Methodology

The performance audit was conducted between May-July 2007 and covered the implementation of the Mid Day Meal Scheme in Chhattisgarh during the period from 2002-03 to 2006-07.

The audit methodology included :-

- Scrutiny of records relating to implementation of the scheme in the Directorate of Public Instruction (DPI), Raipur; Commissionerate of Tribal Development (CTD), and Chhattisgarh Nagrik Apurti Nigam (NAN), Raipur, Development Commissioner, Panchayat and Rural Development.
- Collection of information and analysis of records relating to flow of funds and foodgrains and its utilization, status of infrastructure facilities, adequacy of database of enrolment, attendance, retention and learning level in six² districts selected through Circular Systematic Sampling method³ and field visits to 123⁴ schools as detailed in **Appendix-3.7** (20 schools/centres in each district except Dhamtari 23) in urban and rural areas.

Audit Findings

3.2.7 Financial Management

3.2.7.1 Funding pattern

Various components of the scheme to be financed, Central and State share and changes in rates proportion over the years is summarized in the table below:

Table: Funding of Scheme

Sl. No.	Components of the scheme to be financed	April 2002 to August 2004		September 2004 to June 2006		July 2006 onward	
		Central Government	State Government	Central Government	State Government	Central Government	State Government
1.	Foodgrains	Cost of 100 grams foodgrains per child per school day reimbursed to Food corporation of India (FCI)	Nil	Cost of 100 grams foodgrains per child per school day reimbursed to FCI	Nil	Cost of 100 grams food grains per child per school day reimbursed to FCI	Nil
2.	Transportation of foodgrains from the nearest FCI depot to school	Cost of transportation of foodgrains @ Rs 50 per quintal reimbursed to Zila Panchayat.	Rs 4.00 per quintal	From 1 October 2004 reimbursement @ Rs 75 per quintal to State Nodal Transport Agency, NAN	Nil	Reimbursement @ Rs 75 per quintal to NAN	Nil

² Raipur, Jagdalpur, Janjgir, Korba, Dhamtari and Kawardha.

³ Method of selecting sample units from total units classified into various strata exclusive of each other, arranged in a particular order on the basis of a specific criteria for the purpose testing in audit.

⁴ Eighty schools selected in four districts of the State thorough SRSWOR and 43 schools under 14 Gram Panchayat selected in two districts of the State through judgmental sampling.

Sl. No.	Components of the scheme to be financed	April 2002 to August 2004		September 2004 to June 2006		July 2006 onward	
		Central Government	State Government	Central Government	State Government	Central Government	State Government
3.	Cost of cooking i.e. conversion cost	Nil	Rs 0.75 per child per school day upto 31 March 2004 and Rs 1.00- per child per school day from 1 April 2004 Rs 15 per cook per day in community block schools under School Education Department.	(i) From 2004-05, 15 per cent of additional central assistance under PMGY ⁵ . (ii) w.e.f. 1 September 2004 Rs 1.00 per child per school day in addition to (i) above.	Rs 1.00 per child per school day	Rs 1.50 per child per school day	Rs 0.50 contributed by the state.
4.	Infrastructure	-	Utensils Rs 800 per school in School Education Department as one time non - recurring in the year 2002-03	(i) Construction of Kitchen shed under SGRY, NSDP, SJSRY ⁶ . (ii) Drinking water under SSA, ARWSP and Swajaldhara programme. (iii) utensils under SSA from annual school grant of Rs 2,000 per school	-	Construction of Kitchenshed: Maximum of Rs 60,000 per unit per school and funds available under other development programmes Kitchen devices: Rs 5,000 per school	Nil
5.	Monitoring, Management and Evaluation	Nil	Specified	Not less than 0.9 per cent of total assistance on food grain, transport and cooking cost for 2004-05	Nil	Not less than 1.8 per cent of total assistance on food grain, transport and cooking cost from 2005-06	Nil

3.2.7.2 Budget provision and utilisation

The GOCG provides funds for implementation of the scheme in the budgets of the Departments of School Education and Tribal Development. The budget controlling officers of the two departments namely Director, Public Instruction (DPI) and Commissioner, Tribal Development (CTD) further allot funds to the implementing agencies at the district level Zila Panchayats (ZP)/Assistant Commissioners, Tribal Development (ACTD) who in turn give allotments to Janpad Panchayat (JP).

⁵ Pradhan Mantri Gramodaya Yojana.
⁶ SGRY- Sampurna Grameen Rozgar Yojana
 NSDP- National Slum Development Programme
 SJSRY- Swarna Jayanti Shahri Rozgar Yojana
 ARWSP- Accelerated Rural Water Supply Programme
 SSA- Sarva Shiksha Abhiyan

The year-wise break up of funds provided⁷ and its utilization according to the Appropriation Accounts of the State Government during the years 2002-03 to 2006-07 is as follows:

Budget provision and utilisation of funds

(Rupees in crore)

Name of the agency	Year	Budget provision	Actual expenditure	Saving (-) /excess(+)	Percentage of savings / excesses
1	2	3.	4.	5.	6.
Directorate of Public Instruction	2002-03	33.06	25.68	(-) 7.38	22.32
	2003-04	36.39	27.29	(-) 9.1	25.00
	2004-05	63.12	66.91	(+) 3.79	6.00
	2005-06	77.04	60.59	(-) 16.45	21.35
	2006-07	77.04	66.92	(-) 10.12	13.13
	Sub total		286.65	247.39	(-) 39.26
Commissionerate of Tribal Development	2002-03	11.47	11.00	(-) 0.47	4.09
	2003-04	20.95	19.95	(-) 1.00	4.77
	2004-05	25.40	25.52	(+) 0.12	0.47
	2005-06	66.72	62.12	(-) 4.60	6.89
	2006-07	60.44	53.97	(-) 6.47	10.70
	Sub total		184.98	172.56	(-) 12.42
State as whole	2002-03	44.53	36.68	(-) 7.85	17.62
	2003-04	57.34	47.24	(-) 10.10	17.61
	2004-05	88.52	92.43	(+) 3.91	4.41
	2005-06	143.76	122.71	(-) 21.05	14.64
	2006-07	137.48	120.89	(-) 16.59	12.06
Grand total		471.63	419.95	(-) 51.68	10.95

During the period 2002-07, 10.95 per cent of funds remained unutilised.

Against the overall budget provision of Rs 471.63 crore during the last five years expenditure of Rs 419.95 crore was incurred resulting in savings of Rs 51.68 crore (10.95 per cent).

The Government replied (November 2007) that the data clearly reveals that nearly 90 per cent students are enjoying the hot cooked meal out of allocations provided during the last five years. The reply did not explain the reasons for savings.

3.2.7.3 Excess claim towards reimbursement of transportation cost

Detail of food grains lifted and claims in respect of six test-checked districts during the year 2005-06 is shown below:

Sl.No	Name of the selected district	Quantity of food grains allocated by GOI (MT)	Transported quantity of food grains claimed by NAN (State level) (in MT)	Quantity of food grains lifted as reported by GOCG to GOI (in MT)	Quantity of food grains transported as intimated by District Agency of NAN (in MT)	Amount claimed by State NAN (Rs in lakh)
1	2	3	4	5	6	7 (col.4 x Rs 750)
1.	Raipur	7,817.40	9,457.01	9,448.10	9,457.01	70.93
2.	Jagdarpur	3,407.68	4,914.34	4,779.30	5,313.69	36.86
3.	Janjgir	3,548.94	3,898.90	3,703.20	3,898.97	29.24
4.	Korba	2,151.80	2,429.80	2,342.00	2,411.80	18.22
5	Dhamtari	1,671.60	1,771.60	1,699.50	1,771.60	13.29
6	Kawardha	1,816.04	1,652.35	1,405.90	1,577.50	12.39
	Total	20,413.46	24,124.00	23,378.00	24,430.57	180.93

⁷ Cooking cost inclusive of wages and cost of utensils/ infrastructure etc.

Actual utilisation of rice was not accounted for at any level leading to risk of leakages.

Against a total allocation of 20,413.46 MT rice by GOI, the quantity transported and disbursed as claimed by NAN was 24,124 MT resulting in excess disbursement of 3,710.53 MT for which claim of Rs 27.83 lakh at the rate of Rs 750 per MT was submitted to the GOI and received as reimbursement. The districts agencies reported excess transportation of 4,017.11 (24,430.57-20,413.46) MT of rice against the allocation by GOI. The state nodal department i.e. School Education reported lifting of 23,378.00 MT of rice to GOI in the Annual Work Plan and Budget (AWPB) for 2006-07. The actual utilisation of rice was not furnished and it was not possible to ascertain the closing balances at any level and whether these were taken into account while making allotments by the GOI, the State Government, ZP AND JP level. In the absence of periodical reporting of foodgrains utilised and foodgrains left in stock at various level, there was serious risk of leakages of foodgrains.

Discrepancy in lifting quantity of rice reported by the implementing agencies.

It was observed from the records of rice distributed to 23 schools in seven GPs of two blocks viz Dhamtari and Magarload in Dhamtari districts revealed that NAN, Dhamtari district supplied 147.44 MT through lead society to fair price shops of these GPs for further distribution to schools under the scheme during 2005-06 and 2006-07. JPs, Dhamtari and Magarload allotted 117.26 MT rice to these schools through coupons in these years. Against the actual quantity supplied, FPS at the end of years showed total closing stock of 5.02 MT in form D1 (return) submitted to Food Controller, Dhamtari district. But JP had issued coupons for 117.26 MT against which rice was to be lifted by Sarpanch/self help group. Hence, there should have been closing stock of (147.44-117.26) 30.18 MT at FPS instead of 5.02 MT. As a result, there was a shortage of 25.16 MT of rice amounting Rs 1.61 lakh @ Rs 6,400.00 per MT (rate of rice at FCI depot @Rs 5,650 per MT plus transportation cost @ Rs 750.00 per MT)

The Government replied (November 2007) that Chief Executive Officers (CEOs), Dhamtari and Magarload Janpad Panchayats have been asked to clarify the position regarding shortage of foodgrains (rice).

3.2.7.4 Cost of cooking

One of the major components/inputs of MDM scheme is “Cost of cooking” or “Conversion cost” for preparing and serving quality cooked meal to the children. It includes cost of ingredients, e.g. pulses, vegetables, cooking oil and condiments. It also includes cost of fuel and wages/remuneration payable to cooks or amounts payable to the agency responsible for cooking food.

The State Government provided funds for cooking (conversion) cost and wages in the budget under various grants/major heads of the School Education Department and Tribal Development Department but did not make separate provision for construction of kitchen sheds though this was incorporated as a component as per guidelines, issued by GOI (December 2004). The expenditure of Rs 39.73 crore in 2004-05 and 2005-06 on construction of sheds was also booked under cooking cost.

Budget provision for constructing kitchen sheds were not provided

The Government stated (November 2007) that the department of school education provided separate provision in every year for the construction of kitchen sheds. Reply is not acceptable as separate provision for kitchen sheds was not available in the budget.

Diversion of cooking cost of Rs seven lakh was diverted for construction works.

