



सत्यमेव जयते

**Report of the
Comptroller and Auditor General of India
on
General, Social and Economic Sectors
For the year ended 31 March 2017**



लोकहितार्थं सत्यनिष्ठा

Dedicated to Truth in Public Interest



Government of Chhattisgarh
Report No. 3 of the year 2018

**Report of the
Comptroller and Auditor General
of India**

for the year ended 31 March 2017

General, Social and Economic Sectors

Government of Chhattisgarh

Report No: 3 of the year 2018

TABLE OF CONTENTS		
Description	Reference to	
	Paragraph	Page
Preface		iii
Overview		vii
CHAPTER-I INTRODUCTION		
About this Report	1.1	1
Auditee Profile	1.2	1
Audit Coverage	1.3	2
Response of the Government to Audit	1.4	2
Performance and Compliance Audits	1.5	4
Action taken on earlier Audit Reports	1.6	4
Recoveries at the instance of Audit	1.7	5
CHAPTER-II PERFORMANCE AUDIT		
PUBLIC HEALTH AND FAMILY WELFARE DEPARTMENT		
National Rural Health Mission	2.1	7
AGRICULTURE DEPARTMENT		
Implementation of National Food Security Mission	2.2	36
CHAPTER-III COMPLIANCE AUDIT		
DEPARTMENT OF ELECTRONICS AND INFORMATION TECHNOLOGY		
e-Procurement system in Chhattisgarh	3.1	59
PUBLIC WORKS DEPARTMENT		
Follow-up audit of the Performance Audit on development of roads under Central Road Fund and Minimum Needs Programme	3.2	70
AUDIT PARAGRAPHS		
TRIBAL AND SCHEDULED CASTE DEVELOPMENT DEPARTMENT		
Fraud and misappropriation with possible collusion	3.3.1	77
PUBLIC WORKS DEPARTMENT		
Fraudulent payments	3.3.2	78
Avoidable extra cost	3.3.3	79
Wasteful and Unfruitful expenditure	3.3.4	80
PANCHAYAT AND RURAL DEVELOPMENT DEPARTMENT		
Extra and excess cost	3.3.5	82
WATER RESOURCES DEPARTMENT		
Unfruitful expenditure and undue benefit	3.3.6	84
Non-recovery of Government revenue	3.3.7	86

APPENDICES			
Appendix No.	Description	Reference to	
		Para No.	Page
2.1.1	Scope and coverage of Audit	2.1.5	89
2.1.2	Details of short supply of drugs by Corporation in the test checked health centres	2.1.9.8	91
2.1.3	Details of Ante Natal checkup of pregnant women in test checked districts	2.1.10.1 (i)	91
2.1.4	Details of registered pregnant women and IFA tablets provided in test checked districts	2.1.10.1 (ii)	92
2.1.5	Details of institutional and home deliveries in the test checked districts	2.1.10.1 (iv) b	92
2.2.1	Physical and financial target and achievement under various items implemented under IPM	2.2.9.2 D	93
3.1.1	Partial functionality of e-Procurement system in Mjunction	3.1.2.1	94
3.1.2	Department wise tenders where same computers were used by the Department officials and the bidders	3.1.3.1	95
3.1.3	Contractors using two different PAN numbers for registration in 'e-Works' portal and e-Procurement system	3.1.3.2	98
3.1.4	Tenders awarded to ineligible contractors	3.1.3.4	100
3.1.5	Irregular acceptance of bids on grounds of improper/incorrect submission of income tax returns	3.1.3.5	101
3.2.1	Execution of non-rural road works from MNP fund	3.2.4.1	102

PREFACE

This Report for the year ended 31 March 2017 has been prepared for submission to the Governor of Chhattisgarh under Article 151 of the Constitution of India.

This Report contains results of the Performance Audit (PA) on (i) National Rural Health Mission (NRHM) and (ii) implementation of National Food Security Mission (NFSM) and Compliance Audit on (i) e-Procurement system in Chhattisgarh; and (ii) Follow-up audit of the PA on development of roads under Central Road Fund (CRF) and Minimum Needs Programme (MNP). In addition, the Report contains seven Audit paragraphs based on Compliance Audit of 35 Departments.

The Audit was aimed at assessing the functioning of schemes/programmes during 2012-17 viz., human resource management, financial management, management of implementation of schemes/programmes, supervision and monitoring, internal oversight etc., and report the results in the Audit Report as per the audit mandate of the Comptroller and Auditor General of India to the State Legislative Assembly for ensuring accountability of officials of the concerned administrative Departments.

Significant deficiencies noticed in the execution of schemes/programmes by the concerned Departments are mentioned below:

PA on National Rural Health Mission (NRHM)

Audit reviewed the National Rural Health Mission (NRHM) scheme aimed to provide accessible, affordable, accountable, effective and reliable health care facilities in rural areas to strengthen public health systems.

The State suffers from shortages of human resources in critical positions in the District Hospitals (DHs), Community Health Centres (CHCs) and Primary Health Centres (PHCs) which adversely affected the delivery of mandate of NRHM. These included shortages of specialist doctors to the extent of 89 *per cent*, Medical Officers (MO) by 36 *per cent*, staff nurses by 34 *per cent* and paramedics by 12 *per cent* against their sanctioned strengths. These shortages could not be bridged as 752 doctors appointed during 2012-13 to 2017-18 (February 2018) did not join the Department, for reasons not known to the Department. Even where doctors were available¹, the patients were still deprived of necessary treatments for various illnesses and diagnostic services in these health centres due to shortages² of medical equipment, drugs and consumables, laboratory services, and were referred to other hospitals such as Dr. Bhim Rao Ambedkar Hospital, Raipur, Chhattisgarh Institute of Medical Sciences, Bilaspur etc., as observed from the indoor patient department (IPD) registers.

¹ Between 75 and 100 *per cent* in four out of seven sampled DHs, six out of 14 sampled CHCs and nine out of 28 sampled PHCs

² Shortages of equipment were in the range of 27 to 41 *per cent* in DHs, 25 to 69 *per cent* in CHCs and 32 to 64 *per cent* in PHCs. Similarly the shortage of drugs and consumables were in the range of 40 to 76 *per cent* in DHs, 52 to 75 *per cent* in CHCs and 45 to 67 *per cent* in PHCs and shortage of laboratory services was 45 to 63 *per cent* in DHs, 36 to 58 *per cent* in CHCs and 38 to 71 *per cent* in PHCs

The State could not create sufficient infrastructure to bridge the gaps between requirement and available health facilities as 186 construction works could not be completed by the Department despite lapse of 20 to 56 months from the date of sanction on grounds of non-participation of bidders, high tender premiums, delays in identification and finalisation of availability of land. The State suffered from significant shortages of essential drugs, consumables and equipment at various levels of health centers as Chhattisgarh Medical Services Corporation limited tasked with these supply failed on grounds of non-availability of rate contract for medicines, non-receipt of tenders, late receipt of annual demand from Directorate of Health Services etc. Due to shortage of specialists and MOs, the Department could not upgrade 39 *per cent* of targeted CHCs as first referral units and 45 *per cent* of targeted PHCs to provide 24x7 services.

PA on implementation of National Food Security Mission (NFSM)

National Food Security Mission (NFSM), a centrally sponsored crop development scheme that, aimed to increase the production of food grains, was implemented in Chhattisgarh in 13 districts for rice, nine districts for coarse cereals and all the 27 districts for pulses. However, only four *per cent* farmers (1.38 lakh) who owns six *per cent* (2.76 lakh ha) of cultivated land in the State were benefitted. The production and yield of different crops (rice, pulses and coarse cereals) remained range bound during 2012-17, and no dramatic increases attributable to NFSM could be accomplished. The yield of rice, pulses and coarse cereals of Chhattisgarh was less³ when compared with the neighbouring States of Jharkhand, Madhya Pradesh and Uttar Pradesh and also against the National yield for the period 2012-13 to 2014-15⁴. NFSM had suffered from implementation deficits such as demonstration done in less than the norms of 100 ha area, absence of soil health of cultivable land, failure to ensure visits of scientists, non-organisation of field day, low utilisation of hybrid/ high yield variety seeds, micronutrients and soil ameliorants, absence of trainings to farmers for improved crop production practices etc., under important components which resulted in short achievement of targets. Monitoring and supervision was not effective and district level seed committee was not formed to monitor the distribution of seeds to farmers.

Audit on e-Procurement system in Chhattisgarh

Department of Electronics and Information Technology (DEIT), Government of Chhattisgarh decided to set up an integrated e-Procurement system to ensure transparency and efficiency in all Government procurements. However, the system was declared go-live on 1 April 2016 with only four operational modules (vendor management, e-tendering, e-payment and MIS) as against eight modules planned and rolled out in 35 entities/Departments. Though user acceptance test (UAT) report from these Departments was the pre-requisite for go-live, only 22 entities gave user acceptance test (UAT) for the four modules while 13 entities did not give UAT for any module for want of customisation of the software. As a result of non-functioning of the integrated modules, functions

³ Except Madhya Pradesh for rice in 2012-15 and coarse cereals in 2013-14; and Jharkhand for pulses in 2014-15

⁴ Only data for up to 2014-15 pertaining to yield of various crops of different States was available in the web site of NFSM, Ministry of Agriculture (GoI).

such as award of work after tendering, record of measurement, preparation of progress reports etc., were done manually while payments to the contractors/suppliers were routed through another system (e-works⁵ portal) which limited the effectiveness of the e-Procurement system. The system was not transparent and has control failures. It could not detect and prevent use of 74 common computers by bidders and Government officials in respect of 1,921 tenders valued at ₹ 4,601 crore; use of two sets of PAN by 79 contractors/vendors; use of common e-mail ID by multiple bidders in 133 tenders valued at ₹ 225.14 crore; suppression of bid capacity of a contractor to award 11 works valued at ₹ 23.77 crore which is a red flag to unfair tender practice and merits investigation from vigilance angle and for disciplinary action against the tender committee members for awarding such works.

Follow-up Audit of the PA on development of roads under Central Road Fund and Minimum Needs Programme

No significant improvement was noticed in the implementation and execution of road works under CRF/ MNP despite serious concerns highlighted⁶ in the Audit Report on General, Social and Economic (Non-PSUs) Sectors for the year ended 31 March 2013.

Audit paragraphs

The seven Audit Paragraphs covered in this Report relate to various Departments and contain deficiencies like absence of compliance with rules and regulations, audit against propriety, cases of loss, wasteful/unfruitful expenditures, avoidable extra expenditure, and extension of undue favours. Significant observations include the fraudulent payment of scholarships to non-functional private schools, fraudulent payments to firm.

Non-production of records to Audit

The records⁷ of appointments and promotions of the staff of Chhattisgarh Vidhan Sabha Secretariat were not furnished by the Deputy Secretary (Accounts) to Audit twice, first in February 2017 and again in August-September 2018, though requisitioned and reminded repeatedly by Audit. Such non-production of records severely limits the exercise of CAG's constitutional mandate under section 18 (1) (b) of the C&AG's (Duties, Powers and Conditions of Service) Act, 1971 and may result in possibility of wrong doing, wrong appointments etc. This is a red flag which should be investigated from vigilance angle and considered for disciplinary action against the concerned Deputy Secretary (Accounts).

The instances mentioned in this Report are among those which came to notice in the course of test audit for the period 2016-17 as well as those which came to notice in earlier years but could not be reported in previous Audit Reports.

⁵ e-Works is a separate portal which was prepared by NIC for works Department particularly for PWD, PHE and WRD and through this portal, these Departments makes payment to the contractors

⁶ For instance, execution of work without detailed survey, execution of work without adhering to specifications, execution of additional work without inviting tender etc.

⁷ Service book, personal files of officials, appointment and promotion orders, gradation list etc.

Instances relating to the period subsequent to year 2016-17 have also been included, wherever necessary.

The audit has been conducted in conformity with the Auditing Standards and Regulations on Audit and Accounts, 2007 issued by the Comptroller and Auditor General of India.

OVERVIEW

OVERVIEW

This Report comprises three Chapters: Chapter I presents the planning and extent of audit and a brief analysis on the expenditure of major Departments along with responses of Government to the Audit Inspection Reports/Audit Reports. Chapter II deals with the findings of two Performance Audits (PA) on (i) National Rural Health Mission (NRHM); and (ii) implementation of National Food Security Mission (NFSM). Chapter III presents Compliance Audits on (i) e-Procurement system in Chhattisgarh; (ii) Follow-up Audit of the PA on development of roads under Central Road Fund (CRF) and Minimum Needs Programme (MNP); and (iii) seven Audit paragraphs in various Departments. The audit findings included in this Report have total money value of ₹ 384.05 crore involving issues of systemic deficiencies, misappropriation, fraud, loss, wasteful/ unfruitful expenditures, avoidable extra expenditure, extension of undue favours, excess payments etc.

The audit has been conducted in conformity with the Auditing Standards of the Comptroller and Auditor General of India. Audit samples have been drawn based on Simple Random Sampling without Replacement and Probability Proportionate Size without Replacement methods. The specific audit methodology adopted has been mentioned in each PA and the Compliance Audits. The audit conclusions have been drawn and recommendations have been made taking into consideration the views of the State Government. The main audit findings are summarised in this overview.

1. Performance Audit of Programmes/Activities/Department

(i) Performance Audit on National Rural Health Mission

The National Rural Health Mission (NRHM) was launched (April 2005) by Government of India (GoI) to provide accessible, affordable, accountable, effective and reliable health care facilities in rural areas to strengthen public health systems. The key strategy of the mission was to bridge the gaps in health care facilities, facilitate decentralised planning in health sector, providing an umbrella to existing programmes of Health and Family Welfare including Reproductive and Child Health (RCH) and various disease control programmes. The important Audit findings are:

Human Resource Management

There were shortages in human resources in critical positions in the District Hospitals (DHs), Community Health Centres (CHCs) and Primary Health Centres (PHCs) in the State which adversely affected the delivery of mandate of NRHM. These included shortages of specialist doctors to the extent of 89 *per cent* (1,167 out of 1,312), Medical Officers (MO) by 36 *per cent* (583 out of 1,640), staff nurses by 34 *per cent* (1,225 out of 3,603) and paramedics to the extent of 12 *per cent* (429 out of 3,716) against their sanctioned strengths. Though the Directorate of Health Services appointed 1,226 doctors in the post of MOs during 2012-13 to 2017-18 (February 2018), only 474 MOs (including 35 on contract basis) joined the Department as of February 2018. The reasons for reluctance of doctors to join the Department were not assessed by the Government. In addition, approval of Finance

Department was also obtained (August 2018) for recruitment of 208 MOs/Assistant MOs, 911 staff nurses and 196 other paramedical staff which is awaited (August 2018). In the sampled DHs/CHCs/PHCs, major vacancies were in the field of surgery, anesthesia, gynecology, ophthalmology, radiology, orthopedics, pathology, ENT, and dental. Even where doctors were available¹, the patients were still deprived of necessary treatments for various illnesses and diagnostic services in these health centres due to shortages² of medical equipment, drugs and consumables, laboratory services, and were referred to other hospitals such as Dr. Bhim Rao Ambedkar Hospital, Raipur, Chhattisgarh Institute of Medical Sciences, Bilaspur etc., as observed from the indoor patient department (IPD) registers.

Recommendation

The Department should prioritise the filling up of critical vacancies, especially those of specialist doctors and Medical officers and ensure availability of medical equipment, drugs, consumables, laboratory services so as to deliver the required health facilities at each level in line with the mandate of the Mission.

Paragraph 2.1.8.1

Availability of infrastructure

The State had shortage of CHCs to the extent of 24 *per cent* (54 out of 223) and PHCs by 11 *per cent* (99 out of 884) vis-à-vis the Indian Public Health Standards (IPHS). Further, 20 CHCs, 88 PHCs and 768 Sub Health Centres (SHCs) did not have designated Government buildings and were operational from private buildings, *panchayat* buildings, other Government buildings etc., as on March 2017. These buildings lacked space, infrastructure, delivery service, outdoor patient Department (OPD) facilities, labour rooms, beds, water connectivity, toilets etc., which impaired the healthcare services through these centres.

Though the Department aimed to bridge these gaps, 186 works sanctioned during 2012-16, and on which expenditure of ₹ 14.06 crore was incurred, remained incomplete despite lapse of 20 to 56 months from the dates of sanction, on grounds of non-participation of bidders in the tender for works located in sensitive areas, receipt of high tender premiums, delays in identification and finalisation of availability of land. This included 32 health centres in the sampled districts which could not be completed till June 2018 despite incurring expenditure of ₹ 2.25 crore and delays between eight and 44 months from their completion dates on same grounds. In addition, 70 health facilities (sanctioned during 2012-16) were also not taken up for construction for more than one to four years till December 2017 on grounds of change of place, delay in tender process, non-finalisation of tenders due to receipt of higher rates etc.

¹ Between 75 and 100 *per cent* in four out of seven sampled DHs, six out of 14 sampled CHCs and nine out of 28 sampled PHCs

² Shortages of equipment were in the range of 27 to 41 *per cent* in DHs, 25 to 69 *per cent* in CHCs and 32 to 64 *per cent* in PHCs. Similarly the shortage of drugs and consumables were in the range of 40 to 76 *per cent* in DHs, 52 to 75 *per cent* in CHCs and 45 to 67 *per cent* in PHCs and shortage of laboratory services was 45 to 63 *per cent* in DHs, 36 to 58 *per cent* in CHCs and 38 to 71 *per cent* in PHCs

In addition, the sampled health centres have acute shortage of residential quarters to the extent of 81 *per cent* in the seven DHs, 36 *per cent* in 14 CHCs and 87 *per cent* in 28 PHCs with respect to IPHS norms due to failure of the Department to complete 159 quarters for medical and paramedical staffs valued at ₹ 25.33 crore taken up during 2012-13 till March 2017 on grounds of non-participation of tenderers, naxal affected area and delay in availability of land.

Recommendation

The Department should assess the gaps in availability of physical infrastructure and ensure that all civil works are completed at the earliest and address the project bottlenecks to put the completed buildings to use.

Paragraphs 2.1.9.1 & 2.1.9.3 (i)

Quality of health infrastructure

The Department upgraded 28 (61 *per cent*) CHCs as first referral unit (FRU) against the target of upgrading 46 CHCs into FRU though the State had 169 CHCs on grounds of shortage of doctors and specialists. Resultantly, C-section deliveries were limited to these FRUs. In the test checked districts, 220 (2.3 *per cent*) out of total 9,412 C-section deliveries were conducted in the CHCs which were FRUs. This indicated that women had to depend mostly on district level hospitals for C-section deliveries as this facility was available only in 14 *per cent* (24 out of 169) CHCs in the State.

Similarly, 273 (55 *per cent*) out of targeted 492 PHCs was made 24x7 service provider in the absence of doctors and nurses. Though 14 PHCs (out of the 28 PHCs test checked) were upgraded to 24x7, the MTP service was not available in any of the PHCs, child care and immunisation was not available in one PHC, emergency service and separate male and female wards were not available in 11 PHCs.

There were significant shortages of essential equipment to the extent of 38 *per cent* at DHs, and 53 *per cent* at CHCs, while deficit of drugs and consumables were by 40 to 75 *per cent* in DHs, 33 to 75 *per cent* in CHCs and 45 to 75 *per cent* in PHCs. Shortages were mainly due to failure of the Chhattisgarh Medical Services Corporation limited (Corporation) to supply the drugs and equipment despite receiving indents from the Department on grounds of non-availability of rate contract for medicines, non-receipt of tenders, late receipt of annual demand from Directorate of Health services etc. Resultantly, the patients have to purchase the drugs from outside such as *Jan aushadhi kendra* or local medicine shops etc., while seven DHs and 10 out of 14 sampled CHCs incurred an expenditure of ₹ 2.54 crore to purchase required drugs and consumables from the local market during 2013-17.

Recommendation

The Department should assess the gaps in equipment, medicines, diagnostic services etc., and take immediate measures to bridge these by coordinating with the Corporation. Concerted efforts may also be taken to upgrade CHCs to FRUs and all PHCs into 24x7 service providers.

Paragraphs 2.1.9.5 (ii) & (iii), 2.1.9.6 & 2.1.9.8

Quality of healthcare services

Out of 33.09 lakh pregnant women (PW) registered in the State for ANC, 20.73 lakh (62.65 per cent) were registered in the first trimester. In the test checked districts, only 63.54 per cent PWs could be registered within first trimester of pregnancies while 18 per cent PWs could not receive all the three ANC check-ups. Hence, the Department lagged behind in extending the benefits of NRHM to all the PWs. Further, 5.42 to 28.62 per cent women were not immunised during their pregnancy with both doses (TT-1 and TT-2) of TT vaccine during 2012-17. The reasons included late disclosure of pregnancy by pregnant women, non-availability of transport facility due to inaccessible areas, abortion in some cases, migration of women to other districts or states after ANC registration and insufficient visits by the female health workers.

Recommendation

The Department should ensure that all the pregnant women are invariably registered in the first trimester with the help of ASHAs and their cases followed-up for complete ante-natal care. Besides, TT vaccine to all pregnant women should be provided.

Paragraph 2.1.10.1 (i)

Post-natal care and immunisation

Against the objective of promoting 48 hours stay in hospital after child birth, 5.05 lakh (35.27 per cent) women in the State and 1.72 lakh (35.02 per cent) women in the sampled districts were discharged within 48 hours of delivery during 2012-17 on account of left against medical advice (LAMA), non-availability of diet facility in some of the PHCs, absence of 24x7 facilities in 512 (out of 785) PHCs and absence of C-section delivery facilities in 145 (out of 169) CHCs.

The targets set for child immunisation against seven vaccine preventable diseases could not be achieved in 17 to 23 per cent cases during 2012-17 due to lack of awareness, inaccessible area and migration of families along with children to other States etc.

Recommendation

The Department should ensure that the PWs invariably stay for 48 hours in the health centres after delivery as part of post-natal care. Child immunisation should be ensured on priority basis to achieve the target.

Paragraphs 2.1.10.3 & 2.1.10.4

(ii) PA on implementation of National Food Security Mission

National Food Security Mission (NFSM) was implemented in Chhattisgarh in 13 districts for rice, nine districts for coarse cereals and all the 27 districts for pulses. It has benefitted only four per cent farmers (1.38 lakh) who owns six per cent (2.76 lakh ha) of cultivated land in the State. The objectives of this Mission are to increase the production of food grains through interventions such as demonstration, need based inputs and local initiatives. The important Audit findings are:

Production of crops

The production and yield of different crops (rice, pulses and coarse cereals) remained range bound during 2012-17, and no dramatic increases attributable to NFSM could be found. Part of the lesser production and yield in respect of rice could be attributed to decrease in rainfall which ranged between 1,009 mm and 1,250 mm during this period, against an average of 1,317 mm in preceding periods. The yield of rice, pulses and coarse cereals of Chhattisgarh was less³ when compared to neighboring States of Jharkhand, Madhya Pradesh and Uttar Pradesh and also against the National yield for the period 2012-13 to 2014-15⁴.

Productivity of rice of NFSM districts could not be brought on par with non-NFSM districts in any of the last five years due to more numbers of irrigation projects (25 medium irrigation projects out of 33 in the State) in the non-NFSM districts as compared to the NFSM districts. This accounted for comparatively better yield in non-NFSM districts. However, there is no evidence that the Agriculture Department, though aware of the core problem areas, had coordinated with the Water Resources Department to address the issue by providing necessary infrastructure (such as check dams, anicuts etc.) for irrigation in the NFSM districts to achieve the objectives of the Mission.

Recommendation

The Department should make concerted efforts to increase the productivity of the food grains by extending irrigation facilities in the NFSM districts in coordination with Water Resources Department.

Paragraphs 2.2.8 (i) & (ii)

Implementation of NFSM through demonstration

Production performance of 200 demonstration plots against their control plots in the selected districts revealed improved productions by more than 50 per cent in 13 per cent demonstrations (26 out of 200). Though productions in demonstration plots have surged, the comparative rise remains almost the same even when the farmers in the control plots had used either local seeds or hybrid/HYV seeds. Resultantly, the farmers were not keen on using the hybrid/HYV seeds as also reported (2014) by National level monitoring team (NLMT). However, such reservations of the farmers were not dispelled by the Department by educating them or conducting awareness drives. This was noticed while examining 74 clusters under demonstration component of the scheme where only 34 per cent of the earmarked cost for undertaking field day/publicity material /visits of scientist/staff was spent. Further, the data on production of demonstrations plot and control plots up to district level were not compiled at State level. Hence, contribution of various interventions under demonstration could not be analysed and the Department failed to ensure up-scaling of particular interventions in the succeeding years, though stipulated in the guidelines.

³ Except Madhya Pradesh for rice for 2012-15 and coarse cereals in 2013-14; and Jharkhand for pulses for 2014-15

⁴ Only data for up to 2014-15 pertaining to yield of various crops of different States was available in the web site of NFSM, Ministry of Agriculture (GoI).

Recommendation

The Department should increase publicity of demonstration of crop farming through field days, distribution of public materials and visits of scientist and State officials by spending the money provided under this head.

Paragraphs 2.2.9.1 (ii) & (iii)

Achievements of other NFSM interventions

NFSM had suffered from implementation deficits under important components such as demonstration done in less than the norms of 100 ha area, absence of soil health of cultivable land, failure to ensure visits of scientists, non-organisation of field days, low utilisation of hybrid/ high yield variety seeds, micronutrients and soil ameliorants, absence of trainings to farmers for improved crop production practices etc., which resulted in short achievement of targets. The achievements under seed distribution was 70 per cent for rice, 71 per cent for pulses and only 18 per cent for coarse cereals while it was 71 per cent under integrated nutrient management (INM) and soil ameliorants and 69 per cent under integrated pest management and plant protection measure. Further, the achievement under training was 83 per cent and 59 per cent under local initiatives during 2012-17. The main reasons for shortfall included absence of monitoring, failure to form district level seed committee to augment seed distribution, failure to educate the farmers who mostly (80 per cent) belong to small and marginal category and are not willing to use INM, soil ameliorants etc., even with 50 per cent subsidy from the Government, deviations from scheme designs, absence of trainings, non-identification of works under local initiatives etc. Resultantly, the productivity of rice, pulses and coarse cereals in the State did not improve on the expected lines of NFSM.

Recommendation:

The Department should create awareness and educate farmers to ensure use of hybrid seeds/ HYV seeds to achieve the objective of the Mission. Moreover, the Department should resolve the bottlenecks under different interventions of NFSM (need based inputs, training and local initiative) to optimise achievements against targets.

Paragraphs 2.2.9.2 & 2.2.9.3

Monitoring

The project management team (PMT) responsible for monitoring the implementation of each demonstration was functioning with only one (out of 17 sanctioned posts) technical assistant due to failure of the Department to appoint them at district level for no reasons on record. Moreover, the DLSC tasked with monitoring the distribution of seeds to farmers was not formed. Thus, monitoring and supervision was not effective for the implementation of the scheme and it impacted demonstration activities, seed distribution, concurrent evaluation of the interventions, educating the farmers to effectively use the available interventions under NFSM.

Recommendation

The Department should strengthen the monitoring and supervision by ensuring concurrent evaluation of implementation of the scheme, form the DLSC and instruct the SFSMEC to conduct meetings for effective discharge of its functions. Appointments of consultants, technical assistants at State and districts level for streamlining the monitoring activities of the mission should also be ensured.

Paragraphs 2.2.10, 2.2.10.1 & 2.2.10.2

2. Compliance Audit of Programmes/Activities/Departments

(i) Audit on e-Procurement system in Chhattisgarh

Audit examined the functionality of the new e-Procurement system developed by Department of Electronics and Information Technology (DEIT) through the System Integrator (Mjunction) for the period April 2016 to March 2017. The system was aimed at vendor registration, tendering, award of work etc., for all tenders above ₹ 20 lakh (the threshold was lowered to ₹ 10 lakh in May 2016). Chhattisgarh InfoTech & Biotech Promotion Society (CHiPS) is the nodal agency for setting up and overseeing the functioning of the system. Mjunction is responsible for customisation of the application software under the monitoring of CHiPS to meet the needs of the user entities/Departments. The important Audit findings are:

Partial functionality of the e-Procurement system

The system was declared go-live on 1 April 2016 with only four operational modules (vendor management, e-tendering, e-payment and MIS) and rolled out in 35 entities/departments. Of these, 22 entities gave user acceptance test (UAT) for the four modules while 13 entities did not give UAT for any module. Despite that ₹ 19.78 crore (69 per cent of contract value of) was paid⁵ upfront (between February 2016 and September 2016) to Mjunction without customisation of four modules in 22 Departments/ entities and any module in 13 entities/Department. As a result, functions such as award of work after tendering, record of measurement, preparation of progress reports, were done manually despite the system having dedicated modules for these services. The payments to the contractors/suppliers were routed through another system (e-works⁶ portal) which limited the effectiveness of the e-Procurement system. The MIS, in the absence of other modules remaining non-functional, could not be used to generate the reports for monitoring.

Recommendation

All the eight modules of the software should be made operational with required customisation as per the needs of all the Departments within a specified time span to optimise the system.

Paragraph 3.1.2.1

⁵ For application software with licenses, supply of hardware and yearly cost of ATS (Annual Technical Support) in advance

⁶ e-Works is a separate portal which was prepared by NIC for works Department particularly for PWD, PHE and WRD and through this portal, these Departments makes payment to the contractors

Bypassing the e-Procurement system

Engineers-in-Chief of PWD and WRD did not instruct the works divisions under them to follow the orders of CHiPS for reasons not on record. Consequently, 48 PWD divisions and 18 Water Resources Department (WRD) divisions invited (between May 2016 and June 2017) 658 tenders⁷ worth ₹ 108.35 crore manually each valued between ₹ 10 lakh and ₹ 20 lakh despite instructions (May 2016) from CHiPS for inviting tenders valued at ₹ 10 lakh and above only through the e-Procurement system.