Test check of records of CEO, JP, Dhamtari (District Dhamtari) revealed that out of balance of cooking cost of Rs 21.92 lakh due for disbursement to the GPs for the month of September, October and November 2004, Rs seven lakh was unauthorisedly diverted (November 2004) for making payment of wages on construction works under SGRY Scheme. This led to a delay of three to four months in disbursement of cooking cost to GPs during 2004-05. In reply CEO stated (August 2007) that due to non-receipt of funds under SGRY, fund was diverted for immediate disbursement of wages.

The Government stated (November 2007) that disciplinary action for the diversion was proposed to be taken against the erring officials through the Panchayat and Rural Department. Final compliance is awaited (November 2007).

3.2.8 Execution

3.2.8.1 Allocation of foodgrains

GOI provides free supply of food grains (rice) to the state @ 100 grams per child per school day, the cost of which is reimbursed to the FCI by the GOI.

GOI, MHRD allocates and releases food grains for a financial year according to the district wise requirement on the basis of Average Attendance Rate (AAR) ranging from 80 to 85 *per cent* of the number of children enrolled in primary classes as on 30 September of the previous year/anticipated enrolment of the current year as intimated by the State Government. Any unutilized quantity of the previous year is to be adjusted from the allocation for the current year. District NAN lifts and distributes foodgrains on monthly basis and the quantity lifted for the month is normally 1/10th of the quantity allocated for the whole year. NAN lifts foodgrains from the nearest depot of FCI and delivers to Fair Price Shop (FPS). Details of quantity allocated by GOI, quantity lifted and utilized by the implementing agencies during the period 2002-07 was as follows.

(Quantity in MT)

Year	Rice allocated by GOI	Rice disbursed by NAN	Shortfall(-) /Excess(+)
2002-03	74,545.37	61,580.99	-12,964.38
2003-04	56,571.64	62,621.88	+6,050.24
2004-05	56,571.64	Not available	Not available
2005-06	52,346.28	58,485.33	+ 6,139.05
2006-07	69,222.56	58,756.46	-10,466.10
Total⁸	2,52,685.85	2,41,444.66	-11,241.19

Short fall in disbursement of 11,241.19 MT rice during 2002-07 was noticed.

Excess claim of Rs 24.98 lakh on transportation was reimbursed to NAN due to discrepancy in lifted quantity during 2005-06.

It was seen from the above table that there was a shortfall in disbursement of rice against the quantity allocated by GOI during the year 2002-03 and 2006-07, while excess quantity of rice was disbursed against the allocated quantity during the years 2003-04 and 2005-06. As per State Nodal Department report, lifting of rice in the year 2005-06 was 55,154.30 MT whereas NAN claimed reimbursement of Rs 438.64 lakh as transportation cost from GOI for 58,485.33 MT rice. As a result, excess claim of Rs 24.98 lakh for 3,331.03 MT (3,331.03 MT x Rs 750 per MT) was submitted and received from GOI as reimbursement towards expenditure incurred on transportation.

⁸ Total excluding quantity shown against the year 2004-05.

The Government, in their reply, stated (November 2007) that excess foodgrains were transported by NAN and claimed transport cost on the basis of actual delivery of foodgrains and claim was accepted by the GOI. Government further stated that allotment for 2006-07 were done on the assumption that the previously allotted foodgrains was fully consumed as no left over balance was reported from any district and it was possible that excess foodgrains were also consumed within the given time frame when actual attendance figures were taken into account. In such cases there would be no closing balance of foodgrains. Reply is not tenable since figures of quantity of foodgrains given by the Government and furnished to audit by NAN differed. It was also possible that balances were available but had not been reported. Since no report regarding utilisation was available at any level it was not possible for audit to verify balances. Information furnished to audit by Block Education Officers (BEOs), Kawardha district showed that there was balance of foodgrains. It was essential to institute a monitoring structure for ascertaining actual utilisation and work out balances.

3.2.8.2 Attendance

The State Government sent proposal/requisition to the GOI for allocation of free foodgrains and Central Assistance for cooking cost for the years 2004-05 to 2006-07 citing AAR as given below:

Table: Average Attendance Rate(AAR)

Year	AAR (per cent)
2004-05	80
2005-06	90
2006-07	90

The State Government proposed AAR at 90 per cent for allocation of foodgrains and Central Assistance for the year 2006-07 stating that the increase in attendance rate was due to the scheme. The State Government certified in the AWPB 2006-07 that 90 per cent AAR was proposed after confirming the figures from all the District Collectors.

However, there was no evidence furnished by the District Education Officers (DEOs) and ACTD, in all the six test checked districts to show that the AAR was compiled at the district level based on actual figures of attendance and enrolment from blocks/ janpads and gram panchayats.

Information on the number of MDM run days, enrolment and beneficiaries during 2005-06 and 2006-07 was furnished by the 82 and 84 schools out of the 123 test checked in six districts .It was observed that the AAR was 70⁹ per cent during 2005-06 and 69⁹ per cent during 2006-07. Thus, 90 per cent AAR claimed by the state was not substantiated by actual figures. The average attendance rate actually decreased in 2006-07 as compared to 2005-06, which was contrary to the objectives of the MDM Scheme.

AAR claimed by the State Government was not supported by the school records and the objective of improving attendance remained unattended.

⁹ Calculation of AAR on the basis of information furnished by 82/84 schools out of 123 schools inspected by audit. Average MDM days in 82 schools in the years 2005-06 (18,755/82) was 229 days and in 2006-07 (18,945/84) was 226 days rounded. Average number of children benefited per day during 2005-06 (18,54,749/229) 8,099 and during 2006-07 (17,69,778/226) was 7,831. Hence, AAR during 2005-06 was (8,099/11,569) and 2006-07 was (7,831/11,290).

It was further observed that for 2006-07 the TDD had claimed allocation of free foodgrains for 13.75 lakh children at AAR of 77 per cent whereas the State Government claimed at AAR of 90 per cent. As a result, excess allocation of foodgrains of 4,522.37 MT¹⁰ and central assistance of Rs 452.23 lakh¹¹ was demanded for the year 2006-07.

However, GOI allocated foodgrains and central assistance taking AAR at 85 per cent. Excess allocation of foodgrains and Central Assistance made by GOI in 2006-07 was 2,783 MT and Rs 2.78 crore respectively.

The Government replied (November 2007) that the average attendance rate (AAR) is in close agreement with the allocation and disbursement of rice so it is not an inflated one and substantiated by actual figures of enrolment. It was also stated that allocation under MDM is made on the basis of average attendance of 85 per cent. Actual attendance figures are not taken into account. Instructions have been issued to District Education Officers to instruct the school headmasters to submit actual attendance figures while putting forth demand for the forth coming year.

The reply did not address the difference of about 10-15 per cent between the AAR of 80-85 per cent presumed for distributing foodgrains and the actual AAR of 69-70 per cent during 2005-07 as ascertained by audit. This difference indicates that foodgrain may have been distributed in excess of requirement and accumulation of balances is possible. However, as cited earlier distribution was being made on the presumption that there are no balances. In view of this it is important to investigate and ascertain the position of foodgrain available.

3.2.8.3 Infructuous expenditure on gas connection

It was decided during a review meeting of Education Department (January 2005) to replace firewood and aluminium cooking utensils with gas stoves in primary schools of the State. In compliance, DPI allotted (February 2005) Rs 2.88 crores to 10 DEOs¹² for purchase of gas connections from the public sector gas companies. DPI also issued (January 2005) NITs for purchase of gas stoves and placed supply order (March 2005) for Rs 1.86 crore for supply of 12,500 gas stoves.

The terms of the agreement provided for the supply of gas stoves in two equal lots at block headquarters within 25 and 45 days of acceptance of order respectively failing which penalty was to be imposed. The first lot of gas stoves was supplied (April to June 2005) with a delay of 3 to 35 days and the second lot was supplied with a delay of 15 to 38 days however, no penalty was levied. The sample testing conducted (June-August 2007) by audit in 103 schools of five districts revealed that except for six schools in urban areas,

Gas stoves and cylinders were procured but not put to use resulting in infructuous expenditure of Rs 4.73 crore.

¹⁰ Foodgrain
13.75 lakh x (90-77) per cent x 253 days x 0.001 quintal per child per day = 45,223.75 quintals, i.e., 4,522.37 MT.

¹¹ Central assistance
13.75 lakh x (90-77) per cent x 253 days x Rs1.00 = Rs 452.23 lakh rupees

¹² DEOs :- Raipur, Janjgir, Dhamtari, Kawardha, Mahasamund, Rajnandgaon, Raigarh, Bemetara, Durg, Bilaspur

firewood was being used for cooking. Moreover, DPI also admitted (September 2006) that gas was not being used in many primary schools for cooking purposes. Thus, the expenditure of Rs 4.73 crore (Rs 1.86 crore on gas stoves and Rs 2.87 crore on gas connections/ cylinders/regulators) remained largely infructuous.

3.2.8.4 Enrolment of students

One of the primary objectives of the scheme was to improve enrolment at the primary stage to boost the national objective of universalisation of primary education.

The year wise enrolment of students in the primary schools/centres along with the corresponding figures available under SSA are given in the table below:-

Table: Enrolment of students as on 30th September

(Number in lakh)

Year	Enrolment as per MDM ¹³ Scheme	Percentage of increase (+)/ decrease (-) over previous year	Enrolment as per record of SSA ¹⁴	Total eligible children in (6-11 Age group) as per SSA	Difference in enrolment between MDM and SSA figure
1	2	3	4	5	6 (2-4)
2002-03	28.29	N.A.	N.A.	N.A.	N.A.
2003-04	27.83	(-) 1.62	28.71	29.74	(-) 0.88
2004-05	28.39	(+) 2.01	27.13	31.86	(+) 1.26
2005-06	28.89	(+) 1.76	27.63	29.03	(+) 1.26
2006-07	31.05	(+) 7.48	29.64	30.31	(+) 1.41

The enrolment figures for three years 2004-07 were shown to be higher than SSA, which was not possible as SSA, also included private unaided schools.

The enrolment was shown to be increasing in 2004-05 but as per SSA records, it was decreasing during this year. During the year 2006-07 the enrolment was shown to be even more than the total number of eligible children in the age group shown in SSA records. District wise enrolment figures for MDM were not available either with the CTD or DPI and compiled enrolment data was not available in two test-checked districts. In response to audit query DPI and CTD and ACTD of two test checked districts called for (June 2007) enrolment data from subordinate offices. In the absence of properly compiled data and variation with SSA, the reliability of enrolment figures could not be verified in audit. The compilation of enrolment figures collected by audit (June to July 2007) from attendance registers of 123 sample schools in six test checked districts revealed that in 56¹⁵ schools, the enrolment decreased in the year 2006-07 with reference to the year 2005-06. The compilation is shown below:

¹³ Enrolment of students only in Government, Local bodies, Government Aided, EGS/AIE.

¹⁴ Enrolment of students in Government, Local Bodies, Government Aided, Private unaided schools under Sarwa Shiksha Abhiyan (SSA).

¹⁵ Raipur-10, Jagdalpur-13, Janjgir-06, Korba-08, Dhamtari-09 & Kawardha-10.

Enrolment in sample schools

Name of the District	No. of sample schools	Enrolment 2002-03	Enrolment 2005-06	Enrolment 2006-07	Increase(+)/Decrease(-) w.r.t 2002-03	Increase(+)/Decrease(-) w.r.t 2005-06	Percentage of increase and decrease w.r.t.	
							2002-03	2005-06
Raipur	20	3,773	3,633	3,518	-255	-115	-6.75	-3.16
Jagdalpur	20	1,422	1,401	1,392	-30	-09	-2.10	-0.64
Jangir	20	2,866	2,903	2,947	+81	+44	2.82	1.51
Korba	20	2,676	2,844	2,777	+101	-67	3.77	-2.36
Dhamtari	23	3,125	3,195	3,120	-05	-75	-0.16	-2.34
Kawardha	20	1,783	1,832	1,913	+130	+81	7.29	4.42
Total	123	15,645	15,808	15,667	+22	-141	0.14	-0.89

Increase in enrolment reported by the State Government was not substantiated in audit.

Hence, increase (9.76 per cent) in enrolment of the State in 2006-07 over the year 2002-03 and (7.48 per cent) over the year 2005-06 shown under MDM was not corroborated by the trend in the randomly selected school records. Thus, it was not verified that the objective of improving enrolment was achieved.

The Government replied (November 2007) that the enrolment figures for last four years 2003-07 were in increasing trend but not higher than SSA, because SSA figures included enrolment of unaided schools, whereas school education included the enrolment of non-aided schools for statistics but not for MDM programme.

The nodal department did not furnish figures of enrolment to audit during the course of audit. However, the figures furnished in the reply of the Government differ from the figures on the basis of which the GOI allocated foodgrains and SSA figures quoted in the reply also differ from the data furnished to audit by SSA. Besides, the Government accepted that enrolment figures were not consolidated for the state at DPI and CTD level. The Government contention of increase in enrolment from year to year cannot be authenticated in the light of these discrepancies. Besides, the Government accepted that enrolment figures were not compiled at DPI and CTD level.

3.2.8.5 Infrastructure

Provision of essential infrastructure is a major input of MDM programme. It includes kitchen-cum-store, adequate water supply for cooking, drinking and washing, cooking devices (stove, chullah etc.), containers for storage of foodgrains and other ingredients and utensils for cooking and serving.

Based on inspection and information collected by the audit in 123 sample schools in the six test checked districts, the status of infrastructure was as under :

Availability of infrastructure

Sl. No.	District	Schools inspected	Kitchen – Cum-Store (Pucca)	Clean drinking water	Adequate cooking devices
1	Raipur	20	04	15	14
2	Jagdalpur	20	04	13	14
3	Janjgir	20	09	15	14
4	Korba	20	10	15	16
5	Dhamtari	23	18	14	12
6	Kawardha	20	14	17	17
	Total	123	59	89	87
	Percentage	100	48	72	71

Infrastructural facilities were lacking in schools.

Thus, pucca kitchen cum store was available in 48 *per cent* schools in test checked districts. Other items of basic infrastructure were not available in all schools. Non-availability of infrastructure may have impact on quality of meals served, classroom activities and hygiene.

The Government did not offer any specific comment on non-availability of kitchen sheds. As regards other basic infrastructure the Government cited that no report had been received as to non-availability of cooking devices foodgrains containers etc. Drinking water facilities were stated to be available in the primary schools. Reply is not tenable in view of the audit findings collected from a random sample of schools. It is imperative on the part of the Government to assess the actual position of kitchen sheds, drinking water, cooking devices and take appropriate remedial measures.

3.2.8.6 Enrolment, attendance and retention of students of disadvantaged sections

The Scheme (revised in 2004) has as one of its objectives boosting universalisation of primary education by improving enrolment, attendance, retention and learning levels of children, especially those belonging to disadvantaged sections but it neither defined nor stipulated any norms for identification of poor/disadvantaged sections.

The State Government did not formulate any norm for identifying poor and disadvantaged children and neither did it lay any procedures for special attention to these sections under the scheme. Out of 123 schools selected in six test checked districts no group of children had been identified as disadvantaged group.

The Government intimated (October 2007) that it would create the requisite database.

3.2.8.7 Quality of foodgrains

The State Government, Panchyat and Rural development Department issued (April 2004) instructions that sample of foodgrains (rice) received from the FPS was to be kept with the date of receipt at school so that in case of any complaint of supply of poor quality of foodgrains, the same could be investigated by the concerned department and NAN.

Directorate of Food, Civil Supplies and Consumer Protection, Chhattisgarh, Raipur issued (April 2004) instructions to keep sample of foodgrains (rice) received in a month for making available for checking during the inspection by concerned officers.

Audit scrutiny of records of 123 sample schools, however, revealed that samples of rice were not being kept in schools.

The Government stated (November 2007) that instructions have been issued to the all the field officers and headmasters to keep samples of foodgrains in future for the entire year.

3.2.8.8 Interruption of cooked meal

Information collected from 123 sample schools in six districts revealed that cooked mid day meal was not served to children in 30 schools (24 *per cent*)

Disadvantaged sections were neither defined nor given any special attention.

Sample of rice for quality check was not kept in schools.

for a period of one month and above at a time during the period 2004-05 to 2006-07. District-wise break up of schools is as follows:

(Figures in numbers)

Interruption were noticed in providing Mid-day-meal.

Sl. No.	Name of District	Schools Inspected	Schools where cooked meal not served	Percentage
1.	Raipur	20	03	15
2.	Jagdulpur	20	05	25
3.	Janjgir	20	12	60
4.	Korba	20	05	25
5.	Dhamtari	23	*	--
6.	Kawardha	20	5	25
	Total	123	30	24

* No interruption was noticed in Dhamtari district.

It was seen from the information furnished by BEOs/CEOs of JPs, Nawagarh, Dabhra, Pamgarh, Jaijaipur, Akaltara & Bamnidih blocks in Janjgir district that in 157 schools a total of 16,791 enrolled children were not served cooked meals for a period of 2 to 12 months at a time during the year 2004-05 and 2005-06 despite allocation of foodgrains and funds to the districts/blocks.

The Government stated (November 2007) that no district reported interruption of cooked hot meal any time during 2004-05 to 2006-07. DEO, Janjgir and Champa certified that during 2004-05 and 2005-06 no interruption of MDM had occurred anywhere in the area. The reply is not acceptable. The data on interruptions was collected by audit at block/school level and the reply showed that this information had not even reached the DEO.

3.2.9 Monitoring & supervision

3.2.9.1 Non- submission of action plan for MME

The scheme provides for grant of Central Assistance for Management, Monitoring and Evaluation (MME) at the rate of not less than 0.9 per cent of the total assistance on supply of free foodgrains, actual cost on transportation of foodgrain and cooking cost for the year 2004 and at the rate of not less than 1.8 per cent of such total assistance from 2005-06. Central Assistance for MME was due with effect from October 2004. The allocation to the state under this component is contingent upon submission of detailed and separate Annual work Plan for approval by the National Steering cum Monitoring Committee (NSCM).

The assistance was to be used for (a) school level expenses, (b) management, supervision, training and internal monitoring, (c) external monitoring and evaluation.

Government of Chhattisgarh is yet to send the action plan to avail of the Central Assistance as of March 2007. However, GOI released Rs 127.77 lakh and Rs 98.67 lakh in 2005-06 and 2006-07 respectively as Central Assistance for MME which remained unutilized as of June 2007. As a result important items such as weighing machines, height recorder, replacement/repair/maintenance of cooking devices, utensils for schools etc. could not be provided for better implementation and monitoring of the programme at all levels.

The Government cited (November 2007) that the Central Assistance of MME could not be utilised in prescribed period due to delayed submission of work

Central Assistance for MME of Rs 2.26 crore remained unutilised due to non submission of action plan.

plan for the same and the unspent balance would be utilised as per action plan 2007-08.

3.2.9.2 Formation of the Steering-cum-Monitoring Committees

The scheme guidelines envisage establishment of Steering-cum-Monitoring Committees (SMCs) to oversee the management and monitoring of the programme. Such committees are to be set up at four levels viz. National, State, District and Block levels. In their respective jurisdiction, SMCs were generally to guide the various implementation agencies, assess the impact of the programme and take remedial measures where necessary and mobilize community support. The scheme guidelines also prescribed suggested composition of the SMCs.

Proper representation was not given in SMCs.

The State Government constituted (January 2002) State level SMC and issued order for constitution of SMC at district level. However, composition of State SMC and district SMC did not have representatives as suggested by the scheme guidelines. All the members of state SMC were from State Government departments. No representatives from Food and Nutrition Board of the GOI was included and four persons at least two women with significant contribution/achievements in the area of nutrition/child welfare/community/womens/mobilization/school education/ child health and of at least one teacher were not nominated as the member of SMCs.

The Government accepted (November 2007) that while monitoring and evaluation was being carried out regularly it was not done to the full extent due to over burden. The reply did not indicate why monitoring committees were not formed as per scheme's guidelines.

3.2.9.3 Inspection by Officers

The scheme guidelines also stipulate fixation of monthly targets for inspection of meals served in schools in respect of officers of district, block and other officers belonging to departments like Revenue/ General Administration, Rural Development/ Urban Administration, School Education, Women & Child Development, Health and Family Welfare, Food and Civil supplies etc. Further, inspection targets should be so fixed and inspections should be so coordinated that, as far as possible 25 *per cent* of the Primary Schools and EGS/AIE centres is inspected in every quarter, and all Primary Schools are inspected at least once every year.

The State Government issued (August 2003) order for inspection of schools and prescribed proforma for reporting. However, no targets for inspections of the meals served in schools had been fixed by the State Government till October 2007.

Scrutiny in the 123 schools in six districts showed inadequate inspections by the officers of the districts / blocks etc. as detailed below:

Schools not inspected even once during last three years (2004-05 to 2006-07)

Ineffective and inadequate inspection of the programme in schools.

Name of the District	Sample Schools	No. of schools where no inspection conducted	(Percentage of schools not inspected)
Raipur	20	08	40
Jagdalpur	20	17	85
Janjgir	20	06	30
Korba	20	06	30
Dhamtari	23	09	39
Kawardha	20	18	90
Total	123	64	52

GOCG (December 2005) issued an order requesting the mothers of students to monitor the programme in schools. While there were no records to ascertain whether mothers had monitored cooking and serving of meals in schools it was observed that in Jagdalpur district self help groups (SHGs) operated by local village women were executing the scheme and the mothers were getting involved in the scheme. In other test checked districts the scheme had been executed through GPs.

The Government stated (November 2007) that instructions have been issued to all for regular inspection of the schemes and involvement of parents in the process. The reply was an acceptance that inspection was not conducted as per guidelines of the schemes.

3.2.10 Impact evaluation**3.2.10.1 Retention**

Data on retention/drop out of children was neither captured and compiled by DPI and CTD at the state level nor by the DEOs and ACTDs at the district level and therefore, it was not possible to verify whether the scheme had contributed to retention in schools. However, the details of students studying in classes from I to V in all schools of the state showed progressive reduction in number of students for three years in every successive classes tabulated below.

(Number in lakh)

Retention declined during 2003-06.

Year	Classes					
	I	II	III	IV	V	VI
2003-04	8.14	7.02	6.67	6.26	5.87	4.37
2004-05	8.19	7.00	6.78	6.26	5.82	4.54
2005-06	8.20	7.01	6.79	6.62	6.23	4.64
Average Enrolment	8.17	7.01	6.74	6.38	5.97	4.51

Thus, there was decrease in every higher classes in all the years 2003-04 to 2005-06 which was an indicative of low retention and drop outs.