Recommendation

CHiPS must ensure that concerted efforts are made by the user Department/entities to float tenders valued above ₹10 lakh through the system.

Paragraph 3.1.2.2

Lack of transparency of the e-Procurement system

In 1,921 tenders valued at ₹ 4,601 crore invited during September 2016 to August 2017, 74 computers were used to upload tender details by 17 Departments of the State Government and these computers were also used by one or more bidders to upload their quotes for these 1,921 tenders. Of these, 477 bidders who used these common computers with at least one Government official were awarded works worth ₹ 961.26 crore. Surprisingly, the system, which had an inbuilt business intelligence module to block such violations, failed to detect such lapses until these were pointed out by Audit.

Recommendation

DEIT should ensure investigation from a vigilance angle on the use of same machines in 1,921 tenders by officials and bidders worth ₹4,601 crore under 17 Departments by an independent agency for taking suitable action within a specified time period.

Paragraph 3.1.3.1

Systemic/Control failures

✓ Seventy-nine contractors/vendors used two sets of permanent account numbers (PAN), one for registration in the e-Works portal of PWD and the other for generation of their vendor IDs in e-Procurement system in violation of section 272 B of Income Tax Act 1961, which stipulates that one individual can hold only one PAN. Of these, 25 contractors were awarded works worth ₹ 209.50 crore.

✓ Though the vendor management module is designed to restrict creation of two vendor IDs against the same PAN already recorded in the e-Procurement system, in 90 cases (vendor ID), two vendor IDs were generated against the same PAN. Thus, PAN was not created as unique field against the architectural design of the system.

⁷ PWD-624 amounting to ₹ 102.92 crore and WRD-34 amounting to ₹ 5.43 crore

Recommendation

CHiPS should take adequate and timely measures to put in place input controls for the unique fields like PAN and to integrate the system with income tax Department and e-works portal maintained by NIC.

Paragraph 3.1.3.2

✓ In 133 tenders valued at ₹ 225.14 crore, multiple bidders applying for the same tender mentioned same the partner's email ID for obtaining vendor ID while in 48 of these tenders, more than one bidder mentioned the same primary email ID in addition to the common partner's email ID. In all these 133 tenders, one such bidder got the works which indicated that these bidders possibly formed cartel among themselves to bid for the tenders by adjusting their offers to suit their competitors.

✓ In five tenders valued at ₹ 15.44 crore, works were secured by those contractors who were not eligible to participate in the bidding process as their eligibilities were lower than the classes of tenders. Further, in 12 tenders, contracts worth ₹ 89.34 crore was awarded to those contractors who did not submit Income Tax returns/other requisite documents of the previous five years or submitted partial documentation on financial capacities.

Recommendation

CHiPS should ensure putting in place adequate input controls for the different modules to prevent use of common emails by different vendors, ineligible contractors to bid for works and to ensure submission of all pre-qualification documents by bidders before processing of bids through the system.

Paragraphs 3.1.3.3, 3.1.3.4 & 3.1.3.5

✓ Against the bid capacity of only ₹ 4.38 crore, a contractor was awarded tender worth ₹ 7.19 crore by the tender committee members of PWD by suppressing his bid capacity. Resultantly, his bid capacity dropped to minus ₹ 2.75 crore. The contractor was additionally awarded 10 more works valued at ₹ 16.58 crore between August 2016 and October 2016 by suppressing his actual bid capacity. Thus, in the entirety, the contractor was favoured with 11 tenders valued at ₹ 23.77 crore by suppressing his bid capacity although all his ongoing work details were available in the system itself. This clearly indicates that the systemic controls have either been weakened or compromised to award such works.

Recommendation

DEIT in coordination with PWD should ensure vigilance investigation of all cases of suppression of bid capacity of contractors to award works to the ineligible bidders. Disciplinary action should be taken against the tender committee members involved in the above cases. The in-built business intelligence mechanism should be extensively used to prevent suppression of bid capacity of bidders.

Paragraph 3.1.3.7

(ii) Follow-up Audit of the PA on development of roads under Central Road Fund and Minimum Needs Programme

The Performance Audit of Public Works Department covering the period 2008-13 was included in the Audit Report on General, Social and Economic (Non-PSUs) Sectors for the year ended 31 March 2013, Government of Chhattisgarh. The Report was laid in the State Legislative Assembly in July 2014. The Audit recommendations were accepted by the Department for implementation.

Follow-up Audit revealed that two out of the four recommendations were not implemented which included (i) utilisation of funds in time bound manner on earmarked projects; and (ii) adherence to specifications and provisions of manual.

The recommendations on (i) overlapping of sanctions; (ii) taking up work only upon detailed survey, investigation and finalisation of land were partially implemented.

Paragraph 3.2

(iii) Audit paragraphs

Audit observed significant deficiencies in critical areas, which impact the effectiveness of the State Government. Some important findings arising out of Compliance Audit (seven paragraphs) are included in the Report. The major observations relate to absence of compliance with rules and regulations, audit against propriety, cases of systemic deficiencies, misappropriation, fraud, loss, wasteful/ unfruitful expenditures, avoidable extra expenditure, undue favours, excess payments. Some of these are mentioned below:

✓ Fraudulent payment of ₹ 1.40 crore was made to 21 non-functional private schools with possible collusion at various levels under the Assistant Commissioner, Tribal Development and the District Education Officer Janjgir-Champa.

(Paragraph 3.3.1)

✓ Executive Engineer (EE), PWD Ramanujganj irregularly awarded supply orders valued at ₹ 39.16 lakh to a firm and fraudulently made inflated payment of ₹ 17.24 lakh to the firm.

(Paragraph 3.3.2)

✓ Execution of layer of inverted choke in the construction of a road by EE, Public Works Division, Pathalgaon in contravention of MORT&H specifications and IRC pavement design led to avoidable extra cost of ₹ 4.75 crore.

(Paragraph 3.3.3)

✓ Sanction of a six lane road by PWD including service road in violation of MORT&H and IRC provisions besides execution of another road in Railway land in violation of Works Department manual led to unfruitful expenditure of ₹ 61.29 lakh on incomplete service road and wasteful expenditure of ₹ 33.81 lakh on road works on Railway land.

(Paragraph 3.3.4)

✓ Execution of unwarranted sand layer by Chhattisgarh Rural Road Development Authority, Kawardha despite upgrading the existing sub-grade by bringing soil from borrow pits led to avoidable extra cost of ₹ 78.64 lakh including excess payment of ₹ 49.01 lakh by inflating the rate of execution of sand layer work.

(Paragraph 3.3.5)

✓ Commencement of Mohar Project work by Water Resources Department without preparing land acquisition programme and ensuring its acquisition besides failing to obtain prior environment and forest clearance from Government of India led to unfruitful expenditure of ₹ 9.28 crore on the incomplete works which could not be put to intended use.

(Paragraph 3.3.6)

✓ Recovery of water charges at lower rate by Water Resources Division, Dantewada due to application of wrong tariff from two companies besides failure to recover outstanding water charges from another company by Water Resources Construction Division, Kasdol led to non-recovery of Government revenue of ₹ 1.31 crore.

(Paragraph 3.3.7)

Non-production of records to Audit

Section 18 (1) (b) of the C&AG's (Duties, Powers and Conditions of Service) Act, 1971 stipulates that the C&AG has the authority in connection with the performance of his duties under the said Act to requisition any accounts, books and other documents which deal with or form the basis of or are otherwise relevant to the transactions to which his duties in respect of audit extends. This provision has been further amplified by Regulation 181 of the Regulation on Audit and Accounts 2007 which stipulates that every department or entity shall establish and implement a mechanism to ensure that data, information and documents that are required by Audit are made available to it in time.

The records⁸ of appointments and promotions of the staff of Chhattisgarh Vidhan Sabha Secretariat (CVSS) were not furnished by the Deputy Secretary (Accounts) to Audit twice, first in February 2017 and again in August-September 2018, though requisitioned and reminded repeatedly by Audit. Such non-production of records severely limits the exercise of CAG's constitutional mandate and may result in possibility of wrong doing, wrong appointments etc. This is a red flag which should be investigated from vigilance angle and considered for disciplinary action against the concerned Deputy Secretary (Accounts).

Recommendation

The State Government should direct Secretary, CVSS to examine the matter of non-production of records from a vigilance angle, and consider taking appropriate action against the Deputy Secretary (Accounts).

⁸ Service book, personal files of officials, appointment and promotion orders, gradation list etc.

CHAPTER-I

INTRODUCTION

CHAPTER - I

INTRODUCTION

1.1 About this Report

This report contains the results of Performance and Compliance Audits of various Departments under General, Social and Economic Sectors of the Government of Chhattisgarh conducted during 2016-17 in compliance with the CAG's audit mandate.

The report aims to assist the Chhattisgarh Legislative Assembly in ensuring executive accountability and improving the process of governance and improving public service delivery of various Departments.

This Report contains the following chapters:

- 1. Chapter I:** General information about the auditee Departments
- 2. Chapter II:** Performance Audit (PA) on (i) National Rural Health Mission; and (ii) National Food Security Mission.
- 3. Chapter III:** Compliance Audit on (i) e-Procurement system in Chhattisgarh; (ii) Follow-up Audit of the PA on development of roads under Central Road Fund and Minimum Needs Programme; and (iii) seven Audit paragraphs.

1.2 Auditee Profile

Thirty-seven out of total 45 Departments in Chhattisgarh fall under the General, Social and Economic Sectors (GSES). These Departments are headed by Additional Chief Secretaries/Principal Secretaries/Secretaries, who are assisted by Commissioners/Directors and subordinate officers under them.

The State Government spent ₹ 60,471 crore against the budget of ₹ 80,202 crore during 2016-17 mainly due to decrease of revenue expenditure in education, sports, art and culture (₹ 2,230 crore), agriculture and allied services (₹ 2,129 crore) and pension and miscellaneous general services (₹ 1,697 crore). Similarly, there was decrease in capital expenditure in transport Department valued at ₹ 2,301 crore and rural development Department valued at ₹ 477 crore. Results of audit of the financial performance of the Government for 2016-17 are included in the Report (**Audit Report No. 1 of 2018**) on State Finances. The trend of budget estimates and actual expenditure during 2012-17 is depicted in **Chart 1** and details of major spending Departments are shown in **Table 1.1**.

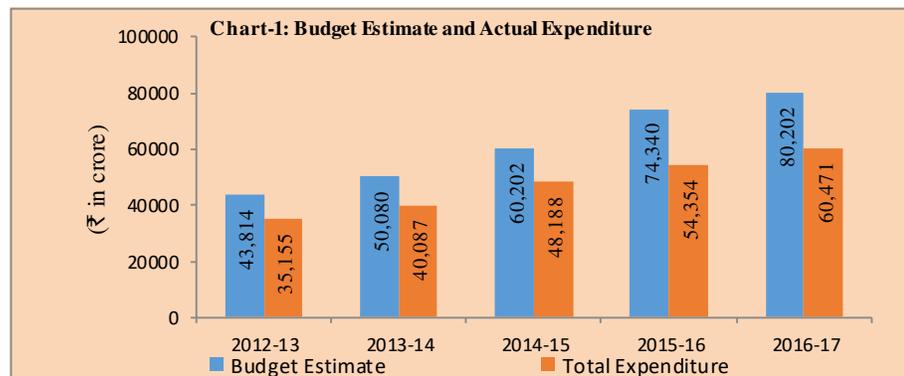


Table 1.1: Trend of expenditure in six major spending Departments during 2014-17

(₹ in crore)

Name of Department	2014-15	2015-16	2016-17
Education, Sports, Arts and Culture	9,518.25	9,822.82	11,596.31
Health and Family Welfare	2,333.35	2,419.42	3,292.27
Water Supply, Sanitation, housing and Urban Development	2,257.81	1,413.26	5,201.09
Agriculture and Allied Services	7,784.11	8,324.55	6,860.73 ¹
Rural Development	4,045.22	2,966.18	4,665.81
Irrigation and Flood Control	1,990.54	2,226.25	2,412.95

1.3 Audit Coverage

Accountant General (Audit), Chhattisgarh conducted the compliance audit of 372 out of 3,622 auditee units under 26 Departments during 2016-17. Of these, 132 units (35 per cent) were from the six major Departments indicated in **Table No. 1.1**.

1.4 Response of the Government to Audit

Audit affords four stage opportunity to the auditee units/Departments to elicit their views on audit observations viz.,

- Audit Memos:** Issued to the head of the auditee unit during the field audit to be replied during the audit itself.
- Inspection Report (IR):** Issued within a month of the actual audit to be replied to by the head of the auditee unit within four weeks.
- Statement of Facts (SoF):** Issued to the heads of the Departments under whom the auditee units function for submission of departmental views within six weeks for consideration prior to these being included in the Audit Report.
- Exit Conference:** Final opportunity is given to the head of Departments and State Government to elicit departmental/Government views on the audit observations.

In all these stages, Audit strives to provide full opportunities to auditee units/heads of Departments/State Government to provide rebuttals and clarifications after which, the audit observations are considered for inclusion in the Inspection Report or Audit Report as the case may be.

Inspection Reports (IRs)

A detailed review of IRs issued up to March 2017 to 3,622 Drawing and Disbursing Officers (DDOs) pertaining to 37 Departments revealed that 16,057 paragraphs amounting to ₹ 31,237.76 crore contained in 3,793 IRs were

¹ The main reason for shortfall in expenditure over previous years was due to decrease in expenditure of ₹ 2063.38 crore in food subsidy under 2408-Food, Storage and Warehousing (Food, Civil Supplies and Consumer Protection Department). Against the budget estimate of ₹ 9053.53 crore, expenditure of ₹ 6860.73 crore was incurred. The savings occurred mainly in the Food and Civil Supplies Department (subsidy under Chief Minister Food Assistance Programme, Gram distribution under Antodaya Anna Yojana and construction of Godowns) and Forest Department (Timber, National Afforestation and National Forestation)

outstanding for settlement for want of convincing replies as on 31 March 2018². Of these, the DDOs submitted initial replies against 13,771 paragraphs contained in 3,436 IRs. The DDOs failed to furnish even initial replies in respect of 2,286 paragraphs contained in 357 IRs having overall money value of ₹ 7,355.24 crore.

Further, 62 *per cent* IRs and 48 *per cent* paragraphs were outstanding for more than five years and 10 *per cent* IRs and 16 *per cent* paragraphs pertain to current year (2016-17). Details are furnished in the **Table 1.2**.

Table 1.2: Outstanding IRs and Paragraphs issued up to 31 March 2017 as on 31 March 2018

Sl. No.	Period	No. of outstanding IRs (<i>per cent</i>)	No. of outstanding paragraphs (<i>per cent</i>)
1	2016-17	372 (10)	2,572 (16)
2	1 year to 3 years	680 (18)	3,798 (23)
3	3 years to 5 years	386 (10)	2,026 (13)
4	More than 5 Years	2,355 (62)	7,661 (48)
Total		3,793	16,057

During 2016-17, four Audit Committee meetings were held with departmental officers, in which 63 IRs and 311 Paragraphs were settled.

Statement of Facts (SoFs)

During 2016-17, 36 SoFs were issued by the Accountant General to heads of 13 Departments to elicit their views on the audit observations. Of these, only 24 replies were received from 10 Departments and no reply was furnished to the 12 SoFs³ till March 2018 as shown below:

No. of SoFs issued during 2016-17	Replies received till March 2018	Replies not received till March 2018
36	24	12

Non-production of records to Audit

Section 18 (1) (b) of the C&AG's (Duties, Powers and Conditions of Service) Act, 1971 stipulates that the C&AG has the authority in connection with the performance of his duties under the said Act to requisition any accounts, books and other documents which deal with or form the basis of or are otherwise relevant to the transactions to which his duties in respect of audit extends. This provision has been further amplified by Regulation 181 of the Regulation on Audit and Accounts 2007 which stipulates that every department or entity shall establish and implement a mechanism to ensure that data, information and documents that are required by Audit are made available to it in time.

Audit of the office of Secretary, Chhattisgarh, Vidhan Sabha Secretariat (CVSS) was conducted in February 2017. The records⁴ of appointments and promotions of the staff of CVSS, though requisitioned in Audit and reminded repeatedly, were not furnished by the Deputy Secretary (Accounts). The audit of the said

² Including IRs and paragraphs issued up to 31 March 2017 and outstanding as on 31 March 2018.

³ Public Works Department (three SoFs), Water Resources Department (four SoFs), Higher Education Department (five SoFs)

⁴ Service book, personal files of officials, appointment and promotion orders, gradation list etc.

unit was again conducted between 27 August 2018 and 07 September 2018. However, these records of appointment and promotions of the staff of CVSS were again not produced to Audit despite requisition and reminders. Such non-production of records severely limits the exercise of CAG's constitutional mandate and may result in possibility of wrong doing, wrong appointments etc. This is a red flag which should be investigated from vigilance angle and also considered for disciplinary action against the concerned Deputy Secretary (Accounts).

Recommendation

The State Government should direct Secretary, CVSS to examine the matter of non-production of records from a vigilance angle, and consider taking appropriate action against the Deputy Secretary (Accounts).

1.5 Performance and Compliance Audits

For the present Audit Report 2016-17, draft reports on two Performance Audits, two Compliance Audits and seven Audit Paragraphs were forwarded to the concerned Administrative Secretaries. These were replied to by the concerned Additional Chief Secretary/Principal Secretary/Secretary of the Departments in the Exit Conference. For the Audit paragraphs, reply has been received for three paragraphs while no replies were furnished by four Departments⁵ on the remaining four paragraphs despite repeated reminders.

1.6 Action taken on earlier Audit Reports

According to the rules of procedure for the internal working of the Committee on Public Accounts, Administrative Departments were to initiate, *suo motu* action on all Audit Paragraphs and Reviews featuring in the Comptroller and Auditor General's Audit Reports (ARs), regardless of whether these are taken up for examination by the Public Accounts Committee (PAC) or not. They were also required to furnish detailed Action Taken Notes (ATNs), duly vetted by Audit, indicating the remedial action taken or proposed to be taken by them. The Audit Reports on GSES for the years 2000-01 to 2015-16 have 357 outstanding paragraphs. The discussion status is mentioned in **Table 1.3** below:

Table 1.3: Status of PAC discussion, Chhattisgarh, Vidhan Sabha

Status	Audit Report (Civil) for the year 2000-01 to 2015-16
No. of outstanding Audit Paragraphs	357
Taken up by PAC for discussion	189
Not taken up for PAC discussion	168
Recommendation made by PAC	81 paragraphs
ATN received	68 paragraphs
Action taken by the Department	68 paragraphs

⁵ Tribal and Scheduled Caste Welfare Department, Public Works Department, Water Resources Department, Panchayat & Rural Development Department

1.7 Recoveries at the instance of Audit

The audit findings involving recoveries that came to notice in the course of test audit of accounts of Departments of the State Government are referred to various departmental DDOs for confirmation and further necessary action under intimation to Audit.

Against recovery of ₹ 576.88 crore pointed out in 75 cases during the year 2016-17, total recovery of ₹ 23.67 crore was made in 28 cases, as detailed in **Table 1.4** below:

Table 1.4: Recoveries pointed out by Audit and accepted/recovered by the Departments

(₹ in crore)

Name of Sector	Recoveries pointed out in Audit and accepted by the Departments during 2016-17		Recoveries effected during 2016-17 (includes recoveries pertaining to previous years)		Name of the Department	Particulars of recoveries
	Number of cases	Amount involved	Number of cases	Amount involved		
Social Sector	0	0	11	11.42	PHE, Panchayat & Rural Development, Health & family Welfare, School Education and Culture	Recovery of penalty, liquidated damages, excess payment from contractors, recovery of advances from officials and Sarpanch.
Economic Sector	75	576.88	17	12.25	PWD, WRD, Agriculture	Royalty, Mobilisation Advance, cost of hard rock obtained from excavation of work site, extra cost, penalty for delay, recovery from staff and contractors.
Total	75	576.88	28	23.67		

A case study of recovery at the instance of audit is given below:

Registrar, Pandit Ravishankar Shukla University (PRSU) Raipur made irregular and unauthorised payment of conveyance allowance of ₹ 1.70 crore to its employees (Group I to IV) between April 2000 and July 2017 in violation of the Rules of the State Government and without obtaining sanction from the State Government. On being pointed out (May 2016) in audit, Registrar, PSRU issued (August 2017) orders stopping the irregular payment at the higher rate to the Group III and IV employees and unauthorised payment to Group I and II employees. Moreover, the University initiated (between October 2017 and August 2018) recovery of excess payment and had recovered ₹ 29.44 lakh from the employees. The Registrar of the University also assured Audit that the remaining amount would be recovered in subsequent installments.

CHAPTER-II

PERFORMANCE AUDIT

2.1 National Rural Health Mission

2.2 Implementation of National Food Security Mission

CHAPTER II

HEALTH AND FAMILY WELFARE DEPARTMENT

2.1 Performance audit on National Rural Health Mission

2.1.1 Introduction

Government of India (GoI) launched the National Rural Health Mission (NRHM) in April 2005 to provide accessible, affordable, accountable, effective and reliable health care facilities to the rural population. NRHM was aimed to help States to achieve goals set under NRHM framework for implementation during 2012-17 to reduce:

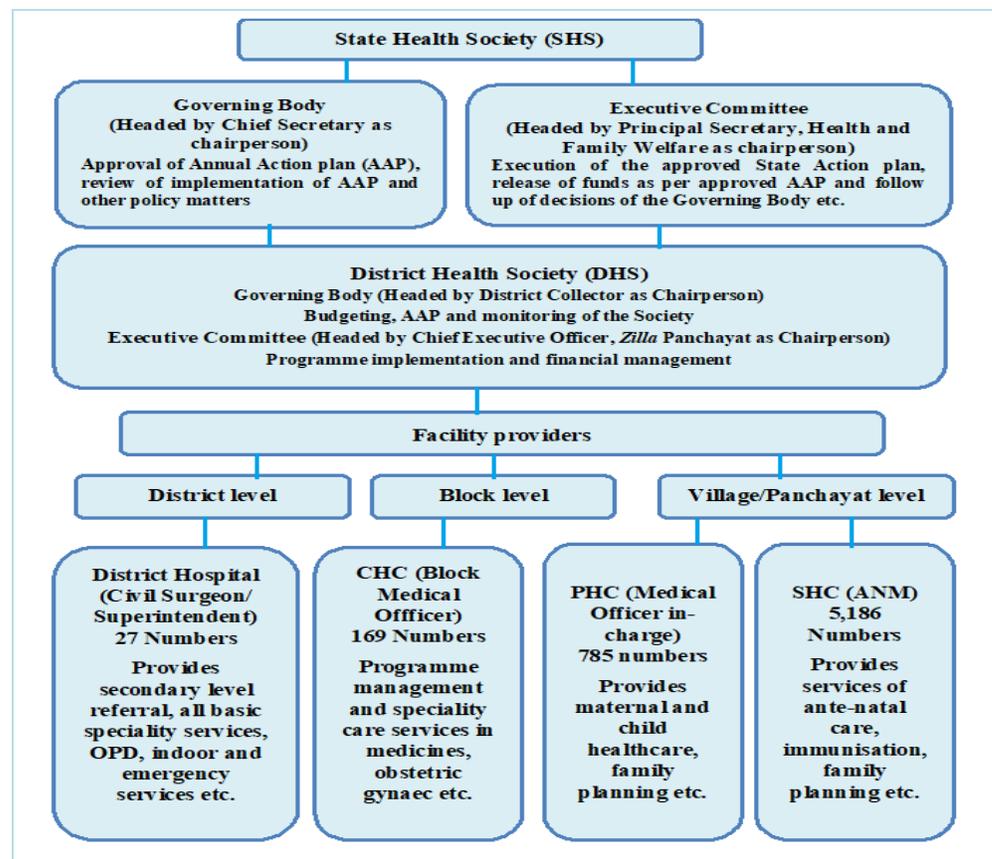
- Infant mortality rate (IMR) to less than 25 per 1,000 live births
- Maternal mortality rate (MMR) to 100 per lakh live births
- Total fertility rate (TFR) to 2.1 by 2017 and stabilising it.

The key strategy of the Mission was to bridge the gaps in health care facilities, facilitate decentralised planning in health sector, providing an umbrella to existing programmes of health and family welfare including reproductive and child health and various disease control programmes.

2.1.2 Organisational set up

NRHM is a mission mode programme carried out by State health society (SHS) as shown in **Chart 2.1.1** below:

Chart 2.1.1: Organisational chart



As on March 2017, there were 169 community health centres¹ (CHCs), 785 primary health centres² (PHCs) and 5,186 sub-health centres³ (SHCs) functioning in the State for providing healthcare services to the rural population.

2.1.3 Audit objective

The objectives of performance audit were to assess the impact of NRHM on improving reproductive and child health in the State by test check of the:

- extent of availability of physical infrastructure;
- extent of availability of health care professionals; and
- quality of health care provided

2.1.4 Audit criteria

The audit criteria were derived from the following sources:

- NRHM framework for implementation 2005-12 and 2012-17
- NRHM operational guidelines for financial management
- Indian public health standards (IPHS) guidelines 2012 for SHCs, PHCs, CHCs and District Hospitals (DHs)
- Operational guidelines for quality assurance in public health facilities 2013 and
- Assessor's guidebooks for quality assurance in DHs 2013 and CHC (first referral unit) 2014

2.1.5 Scope and methodology

The PA on NRHM with special focus on reproductive and child health (RCH) for the period 2012-17 was conducted during April-July 2017 covering seven⁴ out of 27 districts by sampling⁵ method. In these sampled districts, seven DHSs, 14 CHCs (two from each district), 28 PHCs (four from each district with two under each CHC) and 84 SHCs (12 from each district with three under each PHC) were also selected by SRSWOR method. The details of districts and health centres selected are detailed in **Appendix 2.1.1**.

Audit also scrutinised the records/ information collected from the office of the Mission Director and Directorate of health services to assess the overall position at the State. Apart from examination of documents, joint physical inspection of 133 health facilities, interview of 840 beneficiaries who had undergone child deliveries during 2014-17 (out of 16,383 registered beneficiaries under the selected SHCs) and cross verifications of records at various levels were also undertaken.

¹ For a population of 1.20 lakh in rural area and 0.80 lakh in tribal area, there should be one CHC with a minimum 30 bedded accommodation and one operation theatre. In addition to two regular Medical officers, there should be specialist services in surgery, gynaecology and paediatrics

² For a population of 0.30 lakh in rural areas and 0.20 lakh in tribal areas, there should be one PHC with a minimum six bedded accommodation and one Medical officer

³ One SHC for a population of 5,000 in plain area and 3,000 for hilly and tribal area

⁴ Bilaspur, Jashpur, Kanker, Korea, Mahasamund, Raipur and Rajnandgaon

⁵ Adopting simple random sampling without replacement (SRSWOR) method, seven districts were selected, of which six (except Raipur) had rural population of more than 70 per cent. However, Raipur being part of selection by SRSWOR, and also the Capital district, is selected for examination.

An entry conference was held (April 2017) with the Principal Secretary (PS), Health and Family Welfare Department (Department), Government of Chhattisgarh, to discuss the objectives, scope and methodology of the performance audit. An exit conference was also held (March 2018) with the PS of the Department to discuss the audit findings. The views/replies of the Department have been suitably incorporated in the report.

Audit findings

2.1.6 Planning

The NRHM operational guidelines for financial management prescribe a bottom up approach to planning. Under this, block health action plan (BHAP) was to be prepared based on inputs from the implementing units (CHCs, PHCs and SHCs). The BHAPs would then be aggregated to form District health action plan (DHAP) which would be further aggregated at State level to form the State programme implementation plan (PIP). The State PIP is to be submitted to GoI by 31 December to facilitate approval of the plan by 28 February.

Audit observed that the State Government prepared the PIP on the basis of BHAP and DHAP. However, State PIP was submitted to GoI with a delay of 44 to 137 days on grounds of issue of revised guidelines/ instructions by GoI, addition of new components and formats by the Department, preparation of revised PIP and getting approval of governing body etc. Consequently, the approval of GoI was received with a delay of 85 to 224 days which resulted in delay in execution of new works such as appointment of human resources, new construction works and procurement of equipment etc., as commented in paragraph 2.1.8.1 (iv), 2.1.9.3, 2.1.9.6. Had the process of preparation of PIP been properly planned (i.e., the additional components/ formats been planned in the beginning etc.), the delays could have been avoided.

2.1.7 Financial management

2.1.7.1 Public spending on healthcare (NRHM and State budget)

At the national level, NRHM envisaged increasing public spending on health, with a focus on primary healthcare, from 0.9 *per cent* of gross domestic product (GDP) in 2004-05 to 2-3 *per cent* of the GDP by 2012, while the states were required to increase their spending on health sector by at least 10 *per cent* year on year (YOY) basis.

The public spending at national level was 1.05 to 1.18 *per cent* of GDP⁶ during 2013-17. Although the State expenditure on public health increased by eight to 28 *per cent* during the period 2012-17, public spending on health remained at 0.85 to 1.13 *per cent* of gross State domestic product (GSDP⁷).

2.1.7.2 Fund allocation and expenditure

The resource envelope (RE) under NRHM for a financial year consists of (a) unspent balances of the previous years; (b) proposed allocation i.e., budgetary estimates (BE); and (c) State share contribution due for the year which was in the ratio of 75:25 during 2012-15 and 60:40 during 2015-17. Till 2013-14, GoI transferred its annual share based on the approved PIP directly

⁶ Source: Ministry of Statistics and Programme Implementation, GoI.