The Government contended that dropouts in primary schools are caused due to multifarious reasons like seasonal migration, lack of motivation among parents and lack of better infrastructures.

3.2.10.2 Nutritional status

One of the main objectives of the scheme was to improve the nutritional status of children studying in primary classes (class I-V) in Government primary schools and EGS/AIE centres. The revised guidelines of the scheme 2004 also provided for nutritional support to students of primary stage in drought-affected areas during summer vacation. To achieve the said objective the

scheme prescribed a cooked meal with a nutritional content revised from time to time, be served on each school day to a child as under:

Nutritional content	Norm as per NP NSPE 2004 guidelines	Revised norms as per NP NSPE 2006 guidelines
Calories	300	450
Proteins	8-12 grams	12 grams
Micronutrients supplementation	Not prescribed	i) Six monthly dose for de-worming and vitamin-A ii) Weekly Iron and Folic Acid, Zinc iii) Other appropriate supplementation depending on common deficiencies.

As per para 3.3 of the scheme guidelines 2004 it was the responsibility of the respective State Government to ensure that wholesome, cooked mid day meal of satisfactory quality and nutritional value prescribed was served.

The various combinations and quantities of affordable food items within the prescribed amount (upto Rs two per student day), which should provide the desired level of nutritional value was not prescribed. Therefore, it was not possible to assess the nutritional value actually being given to the children.

The Government replied that though the desired level of nutritional value has not been prescribed and effort is to provide wholesome meal to the students. The reply did not indicate that any effort had been made to measure the nutritional value.

The State Government, Department of Panchayat and Rural Development issued orders (March 2005) to organize at least one medical check up of children in a year with the help of the health department and the menu should be varied accordingly. The order also prescribed items to be served in daily meal including iron and folic acid tablets, vitamin 'A' with the help of Health Department to the children. As per detailed proceedings of State Steering-cum-Monitoring Committee (SMC) held on December 2004, Secretary, School Education Department intimated to the committee that there was provision for providing vitamin 'A' and iron tablet to the children under the Health Department Scheme. Hence, there was no need for incurring expenditure from MDM scheme. However, DPI, Raipur issued instructions (June 2006) to provide iron tablets daily and de-worming and vitamin tablets six monthly to the children from the funds provided for cooking cost under MDM scheme.

Information obtained from 123 sample schools in urban as well as rural areas in all the six test checked districts revealed that in 14¹⁶ schools (11 per cent) medical checkup was not conducted during the last two years While it was stated that health check was done in other schools, no records of these checkups were produced to audit and the health status of the children could not be ascertained. It was seen that in 46¹⁷ schools (37 per cent) micronutrients were not supplied to the children. Besides, wherever supplied, it was not on a regular basis.

Nutritional status of children remained unassessed in the absence of prescribed nutritional value of the meal served.

Health check up was not conducted in 11 per cent schools and micronutrients were not supplied in 37 per cent schools .

¹⁶ Health Check Up:- Raipur-4, Jagdalpur-3, Janjgir-1, Korba-1, Dhamtari-1 and Kawardha-4

¹⁷ Micronutrients:- Raipur-11, Jagdalpur-11, Janjgir-7, Korba-6, Dhamtari-3 and Kawardha-8

The Government claimed in reply that health check up, de-worming and distribution of Vitamin-A, iron & folic acid were done on regular basis as per norms. This was not supported by the records available in the test checked schools and was not verified.

3.2.11 Conclusion

Implementation of mid day meal scheme in the state suffered from various deficiencies. There were savings against budget provision, diversion of funds and the department was not able to utilise the Central Assistance under Management, Monitoring and Evaluation. The nodal department could not furnish the amount of rice utilised under the scheme during last five years and there was discrepancy in the figures of lifting of rice between NAN and the nodal department. AAR claimed by the department appeared to be inflated. There was discrepancy in enrolment figures. There was no mechanism to identify disadvantaged children. The quality of rice supplied could not be ensured in the absence of regular inspections and non-availability of samples of rice in schools. The schools had inadequate infrastructure.

3.2.12 Recommendations

- Funds provided for cooking cost should invariably be utilised for cooking purposes only and should not be diverted for other purposes.
- The nodal department should ensure that figures of enrolment and attendance flow from the GP levels and it should be compiled at the Directorate level so that allocation of foodgrains is done in a realistic way.
- In order to obviate the risk of pilferage of rice the nodal department may collect actual figures of utilisation and monitor it against the attendance figures.
- Immediate measures should be taken for ensuring quality, regularity and effective monitoring of the scheme.
- Performance indicators of impact evaluation of the scheme should be fixed and impact should be assessed from time to time.

The findings were discussed with the Government (on 17th September 2007) and the recommendations were accepted. Based on the discussions, the Government prepared a plan (October 2007) for monitoring and database creation and its management.

PUBLIC HEALTH ENGINEERING DEPARTMENT

3.3 Accelerated Rural Water Supply Programme

Highlights

The Government of India (GOI) introduced (1972-73) Accelerated Rural Water Supply Programme (ARWSP) to provide safe and potable drinking water at 40 litres per capita per day (lpcd) to all rural habitations. The GOI provided Rs 239.63 crore during 2002-07, of which State Government could not utilize Rs 58.78 crore. During new survey (2003), 17,968 new habitations emerged out of which 14,471 habitations were uncovered and 3,507 habitations remained for coverage as of February 2007. Allocation by the State for operation and maintenance, source sustainability and quality remained low. There were instances of incorrect reporting of figures. Some important findings of the performance audit are given below :

State was unable to utilize 5.54 per cent to 60.68 per cent of Central funds during the last five years. It could utilize only Rs 47.95 lakh (2.68 per cent) out of Rs 17.90 crore provided by the GOI on the sub mission on quality.

(Paragraph 3.3.6)

Government could not utilize central funds amounting Rs 61.34 lakh provided for computerization project and failed to obtain subsequent release of Rs 1.43 crore.

(Paragraph 3.3.6)

Remedial measures were not taken in 3,090 quality affected habitations with excess iron in 2002-03 and such habitations increased to 4,478 in 2006.

(Paragraph 3.3.14.1)

Field testing kits were not procured till March 2007 inspite of GOI releases of Rs 59.77 lakh

(Paragraph 3.3.14.2)

Figures on coverage by drinking water facilities in rural school were not reliable as against 2,600 uncovered schools in 2006-07, achievement was reported as 3,301 to the GOI.

(Paragraph 3.3.15)

3.3.1 Introduction

GOI introduced ARWSP in 1972-1973 with 100 per cent grants-in-aid to the states. It was discontinued after introduction of Minimum Needs Programme

(MNP) during fifth five year plan in 1974-75 and was revived in 1977-1978. The programme was given a mission approach¹ under National Drinking Water Mission introduced in 1986. A Comprehensive Action Plan was launched in 1999 under which Not Covered (NC) and Partially Covered (PC) habitations were identified.

Programme Objectives

- To ensure coverage of all rural habitations especially to reach the un-reached with access to safe drinking water.
- To ensure sustainability of the system and sources.
- To preserve quality of water by institutionalizing water quality monitoring and surveillance through a catchment area approach.

Coverage Norms

- 40 Litres per capita per day (lpcd) of drinking water for human beings and,
- One hand pump or stand post for every 250 persons

Criteria for identification of problem habitations

(i) NC/NSS (No Safe Source) habitation

- Drinking water source/point does not exist within 1.6 km of habitations in plains and 100 metres elevation in hilly areas;
- Habitations having a water source but are affected with quality problems and,
- Habitations where quantum of availability of safe water from any source is not enough to meet drinking and cooking needs (less than eight lpcd).

(ii) Partial Covered (PC) Habitations- which have a safe drinking water source (either private or public) within 1.6 km in plains and 100 metres in hilly areas but capacity of the system ranges between 10 lpcd to 40 lpcd.

(iii) Fully Covered (FC) Habitations- all the remaining habitations

Under the programme priority was to be accorded for coverage of no safe source habitations. Among them priority was to be given to those inhabited exclusively by SC/ST, quality affected habitations with acute toxicity, upgradation of source level of safe source habitations having less than 40 lpcd water to the level of 40 lpcd and coverage of schools and *Anganwadis* without safe drinking water source.

¹ *The mission approach implied the provision of low cost solutions to identify problems associated with the supply of safe drinking water through the application of scientific and technological inputs.*

Under ARWSP, funds for coverage of NC/PC was to be allocated in the ratio of 2:1.

3.3.2 Organisational Structure

In Chhattisgarh the Public Health Engineering Department (PHED), headed by the Engineer-in-Chief is the nodal agency executing the programme. Under him there are two zones each headed by CE with their headquarters at Raipur and Bilaspur. There is a mechanical formation headed by the C.E. at Raipur. There are 25 Divisions (16 Civil, five Mechanical, three Project and one Water recharge) in the state.

3.3.3 Audit Objectives

The main objective of the performance audit were to-

- ascertain whether planning for implementation of ARWSP was effective;
- assess the adequacy and effectiveness of financial control;
- assess whether schemes were properly prioritized and efficiently executed;
- assess whether priority was accorded to Operation and Maintenance (O & M) of existing water supply sources, and
- ascertain the adequacy and effectiveness of the mechanism to monitor water quality and sustainability.

3.3.4 Scope of Audit

Information was collected from the E-in-C office and records relating to the scheme for the period 2002-03 to 2006-07 were scrutinized in seven² out of 25 divisions selected through random sampling.

3.3.5 Audit Criteria

The criteria used for the performance audit were taken from the rules, regulations and provisions in :

- (i) Guidelines for Implementation of Rural Water Supply Programme (August 2000);
- (ii) Guidelines on *Swajaldhara* (June 2003);
- (iii) Guidelines on Survey of Drinking Water Supply Status in Rural Habitations (February 2003);
- (iv) Guidelines for National Rural Drinking Water Quality Monitoring and Surveillance Programme (January 2006);
- (v) National Water Policy (April 2002); and
- (vi) Draft Project Report and Project Implementation Plan for individual schemes.

² (1) EE,PHE Dn Raipur (2) EE, PHE (E/M) DN, Raipur (3) EE,PHE Dn, Jagdalpur (4) EE,PHE (E/M) Dn, Jagdalpur (5) EE,PHE Dn, Ambikapur (6) EE,PHE(E/M) Dn, Ambikapur (7) EE,PHE Dn,Korba.

Audit Findings

3.3.6 Financial Management

Central assistance is provided under ARWSP and the State Government makes a matching provision under the State Sector MNP. The position of release of Central share, State share and expenditure during the last five years under ARWSP is shown below:-

(Rupees in lakh)

Year	Provision			Expenditure	Overall Savings percentage	Savings in Central Share	Percentage saving in Central share
	Central Share	State Share	Total				
2002-03	4,126.01	6,550.00	10,676.01	9,009.81	15.6	1,537.02	37.25
2003-04	4,168.00	7,680.00	11,848.00	11,128.43	6.07	649.20	15.58
2004-05	4,200.00	7,905.00	12,105.00	8,027.72	34.23	2,548.36	60.68
2005-06	4,169.00	10,075.00	14,244.00	12,536.36	11.99	738.56	17.72
2006-07	7,300.15	11,700.00	19,000.15	17,991.21	5.32	404.70	5.54
Total	23,963.16	43,910.00	67,873.16	58,693.53		5,877.84	

Source : Detailed Appropriation Accounts.

From the above it can be seen that the State was unable to utilize 5.54 to 60.68 per cent of Central funds during the last five years. The savings were highest during the year 2004-05. Consequently, the GOI imposed a cut of Rs 17.21 crore under ARWSP to the State Government during December 2006 which was later released in February 2007.

State was unable to utilize 5.54 to 60.68 per cent of the Central funds.

The component-wise break up of allocation of funds by the State Government for the State as a whole as well as the four test checked districts³ under ARWSP during the last five years is given below:

(Rupees in lakh)

	ARWSP normal	O & M	Percentage	Sustainability	percentage	Quality	Total
State	60,965.07	4,434.71	6.53	2,388.38	3.51	85.00	67,873.16
Total (4 districts)	16,420.79	1,435.134	7.91	263.60	1.45	15.00	18,134.524
Raipur	5,986.44	534.478	7.91	229.00	3.39	--	6,749.918
Jagdalpur	3,479.08	333.081	8.65	20.60	0.53	15.00	3,847.761
Korba	2,460.45	152.355	5.82	3.00	0.11	--	2,615.805
Ambikapur	4,494.82	415.22	8.43	11.00	0.22	--	4,921.04

As per Clause 2.7 of ARWSP guidelines, up to 15 per cent of funds released under ARWSP may be utilized for operation and maintenance (O&M) of assets created. It is seen from the above that only 6.53 per cent of funds were allocated for O&M of assets. Such low priority allocation could not address effectively the problem of slip back of habitations from FC to PC and NC. As per new survey (2003) number of FC habitations decreased from 53,566 to 45,892. E-in-C replied (July 2007) this could be due to choking and filling. Such problems could have been reduced by augmenting allocations for O&M.

³ Raipur, Jagdalpur, Ambikapur, Korba

Quality affected 9,922 habitations were not prioritized.

As per ARWSP guidelines, 15 per cent of annual allocation was to be utilized on sub mission on water quality for addressing quality issues like fluorosis, arsenic, brackishness, iron etc. As on August 2006, there were 9,922 water quality affected habitations out of 11,793 NC in the State. GOI released Rs 17.90 crore during the last four years on the sub mission on quality, of which only Rs 85 lakh was allocated in the State budget of 2005-06. The expenditure was Rs 47.95 lakh, i.e., 2.68 per cent of the earmarked amount.

Delay in release of funds.

As per ARWSP guidelines, five per cent of the ARWSP funds were to be utilized for enhancing the sustainability of ground water sources. It was seen that the funds allocation by the state Government was only 3.51 per cent and actual expenditure only 2.69 per cent of the total provisions. This was inadequate to address the depletion of ground water sources.

Rs 61.34 lakh released by GOI for computerization were kept under deposit and Government failed to obtain subsequent instalment of Rs 1.43 crore.

As per ARWSP guidelines, Central funds are to be released along with the matching MNP share to the executing agencies within 15 days of receipt. It was, however, seen that out of 24 releases 12 were delayed ranging from 44 days to 321 days (*Appendix 3.8*). It would have its consequent effects on timely utilization of funds by the divisions.

Government of India sanctioned (February 2004) Rs 2.04 crore for computerization project under Rajiv Gandhi National Drinking Water Mission (RGNDWM) under revised MIS guidelines. First installment of Rs 61.34 lakh (30 per cent) was released on 27 February 2004, second and third installments (35 per cent each) were to be released after utilization certificate indicating 60 per cent utilization of first installment.

The Government could not utilize the funds and kept the amount under deposits on 31 March 2004. It was noticed that till December 2006 the amount could not be utilized. Thus, the Government failed to obtain further release of Rs 1.43 crore.

It was observed that a complete inventory of drinking water sources created under different schemes, date of start and completion, cost, agency for O&M etc. was not maintained at the district level as required under ARWSP guidelines.

3.3.7 Annual Action Plan

Annual Action Plans were not prepared as per ARWSP guidelines.

Annual Action Plans (AAP) provide a definite direction to the program and also enable monitoring of physical and financial progress vis-à-vis the targets and priorities. Under ARWSP, the State Government was to prepare AAP six months before the commencement of the financial year on the basis of the shelf of schemes, the likely size of the allocations under MNP, ARWSP and likely carry over of funds. These AAPs are to be submitted to the RGNDWM by the beginning of October every year.

Para-2.10 of ARWSP guidelines stipulates that AAP was to give priority to incomplete works, targets for coverage of NC/PC habitations with names, steps taken to function in a mission mode, activities to be taken up under sub

mission, proper operation and maintenance, involvement of Panchayati Raj Institutions etc.

It was, however, observed that annual plans were not prepared as per ARWSP guidelines for the last five years. These plans only provided information on the proposed outlay and physical targets/achievements for coverage of habitations.

Some of the deficiencies noticed in the AAP are detailed below;

- (i) The Annual Plans indicated number of NC/ PC habitations for targeted coverage during the year but habitation wise details including village, block and district, serial number of survey list were not given.
- (ii) Sustainability and quality issues were not addressed.
- (iii) Dual Water Supply Policy for rural populations facing acute water quality problem was not adopted in the Annual Plans.
- (iv) No allocation was proposed for O&M separately in the outlay
- (v) Separate target for SC/ ST population were provided in the five year plan 2002-2007, but these were not reflected in the annual plans.

The details of targets for coverage of NC/PC habitations indicated in the annual plans and targets/ achievement reported to the GOI is as under:-

Year	Targets as per Annual Plan	Targets and achievements reported to GOI	
		Targets	Achievements
2002-03	4,587	2,823	2,196
2003-04	5,647	1,241	1,061
2004-05	8,786	4,500	3,797
2005-06	8,854	11,016	9,338
2006-07	10,182	10,000	8,113 (upto 2/07)
Total	38,056	29,580	24,505

It would be seen that there was no correlation in the Annual plans and actual execution by the Department.

When pointed out in audit, the E-in-C did not furnish specific reply to the points raised in audit and furnished a copy of the five year plan for the year 2002-07. This indicated that while five year plan was available, the Annual Action Plans as envisaged in the ARWSP guidelines had not been prepared.

3.3.8 Survey

Survey was delayed for six months.

GOI directed (February 2003) that a survey should be conducted to ascertain the exact position of the status of drinking water supply in rural habitations and to collect reliable information on the water sources tested for quality problems. The results of this survey were to form the basis for developing future strategies under ARWSP. The survey was conducted in the state between March and October 2003 by the department and the survey report was submitted to the GOI in October 2003.

The status of NC, PC and FC habitations as per the new survey in 2003 and as per the figures with the department as on April 2003 are given below in the table :-

Category	Information as on April 2003	As per new survey (conducted between March and September 2003)	Difference
NC	46	14,471	14,425
PC	1,195	12,412	11,217
FC	53,566	45,892	(-)7,674
Total	54,807	72,775	17,968

(The figures of habitations of new survey (2003) were adopted in the year 2004-05)

Slip back of 7,674 fully covered habitation was not analyzed

It is seen from the above that there was phenomenal increase in total number of habitations and NC & PC habitations in the new survey. While the number of fully covered habitations decreased from 53,566 to 45,892, this implied that there was a slip back of 7,674 fully covered habitations.

The E-in-C, PHED replied (July 2007) that the slip back was due to (i) sources become dry/quality affected and out of service due to choking and filling (ii) some tribes periodically move from one place to another place. The reply gave generalised reasons but there was nothing on record to show that the large number of slip backs had been analysed to identify how many had slipped into PC and how many into NC.

3.3.9 Selection of schemes

The position of targets and achievements for coverage of NC and PC habitations is given in the table below

Year wise status of habitations	Habitations				Not covered habitations			Partially covered habitations		
	Total	FC	PC	NC	Target	Achieve-ment	Per cent	Target	Achieve-ment	Per cent
1 April 2002	54,818	51,995	2,419	404	404	347	86	2,419	1,224	51
1 April 2003	54,818	53,566	1,195	57	46	43	93.5	1,195	969	81
1 April 2004	72,775 (New Survey 2003)	45,892	12,412	14,471	3,000	2,582 ⁴ (96-NC to PC)	86	1,500	1,119	75
1 April 2005	72,775	49,593	11,389	11,793	6,150	4011 (991-NC to PC)	65	4,866	3,002	62
1 April 2006	72,775	56,606	9,378	6,791	4,200	3,284	78	5,800	4,794	83

There was a shortfall of 6.5 to 35 per cent from 2002-03 to 2006-07 in the coverage of NC habitations while coverage of PC habitations registered a shortfall of 17 to 49 per cent during this period. As per ARWSP guidelines for allocation of funds, 2:1 ratio between NC/PC was to be provided while choosing number of villages for the scheme. Clause 2.4 of the guidelines provided priority for coverage to no safe source habitations/NC habitations. It was, however, seen from the progress reports of ARWSP sent to Government of India that the target for coverage of NC, PC habitations was fixed in the ratio 1.26:1 during 2005-06 and 0.7:1 for 2006-07. This showed that the selection of schemes was not prioritized as per the ARWSP guidelines and

⁴ Not Covered habitation converted into partially covered habitations.

Selection of NC/PC habitation was not made in 2:1 ratio as provided in ARWSP guidelines.

adequate number of habitations were not being taken up due to excessive coverage of PC habitations. Preparation of detailed AAPs and selection of schemes as per priority outlined in ARWSP guidelines would have enabled reduction in the number of NC habitations by 2,342⁵ in 2006-07. It was also observed that achievement of 2,325 habitations were shown to be covered in the PC to PC category though not targeted during the year 2005-06. Amount spent on this coverage could have been gainfully employed in the coverage of NC habitations or coverage from PC to FC habitations.

It was observed in Raipur district that nine out of 10 test checked piped water supply schemes (involving an expenditure of Rs 1.71 crores) were executed in 2005-06 and 2006-07 in PC habitations. Two habitations having population less than 2,000 were also selected.

Out of 20 test checked piped water supply schemes in Jagdalpur, three schemes were taken up in villages with population less than 2,000. Besides an amount of Rs 1.59 crore was incurred on construction of 317 tube wells during the last 5 years in FC habitations in Jagdalpur. When pointed out in audit the EE stated (June 2007) that those tubewells were drilled in schools/*Aanganbadis/paras* having water supply less than 40 lpcd. Reply was not tenable as these habitations were categorized in FC.

It was observed that the entire 44 test checked schemes were relying on ground water sources and no scheme was taken up for exploitation of surface water sources. It signifies heavy reliance on ground water sources. This coupled with very low allocation of ARWSP funds under sub mission for ensuring source sustainability would further compound the problem of depletion of ground water sources and quality problems.

3.3.10 Execution of schemes

3.3.10.1 Non-adherence to mix design

As per approved mix design the following proportion of water, cement, sand, and aggregates were to be consumed per cubic metre quantity of M-25 and M-30 grade concrete in the construction of Elevated Service Reservoir (ESR)

Grade of concrete	Water	Cement	Sand	Metal
M-25	179.5 litre	413 kg	655 kg	1298 kg
Proportion	0.44	1.00	1.58	3.14
M-30	178 litre	438 kg	555 kg	1217 kg
Proportion	0.40	1.00	1.26	2.77

It was observed in Korba district that during actual execution of ESR Sirli 20,000 kg (400 bags) cement, 30,400 kg (19 cum) sand and 44,160 kg (24 cum) aggregates were consumed in 33.28 cum M-30 and 16.49 cum M-25 grade concrete. No measurements were taken for water.