⁷ Source: Directorate of Economics and Statistics of Chhattisgarh State.

to the SHS, with the State Government transferring its share separately. The RE was to be supplemented by funds released by the State Government from its budget. From 2014-15 onwards, GoI share is released to the State Government, which thereafter, transfers its share along with the GoI share, to the SHS.

The receipt and expenditure under NRHM during 2012-17 is shown in **Table 2.1.1** below:

Table 2.1.1: Receipts and expenditure under NRHM

(₹ in crore)

Year	PIP approved by GoI	Opening balance	Receipts		Interest & other receipts*	Total fund available	Expenditure/ refund/ adjustment	Closing balance
			GOI	State				
2012-13	858.75	455.63	214.07	135.00	33.39	838.08	391.23(47)	446.85
2013-14 [#]	887.03	462.10	250.53	133.94	43.17	889.74	502.61 (56)	387.13
2014-15	797.22	387.13	306.29	158.23	45.73	897.39	555.97 (62)	341.42
2015-16	947.10	341.42	294.19	275.26	57.90	968.77	672.04 (69)	296.73
2016-17	971.47	296.73	355.27	356.40	93.54	1,101.93	802.34(73)	299.60
Total	4,461.58		1,420.34	1,058.84	273.73		2,924.19	

(Source: Information provided by SHS)

*Includes other grants received under emergency medical response system and mitanin⁸ (ASHA) incentive States share.

[#]Figures of non-communicable disease were also merged in the FY 2013-14 as the grants were received by the Directorate of Health Services and funds were received under NRHM from 2013-14. Hence there is a change in opening balance of 2013-14 from closing balance of 2012-13

NRHM intervention (₹ 2,924.19 crore) was 34.19 per cent of the total expenditure (₹ 8,552.66 crore) of the State Government under Health and Family Welfare Department during 2012-17.

Of the total allocation of funds for intervention through NRHM, the approved outlay and expenditure under the major components such as RCH flexible pool⁹, NRHM flexible pool¹⁰ and immunisation programme is depicted in

Table 2.1.2:

Table 2.1.2: Funds provided and expenditure incurred under RCH, NRHM flexible pool and immunisation during 2012-17

(₹ in crore)

Year	ROP ¹¹	Opening balance	Grant received			Interest/ other receipts	Total	Expenditure (percentage to ROP)	Closing balance
			Total ¹²	GoI	State				
2012-13	654.83	184.97	485.49	201.85	283.64	-	670.46	363.03 (55)	307.43
2013-14	669.05	307.43	428.05	231.46	196.59	-	735.47	466.64 (70)	268.83
2014-15	610.70	268.83	440.35	271.06	169.29	62.79	771.97	519.66 (85)	252.31
2015-16	753.36	252.31	576.09	283.76	292.33	7.60	836.00	601.27 (80)	234.73
2016-17	769.21	234.73	625.64	338.96	286.68	10.55	870.92	696.75 (91)	174.17
Total	3,457.15		2,555.62	1,327.08	1,228.54	80.94		2,647.35¹³	

(Source: Data provided by SHS)

⁸ Accredited social health activist (ASHA) is known as *Mitanin* in the State.

⁹ RCH flexible pool includes funds for RCH related components such as maternal health, child health, family planning, *Janani Suraksha Yojana*, compensation for sterilisation etc.

¹⁰ NRHM flexible pool includes additional activities such as for ASHAs, *Jeevan Deep Samiti*, Untied Fund, annual maintenance grants etc., essential for health activities which cannot be funded from any other programme are funded from this fund.

¹¹ Record of proceedings (ROP) is approval given by the GoI on the State PIP.

¹² OB comprises of committed expenditure of previous year and uncommitted balance. The ROP includes uncommitted balance of OB. Hence, ROP is at variance to OB plus total grants besides short release of fund vis-à-vis the approved PIP for the year.

¹³ Included ₹ 411.76 crore for construction, ₹ 127.32 crore on drugs and ₹ 6.04 crore on equipment.

The short receipt of funds vis-a-vis the ROP were mainly due failure of the SHS to spend the allotted fund which resulted from non-procurement of drugs and equipment (**paragraph 2.1.9.6 and 2.1.9.8**), incomplete construction activities (**paragraph 2.1.9.3**), less routine immunisation (**paragraph 2.1.10.4**), inadequate recruitment of human resources (**paragraph 2.1.8**), less expenditure under female sterilisation (**paragraph 2.1.10.5**) and trainings etc. This impaired the aim of the Mission to deliver uninterrupted and quality healthcare to the beneficiaries as discussed in subsequent paragraphs. As a result of under-spending and short allocation vis-à-vis ROP, the intervention of NRHM on these components ranged between 55 and 91 *per cent* of approved PIP during 2012-17.

In the exit conference (March 2018), the PS stated that the savings were due to large opening balance in 2011-12 and non-availability of human resources and expenditure on infrastructure was adjusted in subsequent years.

The reply is not correct as the savings were due to failure of the SHS to spend the grants on the approved works during the concerned years as mentioned above which is reflected in the form of CB for the current year and OB in the next plan year.

2.1.8 Human resource management

2.1.8.1 Non-availability of healthcare professionals

The position of deployment of manpower *vis-a-vis* sanctioned by the State Government and IPH standards in health centres (DHs, CHCs, PHCs and SHCs) is given in **Table 2.1.3**.

Table 2.1.3: Availability of doctors and paramedical staff in the State as on 31 March 2017

Health facilities	Cadre	Number of health centres	Manpower required as per IPHS for each health centre	Total Man power required as per IPHS	Posts sanctioned by the State Government	Person in position (as per Director of Health Services)	Shortage as per IPH standard (<i>per cent</i>)	Shortage vis a vis sanctioned post (<i>per cent</i>)
1	2	3	4	5	6	7	8	9
DHs	Specialists	26	15/18/36	420	391	102	318 (76)	289 (74)
	Medical officers		13/15/30	361	446	349	12 (3)	97 (22)
	Staff nurse		45/90/225	1,485	963	726	759 (51)	237 (25)
	Paramedical staff		30/41/99	882	800	719	163 (18)	81(10)
	Total		103/162/390¹⁴	3,148	2,600	1,896	1,252(40)	704 (27)
CHCs	Specialists	169	5	845	921	43	802 (95)	878 (95)
	Medical officers		3	507	427	380	127 (25)	47 (11)
	Staff nurse		10	1,690	1,570	1,125	565 (33)	445 (28)
	Paramedical staff		10 ¹⁵	1,690	819	664	1,026 (61)	155(19)
	Total		28	4,732	3,737	2,212	2,520 (53)	1,525 (41)
PHCs	Medical officers	785	1	785	767	328	457 (58)	439 (57)
	Staff nurse		3	2,355	1,070	527	1,828 (78)	543 (51)
	Paramedical staff		5	3,925	2,097	1,904	2,021 (51)	193 (9)
	Total		9	7,065	3,934	2,759	4,306 (61)	1,175 (30)
SHCs	ANM/health worker	5,186	2	10,372	10,372	9,247	1,125(11)	1,125 (11)

(Source: Director of Health Services)

¹⁴ Sanctioned strength for 100 bedded-103 (22), 200 bedded-164 (3) and 500 bedded-390 (1)

¹⁵ Pharmacist-1, laboratory technician-2, radiographer-1, ophthalmic assistant-1, dental assistant-1, cold chain and logistic assistant-1, multi rehabilitation community based health worker-1, councillor-1

The State was reeling under acute shortage of Specialists to the extent of 89 per cent and Medical officers to the extent of 36 per cent

To meet the gap of 1,602 doctors¹⁶ (including Specialists) in 2012 which increased¹⁷ to 1,744 during 2017, the Directorate of health services appointed 1,226 doctors in the post of MOs¹⁸ during 2012-13 to 2017-18 (February 2018) but only 474 MOs (including 35 on contract basis) joined the Department as of February 2018. The reasons for reluctance of doctors to join the Department were not assessed by the Government. In addition, 1,637 staff nurses and paramedical staff were also appointed during 2016 and 2017 while approval of Finance Department was obtained (August 2018) for recruitment against 1,315 posts (208 MOs/ AMOs, 911 nurses and 196 other paramedical staff).

In the exit conference (March 2018), the PS of the Department admitted to the shortage of specialists and doctors and stated that steps were being taken to attract and retain healthcare professionals by providing best remuneration (up to ₹ 2.50 lakh per month) according to location. The PS also informed that walk in interviews are conducted every Monday to recruit doctors.

Audit reviewed the availability of doctors and paramedical staff in the sampled health centres as shown in table below and the following deficiencies were noticed:

Table: 2.1.4 Shortage of staff at State level and the selected health centres

Health facilities (number of health facilities)	Cadre (as per IPHS)	Shortage as per IPH standard (per cent)	Shortage vis a vis sanctioned post (per cent)	No. of health facilities test checked	Posts sanctioned by the State Government	PIP of the test checked units *	Shortage of staff as per IPHS (per cent)	Shortage of staff as per sanctioned strength (per cent)
State Position				Selected health centers' position				
DHs (26)	Specialists	318 (76)	289 (74)	DH (7)	101	58	53 (48)	43 (43)
	Medical officers	12 (3)	97 (22)		141	114	--	27 (19)
	Staff nurse	759 (51)	237 (25)		344	262	143 (35)	82 (24)
	Paramedical staff	163 (18)	81 (10)		151	101	138 (58)	50 (33)
	Total	1,292(40)	704 (27)		737	535	322 (38)	202 (27)
CHCs (169)	Specialists	802 (95)	878 (95)	CHC (14)	65	11	59 (84)	54 (83)
	Medical officers	127 (25)	47 (11)		38	59	--	--
	Staff nurse	565 (33)	445 (28)		140	113	27 (19)	27 (19)
	Paramedical staff	1,026 (61)	155 (19)		104	86	54 (39)	18 (17)
	Total	2,520 (53)	1,525 (41)		347	269	123 (31)	78 (22)
PHCs (785)	Medical officers	457 (58)	439 (57)	PHC (28)	28	9 ¹⁹	19 (68)	19 (68)
	Staff nurse	1,828 (78)	543 (51)		84	37	47 (56)	47 (56)
	Paramedical staff	2,021 (51)	193 (9)		96	91	49 (35)	5 (5)
	Total	4,306 (61)	1,175 (30)		208	137	115 (46)	71 (34)
SHCs (5,186)	ANM/ health worker	1,125 (11)	1,125 (11)	SHC (84)	168	166	2 (1)	2(1)

*includes contractual appointments

(i) District hospitals

In the seven sampled DHs, the shortage of specialists were in the major disciplines such as surgery (two), anesthesia (two), gynecology (one), ophthalmology (three), radiology (five), orthopedics (three), pathology (three), ENT (four) and dental (three). Resultantly, the patients were deprived of

¹⁶ Total sanction of doctors (Specialists and MOs) in 2012-13 was 2,932 and working-1,330; Hence, shortage of doctors was 1,602 in the State.

Total sanction of doctors (Specialists and MOs) in 2016-17 was 3,380 and working-1,636; Hence, shortage of doctors was 1,744.

¹⁷ Due to net of sanction of additional posts, appointments made, retirement/resignations etc.

¹⁸ Specialists are appointed through promotion after fulfilling the required criteria.

¹⁹ In PHCs, apart from MOs (MBBS), 32 AMOs/ RMA (non MBBS) are posted against sanctioned posts of 30 AMOs.

necessary treatments for various illnesses and diagnostic services in these DHs and were referred to other hospitals (such as Dr. Bhim Rao Ambedkar Hospital, Raipur and Chhattisgarh Institute of Medical Sciences, Bilaspur etc.) with such facilities as observed from the indoor patient Department (IPD) registers.

There was huge shortage (37 per cent) of medical professionals

(ii) Community health centres

In the 14 sampled CHCs, only 70 medical professionals (63 per cent) were posted against the requirement of 112 medical professionals²⁰ whereas only 199 paramedical staffs (71 per cent) were deployed against the requirement of 280 paramedical²¹ staff as shown in **Table 2.1.5**.

Table 2.1.5: Availability of medical and paramedical staff in test checked CHCs

Name of the post	Requirement as per IPHS norms	Sanctioned as per State Government	Person-in-position (regular plus contractual)	Shortage (-) / Excess (+) as per IPHS	Shortage (-)/ excess (+) as per sanctioned strength
Specialists	70	65	11	- 59	- 54
Medical officers	42	38	59	+ 17	+ 21
Paramedical staff	280	244	199	- 81	- 45

(Source: data collected from CHCs)

As a result of the shortage of doctors/specialists, in 12 sampled CHCs, 817 women were referred to higher facilities during 2015-16 and 952 women in 2016-17. Further, in the test checked districts only 220 (2.3 per cent) out of 9,412 caesarian-section deliveries were conducted in nine CHCs (out of 47 CHCs) while in the 38 CHCs (in the sampled districts) no caesarian deliveries were conducted mainly due to non-availability of specialists such as gynecologists. Thus, desired healthcare services through these centres were compromised.

(iii) Primary health centres

As per IPH Standards, one doctor (Medical officer) and eight paramedical staff is required in each PHC.

Medical officers were not available in 68 per cent sampled PHCs

In the 28 test checked PHCs, Medical officers (MBBS) were not posted at 19 PHCs (68 per cent), while in 25 PHCs, 32 rural medical assistants/assistant Medical officers (Non-MBBS) were posted. Further, in the sampled PHCs, 128 paramedical staff were posted against the IPHS requirement of 224 staff. The details of staff available and shortage in the test checked PHCs are shown in **Table 2.1.6**.

Table 2.1.6: Medical and paramedical professionals at test checked PHCs

Name of the post	Requirement as per IPHS norms	Sanctioned as per State Government per norms	Person-in-position (regular and contractual)	Shortage as per IPHS (percentage of shortage)	Shortage as per sanctioned strength
Medical officers	28	28	9	19 (68)	19
AMO/RMA	-	30	32	--	+ 2
Paramedical staff	8 ²² x28=224	180	128	96 (43)	52

(Source: data collected from PHCs)

²⁰ Anesthetist (1), Dental Surgeon (1), General Medical officer (2), General Surgeon (1), Obstetrician & Gynecologist (1), Pediatrician (1) and Physician (1).

²¹ Paramedical- staff nurse (10), pharmacist, lab technician (2), radiographer, ophthalmic assistant, dental assistant, cold chain and vaccine assistant, OT technician, multi rehabilitation worker, councillor.

²² Medical officer-1, staff nurse-3, pharmacist-1, health worker male and female-1 each, lady health visitor-1, laboratory technician-1

Absence of Medical officers in 68 *per cent* of the sampled PHCs compounded with shortages of paramedical staff adversely affected the delivery of health services through these centres and forces the public to go to CHCs or DHs for treatments as the AMOs posted in the PHCs were permitted to treat and prescribe only limited number of diseases and drugs.

(iv) Sub health centres

IPHS provides for appointment of one auxiliary nurse midwifery (ANM) and one health worker (male) in each SHC.

In the 84 test checked SHCs, ANMs and health workers (male) were not posted in the three²³ and 14 SHCs respectively. Further, in 15²⁴ of the 84 SHCs, one extra ANM²⁵ were posted. Thus, in the absence of ANMs and health worker (male), the essential care for pregnant women, ANC, PNC check-up and assistance to carryout various health programmes were hampered.

Thus, there was shortage of 1,167 specialist doctors and 583 MOs in the State. In the sampled health centres, the shortage of medical professionals was 15 *per cent* in DHs, 37 *per cent* in CHCs and 68 *per cent* in PHCs. Similarly, the shortage of paramedical staff was 32 *per cent* at DHs, 29 and 43 *per cent* at CHCs and PHCs respectively. Shortage of medical professionals at all levels of health facilities led to denial of mandated health services at public health facilities. However, even where doctors were available²⁶, the patients were still deprived of necessary treatments for various illnesses and diagnostic services in these health centres due to shortages²⁷ of medical equipment, drugs and consumables, laboratory services (**also commented in paragraphs 2.1.9.6, 2.1.9.7 and 2.1.9.8**), and were referred to other hospitals such as Dr. Bhim Rao Ambedkar Hospital, Raipur, Chhattisgarh Institute of Medical Sciences, Bilaspur etc., as observed from the indoor patient department (IPD) registers.

Further, in the State PIP, GoI sanctioned²⁸ appointment of 3,725 persons on contractual²⁹ basis. However, only 2,785³⁰ (74.76 *per cent*) persons could be appointed up to March 2017. Though every year, about 200 MBBS doctors are

The shortage of medical professionals was 15 *per cent* in DHs, 37 *per cent* in CHCs and 68 *per cent* in PHCs

²³ Komakhan, Kosrangi and Mangla

²⁴ Asulkhar, Barvi, Birkondal, Bishunpur, Galonda, Gamhariya, Kelhari, Kere, Kewti, Kodabhat, Lokhandi, Makri Khauna, Pataud, Saraigahana and Vyaskongera

²⁵ These are additional ANMs posted in the SHCs which are remotely located based on sanctions in the ROP. These extra ANMs conduct field work in those inaccessible areas.

²⁶ Between 75 and 100 *per cent* in four out of seven sampled DHs, six out of 14 sampled CHCs and nine out of 28 sampled PHCs

²⁷ Shortages of equipment were in the range of 27 to 41 *per cent* in DHs, 25 to 69 *per cent* in CHCs and 32 to 64 *per cent* in PHCs. Similarly, the shortage of drugs and consumables were in the range of 40 to 76 *per cent* in DHs, 52 to 75 *per cent* in CHCs and 45 to 67 *per cent* in PHCs and shortage of laboratory services was 45 to 63 *per cent* in DHs, 36 to 58 *per cent* in CHCs and 38 to 71 *per cent* in PHCs

²⁸ In addition to the regular sanctioned set-up

²⁹ For implementation of various health programmes under NRHM such as Rashtriya Bal Swasthya Karyakram (RBSK), Nutritional Rehabilitation Centre (NRC), Sick New Born Care Unit (SNCU), District Early Intervention Centre (DEIC), extra staff for 24x7 PHC and extra ANM in SHC with higher deliveries etc.

³⁰ Medical officers-163, Ayush doctor-59, staff nurse-515, ANM-1,123, paramedical staff-276 and other staff-649

produced by the State, yet in the absence of any concerted plan or policy to attract the fresh doctors to join the Health Department, the State continued to suffer from acute shortage of doctors in public sector. Thus, the support extended by GoI under the scheme could not be optimally utilised by the State to bridge the gaps.

In the exit conference (March 2018), the PS agreed with the Audit observation and stated that the State is trying to fill the vacancies of doctors by organising walk in interview.

Recommendation

The Department should prioritise the filling up of critical vacancies, especially those of specialist doctors and Medical officers and ensure availability of medical equipment, drugs, consumables, laboratory services so as to deliver the required health facilities at each level in line with the mandate of the Mission.

2.1.9 Physical infrastructure

2.1.9.1 Availability of health centres against IPHS norms

NRHM framework envisages service delivery by primary health care facilities (CHCs, PHCs and SHCs) based on population norms as per Indian Public Health Standards (IPHS). Scrutiny of records of SHS revealed shortage of health facilities in the State both as per IPHS norms and as determined by the State as shown in **Table 2.1.7:**

Table 2.1.7: Requirement of number of institutions at different level

Year	CHC			PHC			SHC		
	Requirement worked out by Department	Requirement ³¹ as per IPHS norms	Available (shortage per cent)	Requirement worked out by Department	Requirement as per IPHS norms	Available (shortage per cent)	Requirement worked out by Department	Requirement as per IPHS norms	Available (shortage per cent)
2012	200#	200	149 (26)	795#	795	755 (5)	5,043#	5,043	5,111 (26)
2017	200*	223	169 (24)	795*	884	785 (11)	5,043*	5,617	5,186 (8)

(Source: data provided by SHS, census and calculation by Audit)

Previously requirement worked out by the Department for CHC was 194, PHC-776 and SHC-4899

* The State has not calculated the requirement as per projected population for 2017.

The State had shortage of 24 per cent CHCs, 11 per cent PHCs and eight per cent SHCs

Of the total shortages of CHCs, PHCs and SHCs in the State, the tribal areas³² lacked 25 CHCs, 61 PHCs and 210 SHCs.

In the exit conference (March 2018), the PS stated that Government sanctions health institutions on population norms, topography and other factor like *Naxal* affected areas.

The reply is not convincing. Though the Department had followed the criteria

³¹ As per IPHS norms, for a population of 1.20 lakh in rural area and 0.80 lakh in tribal area, there should be one CHC with a minimum 30 bedded accommodation and one operation theatre; for a population of 0.30 lakh in rural area and 0.20 lakh in tribal area, there should be one PHC with a minimum six bedded accommodation; and one SHC for a population of 5,000 in plain area and 3,000 for hilly and tribal area. The requirement has been calculated on the basis of census -2011 and projected population for 2017.

³² Tribal areas are those which are notified as tribal area in the fifth Schedule. Against the requirement of 116 CHCs, 463 PHCs and 3,073 SHCs in Tribal areas, the availability of CHCs was 91, PHCs was 402 and SHCs was 2,863 respectively.

to work out the requirements of health centres, the sanctions were less vis-à-vis the IPHS/departmental requirements, particularly in the tribal areas for reasons not on record.

2.1.9.2 Location of health centres

IPHS norms stipulate that health centres should be centrally located and easily accessible to people and connected with all-weather motorable approach road. The norms also stipulate that a person should have access to a SHC within three kilometers (km) walking distance.

Audit visited the sampled health centres (14 CHCs, 28 PHCs and 84 SHCs) and observed that 13 (93 per cent) out of 14 CHCs were located at a distance of more than 30 km (30-90 km) from the farthest village. Likewise, four³³ out of 28 PHCs (14 per cent) were located at a distance of more than 30 km (35-50 km) from the remotest village and six³⁴ out of 28 PHCs (21 per cent) were not accessible by public transport. Further, 64 out of 84 SHCs (76 per cent) were located beyond three km from the remotest village while 37 out of 84 SHCs (44 per cent) were not accessible by public transport.

In the exit conference (March 2018), the PS stated that the health centres are established on the basis of population but due to non-availability of Government land, some of the SHCs are situated at more than three km from the farthest village. It was also stated that CHCs are established in the block headquarters and hence covers large distance.

Fact remains that failure to establish health centres within permissible distance stipulated under IPHS defeated the purpose of providing accessible health centres to the rural population.

2.1.9.3 Construction of health centres

NRHM aims to bridge the gaps in the existing capacity of the rural health infrastructure by establishing functional health facilities through revitalisation of the existing physical infrastructure such as health centres and new constructions or renovation, wherever required.

Chhattisgarh Medical Services Corporation Limited (Corporation) was set up in October 2010 (functional from May 2013) by the State Government for construction and renovation of health infrastructure facilities in the State. The Corporation is also responsible for procurement of drugs. In addition, the renovation/upgradation works were also awarded to Public Works Department, Rural Engineering Services besides the Corporation by the State Health Society (SHS). The construction activities are discussed below:

2.1.9.3 (i) Construction of new health facilities

Audit noticed that 20 CHCs, 88 PHCs, 768 SHCs did not have designated Government buildings and were operational from private buildings, *panchayat* buildings, other Government buildings etc., as of March 2017. Due to unspecified design these buildings lacked space, infrastructure, delivery service, outdoor patient Department (OPD) facilities, labour rooms, beds, water connectivity, toilets etc. as was noticed in the test checked health

There was shortage of 20 CHC, 88 PHC and 768 SHC Government designated buildings in the State

³³ Kelhari, Nagar, Pandadah and Pharpahud.

³⁴ Asta, Bodsara, Ghaghra, Hardikala, Hathibahra and Hatkarra.

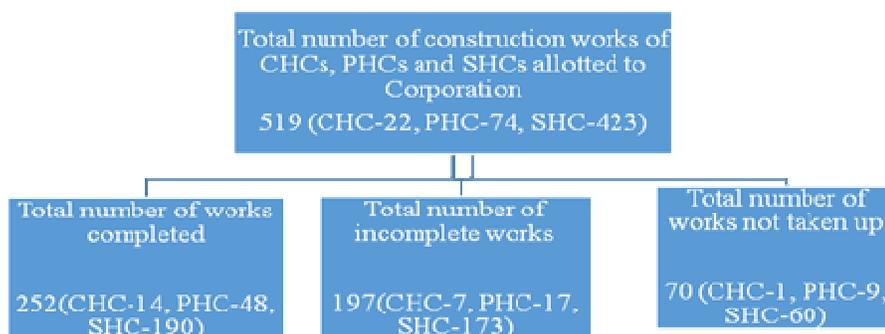
facilities. Resultantly, the mandated healthcare services could not be delivered as discussed under:

(a) State position

Director of Health Services and the SHS awarded (2012-17) construction of 519 health facilities (CHC/PHC/SHC) to the Corporation at a cost of ₹ 187.69 crore in the State. Of these, the Corporation completed construction of 252 health facilities at a cost of ₹ 97.68 crore while 197 health facilities could not be completed as of June 2018. Of these incomplete works, 186 works sanctioned during 2012-16 on which expenditure of ₹ 14.06 crore was incurred, remained incomplete despite lapse of 20 to 56 months from the year of sanction. The reasons, as examined from the files in the test-checked districts were due to non-participation of bidders in the tender for works located in sensitive areas, receipt of tender values more than the amount of administrative approvals, delay in identification and finalisation of availability of land. Though the Department had taken steps for re-tendering, revised technical sanction (TS) etc., and had completed 36 works (included in 252 completed works), further efforts by resolving the bottlenecks (retendering against high tender premiums, ensuring availability of land etc.) to complete the pending works were yet to be taken by the Department. Thus, the expenditure incurred on these works remained unfruitful till date (March 2018).

Further, the Corporation could not take up construction of 70 health facilities till December 2017 on grounds of change of place, delay in tender process due to non-receipt of tenders, delay in finalisation of tenders due to receipt of higher rates etc. These works were sanctioned during 2012-16 and were pending for more than one to four years³⁵. The details are shown in the **Chart 2.1.2**.

Chart 2.1.2: Construction of health centres by the Corporation



(b) Position in the test checked districts

In the seven test checked districts, 150 health centres (seven CHCs, 26 PHCs and 117 SHCs) costing ₹ 56.33 crore were taken up for construction during 2012-17. Of these, 103 health centres (six CHCs, 20 PHCs and 77 SHCs) were completed at a cost of ₹ 40.90 crore while 32 health centres could not be completed till June 2018 despite incurring expenditure of

³⁵ Sanctioned during 2012-13-(7 nos.), 2013-14-(17 nos.) 2014-15-(12 nos.) and 2015-16-(34 nos.)

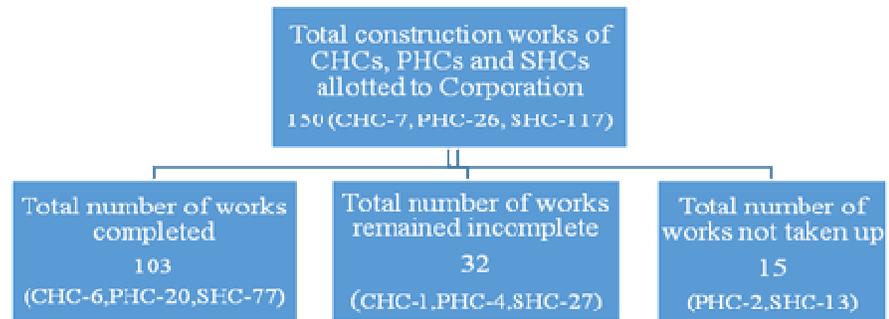
₹ 2.25 crore and delays between eight and 44 months from their completion dates. The major reasons for delays are shown in the **Table 2.1.8**.

Table 2.1.8: Reasons for delay in completion of Health centres in the test checked districts

Reasons for delay	Number of affected works
Delay in construction by contractors	6
Receipt of higher rate in tenders	1
Non availability of land or land dispute or hindrances	18
Non participation of tenderers and land problem	5
Delay in tendering process	2
Total incomplete works	32

The Department did not resolve the above project bottlenecks to complete the pending works of the health centres, especially ensuring the availability of land before commencement of the works as per Works Department manual. Further, the Corporation did not commence construction works of 15 health centres costing ₹ 4.31 crore till June 2018 on grounds of change in work sites, delays in providing layout, delays in finalising the tenders etc. The details are shown in the **Chart 2.1.3**.

Chart 2.1.3: Construction work of health centres sanctioned and undertaken by Corporation in the test checked districts



In the exit conference (March 2018), the PS agreed with the audit observations and stated that the major reason for delay was non-availability of land and non-receipt of adequate tenders in the *naxal* affected areas.

The reply is not acceptable, as construction was to be undertaken on Government land, and identification of such land before sanctioning the works is the responsibility of the Department. Further, the concerns of *naxal* problem was to be factored in before sanctioning the works and sending the PIP incorporating those works to GoI for approval.

2.1.9.3 (ii) Renovation of existing health facilities

During 2012-17, the Department sanctioned 295 renovation works of 10 bedded wards and labour rooms worth ₹ 50.82 crore in the State under NRHM. These works were allotted by the District Collectors to different construction agencies³⁶. Of these, 254 works estimated at ₹ 44.12 crore were completed, eight works were incomplete after incurring expenditure of ₹ 1.36 crore, 22 works estimated at ₹ 3.78 crore were not taken up and 11 works were

³⁶ Public Works Department, Rural Engineering Services, Corporation etc. were selected by DC without any reasons on record.

cancelled/ surrendered. The main reasons for works remaining incomplete were construction delays by contractors, substandard works by contractors, cancellation of works and receipt of higher rate of tenders etc. The cancellations of works were due to location of work sites in sensitive areas, high cost of tenders, delays in selection of sites for construction of additional rooms of the 10 bedded wards etc.

In the seven test-checked districts, 111 renovation works were sanctioned for ₹ 19.65 crore during 2012-17. Of these, 93 works estimated at ₹ 16.61 crore were completed, eight works valued at ₹ 1.52 crore were not taken up on grounds of high cost of tenders, delays in selection of sites, inappropriate sites etc., eight works were cancelled and two works valued at ₹ 40 lakh remained incomplete.

In the exit conference (March 2018), the PS stated that the major reasons for delay was due to non-receipt of adequate tenders in the *naxal* affected areas.

The reply is not acceptable. Though contractors refrain from participating in the *naxal*-infested areas, these concerns should have been factored in before sanctioning the works in such areas and sending the PIP incorporating those works to GoI for approval. Failing to take up and complete the sanctioned works resulted in denial of required health infrastructure to the rural population.

2.1.9.4 Availability of staff quarters

As per IPHS norms, availability of residential quarters near vicinity of health facility is required to make all the health facilities fully functional.

Scrutiny of sampled health facilities revealed shortage of 81 per cent residential quarters in seven DHs, 36 per cent in 14 CHCs and 87 per cent in 28 PHCs with respect to IPHS norms as shown in the **Table 2.1.9**. The availability of staff quarters was also short by 531 numbers with respect to persons in position.

Table 2.1.9: Staff quarters required and available in the test checked health centres

Health facility	Number of sampled health facilities	Staff quarters required as per sanctioned strength	PIP in the test checked health centres	Staff quarters required as per IPHS	Staff quarters available	Shortage of staff quarters as per IPHS norms
DH	7	737	535	881	166	715
CHC	14	347	197	266	171	95
PHC	28	238	176	336	45	291
SHC	84	84	84	84	79	5
Total	133	1,406	992	1,567	461	1,106

(Source: Data collected from the test checked health centres)

While shortages were not bridged, 22 quarters at CHCs and six quarters at PHCs remained vacant due to poor condition, lack of water and electric facility. Further, new staff quarters at CHC, Manendragarh and Bagbahra were not occupied due to failure of the Chief Medical and Health Officer (CMHO) to complete the water supply and electricity facility to these quarters as shown ahead.

There was shortage of 81 per cent residential quarters in DHs, 36 per cent in CHCs and 87 per cent in PHCs test checked



(Date: 25/06/2017) Eight staff quarters constructed at Manendragarh at a cost of ₹ 68.47 lakh were lying unoccupied since their handing over in July and September 2016 due to remote area and lack of electricity, water and boundary wall.



(Date:10/07/2017) Residential quarters at CHC Bagbahra lying vacant since October 2014 for want of electricity and water supply.

Audit further observed that the root cause of shortages in the availability of staff quarters was failure of the Department to complete 159 quarters for medical and para-medical staff valued at ₹ 25.33 crore taken up during 2012-13 till March 2017. The major reasons for non-completion of these staff quarters was non participation of tenderers, naxal affected area and delay in availability of land for which the Department had not taken steps either to resolve the logjams or to fix accountability against the officials responsible for sanction of works in naxal areas without ensuring availability of land.

In the exit conference (March 2018), the PS *inter alia* stated that the construction works were earlier given to PWD but works not commenced by the PWD have now been transferred to the Corporation. The PS further stated that due to *naxal* area, non-receipt of tenders, non-availability of land, construction of some staff quarters were incomplete.

The reply is not acceptable. Though contractors reportedly refrain from participating in the naxal-infested areas, these concerns should have been factored in before sanctioning the works in such areas. Further, ensuring the availability of land is the responsibility of the Department. Moreover, the fact that shortage of staff quarters co-exists with idle quarters compound the problem, as the Department had not taken adequate measures to address the snags.

Recommendation

The Department should assess the gaps in availability of physical infrastructure and ensure that all civil works are completed at the earliest and address the project bottlenecks to put the completed buildings to use.

2.1.9.5 Quality of health infrastructure

As per IPHS, the State should establish one SHC for population of 3,000-5,000, one PHC for population of 20,000-30,000 and one CHC for population of 80,000-1,20,000. The violations noticed are discussed below:

(i) Quality of health infrastructure at sub-centres

During visit to 84 SHCs, Audit noticed that 50 SHCs had been providing health services to population of about 2,77,439. Of these, 29 SHCs were covering population of 5,000-10,000 and one SHC (Sardha) was covering

50 out of 84 sampled SHCs were covering population more than IPHS norms while all the 84 sampled SHCs had one or more infrastructural deficiencies

more than 10,000 population. Moreover, IPHS provide that the Medical officer of the PHC should visit each SHC in his/ her area once in a month not only to check the work of staff but also to provide curative service. However, 42 out of 84 SHCs were not visited by a doctor even once in a month due to which the medical services could not be made available to the public by the SHCs.

Further, IPHS guidelines also prohibit establishment of another health centre/ SHC where a PHC is already located to avoid wastage of human resources. In contravention, 11³⁷ SHCs were functioning either in PHC building or building adjoining to PHC due to which the staff of these SHCs perform the field work such as ANC registration and check-up, immunisation, home visit after delivery etc., and not involved in OPD service and delivery service. Resultantly, public were required to visit the PHCs to get the health services.

Thus, population norms for establishment of SHCs were not followed. Other major deficiencies in infrastructure at SHCs are summarised in **Table 2.1.10**.

Table 2.1.10: Major deficiencies in infrastructure in the test checked 84 SHCs

Sl. No	Deficiency	Number of SHCs	Percentage
1	No designated building	12 ³⁸	14.29
2	No skilled birth attendant, trained ANM	58	69.05
3	No electricity supply	1 ³⁹	1.19
4	No examination table	29	34.52
5	No functional toilet	16	19.05
6	No labour table	14	16.67
7	No compound wall	55	65.48
8	ANM quarter not available	12	14.29

(Source: Data collected from the test checked sub-health centres)

Absence of the above infrastructure denied the delivery service in the SHCs.

In the exit conference (March 2018), PS *inter alia* stated that the sanction of SHC / PHC is done as per population norms and more number of health centres are being sanctioned every year. The PS also stated that absence of functional toilet and labour tables etc., were due to non-availability of designated Government building, while the standard design of SHC did not provide for boundary walls. However, the PS assured to have these constructed in future.

The fact remains that Department could not get the desired number SHCs constructed or provide the other infrastructures as per IPHS norms due to which the public were deprived of the necessary health services at village level.

(ii) Quality of health infrastructure at PHCs

PHC is the first port of call to a qualified doctor of the public sector for the people in rural areas. As per IPHS norms, the PHCs should become functional for round the clock service with 24x7 nursing facilities. 24x7 PHC are health

³⁷ Bilaspur-Chapora, Hardikala Mahasamund-Birkoni, Hathibahara, Komakhan, Kanker-Kewti, Korea-Kelhari, Raipur-Farfoud, Manikchauri, Rajnandgaon-Mudhipar, Surgi

³⁸ Bilaspur- Chapora, Kanchanpur, Podi, Hardikala, Sardha, Mohda, Silpahri, Kanker-Baskund, Khadga, Raipur-Naara, Manikchauri, Rajnandgaon- Surgi.

³⁹ Korea- Bishunpur

Against target of 492 PHCs, only 273 PHCs were upgraded to provide 24x7 services

centre where one Medical officer and at least three staff nurses are provided. Upgradation of PHCs as 24x7 PHCs was one of the goals of NRHM.

Audit scrutiny revealed that 492 (62.68 per cent) out of 785 PHCs in the State were targeted for upgradation for rendering 24x7 services during 2012-17. However, only 273 PHCs (34.78 per cent) could be upgraded to function as 24x7 as of March 2017 while 219 PHCs could not be upgraded as a consequence of shortage of doctors and nurses.

During visit to 28 sampled PHCs in the test checked districts, the following deficiencies in infrastructure and facilities were noticed as shown in the **Table 2.1.11**.

Table 2.1.11: Major deficiencies noticed in the test checked 28 PHCs

Sl. No.	Infrastructure/ facility	Number of PHCs	Percentage of non-availability
1	Non- availability of medical termination of pregnancy (MTP ⁴⁰) service	28	100
2	Child care including immunisation not available	4	14.29
3	No laboratory service available (RBC, WBC, Bleeding time, clotting time etc.)	5	17.86
4	No emergency room available	21	75.00
5	No separate male and female ward available	8	28.57
6	No diet facility available under JSSK	8	28.57

(Source: Data collected from the test checked PHCs)

Of the 28 PHCs test checked, though 14 PHCs were upgraded to 24x7, MTP service was not available in any of the PHCs, child care and immunisation was not available in one PHC, emergency room in 11 PHCs and separate male and female wards in five PHCs were not available.

In the exit conference, the PS, while agreeing to the audit observation stated (March 2018) that due to shortage of doctors and nurses in the PHCs, the target of operationalising the 24x7 PHC was not achieved.

The reply is not acceptable as it is the responsibility of the Department to appoint doctors and nurses. Though efforts were made by the Department for appointment of doctors, staff nurses and other paramedical staff, the Department still could not fill up the critical vacancies in this regard as commented in **paragraph 2.1.8.1**, which prevented 24x7 PHC facilities. Further, the PS did not give any reply for shortage of infrastructure and non-availability of health services in the PHCs.

(iii) Quality of health infrastructure at CHCs

CHC is the secondary level of health care, designed to provide referral as well as specialist health care to the rural population. NRHM seeks to up-grade CHCs as first referral unit (FRUs), which would provide facilities for comprehensive management of all obstetric emergencies, caesarean sections and other surgical interventions, blood bank/ storage centre and management of all sick newborns.

Against target of 46 CHCs, only 28 CHCs could be upgraded as FRUs

Scrutiny revealed that 46 out of 169 CHCs in the State were targeted for upgradation to FRUs by SHS during 2012-17. Of these, only 28 CHCs could be upgraded as FRUs as of March 2017 and remaining 18 CHCs could not be

⁴⁰ MTP with manual vacuum aspiration (MVA) technique to be used at PHC

upgraded due to lack of doctors and specialists. Of the 169 CHCs in the State, C-section deliveries were conducted only in 24 CHCs, of which 92 per cent (22 CHCs) were FRUs.

In the test checked districts, 220 (2.3 per cent) out of total 9,412 C-section deliveries were conducted in the CHCs which were FRUs. This indicated that women had to depend mostly on district level hospitals for C-section deliveries as this facility was available only in four out of the 14 test checked CHCs.

During site visit to 14 sampled CHCs in seven test checked districts, Audit noticed lack of infrastructure and other facilities vis-a-vis the IPHS norms in these CHCs as summarised in **Table 2.1.12**.

Table 2.1.12: Facilities not available at 14 test checked CHCs

Sl. No.	Infrastructure/ facility	Number of CHCs	Percentage
1	Facility of surgery not available	10	71.43
2	Obstetrics and gynecology not available	9	64.29
3	No emergency services	5	35.71
4	Safe abortion service not available	4	28.57
5	No operation theatre	2	14.29
6	Operation theatre available but not in use	3	21.43
7	No new born stabilisation unit	1	7.14
8	No ultrasound facility available	13	92.86
9	Ultrasound facility available but not in use	1	7.14
10	No blood storage facility available	9	64.29

(Source: Data collected from the test checked CHCs)

In the exit conference (March 2018), the PS *inter alia* stated that operationalisation of FRU is dependent on availability of specialists (gynecologist and anesthetist) and other staff nurses, blood storage facilities. Due to shortage of doctors, the targeted number of CHCs could not be operationalised as FRUs. However, to provide caesarian section facilities, training of emergency obstetric care and life saving anesthesia skills training were being imparted to the Medical officers.

The reply is not acceptable as appointment of specialists, nurses, availability of blood storage and other facilities are the responsibility of the Department and failure to ensure these had prevented setting up of FRUs. Further, training in emergency obstetric care and life saving anesthesia would not be effective unless adequate infrastructure for conducting caesarian section deliveries are provided in the CHCs.

(iv) Quality of health infrastructure at district hospitals

District hospital (DH) is a secondary referral level for health care. During visit to seven DHs in the seven test-checked districts, Audit noticed lack of two-dimensional echo in six⁴¹ DHs due to non-availability of trained Medical officer. Thus, the patients are deprived of the desired facility of cardiac checkup at these health centres and are referred to health facilities having such facilities.

⁴¹ Jashpur, Kanker, Korea, Mahasamund, Raipur and Rajnandgaon

2.1.9.6 Equipment in health centres

IPHS prescribes a list of equipment to be available at each level of health facility.

Test check of records of the sampled health centres revealed that none of the DHs, CHCs, PHCs and SHCs had all the essential equipment in their centres as shown in the **Table 2.1.13**.

Table 2.1.13: Availability of essential equipment in the test checked health centres

Health centres test checked	Essential number of equipment to be available ⁴² at test checked health centres	Essential number of equipment available at health centres	Percentage of shortage
7 DHs	2,016	1,249	38
14 CHCs	3,710	1,751	53
28 PHCs	2,576	1,358	47
84 SHCs	5,628	3,180	43

(Source: Data collected from the selected health centres)

Shortage of essential equipment impaired the functioning of these health centres to deliver their mandates as the patients had to be referred to higher centres for diagnosis and advanced treatment.

In the exit conference (March 2018), the PS while agreeing to the audit observation, stated that the equipments were purchased as per requirement and availability of budget and gradually all the equipments would be made available as per IPHS.

Fact remains that the Department has not prepared a list of all the essential equipment that are not available at different health centres and are required to be purchased. Further, the purchase is centralised and the Corporation makes the purchase upon receiving the indents and supplies it to the health centres. However, the Corporation has not been able to supply the equipment on account of absence of rate contracts, non-receipt of tenders, delay in indents etc. The Corporation has not reported about shortage of fund to meet the demands of Director Health services to supply the equipments.

2.1.9.7 Laboratory service in health centres

IPHS has defined laboratory services for each level of health centres.

In the test checked DHs, numbers of available laboratory services ranged between 18 and 53 against the requirement of 97 while in the sampled CHCs, availability was between 10 and 23 against the requirement of 36 services. Likewise, in selected PHCs, availability ranged between two and 15 against the requirement of 21 services. Two sampled SHCs (Tarabakra and Ghaghra) did not provide any laboratory service.

Further, in three to 11 of the 14 sampled CHCs, important laboratory services recommended as per IPHS such as reticulocyte count, sputum cytology, blood urea, blood lipid profile, ECG and X-ray for chest were not available. In the absence of important laboratory services, patients are forced to go to higher level facilities or to private hospitals which contravenes the basic intent of the

⁴² Number of equipment that should be available at each DH is 288, each CHC-265, each PHC-92 and each SHC-67

Mission. The main reasons for non-availability of the laboratory services were due to non-supply of equipment, Auto-analyser, reagents etc., by the Corporation, though indented by the health facilities. In addition, failure of the Department to provide laboratory technicians also resulted in denial of laboratory services by the health facilities.

In the exit conference, the PS while agreeing with the audit observations, stated (March 2018) that there was gap in providing laboratory services and for this, the State has brought out (December 2017) an order for the laboratory technicians to work for all the national programmes irrespective of their recruitment for any specific programme.

The reply is not convincing as instructing the laboratory technicians to work for all the national programmes would not be effective unless the Department prepares plans to bridge the shortage of equipment to deliver the laboratory services.

2.1.9.8 Drugs, consumables, laboratory reagents and disposables in the health centres

IPHS prescribes 493 drugs and consumables such as syringes, needles etc., for DH, 176 for CHC, 148 for PHC and 43 for SHC as essential.

Against the requirements, the sampled DHs had 121 (Bilaspur) to 294 (Raipur) drugs and consumables while the sampled CHCs had 44 (Manendragarh and Patna) to 118 (Khairagarh) drugs. Further, these CHCs had 18 to 49 emergency obstetric care drugs against the requirement of 71 and five to 22 drugs for sick newborn care against the requirement of 25 drugs. Likewise, in the sampled PHCs, 37 (Biharpur) to 81 (Hathibehra and Kewati) drugs were available while the sampled SHCs had 10 (Ghaghra) to 39 (Beercondal) drugs in their stock.

Shortages of drugs and consumables were mainly due to failure of the Department to ensure that the Corporation supplies the drugs and consumables to the health centres after receiving funds from Government. It was noticed that the sampled DHs and CHCs placed demands for supply of 33,777 types of medicines in different test checked months covering the period 2013-17 (as shown in *Appendix 2.1.2*) but the Corporation supplied only 15,641 types of medicines resulting in short supply of 53.69 *per cent* medicines to these health facilities although ₹ 38.14 crore was lying unspent by the Corporation during the period. The short supplies ranged between 1.72 *per cent* (DH-Jashpur for September 2015) and 99.04 *per cent* (CHC Bagbahra for March 2017) as shown in the *Appendix 2.1.2*. This indicates that the Corporation could not supply all the desired drugs and consumables to the indented health facilities.

The Corporation informed Audit that supplies could not be made due to non-availability of rate contract for medicines, non- receipt of tenders, late receipt of annual demand from Directorate of Health Services. Resultantly, the patients have to purchase the drugs from outside such as *Jan aushadhi kendra* or local medicine shops etc., while seven DHs and 10 out of 14 CHCs incurred an expenditure of ₹ 2.54 crore from the *Jeevan deep samiti*⁴³ (JDS) funds to

⁴³ JDS is operated in every health centre, and funds received under untied funds, maintenance grant, JDS grant and other receipts are credited into the JDS account.

purchase required drugs and consumables from the local market during 2013-17.

Thus, procurement of drugs and consumables in the State was not systematic which deprived the health centres to keep the required drugs and consumables in their stock to deliver their mandates.

In the exit conference (March 2018), the PS stated that online indenting of essential drugs has been started to bring uniformity and quicker fulfilment of demands. The Corporation has initiated online drug distribution system which will ensure timely and adequate supply of drugs.

The reply is not acceptable as online drug distribution system will be effective only when the required drugs and equipment are available in stock, which at present is short as discussed above in the paragraph.

Recommendation

The Department should assess the gaps in equipment, medicines, diagnostic services etc., and take immediate measures to bridge these by coordinating with the Corporation. Concerted efforts may also be taken to upgrade CHCs to FRUs and all PHCs into 24x7 service providers.

2.1.10 Quality of healthcare services

2.1.10.1 Maternal healthcare services

(i) Ante natal care

Ante natal care (ANC) is the healthcare received by a woman during her pregnancy. Every pregnant woman should be registered during the first trimester (first 12 weeks) of her pregnancy and undergo three checkups during the pregnancy, at prescribed intervals for proper ANC. She is also to be immunised with tetanus toxoid (TT) and be provided iron folic acid (IFA) tablets.

Audit observed from records of SHS that 33.09 lakh pregnant women (PW) were registered for ANC of which, 20.73 lakh (62.65 *per cent*) were registered in the first trimester while 72.48 to 95.03 *per cent* PWs could get all three checkups during 2012-17. Further, 5.42 to 28.62 *per cent* women were not immunised during their pregnancy with both doses (TT-1 and TT-2) of TT vaccine during 2012-17 while full dose of IFA tablets were given to only 29.04 lakh (88.85 *per cent*) women.

Only 63.54 per cent women were registered for ANC in the first trimester in the test checked districts

In the test checked districts, of the total 11.52 lakh registered PW, 7.32 lakh (63.54 *per cent*) women were registered in the first trimester during 2012-17 and only 44.26 to 88.39 *per cent* PW got the ANC in the first trimester as shown in **Appendix 2.1.3**. Further, 2.07 lakh (18 *per cent*) PW could not receive all the three ANC checkups.

The main reasons of shortfall were, late disclosure of pregnancy by pregnant women, non-availability of transport facility due to inaccessible areas, abortion in some cases, migration of women to other districts or states after ANC registration and insufficient visits by the female health workers (commented in **paragraph 2.1.10.1 (iv) (b)**). Further, non-availability of sufficient IFA tablets restricted their distribution in required quantity as commented in **paragraph 2.1.10.1 (ii)**.

In the exit conference (March 2018), the PS *inter alia* stated that the State is trying to improve ANC registration and there is an increasing trend in ANC registration in the first trimester.

The reply is not convincing as the Department could not register 37.35 *per cent* PWs in the first trimester in the State for providing ANC while 18 *per cent* PWs, in the test checked districts, were not provided all the three ANC check-ups.

Recommendation

The Department should ensure that all the pregnant women are invariably registered in the first trimester with the help of ASHAs and their cases followed-up for complete ante natal care. Besides, TT vaccine to all pregnant women should be provided.

(ii) Shortage of IFA tablets

Daily dose of IFA tablets for 100 days is required for preventive treatment against nutritional anemia in PW.

Scrutiny of records collected from DHSs and Health Management Information Systems (HMIS) revealed that 71.26 to 97.64 *per cent* of registered PW were given IFA tablets for prophylaxis⁴⁴ against nutritional anemia during 2012-17 in the test checked districts.

There was shortage of IFA tablets for 55 *per cent* of registered pregnant women during 2012-16

Further, IFA tablets were shown to have been given to 7.66 lakh PW in the test checked districts as per the HMIS database against 9.33 lakh registered PW during 2012-16. However, audit cross-checked the availability of IFA tablets from the stock registers of Director health services, Chief Medical and Health Officers (CMHOs) and records of Corporation and observed that IFA for only 4.17 lakh⁴⁵ women were available in the stocks of the test-checked districts during the same period. Thus, distribution of IFA tablets to 7.66 lakh PWs seems doubtful and hence, 5.16 lakh (55 *per cent*) PW might have been denied IFA tablets valued at ₹ 1.06 crore which needed investigation. Details are shown in the *Appendix 2.1.4*.

In the exit conference (March 2018), the PS stated that IFA tablets were being provided to the PW but its consumption is very less. The PS further stated that IFA tablets for 2015-16 were purchased during 2016-17.

The reply is not acceptable as the Department could not provide the required quantity of IFA tablets to the PW. Further, there was late indenting by Director Health services (January 2016 for 2015-16) and late procurement (last quarter of 2015-16) by the Corporation. Besides, the PS could not explain how 7.66 lakh PWs were reportedly given IFAs with stock balance for 4.17 lakh PWs.

Recommendation

The Department should ensure adequate distribution of IFA tablets to all pregnant women by each health facility.

⁴⁴ Prophylaxis-treatment given or action taken to prevent disease

⁴⁵ Data compiled from the stock registers of Director health services, CMHOs and records of Corporation.

(iii) Maternal healthcare services in rural health centres

Desired maternal healthcare services could not be provided due to shortage of specialist doctors in the test checked CHCs

Assessment of availability of maternal healthcare services in the sampled health centres (14 CHCs) revealed that caesarean section (C-section) delivery service was available in only four⁴⁶ CHCs, ultra-sonography service was available in only one CHC (Manendragarh), comprehensive obstetric service was available in only five CHCs, round the clock blood storage service was available in only five CHCs and MTP service was available in only 10 CHCs resulting from shortages of specialist doctors in these centres.

This indicates that a large number of CHCs were not able to provide essential maternal healthcare services as well as facility of institutional delivery to cater the demand of rural community. Resultantly, the PWs were sent to higher centres for C- section delivery as noticed from some of the referral slips made available to Audit. However, numbers of cases referred to higher centres for C-section were not maintained by any of the CHCs test checked and visited.

In the exit conference (March 2018), the PS stated that due to shortage of specialists (gynecology and anesthesia), these services are not available in the CHCs.

The reply is not acceptable, as, it is the responsibility of the Department to fill up critical vacancies to upgrade the CHCs to FRUs, and failure to ensure this had resulted in non-delivery of maternal health care services to the PWs.

(iv) Institutional delivery

NRHM encouraged institutional deliveries for improving maternal healthcare through creating awareness among people.

(a) *Janani suraksha yojana* (JSY) was launched as a safe motherhood scheme which aims at reducing maternal and infant mortality through increased institutional deliveries. Under JSY, all pregnant women (PW) who delivered in health facilities were eligible for cash incentive of ₹ 1,400 in rural area and ₹ 1,000 in urban area towards institutional delivery⁴⁷. Accredited social health activists (ASHA)⁴⁸ are engaged to encourage the PW for institutional deliveries and guide/facilitate the beneficiaries for opening of bank account.

31,765 (six per cent) women who delivered at PHIs in the test checked districts did not receive JSY payment

Scrutiny of HMIS data of the State revealed that 53,983 (3.77 *per cent*) out of 14.32 lakh women who delivered at public health institutions (PHI) during 2012-17 did not receive JSY incentive in the State. In the sampled districts, 31,765 (6.47 *per cent*) out of the 4.91 lakh women who delivered at PHIs did not receive JSY incentives. In the test checked health units under the sampled districts, 1.33 lakh deliveries took place and of this, 8,486 (6.38 *per cent*) PWs who delivered in these health centres did not receive JSY incentive mainly in the absence of bank accounts.

⁴⁶ Abhanpur, Bhanupratappur Bilha and Manendragarh

⁴⁷ Institutional delivery at public health institutions and accredited private hospitals except delivered by APL in a private ward at PHCs.

⁴⁸ ASHA is appointed to forge the linkage of hamlet to hospital for curative services, empowerment of women and universalisation of child development services for every 1,000 population. There are 65,901 ASHAs (*Mitanins*) are working in rural areas in the State.

11,229 cheques relating to JSY incentive valuing ₹ 1.46 crore could not be encashed either due to non-deposition of cheques into beneficiary's bank account or non-availability of Bank account in the name of beneficiary

Audit further observed in three out of seven sampled DHs and nine out of 14 sampled CHCs that cheques for incentives were issued to 69,905 women under JSY but 11,229⁴⁹ cheques (pertaining to the period 2012-17) valued at ₹ 1.46 crore could not be encashed either on account of failure to deposit the cheques into beneficiary's bank accounts or non-availability of bank account in the name of beneficiary. Thus, the objective of providing incentive for institutional delivery could not be fully achieved.

In the exit conference (March 2018), the PS stated that earlier JSY incentive was paid through account payee cheques, but due to non-availability of bank account in the name of some beneficiaries, cheques were not collected or after collecting, these were not deposited in bank accounts which resulted in non-payment of the incentive to the beneficiaries. Now direct to bank payment system has been initiated by the State to provide incentive to all the beneficiaries under JSY.

The fact remains that no measures were taken to make payments to those PWs who do not own bank accounts.

(b) Analysis of deliveries

In seven test checked districts, 11.52 lakh PWs were registered for ANC during 2012-17. Against this, the Department fixed⁵⁰ a target of 8.79 lakh institutional deliveries. However, the institutional deliveries were 6.83 lakh and home deliveries were 1.84 lakh as given in **Appendix 2.1.5**. Further analysis of data relating to PWs registered for ANC revealed that:

✓ The percentage of institutional delivery against the total deliveries (home plus institutional deliveries) increased from 65.54 to 94.88 *per cent* over five years during 2012-17, however, the achievement against the target was 78 *per cent* (6.83 lakh out of 8.79 lakh).

✓ Further, test check of 84 SHCs revealed that out of 6,937 deliveries conducted at home during 2012-17, only 20.74 *per cent* home deliveries (1,439) were attended by doctor/ nurse/ANM and 30.20 *per cent* newborns (2,095) were not visited by health worker within 24 hours of home delivery. The reasons stated by the ANMs for not attending were lack of timely information of home delivery and home delivery undertaken outside the area of SHC.

Further, out of total home deliveries during 2012-17 in the State, deliveries ranging between 54.37 and 74.20 *per cent* were carried out by *dais*/relatives/others and 11.17 and 22.69 *per cent* newborns were not visited by a doctor/ANM/nurse within 24 hours of delivery as required under the norms. The reasons stated by the ANMs were lack of timely information of home delivery and home delivery outside the area of SHC.

Though the home deliveries have decreased from 34.46 to 5.12 *per cent* of the total delivery in the test checked districts, delivery by ANMs, who were not trained as skilled birth attendant (SBA), ranged between 44.83 and 77.78 *per cent*. Further, it was observed that only 31 *per cent* (26 out of 84 test checked

⁴⁹ 2012-13-₹ 8.95 lakh, 2013-14-₹ 34.70 lakh, 2014-15-₹ 38.74 lakh, 2015-16-₹ 33.89 lakh, 2016-17- ₹ 29.67 lakh

⁵⁰ Target was fixed according to decadal growth rate as per the census data 2011 and crude birth rate of annual health survey 2012-13

SHCs) ANMs were SBA trained and 1,731 (24 per cent) out of 7,145 ANMs working as on 31 March 2017 in the State were SBA trained.

The shortages in institutional deliveries were attributed to non-availability/timely availability of vehicle due to remote area in some cases and inadequate human resources at 24x7 identified health centres.

Thus, the above deficiencies contributed to failure in achieving the target of reducing the IMR by providing healthcare to newborns within 24 hours of birth.

In the exit conference (March 2018), the PS stated that the State is promoting institutional deliveries which are increasing over the period of last five years 2012-17.

The reply is not acceptable as the Department had not been able to achieve the target for institutional deliveries. Further, the cases of short achievement against targets, home deliveries not attended by doctors/nurse/ANMs or not conducted by any SBA trained ANMs which were counterproductive to the objective of the Mission were not replied by the PS.

Recommendations

The Department should promote institutional delivery through awareness programme, motivating the pregnant women through ASHA and by providing transport services. Efforts should be made to minimise the home deliveries.