⁵ Calculation
 Total targets during 2005-06 : 11016-NC:PC- 2:1=7,344:3,672
 Balance NC in 2005-06- 11,793-7,344=4,449
 Balance NC in 2006-07: 6,791-4,449=2,342

This resulted in execution of sub standard work using less cement (1,387 kg) and aggregates (17,746 kg) and more sand (1,129 kg) as given below due to non adherence of mix design for work costing Rs 8.26 lakh.

	Required	Total quantity of concrete in cum	Total requirement in kg	Consumed in kg	Difference in kg
cement					
M-25	413 kg per cum	16.49	6,810	20,000	1,387
M-30	438 kg per cum	33.28	14,577		
Total			21,387	20,000	1,387
Aggregate					
M-25	1,298 kg per cum	16.49	21,404	44,160	17,746
M-30	1,217kg per cum	33.28	40,502		
Total			61,906	44,160	17,746
Sand					
M-25	655 kg per cum	16.49	10,801	30,400	1,129
M-30	555 kg per cum	33.28	18,470		
Total			29,271	30,400	1,129

In other two cases, it was observed that there was excess consumption of cement and sand and less consumption of aggregates.

On being pointed out in audit EE, PHE division, Korba stated (July 2007) that material consumed in works were as per requirement of site conditions. Reply was not acceptable as materials were not utilized as per ratio of mix design to achieve the specific strength of concrete.

3.3.10.2 Extra cost

Specifications in Para 12 and its sub para of USOR (effective from 1 September 2002) of PHED for water supply and sewerage pipe lines provide that the width of trench for laying of pipe line shall not be more than one third of diameter of pipe and not less than 15 cm on either side.

Scrutiny of records relating to Rural Piped Water Supply Scheme ⁶ in Korba district revealed that for laying of 90 mm, 110 mm, and 160 mm diameter pipes the trenches were excavated with 0.60 metre width and 1 metre depth instead of maximum required width of between 39 cm and 46 cm. This resulted in extra cost of Rs 17.07 lakh.

Extra cost of Rs 17.07 lakh due to excess excavation.

EE, PHE division, Korba stated (July 2007) that trenches were excavated as per topographical condition and gradient for flow. Reply was not acceptable as specifications were made after considering all facts and figures.

3.3.10.2 (2) As per approved estimates 5,800 metres of 90 mm diameter, 2,320 metres of 110 mm diameters and 1,365 metres of 140 mm diameter PVC pipes were to be laid for construction of distribution system⁷ in Korba district. However, during actual execution 90 mm PVC pipe was increased to 13,276.60 metre from 5,800 metre and 110 mm dia PVC pipe increased to 5372.80 metre from 2,320 metre and 1,365 metre of 140 mm dia PVC was substituted by 949 metre of 160 mm dia PVC pipe.

⁶ Pondikala, Chhurikala, Polmi, Jawali, Tuman and Chaitma.

⁷ Nonbirra (Pali), Bandhakhar and Nunera rural piped water supply schemes.

This resulted in extra cost of Rs 16.8 lakh due to increase in length of pipe line and rate difference between 140 mm and 160 mm plus 57 per cent above Unified Schedule Of Rates 2002.

E.E., PHE, Korba stated (July 2007) that length of pipe lines increased due to consideration of new demands. Reply was not tenable as estimates were not prepared as per actual requirements.

3.3.10.2 (3) In Korba district for construction of rising main of five RPWSS⁸ 3,650 metre Cast Iron (CI) pipe of 100 mm diameter including all fittings were laid instead of estimated quantities of 1,400 metre. This resulted in extra cost of Rs 21.42 lakh (2,250 m x Rs 680 per metre plus 40 per cent above rates) due to unrealistic estimation.

3.3.10.2. (4) Unified Schedule of Rates (USOR) effective from 2002 in PHED provides rate difference of Rs 102 per metre between DI-K-9 class (Rs 603 per metre) and CI-LA (Rs 501 per metre) class pipes. Scrutiny of records revealed that 27,898 metre DI-K-9 class 100 mm pipes were used in rising mains in Ambikapur for 38 rural piped water supply schemes whereas for construction of 288 number RPWSS in Raipur, Jagdalpur and Korba district 100 mm diameter CI LA class pipes were laid. Execution of DI-K-9 class pipes led to extra cost of Rs 39.84 lakh.

3.3.10.3 Time Over run

Scrutiny of records in the districts revealed that there was delay ranging from four to 13 months in the completion of 11 out of 44 test checked rural piped water supply schemes.

3.3.11 Institutional set up

As per ARWSP guidelines, district level water and sanitation missions had to be constituted. It was however noticed in audit that such missions were not found to have been constituted in Ambikapur and Korba districts. It was stated (June 2007 & July 2007) by the EE, PHE, Raipur and Jagdalpur that district level water and sanitation missions had been set up but no documentary proof was shown in its support.

3.3.12 Sustainability

Over exploitation of ground water leading to its depletion and deterioration in water quality has been a serious issue. Though a Model Bill regulating ground water resources in a scientific manner was circulated by the GOI in 1996 the State Government is yet to pass an Act to regulate and preserve ground water resources. No concrete proposals were formulated in the Annual Action Plan for taking up projects to sustain ground water. As per ARWSP guidelines, five per cent of the allocation were to be utilized for taking up schemes under source sustainability. However, it was seen that against allocation of 3.51 per cent by the department only 2.69 per cent of the funds were utilised during

Low budgetary allocation and non formulation of projects for sustainability is a major cause for slip back of habitations

⁸ Madanpur, Chhurikala, Pondiuprora, Nonbirra (Kartala) and Pali

the last five years from this sub-mission. This low budgetary allocation and non-formulation of projects to take up source sustainability is a major cause for slip back of habitations

It was observed that 1,788⁹ tube wells were drilled in 2002-03 and 691 tube wells were drilled in Raipur during 2003-04. These were reported as sustainability measures in all the four test-checked districts which was incorrect as sustainability was to be ensured through rain water harvesting, artificial recharge etc. and not by drilling tubewells.

In Jagdalpur Rs 20 lakh was allocated during 2005-06 out of which Rs 1.12 lakh was incurred on projects on sustainability and Rs 18.88 lakh remained unutilised. On being pointed out in audit the E.E stated (July 2007) that sufficient steps have been taken to prevent over-exploitation of ground water and seven stop dams were proposed in Bastar to improve ground water. Reply did not explain reasons for unutilized funds.

3.3.13 Operation and maintenance (O & M)

Inadequate allocation and expenditure under operation and maintenance contributed to slip back of habitations

As per Clause 2.7 of ARWSP guidelines, upto 15 per cent of the funds under ARWSP may be utilized for operation and maintenance for assets created. It was seen that 6.53 per cent of the funds were allocated on O & M out of which expenditure was merely 6.5 per cent. Inadequate allocation and expenditure under this component of ARWSP contributed to slip back of habitation.

3.3.14 Water quality

Sub mission projects on water quality are undertaken by the states for providing safe water to the rural habitations facing water quality problems but no action in this regard was initiated.

3.3.14.1 Water testing labs

Water testing labs exist in Jagdalpur, Ambikapur, Korba and the newly constructed district lab at Raipur is being used as a guest house.

No annual targets were fixed by the E-in-C for testing of water samples and the number of samples taken for testing from the existing and the new sources in Jagdalpur, Korba and Ambikapur remained very low.

Quality affected 3,090 habitations with excess iron in Jagdalpur increased to 4,478 habitations due to failure in taking up sub mission project.

As per ARWSP guidelines, 15 per cent of the allocation of ARWSP funds was to be earmarked for taking up sub mission projects to supply safe drinking water to rural habitations facing water quality problems like fluorosis, brackishness and presence of arsenic/iron etc. It was observed in audit that the State Government allocated Rs 85 lakh on this sub-mission (0.13 percentage of ARWSP and MNP allocation). The required institutional set up for testing the quality of water was not set up from the State to the block level as per

⁹ Raipur 879, Jagdalpur 357, Ambikapur 222, Korba 330

guidelines and no IEC activities were taken up to spread awareness about water born diseases and quality of water in the test checked districts. In Jagdalpur district, it was seen that there were 3,090 quality affected habitations with excess iron (above eight parts per million) in 2002-03. The number of such habitations increased to 4,478 in 2006. This slip back would have been avoided by taking up adequate sub-mission projects.

As per ARWSP guidelines, in the coverage of no source habitations, priority was to be given for coverage of quality affected habitations with acute toxicity.

3.3.14.2 Field testing kits

Field testing kits not procured up to March 2007.

Objective of field testing kit is to monitor quality of all drinking water sources at Gram Panchayat (GP) level. According to National Rural Drinking Water Quality and Surveillance Programme, one field test kit shall be provided for each GP. GOI released (February 2006) Rs 59.77 lakh for procuring such kits. It was however, observed that kits were not procured up to March 2007 in Raipur, Jagdalpur and Ambikapur districts while 40 field testing kits purchased during 2006-07 in Korba were yet to be distributed. The E-in-C, PHED stated (August 2007) that the program is taken up in the current financial year to achieve the goal. The reply proves that field testing kits were not procured up to March 2007.

3.3.15 Drinking water in rural schools

The position of number of schools without drinking water facilities, targets for coverage and achievement is given below:

Year	Numbers of schools without drinking water facility	Target	Achievement	Closing balance of Schools without drinking water at end of year	Difference between opening and closing of previous year
2002-03	11,592	1,448	1,137	10,455	N.A.
2003-04	15,356	5,928	4,569	10,787	4,901
2004-05	11,046	4,500	3,511	7,535	259
2005-06	6,596	6,596	3,996	2,600	(-) 939
2006-07	2,600	3,798	3,301	(-)701	No difference

Incorrect reports sent to GOI regarding drinking water in rural schools

The tabulation shows wide variation between the closing balance (CB) of one year and the opening balance (OB) of the subsequent years, except during 2006-07. In the last year, against 2,600 uncovered schools in 2006-07 the achievement was shown as 3,301 which was not possible.

Similarly, test check of records in Ambikapur revealed that the number of schools without drinking water facility were 1,679 in 2004-05, out of which 388 were covered during the year. However the number of uncovered schools was shown to be 99 in 2005-06 and against 68 number of uncovered schools in 2006-07 the achievement during the year was shown as 243. In Korba against 101 uncovered schools during 2006-07 the achievement was shown as 253.

Thus the figures appeared to be inaccurate and exact status of drinking water in schools could not be verified.

3.3.16 Monitoring

Vigilance and Monitoring Committees were to be formed at the State level and district level. It was observed that such committees were not formed at the State level as well as four test checked districts. No evaluation study was carried out on the implementation of the rural water supply programme in the state during the last five years.

It was noticed from the records of PHE (E/M) division, Jagdalpur that during 2002-03 to 2006-07 total targets for drilling of tube wells were 1,725 against which achievement was shown as 1,752 tube wells. The PHE civil Dn. Jagdalpur during consolidation of progress reports, however, changed the targets and achievements as 1,746 and 1,531. Similarly PHE (E/M) division, Ambikapur drilled 266 tubewells during the year 2006-07 and during consolidation of progress report it was changed as 155 by the PHE (Civil) division Ambikapur.