2.1.10.2 Janani shishu suraksha karyakram

Janani shishu suraksha karyakram (JSSK) was aimed at providing free and cashless services to PW including free drugs and consumables, free diagnostics, free diet during stay in the health institutions. The State Government also provided a smart card⁵¹ with a medical insurance cover of ₹ 30,000 to a maximum of five members of an enrolled family by the Insurance Company either under *Rashtriya swasthya bima yojana* (RSBY) for below poverty line (BPL) family or under *Mukhyamantri swasthya bima yojana* (MSBY) for any family.

In the test checked health facilities, ₹ 1.60 crore (the package amount at the rate of ₹ 4,500 for normal delivery and ₹ 11,250 for caesarian delivery) were irregularly deducted from the smart card of 2,618 beneficiaries of delivery cases in contravention of the mandate to provide free service.

Thus, GoI guidelines on JSSK to provide free delivery service were not followed as package amount for delivery was deducted from the balance in the smart cards of the beneficiaries. This also deprived the families from availing of the service for diseases/ ailments other than delivery service within the limit of the smart card.

⁵¹ A microchip based card issued to the beneficiaries under this scheme after taking photograph and thumb impression of the family members on computer system. This card is used at the time of admission as in-patient in the health facility. This card is pre-loaded with ₹ 30,000 as credit balance at the beginning of insurance period. Treatment cost is debited from the balance amount of the card.

In the exit conference (March 2018), the PS stated that by deducting the amount, the Government is getting the insured amount. However, the PS stated that necessary instructions would be issued in this regard.

The reply is not acceptable as the PWs are entitled to delivery services free of cost under JSSK and the Department has wrongfully charged the PWs for delivery services in violation of the JSSK.

2.1.10.3 Post-natal care

According to JSY, as part of post-natal care (PNC), a PW has to stay for minimum 48 hours after her delivery in the Health centre.

Thirty five per cent women were discharged within 48 hours in the test checked districts mainly due to lack of facility for meals, LAMA etc.

Out of 14.32 lakh public institutional deliveries conducted in the State during 2012-17, 5.05 lakh (35.27 per cent) women were discharged within 48 hours of delivery. In seven test-checked districts, 4.91 lakh institutional deliveries were conducted and of these, 1.72 lakh (35.02 per cent) women were discharged within 48 hours of delivery during 2012-17. Thus, postpartum care for 48 hours after delivery at health facilities could not be provided to these women.

Reasons for discharge within 48 hours of delivery, as noticed from the records and interviews, was mainly due to left against medical advice (LAMA), non-availability of diet facility in some of the PHCs (as mentioned in **Table no.2.1.11**) besides the fact that 512 (out of 785) PHCs did not have 24x7 facilities and 141 (out of 169) CHCs were not FRUs as commented in **paragraphs 2.1.9.5 (ii) and (iii)** to undertake PNC by retaining PWs after delivery.

In the exit conference, the PS, while agreeing to the audit observation stated (March 2018) that the State is trying to operationalise 492 PHCs on round the clock (24x7) basis to ensure 48 hour stay of women after delivery.

The reply lacks rationale as the PS had replied in paragraph 2.1.9.5 (ii) that the PHCs could not be made operational on 24x7 basis due to shortage of doctors and nurses and the shortages have not yet been bridged. Further, the reason for not making available diet in the PHCs, as noticed by Audit, was not replied to by the Department.

2.1.10.4 Immunisation

Routine immunisation is an important strategy for child survival, focusing on preventive care to reduce morbidity against seven preventable diseases. Accordingly, vaccinations for tuberculosis (BCG), diphtheria, pertussis, tetanus (DPT), polio (OPV) and measles are to be given in seven stages to the age group of zero-one year under universal immunisation programme. Pulse polio immunisation campaigns are also taken up for eradication of polio.

Audit observed from the RCH registers at SHCs and immunisation records of test checked PHCs, CHCs and DHs that immunisation⁵² of children between zero and one year age group ranged between 80 and 86 per cent in the State and 77 per cent and 83 per cent in the test checked districts during the period 2012-17. The main reasons for not immunising all the children was lack of

⁵² Carried out by ANMs of SHCs by visiting the villages to vaccinate the eligible children and at other health facilities, these are administered to the children by making entries in the vaccination card

awareness, inaccessible area and migration of families along with children to other States etc.

In the exit conference (March 2018), the PS stated that immunisation services in Chhattisgarh are one of the best services among the States of India. During the last *Indradhanush* programme, Chhattisgarh has achieved around 90 *per cent* of target and GoI appreciated the effort of State and kept it in the list of Non-*Indradhanush* State. The PS also stated that immunisation session at left wing extremism (LWE) areas are being organised at *haat* bazaar etc.

The fact remains that 17 to 23 *per cent* targeted children in the sampled districts and 14 to 20 *per cent* targeted children in the entire State is yet to be immunised.

Recommendation

The Department should ensure that the PWs invariably stay for 48 hours in the health centres after delivery as part of post-natal care. Child immunisation should be ensured on priority basis to achieve the target.

2.1.10.5 Family planning

Family planning (FP) services were to be utilised as a key strategy to reduce maternal and child morbidity and mortality in addition to stabilising population by reducing total fertility rate (TFR). Implementing agencies were to encourage focusing on promotion of spacing methods, especially intra-uterine contraceptive devices (IUCD).

Against the estimated level of achievement (ELA) of 5.89 lakh female sterilisations for the State, the actual achievement was only 4.12 lakh (70 *per cent*) and against the target of 2.62 lakh in the test checked districts, the achievement was 1.36 lakh (52 *per cent*) during 2012-17. Further, the target/ ELA for sterilisation were reduced⁵³ during 2012-17.

Audit observed that IUCD insertions, though voluntary, increased from 90,562 in 2012-13 to 1,48,003 in 2016-17 in the State but the actual achievement against the ELA ranged between 59 and 67 *per cent* despite training given to 2,405 staff (doctors, staff nurses, LHV, RMA and ANMs) during 2012-17 by spending ₹ 4.90 crore. In the test checked districts, the achievement was 60.83 *per cent*. The reasons for shortfall were on account of shortage of OTs and doctors in the centres to conduct the sterilisation operations.

In the exit conference (March 2018), the PS stated that FP is a free programme and sterilisation operations are conducted in facilities having functional OT and surgeons.

The fact remains sterilisation against ELA is short by 30 *per cent* in the State and 48 *per cent* in the test checked districts and ensuring functional OTs and deputing surgeons in the health centres are the primary responsibility of the Department.

⁵³ Target for ELA for laparoscopy and tubectomy was decreased from 1,50,100 in 2014-15 to 49,834 for the year 2015-16 and to 70,000 for the year 2016-17.

2.1.10.6 Quality assurance

(i) Quality assurance programme

As per the guidelines for quality assurance (QA) standards in public health facilities, organisation arrangements is to be ensured for strengthening the QA activities through State quality assurance committee (SQAC) with support of State quality assurance unit (SQAU), district quality assurance committee (DQAC) with support of district quality assurance unit (DQAU) and district quality team (DQT) at respective levels with defined roles and responsibilities.

The main activities of SQAC are to conduct six monthly independent/joint visits for assessment of health facilities, compile and collate monthly data on key performance indicators (KPIs) received from the district quality units, hold half-yearly review meetings and prepare reports.

Audit observed that neither prescribed meetings (only one meeting against four) were held during 2014-16⁵⁴ nor monthly data of KPIs was received from any of the districts and hence no action was taken on this. Further, DQAU was not formed in the test checked districts by the Health Department for reasons not on record but the field visits were made by Medical officers and RMNCH⁵⁵ consultant.

In the exit conference (March 2018), PS agreed that DQAU was not formed and stated that field visits to monitor the quality in the health facilities is done by the Medical officers and other staff to give necessary instructions to the facilities.

The reply is not acceptable. Though makeshift arrangement of sending the Medical officers to field was made a practice, it violates the objectives of the Mission as DQAU needs to be formed with separate set-up in every district as a part of QA standards. No justification was given by the Department for failure to establish the DQAU and how the QA is ensured in its absence.

(ii) Patient satisfaction survey

Under the guidelines, a quarterly feedback (for 30 OPD and 30 IPD patients separately in a month) is to be taken on a structured format by the hospital manager.

The quality assurance guidelines provide for constitution of DQT at the DHs. It was, noticed that DQT was constituted in all DHs but the patient satisfaction survey, to assess the gaps in the quality of service provided by the health facility, was conducted on 2,023 patients (20.07 *per cent*) against 10,080⁵⁶ patients who visited these seven DHs during 2015-17.

Though necessary instructions were given for improvement in the service delivery on the basis of conducted patient's satisfaction survey, in the absence of prescribed number of patients' satisfaction surveys, gaps in the quality of service provided by the health facility may not project true and fair assessment of service delivery.

⁵⁴ SQAC was formed in July 2014.

⁵⁵ Reproductive maternal neonatal child and adolescent health

⁵⁶ Patient satisfaction survey is to be conducted on 30 IPD and 30 OPD patients in a month

(iii) Maternal and infant death review

Maternal death review is an important strategy to improve the quality of obstetric care and reduce maternal mortality. Every health facility is required to conduct death audit for all deaths happening in the facility. The facility should also report the data relating to maternal and infant deaths to DQAC on monthly basis which will compile and collate the data received from facilities and send the report to SQAC.

In seven test checked districts, 1,027 maternal deaths occurred during 2012-17, of which 963 cases were audited and 851 cases were reported to SQAC by DQAC. Similarly, out of 9,720 infant deaths in the sampled districts, 6,200 cases were audited and only 2,740 cases were reported to SQAC.

In the exit conference, the PS while agreeing to audit observations, stated (March 2018) that death audit of mothers was being conducted but the death audit of children has been started from the year 2016-17.

Recommendation

The Department should establish DQAU in all the districts to ensure audit of all maternal and infant deaths, field visits to monitor the quality in the health facilities and its reporting to SQAU for remedial measures.

2.1.11 Status of ultimate goals

NRHM aims to reduce IMR to less than 25 per 1,000 live births, MMR to 100 per lakh live births and TFR to 2.1 by 2017. India is also a signatory to United Nations targets of millennium development goals (MDGs).

The State could not attain the goals of IMR, MMR and TFR and lagged far behind the achievements of other States. As per SRS bulletin of September 2017, IMR of the State was 39 per 1,000 live births while MMR was 173⁵⁷ per 1,00,000 live births. The State stands at 15th place in IMR and 12th place in MMR in the country. TFR stands at 2.2⁵⁸ (2015) against the goal of 2.1 by 2017.

Although the state parameters have improved since the implementation of NRHM scheme, the vital health indicators were still not close to the goals the programme had set. The audit findings in this report highlight and flag the key area of concerns which need to be addressed if the goals of NRHM are to be achieved.

In the exit conference (March 2018), the PS stated that there has been drastic change in the health care situation and the State has improved during the NHM period. The fact remains that the Department needs to address the key concerns flagged in the Audit Report, if the NRHM goals are to be achieved.

2.1.12 Conclusion

Ninety three *per cent* of sampled CHCs and 14 *per cent* of sampled PHCs were located beyond 30 km while 76 *per cent* of sampled SHCs were located beyond three km distance from the farthest villages in violation of IPH

⁵⁷ SRS special bulletin on MMR 2014-16 (May 2018)

⁵⁸ TFR of State was 2.2 as per NFHS -4

standards. Further, 21 *per cent* of sampled PHCs and 79 *per cent* of sampled SHCs were not accessible by public transport. In addition, 876 health centres did not have their own buildings and were functioning from private buildings or other Government buildings where facilities to deliver all the health services were not available.

There were shortages in human resources in critical positions in the DHs, CHCs and PHCs in the State which adversely affected the delivery of mandate of NRHM. These included shortages of specialist doctors (89 and 89 *per cent*), Medical officers (36 and 36 *per cent*), staff nurses (57 and 34 *per cent*) and paramedics (49 and 12 *per cent*) with respect to IPH standards and sanctioned strength respectively.

The Department failed to achieve the target of setting up FRU and to provide 24x7 services. Out of 169 CHCs, the Department planned to upgrade 46 CHCs into FRU but only 28 (61 *per cent*) CHCs could be upgraded. Similarly, 273 (55 *per cent*) out of targeted 492 PHCs could be made 24x7 service provider although the State had 785 functional PHCs.

The Department suffered from significant shortages of essential drugs, consumables and equipments. While shortages of equipment were 38 *per cent* at DHs, 53 *per cent* at CHCs, 47 *per cent* at PHCs, the deficit of essential medicines were to the extent of 40 to 75 *per cent* in DHs, 33 to 75 *per cent* in CHCs and 45 to 75 *per cent* in PHCs. In addition, shortages in availability of laboratory services were noticed at all levels.

Out of 33.09 lakh pregnant women registered in the State for ANC, 20.73 lakh (62.65 *per cent*) were registered in the first trimester. In the test checked districts, only 63.54 *per cent* PWs could be registered within first trimester of pregnancies while 18 *per cent* PWs could not receive three ANC check-ups. Hence, the Department lagged behind in extending the benefits of NRHM to all the PWs

Against the objective of promoting institutional delivery and 48 hours stay in hospital after child birth, only 79 *per cent* deliveries were performed in institutions while 21 *per cent* deliveries were performed in homes in the test checked districts during 2012-17. Further, 35.02 *per cent* women (1.72 lakh) were discharged within 48 hours of delivery in public health institutions while 69.59 *per cent* of total home deliveries (1.84 lakh) during 2012-17 were not attended by SBA trained health professionals.

The targets set for child immunisation against seven vaccine preventable diseases could not be achieved in 17 to 23 *per cent* cases during 2012-17.

In the absence of adequate improvement in health care facilities, the infant and maternal mortality rates (IMR: 39/1,000, MMR: 173/1,00,000) were far short of the NRHM goals (IMR: less than 25/1,000, MMR: less than 100/1,00,000) and MDG (IMR: 27/1,000 and MMR: 109/1,00,000). The total fertility rate was 2.2 against the NRHM target of 2.1.

AGRICULTURE DEPARTMENT

2.2 Performance Audit on implementation of National Food Security Mission

2.2.1 Introduction

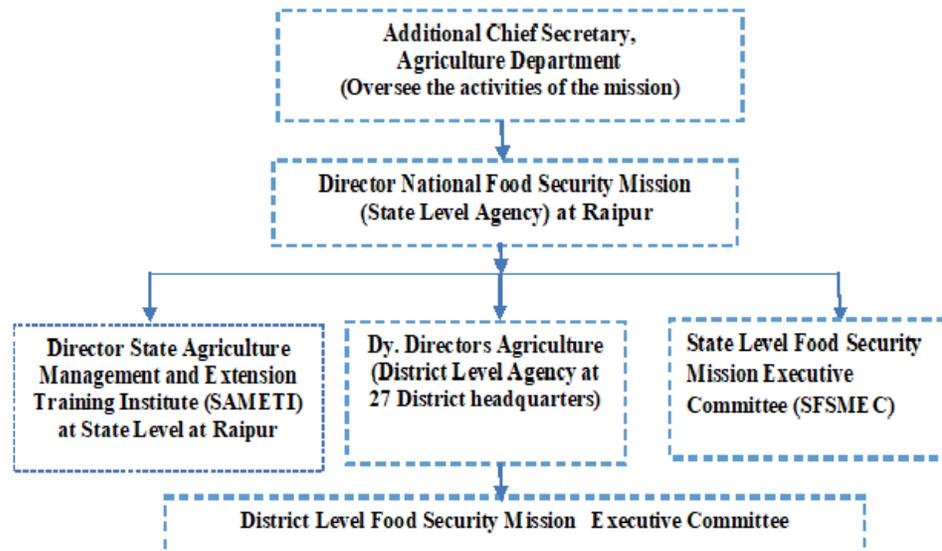
Government of India (GoI) launched (October 2007) the National Food Security Mission (NFSM), a centrally sponsored crop development scheme, in the 11th five year plan (FYP) to increase the production of rice, wheat and pulses. NFSM was continued in 12 FYP (2012-17) by including two more crops viz., coarse cereals and commercial crops.

Production of food grains was to be increased through area expansion, productivity enhancement in a sustainable manner, restoration of soil fertility and enhancing productivity at the individual farm levels. The NFSM guidelines provide for major interventions such as demonstration, need based inputs, i.e., seed distribution, integrated nutrient management (INM), soil ameliorants, integrated pest management (IPM) and plant protection measures (PPM), farm mechanisation and training, and local initiatives.

In Chhattisgarh, 13 districts were taken up (2012-17) under NFSM for rice, nine districts for coarse cereals and all the 27 districts for pulses.

2.2.2 Organisational set-up

The Mission is implemented by the Agriculture Department (Department) in the State. The organisational chart below depicts the key functionaries.



2.2.3 Audit Objectives

The objectives of the Performance Audit were to assess whether:

- NFSM interventions were properly planned and executed efficiently and effectively in compliance with the scheme guidelines;

- Funds were released, accounted for and utilised by the Department economically and efficiently as per the provisions of the scheme;
- Increase in production of food grains, restoration of soil fertility and productivity at the individual farm level were achieved;
- Monitoring and evaluation was done as per prescribed guidelines of NFSM.

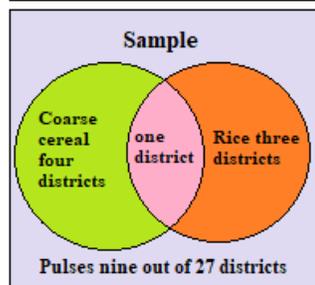
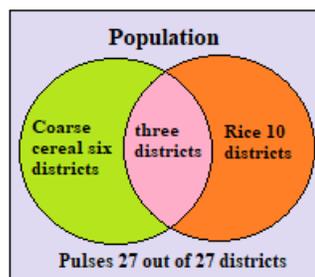
2.2.4 Audit criteria

The audit criteria were derived from the following sources:

- NFSM Guidelines 2012
- Provisions of General Financial Rules, State Finance code, Treasury code and Budget Manual of Government of Chhattisgarh
- Instructions issued through Government orders from time to time
- Impact evaluation report and evaluation studies by the State level agencies
- State action plan for implementation of NFSM

2.2.5 Audit scope and methodology

The performance audit covered the period 2012-13 to 2016-17 by test check of records of nine⁵⁹ out of 27 districts in the State selected by the simple random



sampling without replacement (SRSWOR) method. In these nine districts, four were NFSM-rice, five were NFSM-coarse cereals and all the nine were NFSM-pulses. Apart from this, records in the office of the Director, Agriculture, Director, SAMETI, and nine Deputy Directors, Agriculture (DDA) at district levels were also test-checked. Audit also conducted beneficiary survey of 720 farmers (80 farmers from each selected district) benefitting from the scheme. In addition, 200 demonstrations of which 120 demonstrations (40 each from Chhattisgarh plains, Northern hills and Bastar plateau) pertains to pulses, 60 demonstrations (20 each from Chhattisgarh plains, Northern hills and Bastar plateau) pertains to rice and 20 demonstrations (10 each from Northern hills and Bastar plateau) pertains to coarse cereals were also reviewed in audit to

evaluate the extent of achievement of the scheme objectives.

An entry conference was held (July 2017) with the Additional Chief Secretary (ACS) of the Agriculture Department to discuss the objectives, scope and methodology of the performance audit. An exit conference was also held (March 2018) with the ACS of the Department to discuss the audit findings.

⁵⁹ Balrampur, Bemetara, Bilaspur, Dantewada, Jagdalpur, Kanker, Korea, Raipur and Surguja

The views/ replies of the Department have been suitably incorporated in the Report.

Audit findings

2.2.6 Planning

Preparation of annual action plans

NFSM guidelines stipulate that the Ministry of Agriculture and Cooperation, GoI would communicate component wise tentative annual outlay to each State for developing annual action plan (AAP). The district level food security mission executive committee (DFSMEC) would prepare the AAP at the district level keeping in view their priority and potential and submit the plan to the State Mission Director (SMD). The district action plans would be aggregated to prepare the State action plan by the SMD. The State action plan would be vetted by the SFSMEC and sent to the Ministry of Agriculture, GoI for consideration by the national food security mission executive committee (NFSMEC). Audit observed the following deficiencies in the preparation of AAP:

2.2.6.1 Preparation of perspective plan and conducting base line survey

The guidelines stipulate that State level agency (SLA) has to prepare perspective plan in consonance with the Mission's goals and objectives in close co-ordination with the State Agriculture Universities (SAUs) and Indian Council of Agriculture Research (ICAR). Further, the SLA has to organise/ conduct baseline survey and feasibility studies in the area of operation (districts, sub districts or a group of districts) to determine the status of crop production, its potential and demand.

Scrutiny of records of Directorate, NFSM revealed that though the Director instructed (January 2008) the DDAs to conduct baseline surveys, there is no record of such surveys having been conducted. Consequently, the Directorate also failed to prepare the perspective plan.

In the absence of perspective plan and base line survey, status of crop production, its potential and demand could not be reflected in the AAP and use of correct strains of seeds/ correct crops suitable for maximum yield in specific areas where the crops were cultivated could not be ensured. Resultantly, targets set under different interventions were not achieved as mentioned in **paragraphs 2.2.9.1** (field demonstrations), **2.2.9.2 A (i)** (seed distribution), **2.2.9.2 C** (INM and Soil ameliorants), **2.2.9.2 D** (PPM and IPM), **2.2.9.2 E** (farm mechanisation), **2.2.9.2 F** (training) and **2.2.9.3** (local initiatives).

The ACS stated (December 2017) that instructions were issued (January 2008) to 12 district offices (NFSM implemented districts) to conduct base line survey. It is evident that the Department failed to ensure follow-up of its own orders, and this resulted in the shortcomings discussed above.

2.2.6.2 Participation of PRIs in the preparation of AAP

The guidelines stipulate that Panchayati Raj Institutions (PRIs) should be actively involved in selection of beneficiaries and local interventions in the identified districts. The guidelines further stipulate that 33 *per cent* of funds

The Directorate did not prepare perspective plan or ensure conduct of base line survey for implementation of NFSM

In violation of scheme guidelines PRIs were not involved in preparation of AAP for implementation of NFSM

are to be allocated to small and marginal farmers and 30 per cent to women farmers.

Audit examination of records in the nine sampled districts revealed however, that PRIs were not involved in the selection of beneficiaries, and district offices prepared the AAPs by adding 10 per cent to 15 per cent to the previous year's achievement in the different categories. Further, funds were not earmarked for small and marginal farmers and for women farmers as required under the guidelines.

The reply (December 2017) of the ACS did not address the issues regarding preparation of the AAPs as discussed above. Regarding the involvement of PRIs, the ACS stated that the beneficiaries list was approved by three tiers of PRIs. This is not the same as ensuring that the PRIs should be involved in the selection of beneficiaries. Further, no justification was given for not earmarking specified proportion of funds for small and marginal farmers and for women farmers.

Recommendation

The Department should conduct base line surveys, prepare the perspective plan, involve PRIs in the selection of beneficiaries and ensure allocation of specified proportion of funds to small and medium farmers and women farmers in terms of the guidelines.

2.2.7 Financial Management

In terms of the guidelines, the GoI⁶⁰ share is transferred to State Governments, who in-turn release the funds to the State Level Agency (SLA), viz., the Directorate, NFSM, for further release to the District Level Agencies, viz., DDAs according to the approved programme of the districts, based on progress reports and submission of utilisation certificates (UCs).

Details of fund release and expenditure during 2012-17 are given in **Table 2.2.1:**

Table 2.2.1: Target, fund released and expenditure incurred on NFSM during 2012-17
(₹ in crore)

Year	Financial target as per approved action plan	Opening balance	Release	Interest earned and other income	Total funds available	Expenditure	Closing balance
2012-13	61.73	23.82	52.58	1.59	77.99	50.47	27.52
2013-14	82.79	27.52	79.46	1.64	108.62	67.57	41.05
2014-15	95.89	41.05	47.94	5.95	94.94	53.11	41.83
2015-16	133.46	41.83	81.09	2.35	125.27	97.32	27.95
2016-17	126.49	27.95	88.96	6.08	122.99	77.71	45.28
Total	500.36		350.03	17.61		346.18	

(Source: Information given by Directorate)

As may be seen, works worth ₹ 154.18 crore⁶¹ (31 per cent of approved AAP) were not executed which resulted in less achievement of target on demonstration (76 per cent), seed distribution (48 per cent), INM and soil ameliorants (54 per cent), IPM and PPM (58 per cent), and farm mechanisation

⁶⁰ From 2012-2015 the scheme was totally centrally sponsored scheme; the central and State share in 2015-16 and 2016-17 were 50:50 and 60:40 respectively.

⁶¹ Target ₹ 500.36 crore – expenditure ₹ 346.18 crore = ₹ 154.18 crore

(51 per cent), training (74 per cent) and local initiatives (42 per cent) as discussed in paragraph 2.2.9.

2.2.7.1 Loss of interest due to parking of funds in current accounts

The Directorate maintained separate bank account (savings account) for implementation of NFSM scheme. However, three to six districts offices deposited NFSM funds in current accounts, resulting in loss of interest of ₹ 1.55 crore as detailed in **Table 2.2.2**:

Table 2.2.2: Parking of NFSM funds during 2012-17

(₹ in crore)						
Year	No. of districts in the State	No. of district parking funds in savings accounts	Interest earned from saving accounts	No. of districts parking funds in current accounts	Amount deposited in current account	Loss of interest at six per cent per annum
2012-13	27	21	1.60	6	9.40	0.56
2013-14	27	22	1.64	5	4.20	0.25
2014-15	27	23	1.58	4	6.28	0.38
2015-16	27	24	2.35	3	6.05	0.36
2016-17	27	24	0.69	3	0.00	0.00
Total			7.86		25.93	1.55

(Source: Information given by the Department and complied by Audit)

The ACS stated (December 2017) that guidelines envisage opening of separate bank account but do not specify whether it would be savings or current.

The reply is not acceptable as the Department has not developed any policy for keeping money in interest bearing accounts especially when it was aware that large sums of money are being kept in bank accounts for implementation of schemes.

Recommendation

It is recommended that Departmental offices maintain savings accounts with sweep facility to maximise returns on unutilised balances under NFSM.

2.2.8 Production performance

As on December 2014, Chhattisgarh had 37.36 lakh farmer families having 47.75 lakh hectares (ha) of cultivated land. During 2012-17, demonstration⁶² was done in only 2.76 lakh ha (six per cent) of land of 1.38 lakh (four per cent) beneficiaries. The farmers also benefited through other NFSM interventions such as through seed distribution-23.89 lakh farmers (64 per cent), INM/soil ameliorants-2.11 lakh farmers (six per cent), PPM and IPM-1.26 lakh farmers (three per cent), farm mechanisation-2.27 lakh farmers (six per cent), training-0.16 lakh farmers (0.4 per cent) and local initiatives-0.01 lakh farmers (0.02 per cent).

The status of crop production in the State and selected districts and deficiencies noticed in implementation of different interventions of NFSM are mentioned below:

⁶² Demonstrations were to be conducted in a contiguous block by dividing the fields in two blocks, one for improved practices and the other for farmer's practices in a cluster of 100 ha or more size

There was no increase in production of rice and course cereals even after implementation of NFSM

2.2.8 (i) Crop production status of the State

In terms of the guidelines, NFSM is aimed at increasing the production of rice, pulses and coarse cereals through area expansion and productivity enhancement in a sustainable manner. Further, NFSM guidelines provide focus on districts with low productivity but having high potential including cultivation of crops in rain fed areas. The Mission was implemented in 13 districts for rice, all 27 districts for pulses, and nine districts for coarse cereals in the State.