On being pointed out in audit E.E., PHE, Jagdalpur and Korba did not furnish specific reply in regard to reduction in figures.

The figures of achievement reported in progress reports were unreliable.

During the years 2005-06 and 2006-07, 256 dry tube wells (206 in Korba and 50 in Ambikapur) in rural NC/PC area were converted to successful tube wells through hydro fracturing process. Installation of hand pumps and allied civil works were also done. But the successful tube wells were not shown in the progress report during above period.

On being pointed out in audit, EE, PHE division, Korba stated (June 2007) that the targets will be revised, while EE, PHE division, Ambikapur stated that action would be taken.

These cases indicated that the progress was not being reported accurately by these divisions and monitoring of actual situation using progress reports would be difficult.

3.3.17 Rig Management

Out of 48,609 tubewells drilled, 16,504 tube wells were drilled by the departmental machines (mechanical divisions) while 32,105 tubewells were drilled by the civil divisions through contractors. It is observed that the department was not able to fully utilize the departmental rigs as there was a shortfall of 10.8 to 21.17 *per cent* against the targets during 2005-06 and 2006-07.

3.3.18. Swajaldhara

As of March 2007 only 210 swajaldhara schemes could be completed. No scheme was proposed during 2004-07.

Swajaldhara was launched in December 2002. It involved a participatory and demand driven approach and guidelines provided upto 20 *per cent* allocation of funds under ARWSP. It was seen that the allocation of GOI ranged from

0.43 per cent to 6.11 per cent during the last four years. The State Government did not enter into MOU with the GOI as mandated in the guidelines. Neither were the communication and capacity development units set up at the district levels. During the year 2002-03 to 2006-07, 312 schemes were sanctioned in the State out of which 210 schemes have been completed as of March 2007. Out of total available funds of Rs 5.28 crore (GOI-Rs 4.74 crore and Rs 53.99 lakh-community share) for 312 schemes, 33 per cent of the funds remained unutilized as of March 2007. No swajaldhara scheme was proposed during 2004 to 2007.

Test check of records of 83 sanctioned schemes in four¹⁰ districts revealed the following deficiencies:

- In 19 out of 28 schemes in Korba, the community contribution was less than 10 per cent.
- Accounts were not audited by the Chartered Accountants in three out of four districts upto March 2007.
- In three out of four districts (Raipur, Jagdalpur and Korba) the unutilized amount was not returned to GOI upto March 2007 despite instructions in August 2006.
- In Korba, electrification work in 22 out of 24 Piped Water Supply Scheme remained incomplete since 2003-04.
- Water quality test, rain water harvesting and ground water recharge system were not executed in all 83 schemes.

On being pointed out in audit EE, PHE, Ambikapur stated (June 2007) that the accounts would be audited by July 2007 and EE, PHE, Korba stated (June 2007) audit would be done. EE, PHE, Raipur did not furnish specific reply regarding audit.

3.3.19 Conclusion

Implementation of ARWSP in the state suffered from deficiencies. The annual action plans did not prioritize coverage of habitations as per guidelines. There was huge increase in the number of problem habitations in the survey of 2003 and slip back in fully covered habitations. There was savings in the central share of the funds while allocations by the state for O&M, source sustainability and quality remained low. Piped water supply schemes were executed inefficiently and there were instances of extra cost, non adherence to mix design and delays. Field testing kits had not been procured and the monitoring committees had not been formed. There was incorrect reporting of figures by divisions and discrepancies existed in the data furnished to GOI.

¹⁰ Raipur, Jagdalpur, Ambikapur and Korba

3.3.20 Recommendation

- Annual action plans should be prepared in accordance with the scheme guidelines for prioritizing the works efficiently.
- Coverage of NC habitations should be given priority in accordance with scheme guidelines.
- District level targets should be fixed to monitor quality of water and field testing kits be provided to the functionaries.
- Works should be executed as per approved specification so as to avoid cost escalation.

FINANCE DEPARTMENT

3.4 e-KOSH on-line treasury computerisation system

Highlights

With a view to develop a new system of payments, works accounting, deposit accounts, receipts, pension and stamp accounting in treasuries, Government of Chhattisgarh started an on-line computerization system "e-kosh" in two phases and the scheme was implemented from November 2004. Various stages of system development were not adequately documented. DDO allotment checks were getting bypassed due to incorrect categorisation. There were inadequacies in maintenance of DDO, form, budget masters and various security features.

There was no documented IT Policy. Documentation of various stages of system development was also inadequate.

(Paragraph 3.4.6)

Data analysis of four treasuries revealed that 269 contingent bills amounting to Rs 2.13 crore were passed without allotment check resulting from incorrect categorization of bills.

(Paragraph 3.4.7)

Out of 23.32 lakh and 16.17 lakh transactions in Central Server during the year 2005-07, 44,676 and 17,026 had accounting classifications that did not exist in the budget.

(Paragraph 3.4.7)

Budget figures of 2006-07 on the system did not reconcile with budget book in case of 22 grants.

(Paragraph 3.4.8)

Eighteen bills amounting to Rs 1.04 crore were passed on 31 March 2007 without obtaining Finance Department's orders in contravention of the codal provisions.

(Paragraph 3.4.14)

Bills of Rs 42.68 lakh pertaining to a financial year 2005-06 were passed after close of that financial year.

(Paragraph 3.4.15)

3.4.1 Introduction

TRACIS¹ software developed by (NIC) was being used by treasuries in undivided Madhya Pradesh. After State formation and keeping in view the advancement of technologies and study (May 2003) of similar treasury computerisation project '*Khajane*' of Karnataka State, the Government, decided (December 2003) to develop a new system for payments, works accounting, deposit accounts, receipts, pension and stamp accounting. The project was named as '*e-Kosh*' and developed on client server structure using VSAT² based VPN³ technology with common SAN⁴. It was split into two phases, in pilot phase (August 2004) the Data Management Centre (DMC) at the Directorate, office of Joint Director, Pension (JDP) at Raipur, treasuries at Korba, Raipur City and Raipur, their sub-treasuries (eight) and Disaster Recovery Centre (DRC) at Bilaspur were covered and in the second phase remaining treasuries (14), sub-treasuries (38) and two JDP offices were covered.

A Memorandum of Understanding (MoU) was executed (November 2004) between the Director, Treasury Accounts & Pension (DTAP), NIC and NICS⁵ which provided that, NICS⁵ was to facilitate procurement of equipment, hardware and software support for implementation of project through empanelled vendor and NIC was to develop the software for the systems of treasuries. Pilot phase was implemented in November 2004 and the project was rolled out in all 17 treasuries, 46 sub-treasuries and three JDP offices in April 2005.

An amount of Rs 12.66 crore was received from the Centre (Rs 1.55 crore) and State Government (Rs 11.11 crore) during the period 2000-01 to 2006-07 for implementation of *e-kosh* project, out of which Rs 9.67 crore was spent.

3.4.2 Project objectives

The main objectives of the project were to ensure:

- Faster dissemination of financial data at all levels, streamline and control the processing, drawal of funds and passing of bills strictly in consonance with sanctioned budget;
- Automation in calculation of pension, gratuity, commutation and their respective orders with monthly reports to JDP and Directorate;
- Maintenance and updation of deposit accounts of various departments by respective treasuries;
- Proper inventory control and computerize activities of Strong Room and Stamp Accounting;

¹ Treasury Accounting Information System

² Very Small Aperture Terminal

³ Virtual Private Network

⁴ Storage Area Network consisting capacity of 500GB to one terabyte

⁵ National Informatic Centre Services Inc.

- Periodic submission of accounts by sub treasuries to respective district treasury and district treasuries to the State Government and the Accountant General Office; and
- Instant and updated daily, weekly, monthly, quarterly, annual reports through computerised system.

3.4.3 Organisational set-up

The Directorate of treasuries is under the administrative control of Finance department headed by Director Treasury Accounts and Pension (DTAP) and assisted by Additional Director and Deputy Director. The Assistant Director is the State level implementing authority and the three divisional JDPs at Raipur, Bilaspur and Jagdalpur are responsible for pension and Letter of Credit (LoC) related works whereas DTAP is responsible for receipt and payment of money on behalf of Government and maintaining accounts relating to these transactions in treasuries and sub-treasuries.

3.4.4 Audit objectives

The audit objectives were to evaluate how the various controls in the system were ensuring the mapping of Business Rules on the system, System security and Backup and Recovery procedures.

3.4.5 Scope of audit

The records of DTAP and seven⁶ treasuries (out of 17) were scrutinized during February 2007 to May 2007 covering the period from 2005-06 to 2006-07 and the databases of the seven treasuries were analysed using SQL⁷.

Audit Observations

3.4.6 Documentation

It was observed that the DTAP did not have any documented IT policy or strategy.

The MoU did not outline stages of system development such as feasibility study, design, development, implementation and post implementation review. User Requirement Specifications (URS) was not prepared and did not serve as the basis for the System Requirement Specification (SRS).

As per the clause 46 of MoU, the DTAP was required to attach at least two domain experts to coordinate development and implementation of the software with NIC, but no such experts were designated.

No records could be produced to audit to show what modifications had been suggested by the Department during the Pilot Project or after implementation under change management although there were a large number of modifications. The test checked Treasuries did not have any record or log of the problems faced during implementation or afterwards.

⁶ Ambikapur, Bilaspur, Dantewada, Durg, Jagdalpur, Raipur District and Raipur City.
⁷ Structured Query Language

There was no documentation to show that the software developed by NIC had been evaluated through trial run and testing before acceptance of the software. Therefore the various stages of system development and the degree of involvement of the users were not documented. It was observed that there were frequent changes in the software⁸ which pointed to inadequacy in assessing requirements at various stages. This could have been minimized by proper documentation at every stage.

3.4.7 Budgeted and non-budgeted bills

The system has categorized all bills into two main categories- budgeted⁹ head and non-budgeted¹⁰ head bills. All bills classified as “budgeted” are linked to the allotment of the DDO in the Central Server using the relevant accounting classification as available in the Budget. The bills are passed if the DDO has adequate allotment and after passing the amount of the bill is deducted from the available allotment so that the balance is available for subsequent transactions. This ensures that the DDO does not exceed his allotments and the expenditure is booked against the correct Budgetary Accounting Head. For non-budgeted bills, the DDO allotment was not required to be checked as per Government policy. Therefore if a “budgeted” bill was classified as “non-budgeted” the expenditure would be booked on the relevant head but there would not be any deduction from the allotment resulting finally in excess over allotment.

It was observed that bills for Rs 15.92 lakh pertaining to 14 DDOs in Raipur city treasury were paid in excess of allotment, as budgeted bills were wrongly categorized as non-budgeted.

The various kinds of bills (Salary, TA, Grants in aid etc.) used by the treasuries are categorized on the system through the field “Form No.”. Form no. 24 was the categorisation for salary bills which were non-budgeted. It was observed that in 269 instances in four¹¹ treasuries, budgeted contingent bills amounting to Rs 2.13 crore were wrongly categorized as Form no. 24. Thus the allotment checks were bypassed and led to expenditure of DDOs exceeding the allotment.