The area under cultivation of rice, pulses and coarse cereals and its production and yield in the State during 2012-17 is shown in the **Table 2.2.3:**

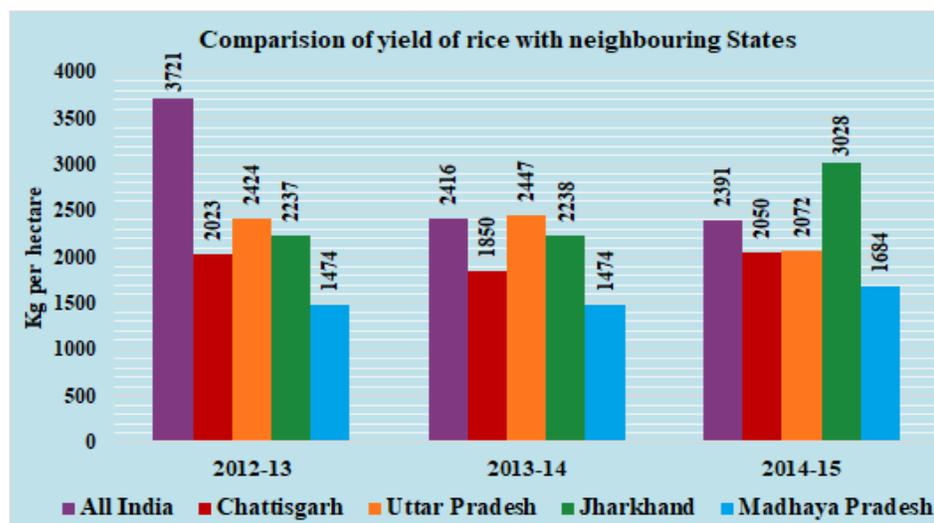
Table 2.2.3: Area, production and yield of rice, pulses and coarse cereals

Year	Area (in 000' Ha)			Production (in 000' MT)			Yield (in kg/ Ha)		
	Rice	Pulses	Coarse cereals	Rice	Pulses	Coarse cereals	Rice	Pulses	Coarse cereals
2012-13	3,901.13	1,211.60	331.70	7,893.43	823.52	485.95	2,023	680	1,465
2013-14	3,887.21	1,225.57	372.17	7,191.02	714.89	611.06	1,850	538	1,642
2014-15	3,990.24	1,170.36	380.79	8,176.67	809.51	583.22	2,050	691	1,532
2015-16	3,833.71	1,135.40	365.25	5,105.54	656.37	503.51	1,332	578	1,378
2016-17	3,923.98	1,211.23	352.74	6,425.03	839.46	480.90	1,637	693	1,363

(Source: Information given by Directorate Agriculture)

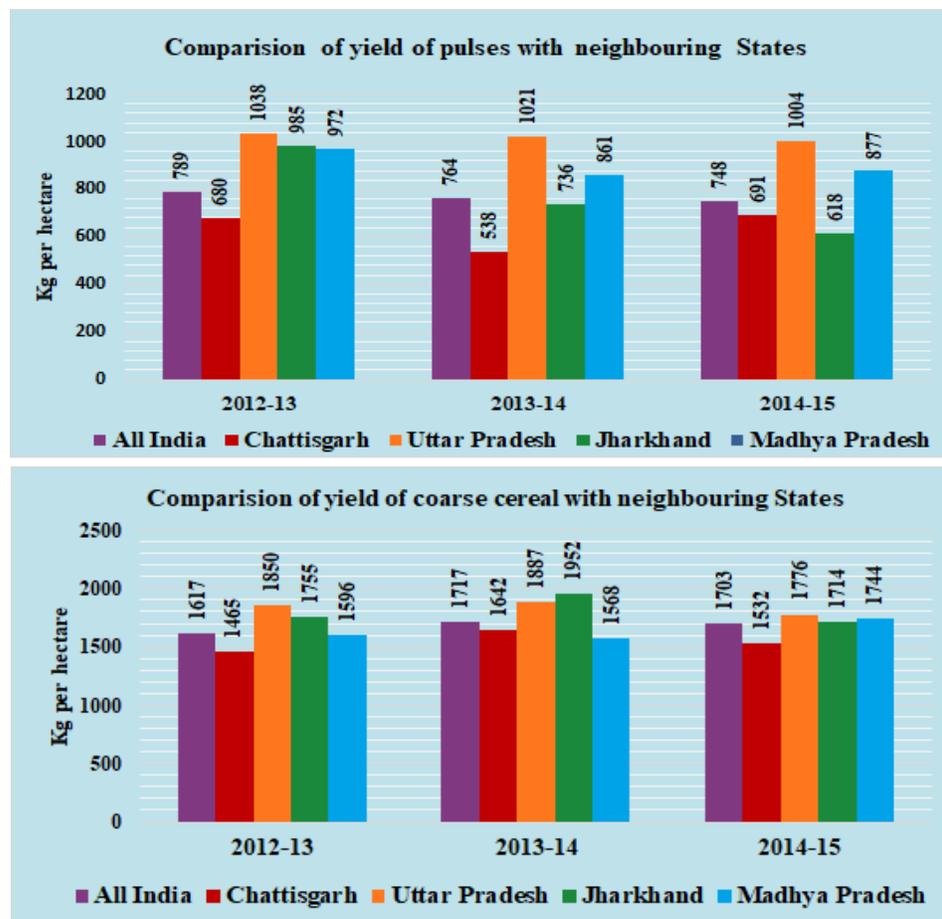
As may be seen, area under cultivation, production and yield of different crops remained range bound during 2012-17, and no dramatic increases attributable to NFSM could be found. Part of the lesser production and yield in respect of rice could be attributed to decrease in rainfall which ranged between 1,009 mm and 1,250 mm during this period, against an average of 1,317 mm in preceding periods.

Further, the yield of rice, pulses and coarse cereals of Chhattisgarh was less⁶³ when compared with its neighbouring States and with the National yield for the period 2012-13 to 2014-15⁶⁴ as shown in the charts below:



⁶³ Except Madhya Pradesh for rice for 2012-15 and coarse cereals in 2013-14; and Jharkhand for pulses for 2014-15

⁶⁴ Only data for up to 2014-15 pertaining to yield of various crops of different States was available in the web site of NFSM, Ministry of Agriculture (GoI).



In reply to the audit observation, the ACS stated (December 2017) that production of the State depends on monsoons, but production had increased by 20 to 25 *per cent* through demonstration under NFSM.

The reply is not acceptable as increase in production by demonstration (one of the seven interventions which affects the production of crops) had negligible effect on the overall production of the crops as it was limited to six *per cent* (2.76 lakh ha) of cultivated land (47.75 lakh ha) of the State and had shown more of a diminishing trend (indicated in **Table 2.2.3**) than an increasing trend except pulses which showed a mere increase of sub two *per cent*.

2.2.8 (ii) Comparison of performance of NFSM and non-NFSM districts

A comparison of the average yield of rice and coarse cereal of NFSM and non-NFSM districts for the period 2012-17 is given in **Table 2.2.4** and **Table 2.2.5** below:

Table 2.2.4: Comparison of average yield of rice

Year	State	NFSM (13 districts)	Non-NFSM districts (14 districts)
2012-13	2,023	1,957	2,055
2013-14	1,850	1,646	2,054
2014-15	2,050	1,815	2,285
2015-16	1,332	1,215	1,085
2016-17	1,637	1,455	1,750

(Source: Information produced by Directorate of Agriculture)

Table 2.2.5: Comparison of average yield of coarse cereals

Year	State	NFSM (nine districts)	Non-NFSM districts (18 districts)
2012-13	1,465	1,459	1,471
2013-14	1,642	1,620	1,664
2014-15	1,532	1,476	1,588
2015-16	1,378	1,407	1,349
2016-17	1,363	1,830	896

(Source: Information produced by Directorate of Agriculture)

The productivity of rice of NFSM districts could not be brought on par with non-NFSM districts in any of the last five years, an objective that the Mission strived to achieve. The Director, NFSM stated (September 2018) that irrigation facilities in non-NFSM districts are more (25 medium irrigation projects out of 33 in the State) as compared to the NFSM districts and this was one of the main reasons of comparatively better yield in non-NFSM districts. The reply is not acceptable, since there is no evidence that the Agriculture Department, though aware of the core problem areas, had coordinated with the Water Resources Department to address the issue by providing necessary infrastructure (such as check dams, anicuts etc.) for irrigation in the NFSM districts to achieve the objectives of the Mission.

Recommendation

The Department should make concerted efforts to increase the productivity of the food grains by extending irrigation facilities in the NFSM districts in coordination with Water Resources Department.

2.2.9 Implementation of NFSM

Details of expenditure in the State and in the districts selected for Audit under NFSM during 2012-17 are detailed in **Table 2.2.6:**

Table 2.2.6: Interventions wise expenditure during 2012-17

Sl. No.	Name of the interventions	State		Selected districts	
		Expenditure (₹ in crore)	Percentage of expenditure	Expenditure (₹ in crore)	Percentage of expenditure
1	Field demonstration	156.19	45	41.58	53
2	Seed distribution	49.87	14	10.90	14
3	Soil ameliorants and PPM	20.29	6	9.66	12
4	Farm mechanisation	45.46	13	12.26	16
5	Cropped based training programme	2.77	1	0.87	1
6	Local initiatives	12.18	4	2.26	3
7	Miscellaneous expenditure	59.52	17	1.46	1
	Total	346.18	100	78.99	100

(Source: Information given by Department and compiled by Audit)

2.2.9.1 Field demonstration

In terms of the guidelines, field demonstration is to be conducted by dividing the fields in two blocks, one for improved practices (demonstration plot) and the other for farmer's practices (control plot) in a cluster of 100 ha or more. District consultants/ technical assistants of NFSM monitor the demonstrations and report the outcome in prescribed format to the district level project management team (PMT). Results of demonstrations are to be compiled at

block, district and State levels. Display boards are to be put up on demonstration plots with information of the farmers and critical inputs applied on the plots. A field day⁶⁵ should be conducted and relevant extension literature like leaflets, pamphlets etc., are made available to participating farmers.

The crop wise targets and achievement of demonstration in the State and selected districts during 2012-17 are shown in the **Table 2.2.7** below:

Table 2.2.7: Target and achievement of demonstration of rice, pulses and coarse cereals

Name of the crop	State					Selected districts				
	Target (in lakh ha)	Achievement (in lakh ha)	Provision (₹ in crore)	Expenditure (₹ in crore)	Unutilised amount (₹ in crore)	Target (in lakh ha)	Achievement (in lakh ha)	Provision (₹ in crore)	Expenditure incurred (₹ in crore)	Unutilised amount (₹ in crore)
Rice	1.62	1.62 (100)	121.70	90.66	31.04 (26)	0.30	0.29 (97)	22.65	14.45 (64)	8.20 (36)
Pulses	1.05	1.05 (100)	80.26	62.67	17.59 (22)	0.52	0.47 (90)	35.77	26.14 (73)	9.63 (27)
Coarse cereals	0.09	0.09 (100)	4.60	2.86	1.74 (38)	0.05	0.04 (80)	2.38	0.99 (42)	1.39 (58)
Total	2.76	2.76 (100)	206.56	156.19 (76)	50.37 (24)	0.87	0.80 (92)	60.80	41.58 (68)	19.22 (32)

(Source: Information given by Department and compiled by Audit)

Note: Figures in bracket indicate percentage

Audit noticed as under:

✓ The variations between the State and sampled districts figures, as seen from the above table, were due to skewed⁶⁶ fixation of targets in the State and samples drawn in Audit based on such targets.

✓ The achievement of 100 per cent of target in the State with 76 per cent of the financial outlay was due to the fact that components of the programme such as field day/publicity material/visits of scientist/staff were partially executed (34 per cent of earmarked fund was spent in 74 clusters examined by Audit) during the demonstration work as mentioned in **paragraph 2.2.9.1 (iii)**.

✓ In the sampled districts, the achievement against target was less by eight per cent as the farmers in the Northern hills (Sarguja, Balrampur and Korea districts) and Bastar plateau (Jagdalpur, Dantewada and Kanker districts) did not part with their land for the demonstration activities as seen from the records of the DDAs of these districts.

To assess the actual benefits of demonstrations, Audit visited 200 demonstration sites including 60 demonstrations of rice, 120 demonstrations

⁶⁵ A meeting preferably at grain filling stage on a field where scientists from SAUs/ KVK interact with farmers of that locality to provide critical observations and find solution to the problems faced by farmers.

⁶⁶ In 12 districts of Northern hills and Bastar plateau, targets set were less vis-à-vis the 15 districts of Chhattisgarh plains due to hilly areas and naxal problem. In the audit sample, six districts have been taken from Northern hills and Bastar plateau and three districts from Chhattisgarh plains which resulted in variance between State and sampled district's figures.

of pulses and 20 demonstrations of coarse cereals. Findings are discussed below:

2.2.9.1 (i) Area of cluster for demonstration

The guidelines require village *panchayats* to be involved in selection of beneficiary farmers. Further, the demonstrations should be conducted in a contiguous block by dividing the field in two blocks, one for improved practices and the other for farmer's practice in a cluster of 100 ha and more. The guidelines further provide that size of cluster for hill areas will be 10 ha.

Norms of area (100 ha or more) of cluster for demonstration was not adhered to

Scrutiny of records revealed that village *panchayats* were involved in selection of beneficiaries. Further, 44 out of 60 demonstrations for rice, 75 out of 120 demonstrations for pulses and 10 out of 20 demonstrations for coarse cereals had clusters of 100 ha and more. Thus, 71 clusters of demonstrations (16 clusters for rice, 45 clusters for pulses and 10 clusters for coarse cereals) had area less⁶⁷ than 100 ha. Of these, 36 clusters belonged to the selected districts of Northern hills area (Surguja, Korea and Balrampur) whereas the remaining 35 clusters belonged to the selected districts of Bastar plateau (Jagdapur, Dantewada and Kanker). In the selected districts of Chhattisgarh plains area (Raipur, Bilaspur and Bemetara) no clusters having less than 100 ha for demonstration were noticed.

The main reasons for selection of cluster for demonstration having less than 100 ha in selected districts were non-willingness of farmers to part with their fields due to lack of confidence expressed by them on the new variety seeds to carry out the demonstration works as reported (2014) by the National Level Monitoring team.

The ACS stated (December 2017) that it is not possible to make a cluster of 100 ha in Northern hills and Baster plateau. The reply is not acceptable, since, the Department has not yet surveyed these areas to record the actual availability of land of farmers to take a policy decision in this regard.

2.2.9.1 (ii) Soil analysis, identification of demonstration technologies and inclusion of new varieties for demonstration

The guidelines stipulate that soil fertility status of the selected field should be known well in advance for deciding the use of fertilisers and soil ameliorants. Further, improved practices for the demonstration plots should be identified in consultation with State Agriculture University (SAU) through their regional research stations/ krishi vikas kendra (KVK) located in the area and the seed varieties to be included in the package should preferably be new varieties. Also, the results of the demonstrations should be compiled at block, district and State level. The contribution of various interventions such as seed distribution, distribution of INM, IPM etc., undertaken under cluster demonstrations and up-scaling of particular intervention should be analysed in the succeeding years.

Audit observed from files of the DDAs of sampled districts that plot wise soil health cards of the farmers were not prepared by the concerned DDAs as no such instructions have been given by the Department for reasons not on

⁶⁷ Rice-75 ha (four), 50 ha (12); pulses-50 ha (30), 25 ha (two), 20 ha (two), 10 ha (one), one ha (10); and coarse cereal –50 ha (three), 40 ha (one), 35 ha (six)

record. As a result, the Department had not examined the fertility status of selected fields before execution of demonstration work. Further, though required, regional research stations of SAU/KVK were not involved for improved practices. Rather, field level functionaries such as Senior Agriculture Development Officers (SADO)/Rural Agriculture Extension Officers (RAEO), who were not domain experts, were directly involved in conducting the demonstration.

Audit evaluated the production performance of 200 demonstration plots against their control plots in the selected districts and observed that 13 per cent demonstrations (26 out of 200) have shown improved productions by more than 50 per cent as indicated in **Table 2.2.8** below:

Table 2.2.8: Production performance of demonstration plots as compared to control plot for variety of seeds used in demonstration

Variety of seeds used in demonstration	No. of demonstration plots	Increase in production performance as compare to control plot		
		Up to 25 per cent	26 to 50 per cent	More than 50 per cent
Control Plots (Local variety) v/s Demonstration Plot (HYV/hybrid)	58	33	19	6
<i>Increase percentage</i>	<i>100</i>	<i>57</i>	<i>33</i>	<i>10</i>
Control Plots (HYV/hybrid) v/s Demonstration Plot (HYV/hybrid)	142	76	46	20
<i>Increase percentage</i>	<i>100</i>	<i>54</i>	<i>32</i>	<i>14</i>
Total	200	109	65	26
<i>Increase percentage (Total)</i>	<i>100</i>	<i>55</i>	<i>32</i>	<i>13</i>

(Source: Information given by Department and compiled by Audit)

Though production in demonstration plots have surged, the comparative rise remains almost the same even when the farmers in the control plots have used either local seeds or hybrid/ HYV seeds. This is probably the reason why the farmers are not very keen on using the hybrid/ HYV seeds as reported (2014) by National level monitoring team (NLMT) as commented in **paragraph 2.2.9.2A (i)**. However, such reservations of the farmers, though required to be dispelled by the Department through educating them or by awareness drives, were not carried out as commented in **paragraph 2.2.9.2A (ii)**. Further, the data on production of demonstrations plot and control plots up to district level were not compiled at State level. Hence, contribution of various interventions under demonstration could not be analysed and the Department failed to ensure up-scaling of particular interventions in the succeeding years, though stipulated in the guidelines.

The reply of the ACS (December 2017) did not address the audit observation.

2.2.9.1 (iii) Cost norms of demonstrations

The guidelines indicate that cost of demonstrations for one ha area should be ₹ 7,500. Accordingly, Director NFSM issued cost norms of demonstrations which included ₹ 6,700 for purchase of seeds, INM, weedicide, IPM and ₹ 800 for field day/publicity material /visits of scientists/staff.

In the sampled districts, block wise details of expenditure incurred for purchase of seeds, INM, weedicide, IPM and other expenditure were maintained in ledgers. However, cluster wise expenditure details were not

Norms of cost of expenditure during demonstration was not adhered to

maintained by the districts offices, in the absence of which, cluster wise expenditure of each demonstration, could not be worked out.

However, seven out of nine sampled district offices furnished details of cluster wise expenditure (2016-17) of 74 clusters to audit. The details are given in **Table 2.2.9:**

Table 2.2.9: Cluster wise expenditure

Name of the districts	No. of clusters (area in hectares)	Norms of expenditure for one ha (in ₹)		Total expenditure to be incurred on seed etc. (₹ in lakh)	Expenditure actually incurred on seed etc. (₹ in lakh)	(+/-) Excess expenditure / unutilised (₹ in lakh)	Total other expenditure to be incurred (₹ in lakh)	Total other expenditure actually incurred (₹ in lakh)	(+/-) Excess expenditure / unutilised (₹ in lakh)
		Seed, INM, IPM, weedicide	Other expenditure						
Raipur	4 (400)	6,700	800	26.80	23.83 (89)	- 2.97 (11)	3.20	3.82 (119)	0.62 (zero)
Bilaspur	7 (700)	6,700	800	46.90	39.57 (84)	- 7.33 (16)	5.60	4.80 (86)	- 0.80 (14)
Bemetara	1 (100)	6,700	800	6.79	5.32 (78)	- 1.47 (22)	0.80	0.80 (100)	Nil (nil)
Korea	13 (1,300)	6,700	800	87.10	65.37 (75)	- 21.73 (25)	10.40	7.60 (73)	- 2.80 (27)
Surguja	8 (800)	6,700	800	53.60	51.41 (96)	- 2.19 (04)	6.40	0.10 (2)	- 6.30 (98)
Kanker	16 (1,600)	6,700	800	107.20	139.11 (130)	31.91 (nil)	12.80	Nil (nil)	- 12.80 (100)
Jagdalspur	25 (2,500)	6,700	800	167.50	140.92 (84)	- 26.58 (16)	20.00	2.97 (15)	- 17.03 (85)
Total	74			495.89	465.53 (94)	- 30.36 (06)	59.20	20.09 (34)	- 39.11 (66)

(Source: Information given by Department and compiled by Audit)

Note: Figures in bracket indicate percentage

As may be seen, the DDAs of the sampled districts did not spend the earmarked fund to promote the objectives of the Mission to undertake field days/ distribution of publicity materials/ visits of scientist/ staff for reasons not on record. The ACS stated (December 2017) that specified amount could not be incurred due to variation in cost of seeds and other inputs.

The reply is not acceptable as more than 10 years have been completed since the launching of NFSM and the Department should have by this time addressed the issue of variation in costs of seeds/other inputs.

Thus, the Department did not ensure publicity of demonstration of crop farming through field days, distribution of public materials and visits of scientists/GoI and State officials. The impact, though not evaluated by the Department, may have deprived the farmers the use of latest variety seeds, INM, PPM etc., as discussed in **paragraph 2.2.9.2 A (ii)**. The conclusion is also drawn from the fact that 720 scheme beneficiaries reported to Audit during beneficiary survey that they were not aware of these interventions as commented in **paragraph 2.2.9.2 B**.

Recommendation

The Department should increase publicity of demonstration of crop farming through field days, distribution of public materials and visits of scientist and State officials by spending the money provided under this head.

2.2.9.2 Need based inputs

A Seed distribution

2.2.9.2A (i) Non-achievement of targets

The guidelines provide that seed producing agencies authorised by the State would distribute seeds to the farmers in selected districts. Further, DFSMEC would finalise the list of beneficiaries in consultation with village *panchayats*.

Scrutiny of records of DDAs of selected districts revealed, however, that DFSMEC did not consult village *panchayats* when finalising the list of beneficiaries. Rather, based⁶⁸ on targets set by the Directorate, NFSM for distribution of seeds to each district, DDAs issued orders to *Beej Nigam* for storage of seed in various offices of SADO/Large size *Adivasi* multipurpose societies (LAMPS) at block level, from where, farmers of the concerned blocks were to purchase required seeds at subsidised rates. The *Beej Nigam* claims reimbursement of subsidy amount from the DDA based on the quantity of seeds purchased.

The crop wise targets and achievement of seed distribution in the state and selected districts during 2012-13 to 2016-17 are given in **Table 2.2.10**:

Table 2.2.10: Targets and achievement of seed distribution

Name of the crop	State						Selected districts					
	Target in MT	Achievement in MT	(-) Excess/ (+) short achievement in MT	Provision in ₹ in crore	Expenditure ₹ in crore	Unutilised amount (₹ in crore)	Target in MT	Achievement in MT	(-) Excess/ (+) short achievement in MT	Provision in ₹ in crore	Expenditure incurred in ₹ crore	Unutilised amount ₹ in crore
Rice	80,891	56,520 (70)	24,371 (30)	58.54	28.08 (48)	30.46 (52)	14,544	11,122 (76)	3,422 (24)	12.23	5.92 (48)	6.31 (52)
Pulses	21,408	15,093 (71)	6,315 (29)	43.92	21.62 (49)	23.30 (51)	6,821	3,671 (54)	3,150 (46)	11.83	4.77 (40)	7.06 (60)
Coarse cereals	319	58 (18)	261 (82)	1.80	0.17 (9)	1.63 (91)	232	44 (19)	188 (81)	0.91	0.21 (23)	0.70 (77)
		Total		104.26	49.87 (48)	54.39 (52)	Total			24.97	10.90 (44)	14.07 (56)

(Source: Information given by Department and compiled by Audit)

Note: Figures in bracket indicate percentage

The target of seed distribution could not be achieved by the Department as, for reasons not on record, DFSMEC failed to form district level seed committees (DLSC) to monitor seed distribution in the districts, its indent and ultimate distribution to end users. Further, NLMT reported (2014) that the farmers were not keen on using the hybrid/ HYV seeds which Audit also observed from examination of 200 demonstration activities in the sampled districts (commented in **paragraph 2.2.9.1 (ii)**) that though production of demonstration plots have improved, the percentage of increase in demonstration plots remained the same even when local seeds were used in control plots. In addition, the Department had also not bothered to take any feedback on the low purchase of seeds by farmers under such arrangement from the DDAs.

⁶⁸ Target for seed is arrived at by taking inputs from districts.

The Department did not factor in these causes to manage the distribution of seeds among farmers and this led to funds worth ₹ 54.39 crore earmarked for this intervention remaining unspent during 2012-17. This could also be one of the basic reasons for less productivity of rice, pulses and coarse cereals in the State as commented in **paragraph 2.2.8 (i)** when read with other observations in the report.

The ACS stated (December 2017) that quantity of seed was provided to each district as per the target of the district. Wherever additional quantity of seed was required by any district, the same had been fulfilled from the allotment of seed of other districts which had less achievement in seed distribution in the same year.

The reply is not acceptable as the Department had only ensured that seeds are stored in the offices of SADO/LAMPS for willing farmers to purchase voluntarily, instead of addressing the low purchase of seeds by educating the farmers, especially when the Department was informed by NLMT in 2014 that the farmers are not inclined to use such seeds.

2.2.9.2A (ii) Inadequate use of hybrid and high yield seeds

The guidelines provide for promotion and extension of improved quality of seeds. The Performance Audit report of the Agriculture Department 2010-11, recommended promotion of latest varieties of seeds over local seeds and the Department had agreed to follow this.

Department failed to promote the use of latest variety of seeds by educating the farmers through intervention under demonstration

However, the Department did not follow the recommendation and against the target of distributing 1,880 MT hybrid seeds valued at ₹ 9.03 crore and 79,011 MT high yield variety (HYV) seeds valued at ₹ 49.51 crore during 2012-17, only 311 MT hybrid seeds (16 *per cent*) worth ₹ 1.13 crore and 56,210 MT HYV seeds (71 *per cent*) worth ₹ 26.95 crore were distributed. The position in the sampled districts is shown in **Table 2.2.11** below.

Table 2.2.11: Target and achievement of distribution of hybrid and HYV Seed

(In quintal)

Name of the district	Hybrid seed			High yield variety seed		
	Target	Achieved	Not achieved	Target	Achieved	Not achieved
Balrampur	350	0 (nil)	350 (100)	3,350	2,222 (66)	1,128 (34)
Surguja	950	0 (nil)	950 (100)	15,000	10,727 (72)	4,273 (28)
Jagdalpur	2,500	751 (30)	1,749 (70)	1,400	0 (nil)	1,400 (100)
Dantewada	415	7 (2)	408 (98)	6,000	1,652 (28)	4,348 (72)
Korea	1,600	872 (55)	728 (45)	40,200	18,524 (46)	21,616 (54)
Raipur	1,250	122(10)	1,128 (90)	73,750	72,703 (99)	1,047 (01)
Bilaspur	50	0 (nil)	50 (100)	16,060	2,352 (15)	13,708 (85)
Total	7,115	1,752 (25)	5,363 (75)	1,55,760	1,08,180 (69)	47,580 (31)

(Source: Information given by Department and compiled by Audit)

Note: Figures in bracket indicate percentage of achievement/non-achievement

Audit observed that the Department had not adequately created awareness/interest and educated the farmers to use hybrid/HYV seeds over local variety seeds through field days, publicity materials and visits of scientist (commented in **paragraph 2.2.9.1 (iii)**). In addition, the farmers were also not keen on using the new variety seeds as reported by NLMT to the Department. However, Audit noticed that where efforts were made by the Department to educate the farmers, distribution of new varieties of seeds had increased.

For example, the Department spent 15 *per cent* of allocated funds on educating farmers for using these seeds in Jagdalpur district, 73 *per cent* in

Korea district and 73 per cent in Raipur district. These districts have shown better distribution of seeds as may be seen from the above table (up to 55 per cent for hybrid seed and 99 per cent for HYV). In contrast, only two per cent of earmarked fund was spent in Surguja district, and none of the farmers purchased hybrid seeds.

The ACS stated (December 2017) that hybrid seeds are costly in comparison to HYV seeds and could be used for one year only and hence, less quantity of hybrid seeds were purchased /used by small and marginal farmers.

The reply is not acceptable as the Department had not undertaken adequate awareness measures (spent between two and 73 per cent of allotted fund) to educate the farmers or taken any initiative such as subsidy etc., to facilitate farmers to use these seeds. Consequently, the Department failed to promote the mandate of NFSM for use of improved variety seeds, especially hybrid to augment production.

Recommendation

The Department should create awareness and educate farmers to ensure use of hybrid seeds/ HYV seeds to achieve the objective of the Mission.

2.2.9.2 B Application of INM, soil ameliorants, IPM and PPM

The guidelines stipulate development of strategies to promote and extend improved technologies such as seed, integrated nutrient management (INM) including micronutrients, soil ameliorants, integrated pest management (IPM) and plant protection measures (PPM).

23 to 92 per cent farmers in the sampled districts reported ignorance on use of INM, soil ameliorants, IPM and PPM to Audit in the beneficiary survey

Survey of 720 beneficiaries⁶⁹ in the selected districts revealed that 221 (92 per cent) out of 240 beneficiaries in three districts of Bastar plateau area (Jagdalpur, Dantewada and Kanker), 188 out of 240 (78 per cent) beneficiaries in three districts of Northern hills area (Surguja, Korea and Balrampur) and 55 (23 per cent) out of 240 beneficiaries in three districts of Chhattisgarh plains area (Raipur, Bilaspur and Bemetara) were unaware about the application of INM, soil ameliorants, IPM and PPM. This is despite the fact that the Department had spent ₹ 9.66 crore out of ₹ 18.24 crore (target) allotted for this purpose. Thus, the Department failed to educate the farmers on the use of these measures under the NFSM intervention of need based inputs.

The ACS accepted the audit findings and stated (December 2017) that Chhattisgarh is a tribal state and two training sessions were organised in *Rabi* and *Kharif* season to create awareness among the farmers on the use of these need based inputs.

The reply cannot be accepted since (i) the numbers of farmers attending such trainings were not provided to Audit; and (ii) 23 to 92 per cent beneficiaries have reported ignorance of these measures to Audit during beneficiary survey.

2.2.9.2 C Integrated nutrient management (INM)/ soil ameliorants

Under the guidelines, the Agriculture Department is required to implement INM/soil ameliorants. The DFSMEC is required to finalise the list of beneficiaries in consultation with village *panchayats*. Micro-nutrients/lime/gypsum or other sulphur containing fertilisers such as phosphor-gypsum/

⁶⁹ Selected randomly in consultation with the RAEO/SADO posted in the village/block

bentonite sulphur are to be applied as a basal/foiler application⁷⁰ based on the recommendations of ICAR/ SAUs concerned. The farmers are to bear 50 per cent of the cost of these inputs, and the balance is to be borne by the Department subject to the financial limits⁷¹.

Scrutiny of records in the selected districts revealed that the DFSMEC neither finalised the list of beneficiaries in consultation with village *panchayat*; nor did the Department follow the procedures and obtain recommendations of ICAR/ SAUs etc. Instead, assistance under INM initiative was provided after receiving farmer's demand and upon report by SADO/ RAO of concerned block that it was necessary. Thus, the process was subverted. Consequently, 63 per cent of target set for bio-fertilisers could only be achieved whereas achievement of micronutrient was 91 per cent. The main reasons for better performance of micronutrient was due to the fact that it was used in plants as essential elements and required small quantity.

Details of physical and financial targets and achievements under the micronutrients and soil ameliorants interventions in the State and in selected districts during 2012-17 are shown in **Table 2.2.12**:

Table 2.2.12: Physical and financial target and achievement under various items implemented under INM

Name of the item	State						Selected districts					
	Target (in ha)	Achievement/p percentage (in ha)	(-) Excess/ short achievement	Provision (₹ in crore)	Expenditure (₹ in crore)	Unutilised amount (₹ in crore)	Target (in ha)	Achievement (in ha)	(-) Excess/ (+) short achievement (in ha)	Provision (₹ in crore)	Expenditure incurred (₹ in crore)	Unutilised Amount (₹ in crore)
Micronutrient	1,00,009	91,439 (91)	8,571 (9)	5.00	3.65 (73)	1.35 (26)	80,255	57,605 (72)	22,650 (28)	4.05	2.41 (60)	1.63 (40)
Lime/gypsum	48,410	51,411 (106)	(-) 3,001 (-6)	3.83	1.02 (27)	2.81 (73)	24,495	7,635 (31)	16,860 (69)	1.87	0.50 (26)	1.38 (74)
Distribution of rhizobium culture /phosphate solubility/ microzium/ bio-fertilisers	4,41,596	2,80,293 (63)	1,61,303 (37)	6.05	3.41 (56)	2.64 (44)	1,25,725	1,05,723 (84)	20,002 (16)	1.52	0.81 (54)	0.70 (46)
Total	5,90,015	4,23,143 (71)	1,66,872 (29)	14.88	8.08 (54)	6.80 (46)	2,30,475	1,70,963 (74)	59,512 (26)	7.44	3.72 (50)	3.72 (50)

(Source: Information given by Department and compiled by Audit)

Note: Figures in bracket indicate percentage

The main reasons of failure to achieve the targets are:

✓ In Chhattisgarh, 80 per cent farmers belong to small and marginal category and are not willing to use INM, soil ameliorants etc., even with 50 per cent subsidy from the Government as noticed from records of DDAs. However, the Department has not yet addressed the issue. Hence, 46 per cent of the earmarked funds could not be spent.

⁷⁰ Basal applications are administered directly on the land prior to or at the time of sowing; foliar application are administered on standing crops

⁷¹ Micro-nutrients-₹ 500/ha, liming or paper mud of acidic soil-₹ 1,000/ha, gypsum/other sources as sulphur-₹ 750/ha, bio fertilisers such as rhizobium, phosphate solubilising bacteria in pulses-₹ 100/ha

✓ The Department had not followed the prescribed procedure for the intervention such as obtaining recommendations of ICAR/SAUs and to educate the farmers about the use of these measures to improve production.

✓ Though the Department stated that efforts are being made to create awareness among farmers for these interventions, the fact remains that the Department has not assessed the purchasing capacity of the farmers to use these inputs for possible measures such as subsidy etc.

2.2.9.2 D Plant protection measures and integrated pest management (IPM)

The guidelines stipulate financial assistance of ₹ 500 per ha or 50 per cent of the cost, whichever is less, to farmers for IPM including plant protection chemicals, bio-pesticides and weedicides in the identified districts.

Audit found shortfalls in achieving the targets during 2012-17 to the extent of 12 per cent in IPM, 41 per cent in distribution of nucleo polyhedro virus (NPV), 30 per cent in plant protection chemicals and bio-fertilisers, 54 per cent in liming in acidic soil and 35 per cent in weedicides as detailed in **Appendix 2.2.1**. In the selected districts the achievements against targets ranged between 41 and 100 per cent except in Balrampur, where no such activity was taken up, for reasons not on record.

The main reason of failure to achieve the targets is that in Chhattisgarh, 80 per cent farmers belong to small and marginal category and are not willing to use IPM measures even with 50 per cent subsidy from the Government. However, the Department has not yet addressed the issue of improving the purchasing capacity of the farmers with possible measures such as subsidy etc.

The ACS accepted (December 2017) the audit observations.

2.2.9.2 E Farm mechanisation

The guidelines provide for assistance of 50 per cent of the cost⁷² of farming equipment such as pumps, pipes etc., to the selected farmers to facilitate timely completion of field operations, improving efficacy of field operations, increasing cropping intensity and economising the cost of cultivation. The list of beneficiaries is to be prepared by the DDA in consultation with the *Zila Parishad* and approved by the DFSMEC.

Audit observed that in none of the selected districts, did the DDAs prepare the list of beneficiaries in consultation⁷³ with the *Zila Parishad* for approval by the DFSMEC. Instead assistance under farm mechanisation was provided upon receiving demands from farmers which was less than the provisions made for extending the intervention under the Mission. Thus, the process was subverted at district levels by the DDAs.

Resultantly, the Department spent ₹ 12.26 crore to provide 3.11 lakh metres (37 per cent) of pipe and 0.44 lakh (63 per cent) equipments during 2012-17

⁷² Subject to their ceiling amount

⁷³ Though selection of beneficiaries by *Zila Parishad* in Demonstration activities has resulted in achievement of 100 per cent of physical target, in comparison to other interventions (seed distribution, Soil ameliorants/INM, PPM, Farm Mechanisation, local initiative) where the achievement was 18 to 71 per cent with beneficiaries not selected by the *Zila Parishad*

on demand basis against the provision of ₹ 23.93 crore for supply of 8.40 lakh metres of pipes and 0.70 lakh equipments for implementation of farm mechanisation under NFSM.

Audit also conducted survey with 720 scheme beneficiaries⁷⁴, and noticed that only 243 beneficiaries (34 per cent) have pumps and pipes for irrigation purpose, 358 beneficiaries (50 per cent) have only pumps, and 119 beneficiaries (16 per cent) did not have any pumps or pipes. These farmers informed Audit that in the absence of pumps and pipes they faced difficulties in irrigating their fields and had to depend on the pumps of the neighbouring farmers.

Thus, the purpose of NFSM to improve efficacy of field operations through farm mechanization was not achieved.

The ACS stated (December 2017) that farm equipments were used by special farmers and efforts were being made to convince farmers for increasing irrigation through use of pipe.

The reply is not acceptable as (i) the guideline provision was not adhered to in the selection of beneficiaries for extending the facility; (ii) the Department has not ascertained the number of farmers who do not own pumps and pipes to extend assistance under the intervention.

2.2.9.2 F Training

The guidelines state that training of farmers plays a crucial role in speedy dissemination of improved crop production practices. Further, the guidelines proposed to organise four sessions of each training i.e. one at the beginning of *Kharif* and *Rabi* season, one each during *Kharif* and *Rabi* season. There will be a group of 30 participants/farmers in each session and participants in all four sessions will be same.

The year wise details of target of training of farmers and achievement (both physical and financial) in the State and selected districts are given in **Table 2.2.13 and 2.2.14:**

Table 2.2.13: Physical and financial target and achievement of training in the State during 2012-17

Year	Physical target (no. of sessions)	No. of farmers to be imparted training	Physical achievement (no. of sessions)	No. of farmers imparted training	Financial target (₹ in crore)	Financial achievement (₹ in crore)
2012-13	460	3,450	380	2,850	0.64	0.44
2013-14	380	2,850	342	2,565	0.53	0.59
2014-15	250	1,875	196	1,470	0.35	0.32
2015-16	812	6,090	659	4,943	1.14	0.74
2016-17	754	5,655	631	4,732	1.06	0.68
Total	2,656	19,920	2,208	16,560	3.72	2.77

(Source: Information given by Department and compiled by Audit)

⁷⁴ Selected randomly in consultation with the RAEO/SADO posted in the village/block

Table 2.3.14: Physical and financial target and achievement of training in the selected districts during 2012-17

Year	Physical target (no. of sessions)	No. of farmers to be imparted training	Physical achievement (no. of sessions)	No. of farmers imparted training	Financial target (₹ in crore)	Financial achievement (₹ in crore)
2012-13	120	900	112	840	0.18	0.16
2013-14	120	900	108	810	0.16	0.14
2014-15	88	660	60	450	0.13	0.10
2015-16	248	1,860	200	1,500	0.34	0.21
2016-17	192	1,440	108	810	0.26	0.14
Total	768	5,760	588	4,410	1.07	0.75

(Source: Information given by Department and compiled by Audit)

Training targets have not been achieved

Audit observed that only 16,560 farmers (0.44 per cent) in the State were imparted training under NFSM out of 37.36 lakh farmer families and hence, the impact of training on productivity could not be seen at the State level. In the test checked districts also, the impact of training on productivity could not be assessed as the district wise farmer families were not maintained by the Director, NFSM. However, against the target for training in the nine test checked districts, two⁷⁵ had achieved 100 per cent, five⁷⁶ districts achieved between 60 and 91 per cent whereas the achievement of two⁷⁷ districts ranged between eight and 40 per cent of physical target.

Audit could not find any reasons in the files of the concerned DDA and the Department for not imparting training despite availability of funds. The Department stated (December 2017) that the trained farmers shared their knowledge with other farmers.

The reply is unacceptable. The ground of sharing of training experience among farmers cannot absolve the Department of its responsibility to impart training as per the targets set.

2.2.9.3 Local initiatives

The guidelines state that financial assistance of 50 per cent of the cost of each work (subject to a maximum ₹ 1.50 lakh) was to be provided to States to undertake location specific interventions (not covered under the normal activities of the Mission) for boosting the production of rice, wheat, pulses and coarse cereals. Augmentation of water resources, development of godowns for safe storage of critical inputs etc., were to be done under this intervention. These interventions were to be selected in consultation with Zila Parishad and were to be evaluated by a team of experts at the State level. Upon clearance of specific interventions by SFSMEC, funds were to be released to the DDA at the districts level.

The expenditure incurred on local initiatives during 2012-17 in the State and selected districts is detailed in **Tables 2.2.15 and 2.2.16:**

⁷⁵ Bemetra and Korea

⁷⁶ Bilaspur, Dantewada, Jagdalpur, Kanker and Raipur

⁷⁷ Balrampur and Surguga

Table 2.2.15: Physical and financial target and achievement of local initiative in the State during 2012-17

Year	Physical target	Physical achievement (Percentage)	Financial target (₹ in crore)	Financial achievement (Percentage) (₹ in crore)
2012-13	200	0 (01)	1.94	0.11 (06)
2013-14	166	76 (46)	2.67	0.53 (20)
2014-15	352	280 (80)	3.86	1.51 (53)
2015-16	1,078	784 (73)	11.00	6.06 (55)
2016-17	806	404 (50)	9.50	3.97 (41)
Total	2,602	1,544 (59)	28.97	12.18 (42)

(Source: Information given by Department and compiled by Audit)

Table 2.3.16: Physical and financial target and achievement of local initiative of selected districts during 2012-17

Year	Physical target	Physical achievement (percentage)	Financial target (₹ in crore)	Financial achievement (Percentage) (₹ in crore)
2012-13	200	50 (25)	0.61	0 (0)*
2013-14	40	20 (50)	0.30	0 (0)*
2014-15	80	51 (64)	0.92	0.35 (38)
2015-16	116	103 (89)	1.74	0.58 (33)
2016-17	167	120 (72)	2.23	1.50 (67)
Total	603	344 (57)	5.80	2.43 (42)

(Source: Information given by Department and compiled by Audit)

* Although physical progress is seen during 2012-13 and 2013-14, no payment had been made by the DDAs of the selected districts for local initiatives for reasons not on record

The main reasons for under-utilisation of fund was failure of the Department to identify the works which would benefit the farmers in enhancing the production and yield of crops in consultation with *Zila Parishad* and involving experts at the State level by SFSMEC as stipulated in the guideline. This led to non-execution of local initiatives and this was especially when there was fall in the production of rice and coarse cereals.

The ACS stated (December 2017) that the farmers need to give applications to obtain the benefit of interventions and thereafter, benefit of the scheme are given on first come first serve basis (except demonstration).

The reply is not acceptable as the scheme guidelines nowhere stipulate that farmers have to give application to get benefit of the intervention. Rather, the interventions were to be selected in consultation with *Zila Parishad* as per the guidelines and were to be evaluated by a team of experts at the State level, which was not done. No reasons for not following the norms were furnished to audit.

Recommendation

The Department should resolve the bottlenecks under different interventions of NFSM (need based inputs, training and local initiative) to optimise achievements against targets.

2.2.10 Monitoring and evaluation

The project management team (PMT) was to monitor the implementation of each demonstration and record the data on crop yield in demonstration through crop-cutting experiments and concurrent evaluation of success of the programme. The results of each demonstration were to be compiled at block, district and State level in the form of a booklet with reference to some success stories. Close monitoring of achievement of physical and financial targets of

interventions was to be conducted and submitted quarterly/ annually to the district/State level. Concurrent evaluation of the Mission was to be done by the State Department of Agriculture/Department of Economics and Statistics/SAU to assess the performance of the Mission commensurate with AAP and its objectives.

Though the Department constituted (August 2012) the PMTs with one consultant⁷⁸ as required, only one technical assistant was appointed against the provision of 17 technical assistants at district level. Due to shortage of staff at monitoring level, results of demonstrations were not compiled in the form of booklet as required in the guidelines. Further, no evaluation of the scheme was done since inception by the Department except one yearly concurrent evaluation (2014-15) of implementation of the scheme by National team of GoI. This evaluation report stressed the need to select the beneficiaries carefully, expand the demonstration and use of technology for improved yield. However, the Department did not take action in any of these areas as mentioned in various paragraphs of this report.

The ACS stated (December 2017) that a monitoring team including a scientist of the agriculture university has been constituted at National level to monitor and evaluate implementation of the scheme twice a year. The AAP of the next year would be prepared as per their recommendation.

The reply is not convincing as PMT had only one technical assistant against the provision of 17 technical assistants at district level and this adversely impacted monitoring of the scheme. Further only one concurrent evaluation of the scheme was done in 2014-15 by the National team and no evaluation was done by the Department since inception of the scheme in the State.

2.2.10.1 Functioning of State food security mission executive committee

The guidelines stipulate constitution of the State food security mission executive committee (SFSMEC) under the chairmanship of Chief Secretary along with the Secretaries from various Government Departments including Department of Agriculture, Irrigation, Power, *Panchayati Raj*, Tribal Affairs and Social Welfare as its members. The main function of the committee was to oversee the activities of the Mission in the State.

The State Government constituted the SFSMEC in October 2007 to monitor the activities of the Mission.

The ACS stated (December 2017) that SFSMEC gives approval to State AAP before it is sent to GoI. NFSM scheme is being implemented as per decision taken in the meetings of the committee.

The reply is not acceptable as the Department failed to produce any evidence of meetings by the committee during 2012-17 except a solitary meeting in 2015-16. In the absence of meetings, the claim of the Department is not backed by documentary evidence.

2.2.10.2 Formation of district level seed committee

Paragraph 12.5 of operational guidelines stipulates that a district level seed committee (DLSC) will be constituted by the chairman of the DFSMEC which

⁷⁸ The consultant was paid ₹ 5.70 lakh during the period 2012-15

will be tasked to verify the list of beneficiaries for seeds, its indent and its ultimate distribution to end users.

Audit observed that seed committees were not constituted in the test checked districts on the ground that assessment of seed was done by the Department.

The ACS stated (December 2017) that assessment of variety of seed is done as per guidance of scientist of KVK.

The reply is not acceptable as failure to form the DLSC deprived preparation of list of beneficiaries for seeds, its indent and its ultimate distribution to end users etc.

Recommendation

The Department should strengthen the monitoring and supervision by ensuring concurrent evaluation of implementation of the scheme, form the DLSC and instruct the SFSMEC to conduct meetings for effective discharge of its functions. Appointments of consultants, technical assistants at State and districts level for streamlining the monitoring activities of the Mission should also be ensured.

2.2.11 Conclusion

NFSM was implemented in 13 districts for rice, nine districts for coarse cereals and all 27 districts for pulses while wheat and commercial crops were not taken up under NFSM. The baseline survey was not conducted and the perspective plan was not prepared before implementation of the interventions under NFSM.

Production and yield of rice and coarse cereals has decreased in 2016-17 over 2012-13 while for pulses, the production increased marginally by 1.94 *per cent* (15,940 MT) and yield by 1.91 *per cent* (13 kg/ha). The area expansion did not happen for pulses during 2012-17 while for rice it was 0.59 *per cent* (22,850 ha) and 6.34 *per cent* (21,040 ha) for coarse cereals. Thus, absence of increased production, yield capacity and area expansion defeated the objective of the Mission.

During 2012-17, NFSM benefits were provided to only four *per cent* farmers (1.38 lakh) owning six *per cent* (2.76 lakh ha) of cultivated land through demonstration, 64 *per cent* farmers (23.89 lakh) under seed distribution, six *per cent* farmers (2.11 lakh) under INM/soil ameliorants, three *per cent* farmers (1.26 lakh) under PPM and IPM, six *per cent* farmers (2.27 lakh) under farm mechanisation, 0.4 *per cent* farmers (0.16 lakh) in training and 0.02 *per cent* farmers (0.01 lakh) under local initiatives. These indicated the limited intervention of NFSM in the State.

NFSM had suffered from implementation deficits under important components. As a result, achievements under seed distribution was 70 *per cent* for rice, 71 *per cent* for pulses and only 18 *per cent* for coarse cereals while it was 71 *per cent* under INM and Soil ameliorants and 69 *per cent* under IPM and PPM. Further, the achievement under training was 83 *per cent* and 59 *per cent* under local initiatives during 2012-17. Resultantly, 31 *per cent* (₹ 154.18 crore out of ₹ 500.36 crore) of the total earmarked fund for these interventions under NFSM remained unutilised.

In the sampled districts, 75 *per cent* of the targeted hybrid seeds and 31 *per cent* of high yield variety seeds could not be distributed to the farmers while 23 to 92 *per cent* of 760 beneficiaries of NFSM interventions have reported to Audit their ignorance on application of INM, soil ameliorants, IPM and PPM. Further, the demonstration activity could raise the productivity of only 10 to 14 *per cent* of the 200 demonstration plots by more than 50 *per cent* in comparison to the control plots using local and improved variety of seeds. In addition, 58 *per cent* of the available fund under local initiatives could not be spent by the Department while 17 *per cent* (3,360 out of 19,920) of the farmers were not imparted any training despite availability of fund.

Monitoring and supervision was not effective as SFSMEC, though constituted in October 2007 to monitor the activities of the Mission, had met once⁷⁹ during 2015-16 while district level seed committee to monitor the distribution of seeds to farmers were not formed. Further, technical assistants were not appointed at district level to facilitate monitoring. In addition, concurrent evaluation of the Mission was done by the Department only once in 2014-15 against the requirement of yearly evaluation.

⁷⁹ Conclusion drawn on the basis of production of records of only one minute of its meeting during 2015-16 by the Directorate, NFSM

CHAPTER-III

COMPLIANCE AUDIT

3.1 e-Procurement system in Chhattisgarh

3.2 Follow-up audit of the Performance Audit on development of roads under Central Road Fund and Minimum Needs Programme

3.3 Audit paragraphs

CHAPTER-III

DEPARTMENT OF ELECTRONICS AND INFORMATION TECHNOLOGY

3.1 Audit on e-Procurement system in Chhattisgarh

3.1.1 Introduction

Department of Electronics and Information Technology (DEIT), Government of Chhattisgarh rolled out¹ (August 2007) an integrated e-Procurement system to ensure transparency and efficiency in all Government procurements through a consortium comprising NexTenders and M/s Wipro Limited. The tenure of the consortium was for a period of five years up to December 2011 extended till September 2016. The functioning of the e-Procurement system was included in Audit Report (Civil and Commercial) of the CAG of India for the period ended March 2010. The initial software provided (August 2007) by NexTenders was replaced (April 2016) by a new enterprise resource planning (ERP) based commercial-off-the-shelf (COTS) software provided by Mjunction, another System Integrator (SI). The legacy system of NexTenders was wound up in September 2016, and the data was not migrated to the new system except for vendor registration. Hence, audit was confined to examination of the functionality of the new e-Procurement system developed by Mjunction for the period April 2016 to March 2017 by test check of records of CHiPS and three² out of 35 Departments/entities selected by sampling³ method.

Chhattisgarh InfoTech & Biotech Promotion Society (CHiPS⁴) is the nodal agency under DEIT for setting up and overseeing the functioning of the system. Mjunction is responsible for customisation of the application software under the monitoring of CHiPS to meet the needs of the user entities/Departments.

The e-Procurement system was to facilitate vendor registration, tendering, award of work etc., for all tenders above ₹ 20 lakh (the threshold was lowered to ₹ 10 lakh in May 2016).

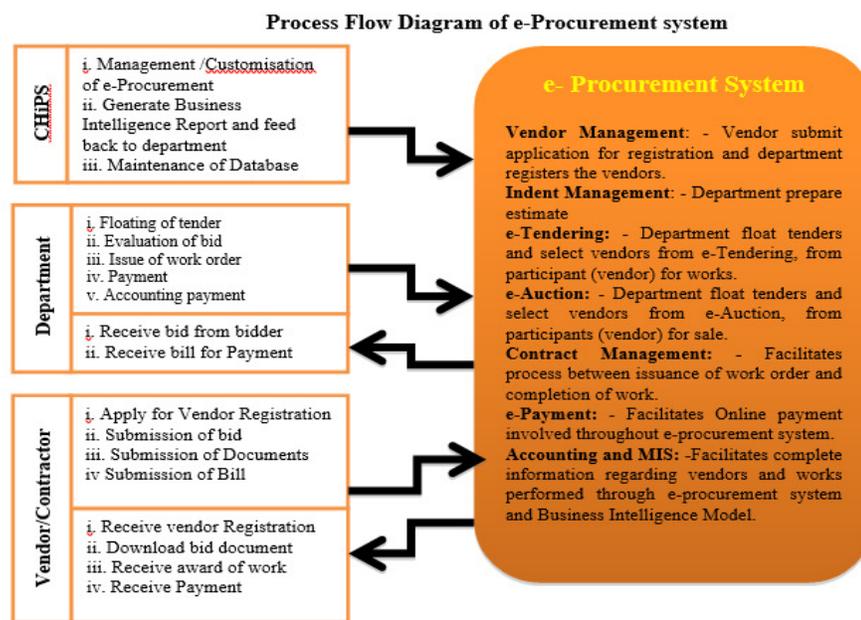
¹ Under public-private partnership (implemented in build-own-operate) mode involving developing the system and providing e-Procurement services

² Public Works Department (PWD), Water Resources Department (WRD) and Panchayat and Rural Development Department (PARD).

³ Of the 35 Department/entities, 27 had floated less than 200 tenders during 2016-17 and were not considered. In the rest eight Departments/entities, two Departments (WRD-489 tenders and PARD-2,102 tenders) were selected using the Probability Proportionate Size without Replacement (PPSWOR) sampling method and PWD was selected on ground of being the nodal Department and also for floating second highest number (1,794) of tenders. Further, these three Departments together floated 39 per cent (3,268 numbers) of the total tenders valued ₹ 9,723 crore (55 per cent of total tender value of ₹ 17,765 crore) through the system. For test check of the e-Procurement system in the field offices, nine units (four out of 80 of PWD, three out of 90 of WRD and two out of 106 of PARD) were selected.

⁴ CHiPS was formed in September 2002 as an autonomous nodal agency for management of IT projects in the state under DEIT

To participate in the bidding process through the e-Procurement portal, the user Departments/entities and the vendors/contractors are required to register themselves, after which, users would be able to login to the system through user id and passwords generated by the system. The e-Procurement system also provides different payment gateways and other tender related services to the bidders. The functional architecture of the e-Procurement system is indicated in the process flow diagram:



During 2016-17, 8,444 tenders valued at ₹ 17,765 crore were floated through the system of Mjunction by 35 entities/Departments⁵ out of 45 Departments of the State Government. All these tenders and other details available in the database of Mjunction were analysed by Audit using the business intelligence tool of the system and through IDEA software.

An entry conference was held (May 2017) with the Principal Secretary (PS), DEIT to discuss the objectives, scope and methodology of the Audit. An exit conference was also held (January 2018) with the PS, DEIT to discuss the audit findings. In the exit conference, Secretaries of PWD and WRD were also present. The views/replies of the PS, DEIT and Secretaries of PWD and WRD have been suitably incorporated in the Report.

Audit findings

3.1.2 Functionality of the (new) e-Procurement system

3.1.2.1 Establishing the (new) e-Procurement system

CHiPS entered into an agreement (June 2015) worth ₹ 28.50 crore with Mjunction for setting up the new e-Procurement system and to provide e-Procurement services for a period of five years. The system was designed to include eight modules viz., vendor management, e-tendering, indent management, e-payment, MIS, contract management, e-auction and

⁵ 20 Departments and 15 entities viz., corporations, societies, boards etc.

accounting as a complete ERP solution as detailed in **Appendix 3.1.1**. The new system was to go-live by January 2016.

As per terms of agreement, Mjunction was required to complete one transaction cycle of one tender involving all the eight modules in five pilot⁶ Departments. Upon successful completion of these exercises and obtaining user acceptance test (UAT) report from these Departments, the system was to be declared go-live by January 2016. Thereafter, the system was to be rolled out in the remaining 30 entities/Departments and UAT was also to be obtained from these entities/Departments by February 2016. The go-live was to be followed by O&M support for a period of five years. In the event of breach of these milestones, CHiPS was entitled to levy a penalty of ₹ 50,000 per week of delay on Mjunction.

Despite four out of eight modules were non-functional, the system was declared go-live and rolled out in all the 35 entities

Audit observed deficiencies as under:

- ✓ The payment terms were front loaded as 74 *per cent*⁷ of the contract value was to be paid to Mjunction upfront on receipt of application software with licenses, supply of hardware and yearly cost of ATS (Annual Technical Support) in advance and only seven *per cent* (₹ two crore) was earmarked for customisation of the software for the user Departments/entities. Resultantly, ₹ 19.78 crore (69 *per cent* of contract value of) was paid⁸ (between February 2016 and September 2016) but customisation work had not been carried out for four modules in 22 Departments/entities and in none of the eight modules in 11 of the 35 Departments/entities where the system was rolled out. The balance amount of contract value worth ₹ 8.72 crore to be released in a phased manner on account of yearly ATS cost and customisation cost etc., had not been paid till date (January 2018).
- ✓ The system was declared go-live on 1 April 2016 with only four operational modules (vendor management, e-tendering, e-payment and MIS) and receiving UAT only from three⁹ out of the five pilot entities/Departments for failure of the Mjunction/CHiPS to provide necessary customisation to the needs of the remaining two pilot Departments.
- ✓ Even the e-payment and MIS modules, though operational, could not be used as the contract management module which is linked to the payment module was not functional for failure of Mjunction/CHiPS to make necessary customisation to the needs of the user entities. As a result, payments to the contractors/suppliers were routed through another system (e-works¹⁰ portal) which limited the effectiveness of the e-Procurement system. The MIS, in the

⁶ PWD, WRD, PHED, Health & Family Welfare, and Commerce & Industries identified by CHiPS from the 35 entities served by the legacy system of NexTenders on the basis of maximum numbers of tenders floated through the legacy system

⁷ On receipt of licenses of application modules- ₹ 18.30 crore; supply of hardware- ₹ one crore; ATS Cost in advance for one year- ₹ 1.80 crore; total- ₹ 21.10 crore

⁸ For application software with licenses, supply of hardware and yearly cost of ATS (Annual Technical Support) in advance

⁹ PHED, Health & Family Welfare (Chhattisgarh State Medical Society Corporation), and Commerce & Industries (Chhattisgarh State Industrial Development Corporation)

¹⁰ e-Works is a separate portal which was prepared by NIC for works Department particularly for PWD, PHE and WRD and through this portal, these Departments makes payment to the contractors

absence of other modules remaining non-functional, could not be used to generate the reports for monitoring.

✓ CHiPS allowed Mjunction to roll out the incomplete system in 30 additional entities, of which UAT was received only from 19 entities for the four modules while no UAT was received from 11 entities/Departments even for a single module. The main reasons, as noted from the files of CHiPS and responses of the sampled entities, were non-customisation of the modules of the system to the needs of these Departments. Resultantly, only 22 out of the 35 entities/Departments gave UAT for the four modules.

✓ The system was partially functional in the 22 entities which gave UAT and functions such as award of work after tendering, record of measurement, preparation of progress reports, payments to contractors etc., were done manually despite the system having dedicated modules for these services. In the 11 entities which did not give UAT for any module, only tenders were floated through the system and other related works done manually.

✓ CHiPS, though required to impose penalty worth ₹ 53 lakh till date (January 2018) against Mjunction for the delay in setting up the fully functional system, levied (March 2017) a penalty of only ₹ five lakh for the delay and that too after this was pointed out by Audit. No reasons were on record of CHiPS or DEIT for levying part penalty. Further, no penalty could be levied against Mjunction for failure to provide necessary customisation to the needs of the entities/Departments where the system was rolled out in the absence of any such clause in the contract. However, ₹ two crore earmarked for customisation has not been paid to Mjunction till August 2018.

In the exit conference (January 2018), the PS, DEIT *inter alia* stated that all the modules were prepared and deployed for use by the user Departments and any customisation as per the requirement of the user Departments would be done accordingly. The PS also stated that the user Departments have been requested to adopt the modules as per their requirement for optimal use of the integrated e-Procurement system. The PS further stated that CHiPS had made payment against the modules actually in use.

The reply is not correct as (i) the Joint Secretary, DEIT after the exit conference had confirmed (March 2018) to Audit that four modules have been partially adopted by the Departments while the remaining four modules were not being utilised by the Departments for lack of customisation; (ii) the Secretary, PWD present in the exit conference informed (January 2018) Audit that it had not granted the UAT in the absence of necessary customisations in the e-Procurement system, and Audit noticed that PWD had been using the e-works portal for making payments to contractors and not the payment module of the e-Procurement system. Hence, the request of PS, DEIT to the user entities/Departments to use the system, which was not functional in all respects, lacked rationale; (iii) the payment to the SI has been made upfront without linking it with customisation work and hence, the reply that payment was made against modules actually in use was not backed by evidence.