Bills getting wrongly categorized as “non-budgeted” are therefore an area of high risk as allotment checks are bypassed, rendering the budgetary control mechanism ineffective.

A secondary effect of this categorisation was that since the non-budgeted bills were not being linked to DDO allotments, they were also not being linked by the system to the accounting classification available in the budget. It was observed that out of 23.32 lakh and 16.17 lakh transactions in central server during the year 2005-07, 44,676 and 17,026 transactions were posted with classifications that were not available in the budget. The system was required to be modified to introduce a classification check for non-budgeted heads.

⁸ 21 version changes

⁹ TA, Medical, CC Bill, GIA, O.E Bills etc

¹⁰ Salary Bills, pension payment, GPF, GIS, FBF withdrawal, relief pertaining to Natural calamities etc

¹¹ Ambikapur, Bilaspur, Dantewada and Raipur City.

3.4.8 Deficiencies in Budget figures and similar data on the system

Electronic copy of Budget data supplied by the Finance department was being imported to budget tables in the Central Server.

A comparison with the printed budget of 2006-07 showed that in 14¹² demands the database showed excess provision of Rs 344.76 crore whereas in eight¹³ demands it was less by Rs 31.43 lakh. Out of 7,754 scheme codes, 3,374 (44 *per cent*) scheme codes were not having any description. In the year 2005-06 an amount of Rs 1,833.17 crore was shown in invalid demand number '00'. Data, from which the budget was being printed, was uploaded in the system. The fact, that data differences have arisen between the printed budget and the data available in the system, puts a question mark on the safety and security of data in the system.

3.4.9 DDO and Form Masters¹⁴

It was observed that all test checked treasuries had their own DDO masters in addition to the master table in the Central server containing 3,543 DDOs.

In four¹⁵ treasuries the master tables had a total of 1174 DDOs whereas in central server it was 1,059. On being pointed out, the department stated that the central server was correct and updated and the concerned treasuries had been directed to replace the old DDO master with current DDO master available in central server.

Similarly, the Form master in the Central Server had 25 types of Forms¹⁶. The seven test checked treasuries had their own form masters having between 22 to 28 Forms. It implied that reports based on bill categories would be inaccurate. Moreover, permitting different treasuries to operate different sets of bill categories weakened the internal control mechanism.

It was necessary to use identical master tables everywhere to maintain uniformity in the system.

3.4.10 Modifications in Cash account

It was noticed that the monthly accounts were being generated using Reporting facility of the software and the final output communicated to Accountant General's office for compilation of accounts. During scrutiny, it was observed that, corrections and alterations were made in the closed accounts using the Voucher Edit Facility without the consent of AG in contravention of the provisions of Chhattisgarh Treasury Code Rule 37 (b) & (c). On being pointed out, the department stated that this was necessary because the Cash account generated by the system didn't incorporate the transactions of 'by Transfer items' (Treasury Deductions). This was required to be rectified to ensure that the system accurately reflected the monthly accounts sent to the AG for compilation.

¹² Demand nos. 03, 10, 12, 20, 23, 24, 27, 41, 45, 55, 58, 64, 67 and 80.

¹³ Demand nos. 06, 08, 13, 19, 34, 47, 49 and 79.

¹⁴ DDO master: Table containing all DDOs with codes
Form master: Table containing all categories of bills with codes

¹⁵ Ambikapur, Durg, Jagdalpur and Raipur City

¹⁶ The different categories of bills are ascertained by a unique form no. like 24- Pay Bill, 33- Contingent Bills, 44- Refund of Revenue Bill, 24P- Pension Bill etc.

3.4.11 Gross Amount was shown as less than the net amount

During 2005-06 and 2006-07, in 96 bills the gross amount of the bill was recorded in the database as less than the Net¹⁷ amount which was not possible. This showed that some anomaly in the software permitted acceptance of these incorrect figures in some cases. On being pointed out, the treasury officers replied that this was due to technical errors in the software. A direct consequence was that the data as recorded in the database could not be termed as reliable.

3.4.12 Check total not used in Bill Entry

A DDO sends a set of bills through Bill Transit Register (BTR) to the treasury counter. Bill wise details are entered by Treasury in the "Counter Bill Entry Form". It was stated that after this the total of bills entered was checked manually with the total shown in the BTR. However, this validation could be done easily by the system by capturing the BTR total as a check total in the Counter Bill Entry Form.

On being pointed out the Department replied that validation of BTR entries at the Counter Bill Entry stage could not be done owing to staff shortage. However, trapping the errors at initial stage would cut down the subsequent work of rectifying the original entries which would be more time consuming.

3.4.13 Delay in passing of bills

The objective of e-kosh was to expedite the process of passing of bills timely and within three days of its submission. Audit scrutiny revealed that 3214 bills were passed in test checked treasuries with a delay ranging from five to 300 days during the year 2005-07. On being pointed out in audit, TO Bilaspur clarified that the software did not have the feature of capturing resubmission dates of bills returned to DDOs for clarifications and they appeared to be pending for long. This indicated that requisite modification was necessary in the software.

3.4.14 Irregular passing of bills without obtaining FD orders

According to Finance Department order dated 21st March 2007, no bills were to be accepted or passed after 30th March 2007 without its approval. But no provision was made in the software to incorporate a suitable check.

For instance, during data analysis it was found that 18 bills amounting to Rs 1.04 crore were accepted and passed on 31 March 2007 by TO Bilaspur and Ambikapur without obtaining the orders of finance department.

3.4.15 Passing of bills after closure of financial year

It was observed that 79 cheques amounting to Rs 42.68 lakh were issued against bills passed after closure of financial year 2005-06, between 1 April to 10 April 2006, by five treasuries which was irregular. On being pointed out in

¹⁷ *Gross amount of the bill minus treasury & AG deductions*

audit, the DTAP stated that departmental action would be initiated against the responsible officers and necessary provisions in the software would be made to avoid such occurrences in future. Details of modifications to block such transactions were awaited (July 2007).

3.4.16 Non-functional Modules

3.4.16.1 Deposit Module

In the test checked treasuries, it was observed that in the Deposit module, the system provided for passing of bills subject to availability of balance. As cumulative balances had not been entered on the system, the bills were scrutinised against balances available in manual records and after manually passing the bills they were being passed by the system by first entering the bill amount as Opening Balance. This was a system of permitted bypassing of a key validation and open to risk of manipulation as the balances were kept manually while transactions were posted on the system. In Bilaspur, even the manual records were not being maintained after computerisation and there was high risk of overpayments. The plus/minus memoranda sent to the AG Office were being prepared manually. It was necessary to make the module fully operational by feeding requisite balances.

On being pointed out the TOs stated that the Deposit module was not implemented and it would be taken up at DTAP level to modify the software through NIC. In view of the shortcomings, this work should have continued manually instead of partial implementation which had weakened the control mechanism.

3.4.16.2 Strong Room and Stamp Accounting

The activities of Strong Room and Stamp Accounting had not been computerised although targeted in the objectives of the project.

3.4.16.3 Non inclusion of provision for passing of AC/DC Bills

Abstract contingent bills can be raised in case of emergencies and at the time of clearance such AC bills should supported with detailed contingent bill containing sanction no and date, allotment and balance etc. Further, the DC clearance certificate would enable the DDO to draw the claims for the next three months from the treasury. The provision was not incorporated in the system to record the AC Bills for sanction number and date which was being done manually. Besides this, there was no provision in the software for the pairing of AC Bills with the DC bills and subsequently issuing the clearance certificate to the DDOs.

3.4.17 Business Continuity Plan

Business continuity planning ensures quick recovery of key business processes following disasters. It was observed that though a Disaster Recovery Centre was established at Bilaspur with the same configuration as that of the Central Server, no records were produced to audit to show that the readiness of the DRC to take on the functions of Central Server was tested after commissioning of the whole system.

3.4.17.1 Backup Policy

Every Treasury was provided with two identical servers- primary and secondary. In the test checked Treasuries different RDBMS were installed in the two servers¹⁸. There was no documentation or manual for taking backup in the Treasuries. The data backup was being done on a daily, weekly and monthly basis in the local server and transmitted to the Central server but it was not possible to upload into the Secondary Server. Therefore, in the case of exigencies the server would be restored by last back up from the Central server. Thus the purpose of installing the secondary server was totally defeated.

On being pointed out, the Department expressed its ignorance and replied that the maintenance, control and upkeep were under the control of the NIC officials in the absence of designated Database Administrators.

3.4.18 System Security

3.4.18.1 Physical and Logical Access

In Ambikapur treasury there was no separate room for server. As such the restriction to entry in server room cannot be ensured. Further, there were no alarms or fire detectors in the server rooms in all treasuries covered by audit.

Logical access to server is particularly not restricted. Though there were module wise user permissions, there was no uniformity and they were different in different treasuries. There was no standard documented policy for securing access.

3.4.18.2 Activity Logs

Activity Logs are maintained to identify unauthorized or exceptional activities and fix responsibility in case of errors, malfunction etc.

Audit of the seven test checked treasuries revealed the following shortcomings:

- A detailed listing of date & time of input, user id and terminal location, which permits the system administrator to fix the responsibility in case of unauthorized access, was absent in the treasuries.
- The daily activity registers like the terminal log on, logout, activity of users etc. were also not found maintained in any of the treasuries covered by audit.

3.4.18.3 Password Controls

Any web based payment system should have a strong password policy to make the system secure and foolproof.

It was observed in test checked treasuries that the password controls were deficient as detailed below:

- All the seven treasuries had the same user ID and password for accessing the database.

¹⁸ Oracle was installed in primary server and SQL server in the secondary server

- In Bilaspur and Ambikapur treasuries, the User ID and password of the Treasury officer was widely used by the staff. Thus many persons had access to the restricted features of the software.
- The system does not have the provision to restrict password guessing attacks, like after 3 unsuccessful attempts to enter password, the involved User ID must either be suspended until reset by the system administrator or temporarily disable the User ID for not less than 10 minutes.
- There was no time limit for expiry of password. Recommended good practice is that all users must be automatically forced to change their passwords at least once in 30 days. It should also be ensured that the initial passwords issued by the security administrator are changed after first on line session.
- Another recommended best practice is that length of the passwords must be checked automatically at the time of creation. All passwords must have at least six characters (alpha-numeric).

3.4.19 Training

Under the project, training was to be provided by NIC to Executive level (one week), system administrators & resource persons (one month), Operators (15 days) alongwith hardware training of three months was to be provided by NIC. It was noticed that except training to Operators no other training was imparted. The records relating to training of personnel were not produced to audit.

3.4.20 Conclusion

The e-Kosh online treasury computerisation system was implemented to ensure overall control on flow of funds and to assess the financial position of the state at a given point of time. Various stages of the system development were not adequately documented. Due to incorrect classification, DDO allotment checks were getting bypassed and there were inadequacies in maintenance of DDO, form and budget masters and various system security features.

3.4.21 Recommendations

- All change management requests should be fully documented and issued to consultant (NIC) with approval of appropriate authority.
- Categorisation of bills as Non-budgeted should be validated
- Classification check must be introduced for non-budgeted bills.
- The DDO master, form master, Budget master available in Central Server should be reconciled and replicated in the Treasury Servers as per approved regular schedule.
- Reasons for discrepancy in net and gross amounts to be ascertained and corrected.
- The password controls may be strengthened.
- Appropriate activity logs should be introduced.