Recommendation

All the eight modules of the software should be made operational with required customisation as per the needs of all the Departments within a specified time span to optimise the system.

3.1.2.2 Manual floating of tenders of ₹ 108.35 crore

Tenders worth ₹ 108.35 crore, each valued between ₹ 10 lakh and ₹ 20 lakh were floated manually by PWD and WRD bypassing the system

CHiPS, based on an instruction from Empowered Committee (EC¹¹), directed (May 2016) all the Departments to reduce the threshold value of processing online tenders from ₹ 20 lakh to ₹ 10 lakh. However, the Engineer-in-Chiefs of PWD and WRD did not issue instructions to their divisions to invite all tenders valued ₹ 10 lakhs and above through the new e-Procurement system for reasons not on record.

Resultantly, between May 2016 and June 2017, all the 48 PWD divisions and 18 WRD divisions manually invited 658 tenders¹² worth ₹ 108.35 crore, each valued between ₹ 10 lakh and ₹ 20 lakh. Thus, the new e-Procurement system was bypassed.

The Secretary, WRD stated that no tenders valued above ₹ 10 lakh were floated manually except the work through expression of interest and RFP. The reply was incorrect as 34 tenders were invited¹³ by WRD manually between May 2016 and June 2017 having value of more than ₹ 10 lakh each. The Secretary PWD could not give any justification for inviting tenders between ₹ 10 lakh and ₹ 20 lakh manually.

Recommendation

CHiPS must ensure that concerted efforts are made by the user Department/ entities to float tenders valued above ₹ 10 lakh through the system.

3.1.3 Data analytics

Analysis of data in the database of e-procurement system through the business intelligence (BI) module of the system and IDEA software tools along with scrutiny of the reportedly functional modules by Audit revealed collusion between the departmental officials and the contractors resulting in unfair tender practices as commented below:

3.1.3.1 Lack of transparency in the e-Procurement system

The BI module of the ERP system is equipped with the reporting format to detect collusive bidding by keeping a track of various activities of the vendor as well as the departmental officials. One such BI report was to identify the cases where the vendors as well as the officials dealing with the bidding process are in close contact prior to bidding. Use of same machines by both the vendor and Department may indicate possible collusion.

Audit analysed the data obtained through the analytical tool of Mjunction and by using IDEA and observed that in 1,921 tenders (*Appendix 3.1.2*) valued at

¹¹ EC was formed in June 2006 to grant approvals to the IT projects in various Departments of the State

¹² PWD-624 amounting to ₹102.92 crore and WRD-34 amounting to ₹ 5.43 crore

¹³ Which were neither through expression of interest nor RFP

In 1,921 tenders, valued ₹ 4,601 crore, one or more bidders have used such 74 computers to upload their bids which were also used by officials of 17 Departments indicating cartel formation and requiring investigation from vigilance angle

₹ 4,601 crore invited by 17 Departments/entities during April 2016 to March 2017, one or more bidders had used such 74 numbers of computers¹⁴ to upload their tender details which were also used by at least one Government official in these 17 Departments/entities for tendering. Of these, 477 bidders who used these common machines with at least one Government official were awarded works worth ₹ 961.26 crore.

This indicated that the bidders and the officials processing these bids were in close touch even before the bidding process and with several vendors/bidders using the same primary email-id (commented in **paragraph 3.1.3.3**), the whole system becomes porous and unreliable. Moreover, WRD had cancelled (2016) 10 tenders on the grounds of collusive practice between the Department officials and the bidders for using the same machine and requested (April 2017) CHiPS to take preventive measures. However, no such measures were taken by CHiPS, for reasons not on record. The matter, therefore, is a red flag to probable cartel formation and merits examination from a vigilance angle.

In the exit conference (January 2018), the PS, DEIT stated that corrective measures have been taken by CHiPS by blocking the use of same MAC-id by Departments and vendors and also by multiple vendors. Further, the PS also stated that the data extracted from the system need not be considered as cases of collusion/ cartel formation and loss to the State, as it needs to be further corroborated, to conclusively establish that collusion/cartel formation has actually happened. CHiPS further stated (March 2018) that they had alerted user Departments several times against the use of same machine by multiple bidders.

The reply of PS, DEIT and CHiPS is not acceptable as CHiPS should have blocked the use of same MAC-id by officials and vendors and not limited itself to merely flagging the issue to the user Departments despite the same situation also occurring in CHiPS (**Appendix 3.1.2**) and especially when WRD sounded CHiPS for preventive measures on same grounds. Further, no steps were taken by CHiPS and DEIT either to identify the 73 computers used by officials and vendors upon reported by Audit or to take action against the officials involved in such practice. Moreover, the fact that the vendors used the same computers with the departmental officials and also possessed common primary and partner's email-id is in itself a strong indication of cartel formation/collusive practices and needed investigation from vigilance angle. Cancellation of tenders by WRD on the ground of collusive practices by bidders further substantiates the audit finding.

Recommendation

DEIT should ensure investigation from a vigilance angle on the use of same machines in 1,921 tenders by officials and vendors worth ₹ 4,601 crore under 17 Departments by an independent agency for taking suitable action within a specified time period.

¹⁴ One computer was found in the tender cell of PARD, Raipur but the locations of other 73 computers were not on record of the CHiPS and though called for by Audit, was not replied to. These computers were identified by Audit through the computer machine number.

3.1.3.2 Lack of validation for the unique field ‘PAN’ in vendor management module

The vendor management module stipulates that every bidder should obtain a vendor registration (vendor-id) for participating in the tenders by registering with the e-Procurement portal. For this, the vendor/ contractor needs to submit Permanent Account Number (PAN) and other financial details. As per the RFP, PAN should be the unique feature for vendor registration.

Audit observed as under:

e-Procurement system could neither match PAN used by vendors in the e-Works portal nor it could prevent dual use of same PAN for generating vendor-ids more than once for failure to create unique field as per the approved architecture of the system and integration with the e-Works portal

✓ The vendor management module, though operational, could not register the vendors as it was not functioning properly. As a result, the contractors had done their registration from PWD through e-works portal and submitted the registration number certificate in physical form to generate vendor-id through CHiPS in the vendor registration module of e-Procurement system. However, the vendor registration certificate does not contain the PAN used to generate it.

✓ Cross verification of data in the databases of e-Works and e-Procurement system revealed that 79 contractors/vendors (*Appendix 3.1.3*) have used two sets of PAN numbers, one for registration in the e-works portal of PWD and the other for generation of their vendor-id in e-Procurement system in violation of section 272 B of Income Tax Act 1961, which stipulates that one person can hold only one PAN.

✓ No action could be taken against these contractors as the e-Procurement system was not integrated by CHiPS either with the e-Works or with the Income Tax Department, though required as per the RFP. Rather, 25 of these 79 contractors/vendors were awarded tenders valued at ₹ 209.50 crore.

✓ The vendor management module is designed to restrict creation of two vendor-id against the same PAN already recorded in the e-Procurement system. However, in 90 cases (vendor-id) two vendor-ids were generated against the same PAN¹⁵ and this would facilitate the same bidder to generate as many vendor-ids as they want and also assist bidding more than once for the same tender using such vendor-ids.

Thus, the e-Procurement system could neither match PAN with the PAN used in e-works portal for the same vendor in the absence of integration of these two systems nor the unique field in the e-Procurement system could be established as per the system architecture to prevent the use of same PAN more than once.

In the exit conference (January 2018), the PS, DEIT and the Secretary, PWD stated that the anomaly resulted from non-integration of the centralised vendor registration portal of e-works managed by NIC with the vendor registration of the e-Procurement system for which efforts would be made to integrate the two systems.

¹⁵ For example, vendor-id 15987 and 18275 was generated against the same PAN ‘AADCK8525G’

The reply is not acceptable as no efforts were taken by CHiPS to (i) make PAN the unique field in the e-Procurement system to prevent generation of multiple vendor-ids against the same PAN; (ii) integrate the system with the income tax Department as per RFP or to intimate¹⁶ the income tax Department about the vendors possessing more than one PAN; and (iii) coordinate with PWD to integrate the system with e-works portal by devising suitable mechanism/common fields etc.

Recommendation

CHiPS should take adequate and timely measures to put in place input controls for the unique fields like PAN and to integrate the system with income tax Department and e-works portal maintained by NIC.

3.1.3.3 Use of common email ids by vendors

All bidders applying for tender through the system had to provide primary email id and partners email-id. Audit observed that 1,459 vendors used 235 common primary email-ids between November 2015 and March 2017 to generate vendor-ids where one common email id was used by a minimum of two vendors and maximum¹⁷ by 309 bidders. In the three sampled Departments, multiple bidders applying for the same tender (in 133 tenders valued at ₹ 225.14 crore) mentioned the same partner's email-id for obtaining vendor-id while in 48 of these tenders (out of 133 cases), more than one bidder had mentioned the same primary email-id in addition to the common partner's email-id. In all these 133 tenders, one of the participating bidders who either submitted common primary email-id or partner's email-id got the works.

In the exit conference (January 2018), the PS, DEIT informed Audit that measures have been taken to block common email-id, common PAN and common mobile number.

3.1.3.4 Non-detection of ineligible bidders

PWD assigns a class to each contractor based on their capacity which is recorded in the e-Works portal and vendor management module of the e-Procurement system. Five contractors, in violation of their classes assigned by PWD (*Appendix 3.1.4*), were allowed to submit bids for five tenders valued at ₹ 15.44 crore which was beyond their eligible classes. However, the vendor management module could not detect and prevent low class contractors bidding for high value tenders as the vendor management module in the e-procurement system are not mapped with the class of contractors assigned by PWD in the e-Works portal.

Five contractors were irregularly allowed to bid beyond their classes

In the exit conference (January 2018), the PS, DEIT and Secretary, PWD stated that the anomaly would be avoided once the contractor's data is integrated between e-Works and e-Procurement.

¹⁶ Audit intimated (April 2018) the IT Department about these 79 vendors possessing more than one PAN for suitable action

¹⁷ Email id -harendracg@gmail.com was used by 309 different bidders in the system; tenderjdp@gmail.com- 180 different bidders; etenderconsultant@gmail.com- 75 bidders; sanisurajpur@gmail.com- 70 bidders; sprasad469@gmail.com- 56 bidders

3.1.3.5 Non-submission of pre-qualification documents

In four out of nine sampled divisions (*Appendix 3.1.5*) under two (PWD and WRD) out of three sampled Departments, Audit found that seven firms participated in the bidding process of 12 tenders without submitting income tax returns/other documents of the previous five years and submitting partial documentation on financial capacities, a precondition for qualifying for the bids. However, the concerned fields in the system did not prevent processing the bids and the firms were awarded contracts worth ₹ 89.34 crore. This was rendered possible as inputs controls were not put in place or the primary key for this field was not defined.

In the exit conference (January 2018), the PS, DEIT accepted the audit observation and asked the Secretaries of Departments present in the meeting to take corrective measures.

Recommendation

CHiPS should ensure putting in place adequate input controls for the different modules to prevent use of common emails by different vendors, ineligible contractors to bid for works and to ensure submission of all pre-qualification documents by bidders before processing of bids through the system.

3.1.3.6 Irregular acceptance of tenders bypassing online pre-bid evaluation

E-Tendering module of e-Procurement system comprises of system built evaluation of availability of required plant and machinery (P&M), key technical personnel etc., with the bidder after online submission of bids. Opening of financial bid of bidders is subject to their eligibility in pre-qualification (PQ) criteria.

Four contracts were awarded to a contractor who submitted the same list of P&M and key personnel in all the works

Audit observed in PWD (B/R), division Mahasamund that four contracts¹⁸, each valued at more than ₹ five crore, were awarded during 2016-17 to the same contractor who submitted the same list of P&M and technical personnel. Further, the contractor submitted proof of ownership of only one out of 12 P&M and qualification certificates of only two Engineers out of five technical personnel¹⁹ engaged in those works without their experience certificates. Thus, the PQ was not met and the contracts were to be instantly rejected. However, the evaluation of technical bids was carried out manually by the technical bid evaluation committee of PWD and nothing was reported about not meeting the PQ criteria. The financial bids were opened and processed through the system to award the work to the ineligible bidder. The main reason for manual evaluation was the fact that the system did not require an end to end processing and facilitated a pick and choose approach.

In the exit conference (January 2018), the PS, DEIT accepted the audit observation and asked the Secretary, PWD to take corrective measures. Secretary, PWD also accepted that contractors submitted the same technical staff and P&M for executing more than one work before finalisation of bid.

¹⁸ 38 DL/2016-17, 39 DL/2016-17, 41 DL/2016-17 and 69 DL/2016-17

¹⁹ Site engineer, plant engineer, quantity surveyor, soil & material engineer and survey engineer.

However, the Secretary, PWD did not initiate any action against the technical evaluation committee for suppressing the fact of ineligibility of the bidder.

Recommendation

CHiPS should ensure that all the modules are made fool proof and are functional in all respects. PWD should initiate action against the technical evaluation committee for suppression of the PQ criteria of the ineligible bidder to award the work by bypassing the e-tendering module.

3.1.3.7 Award of work beyond bidding capacity of the bidder

As per the pre-bid condition, any contractor applying for a tender should have bid capacity²⁰ more than the estimated value of the contract.

In the e-Procurement system, tender for construction of Rafel-Manpali-Bastipali-Dongijharan-Kesratar road was invited (system tender number 7279) for ₹ 7.19 crore by PWD. The work was awarded (August 2016) to a contractor based on his bid capacity of ₹ 13.47 crore²¹ calculated²² by PWD by factoring in 14 works in hand under PWD valued at ₹ 25.19 crore.

However, Audit noticed from the e-Procurement database that the contractor had 18 works in hand valued at ₹ 34.23 crore in different Departments during the same period and accordingly his bid capacity was only ₹ 4.38 crore²³. As the actual bid capacity was less than the contract value of ₹ 7.19 crore, the contractor was not eligible to get the work. After award of above work, the value of works in hand was enhanced from ₹ 34.23 crore to ₹ 41.42 crore and his bid capacity further dropped to minus ₹ 2.75 crore²⁴. Despite negative bid capacity, the contractor was additionally awarded 10 more works valued at ₹ 16.58 crore between August 2016 and October 2016 by suppressing his actual bid capacity. This is a red flag to unfair tender practice and merits investigation from vigilance angle and disciplinary action against the tender committee members.

In the exit conference (January 2018), the PS, DEIT accepted the audit observation and asked Secretary, PWD to take corrective measures.

Recommendations

DEIT in coordination with PWD should ensure vigilance investigation of all cases of suppression of bid capacity of contractors to award works to the ineligible bidders. Disciplinary action should be taken against the tender committee members involved in the above cases. The in-built

PWD awarded 11 works valued ₹ 23.77 crore to a contractor by suppressing his bid capacity

²⁰ Bid capacity = $A \times N \times 2.5 - B$, where,
A= maximum financial turnover in any one year during last five years
B=existing commitment and ongoing work for the period of completion mentioned in NIT
N=Period of completion as per NIT (more than 6 months is taken as one year)

²¹ Bid Capacity = $A * N * 2.5 - B$
₹ 13.47 crore = ₹ 15.47 crore * 1 * 2.5 (-) ₹ 25.19 crore

²² Calculated by tender evaluation committee comprising of members such as Chief Engineer, Superintending Engineer and Executive Engineer

²³ Bid Capacity ($A * N * 2.5 - B$) = ₹ 15.47 crore * 1 * 2.5 (-) ₹ 34.23 crore = ₹ 4.38 crore

²⁴ Bid capacity ($A * N * 2.5 - B$) = ₹ 15.47 crore * 1 * 2.5 - (₹ 34.23 crore. + ₹ 7.19 crore = ₹ 41.42 crore) = (-) ₹ 2.75 crore

business intelligence mechanism should be extensively used to prevent suppression of bid capacity of bidders.

3.1.4 Conclusion

The e-Procurement system suffered from functional deficiencies as four out of eight modules were non-functional since the system had gone live in April 2016. The incomplete system was rolled out in 35 entities/Departments of which, only 22 had given UAT.

Though tenders above ₹ 10 lakh was to be invited only through the e-Procurement system effective May 2016, 48 PWD divisions and 18 WRD divisions invited 658 tenders worth ₹ 108.35 crore manually each valued between ₹ 10 lakh and ₹ 20 lakh between May 2016 and June 2017 for failure of Engineer-in-Chiefs to instruct the divisions under them. Thus, the new e-Procurement system was bypassed.

In 1,921 tenders valued at ₹ 4,601 crore invited by 17 Departments during September 2016 to August 2017, one or more bidders had used 74 numbers of computers to upload their tender details which were also used by at least one Government official in these 17 Departments for tendering. Of these, 477 bidders who used these common machines with at least one Government official were awarded works worth ₹ 961.26 crore. The matter, therefore, is a red flag to probable cartel formation and merits examination from a vigilance angle.

In violation of section 272 B of Income Tax Act 1961, which stipulates that one person can hold only one PAN, 79 contractors/vendors used two sets of PAN numbers, one for registration in the e-Works portal of PWD and the other for generation of their vendor-id in e-Procurement system. Of these, 24 contractors were awarded works worth ₹ 209.50 crore.

The vendor management module, though intend to restrict creation of two vendor-id against the same PAN already recorded in the e-Procurement system, failed to ensure this in 90 cases (vendor-id) where two vendor-ids were generated against the same PAN. Thus, PAN was not created as unique field against the architectural design of the system.

Against the bid capacity of only ₹ 4.38 crore, a contractor was awarded 11 tenders valued at ₹ 23.77 crore by tender committee members of PWD by suppressing his bid capacity. Likewise, another contractor was awarded a tender worth ₹ 7.73 crore although he had not met the pre-bid requirements.

PUBLIC WORKS DEPARTMENT

3.2 Follow-up audit of the Performance Audit on development of roads under Central Road Fund and Minimum Needs Programme

3.2.1 Introduction

Despite serious concerns highlighted in performance audit (PA) report for the year ended 31 March 2013 on development of roads under Central Road Fund (CRF) and Minimum Needs Programme (MNP), no significant improvements were noticed in the implementation and execution of road works under CRF/MNP. Deficiencies pointed out in the previous PA report such as execution of work without detailed survey, execution of work without adhering to specifications, execution of additional work without inviting tender etc., continued unabated. As a result, two out of the four previous recommendations were not implemented while two recommendations were partially implemented.

The PA on development of roads under CRF and MNP covering the period 2008-13 was included in the Audit Report on General, Social and Economic (Non-PSUs) Sectors for the year ended 31 March 2013 of Government of Chhattisgarh (Government). The Report was laid in the State Legislative Assembly in July 2014. The Audit recommendations were accepted (July 2017) by the Department for implementation.

Follow-up audit was conducted between April and July 2017 covering the period 2013-17 to assess the extent of implementation of recommendations made in the report and steps taken by the Public Works Department (PWD) to mitigate the deficiencies. For this, records in the offices of Engineer-in-Chief, PWD and 10 out of 15 PWD divisions²⁵ test checked during the PA were scrutinised in follow-up audit.

An entry conference was held (May 2017) with the Secretary, PWD, Government of Chhattisgarh to discuss the objectives, scope and methodology of the follow-up audit. An exit conference was also held (December 2017) with the Secretary, PWD to discuss the audit findings. The replies furnished by the Department have been suitably incorporated in the report.

Audit Findings

3.2.2 Overlapping of sanctions

Audit observed (2013) that due to inadequate planning and non-prioritisation of road, there was overlapping of sanctions in three road works under CRF and MNP.

Based on the audit findings, Audit had recommended that the PWD should properly plan and finalise a list of priority roads required to be developed under different schemes to avoid overlapping of sanctions under different schemes.

²⁵ Ambikapur, Balodabazar, Champa, Durg, Gariyabandh, Korba, Pendra Road, Raipur No. 1, Rajnandgaon and Surajpur

In the follow-up audit, no new cases of overlapping of sanction in MNP and CRF works were noticed. However, list of priority roads was not prepared by the Department. Thus, the recommendation was partially implemented.

3.2.3 Works taken up without detailed survey, forest clearance and land acquisition

Audit observed (2013) that the PWD failed to make detailed survey and investigation before execution of road works which led to significant variations in quantities and delay in completion of the road works. Execution of road works without availability of required land and forest clearance delayed the works and increased cost.

Based on the audit findings, Audit had recommended that the works should be taken up after detailed survey and investigation and after finalising the availability of land free from all encumbrances to avoid delay in completion.

In line with the recommendation, Government decided (October 2014), not to invite tender until 90 per cent of land required for construction had been acquired.

Follow-up audit revealed that works were still taken up without detailed survey as discussed under:

3.2.3.1 Works taken up without detailed survey

In three out of 10 sampled PWD divisions, five works were taken up without detailed survey which led to extra cost of ₹ 5.42 crore as detailed in **Table 3.2.1**:

Table 3.2.1: Changes in scope of work after award of work

Sl. No.	Division	Name of Work	Audit Findings
1	Surajpur	Construction of Ghat cutting and cement concrete road work on Bedmi-Tamki-Masanki road	After award (October 2014) of work by the EE, PWD Surajpur, length of the road was increased (February 2016) on both sides to connect the approach road to main road by 2.86 KM. As a result, the scope of work increased by ₹ 3.11 crore.
2	Surajpur	Construction of Pawanpur-Bithiapara-Parmeshwarpur road of Premnagar	Traffic intensity of the road was calculated (December 2015) after award of work by the EE PWD Surajpur. Consequently, crust design of the road was changed to 50 mm bituminous macadam (BM) and 25 mm semi dense bituminous concrete (SDBC) in replacement of premix carpet and seal coat. This resulted in increase in cost of the work by ₹ 75.08 lakh.
3	Surajpur	Ghat cutting and strengthening of Pratappur-Chandora to Ghat Pendari-Banaras road	After award of work by the EE, PWD Surajpur, changes such as widening of road and construction of retaining wall with back filling etc., valued at ₹ 61.95 lakh were made in the scope of work.
4	Durg	Construction of Cement Concrete road in four-way direction of Durg city	Changes such as laying of paver block on shoulder, change in design of side drain, construction of culvert etc., valued at ₹ 52.34 lakh were made in the scope of work awarded to the contractor by the EE PWD Durg.
5	Baloda-bazar	Construction of Dhabadih-Boirdih-Sonadih road	After award (October 2015) of work by the EE, PWD Baloda-bazar crust design was changed which increased cost of the work by ₹ 42.08 lakh.
Total extra cost was ₹ 5.42 crore after award of work			

In the exit conference (December 2017), Secretary, PWD stated that work orders were issued as per the sanctioned estimates. However, changes were necessitated as per site conditions, demand of public and public representatives, time gap between sanction of estimates and commencement of work, increase in traffic intensity etc.

The reply is not acceptable as the reasons for post award changes as detailed in the above table were necessitated by failure to conduct site surveys before preparing the estimates of the works. Further, the reasons cited by the Department were generic in nature and not specific to these works and should have been factored in before commencing the works to avoid post award variations in scope of works. Thus, the recommendation was partially implemented as post tender changes due to failure to conduct proper survey still persists.

3.2.4 Fund Management

Audit observed (2013) that funds made available under CRF and MNP were not utilised in time bound manner. Further, EEs of three PWD divisions utilised ₹ 11.42 crore from MNP funds for non-MNP works such as for payment of suppliers' bills, non-plan maintenance works, development of roads under MNP etc.

Based on the audit findings, Audit had recommended that funds should be utilised in a time bound manner for the earmarked projects.

During follow-up audit, it was noticed that the concerned EEs had yet failed to adjust ₹ 10.02 crore against ₹ 11.42 crore mentioned above, till date (December 2017).

Further, PWD could not utilise the funds allotted under MNP and CRF during 2013-17 and persistent savings continued as mentioned in **Table 3.2.2** below:

Table 3.2.2: Allotment, expenditure and savings during 2013-17

(₹ in crore)

Year	MNP			CRF		
	Allotment	Expenditure	Saving (-)/ Excess (+) (per cent)	Allotment	Expenditure	Saving (-)/ Excess (+) (per cent)
2013-14	101.00	46.10	(-)54.90 (54.36)	60.00	57.66	(-) 2.34 (3.9)
2014-15	124.00	73.40	(-)50.60 (40.81)	32.00	29.22	(-) 2.78 (8.69)
2015-16	190.58	89.50	(-) 101.08 (53.04)	239.00	35.63	(-) 203.37 (85.09)
2016-17	280.00	114.70	(-) 165.30 (59.04)	210.11	111.89	(-) 98.22 (46.75)
Total	690.58	323.70		541.11	234.40	

(Source: Information/data provided by the Department and compiled by audit)

In the exit conference (December 2017), Secretary, PWD admitted that savings were due to delay in approval of estimates, administrative approvals, tendering processes etc. However, no accountability was fixed for the delays.

Further, Audit also noticed deviation from the main purpose of MNP as under:

3.2.4.1 Irregular implementation of MNP on non-rural roads

In eight out of the 10 sampled PWD divisions²⁶, 17 works valued at ₹ 92.24 crore sanctioned under MNP during 2013-17 were for construction of roads other than rural roads such as internal city roads in urban area, major

²⁶ Champa, Durg, Gariyabandh, Korba, Pendra road, Raipur division no 1, Rajnandgaon and Surajpur

district roads, interstate main roads, important bypass road etc. These works were beyond the scope of MNP work. Of these, the EEs of the concerned divisions incurred total expenditure of ₹ 46.36 crore as of August 2018 as detailed in **Appendix 3.2.1**.

In exit conference (December 2017), Secretary, PWD accepted the Audit observation. However, he stated that inclusion of these works under MNP was a policy matter of the State Government with the concurrence of the Finance Department. The Secretary also stated that in future, appropriate head/nomenclature for the works would be discussed with the Finance Department.

The fact remains that the administrative approvals of these works were issued after the concurrence of the Finance Department and this cannot be construed as a policy matter of the State Government to include non-rural roads under the scope of MNP. Further, the Department did not produce any copy of the policy matter, if any, to Audit. Thus, sanction of the non-rural roads under MNP defeated the scheme objective and hence, the recommendation was not implemented.

3.2.5 Contract management and execution of work

Audit observed (2013) failure of the PWD to adhere to the Government's instructions and contractual conditions leading to non-remittance of royalty into government account, non-recovery of penalty despite delay in execution of works, inadmissible payment of price escalations, non-termination of contracts despite inordinate delays, non-recovery of difference of cost of bulk and packed bitumen, excess payments due to wrong application of rate, execution of work without adhering to specifications, irregular execution of works etc.

Based on the audit findings, Audit had recommended that specifications and provisions of the manual²⁷ should be strictly adhered to for completion of the works in an economic, efficient and effective manner.

The Department had accepted the above observations and had taken action in some cases pointed out by Audit as detailed in **Table 3.2.3** below:

Table 3.2.3: Action taken by the Department

Sl. No.	Observation mentioned in Audit Report (2013)	Action taken by the Department till exit conference (December 2017)
1	2	3
1	Non-remittance of royalty of ₹ 1.31 crore into Government account.	Royalty of ₹ 1.06 crore was remitted into Government account.
2	Non-recovery of penalty of ₹ 98.28 lakh despite delay in execution of works.	Penalty worth ₹ 60.11 lakh was recovered.
3	Inadmissible payment of price escalation-₹ 49.02 lakh.	Government agreed to recover ₹ 15.84 lakh but recovery was awaited.
4	Non-termination of contract despite inordinate delay.	Contract was terminated and recovery of total dues of ₹ 14.36 lakh was made.
5	Non-recovery towards difference of cost of bulk and packed bitumen-₹ 10.66 lakh.	Recovery of ₹ 7.75 lakh was made.
6	Excess payment due to wrong application of rate-₹ 24.41 lakh.	Department stated that action for the recovery was under process.

²⁷ Works Department manual, MORT&H specifications, Rural Road Manual etc., used in the construction work

1	2	3
7	Execution of work without adhering to specifications.	An amount of ₹ 34.16 lakh (out of recoverable amount of ₹ 39.42 lakh) was recovered from the contractor on account of repair of road in disregard to the approved specifications.
8	Irregular execution of works	Approval of supplementary schedule after permission of the State Government for execution of additional works without sanction of the competent authority was required in two works. It was approved in one case ²⁸ for ₹ 64.89 lakh and is awaited in another case ²⁹ for ₹ 96.82 lakh.

(Source: Information provided by the Department)

Follow-up audit also revealed that despite accepting the recommendation made by Audit and action taken by the Department as mentioned in **Table 3.2.3**, repetition of similar observations were again noticed as discussed under:

3.2.5.1 Execution of work without adhering to specifications

Audit observed execution of works without adhering to Ministry of Road Transport and Highways (MORT&H) specifications in four cases as detailed in **Table 3.2.4**:

Table 3.2.4: Execution of works without adhering to the specifications

Sl. No.	Name of division	Name of work	Audit findings
1	2	3	4
1	Raipur 1	Cement concrete work of <i>Gondwara canal to Shitala Mata Mandir Road</i>	TS for the work was granted by Chief Engineer, PWD Zone Raipur without preparing the crust design in violation of the MORT&H guidelines. The road was constructed at a cost of ₹ 1.18 crore (October 2017). Hence, the specifications required to execute the work and actually executed could not be compared. In the exit conference (December 2017), Secretary, PWD stated that the road has very low traffic and hence, minimum crust design was adopted. However, the Secretary did not mention the reasons for granting TS without preparing the crust design of the road.
2	Gariabandh	Cement concrete work of <i>Girsul to Ghoghar</i>	In violation of clause 401.2.1 of MORTH specification, single layer of Granular Sub Base (GSB) Grade V was made instead of two separate layers of GSB. Further, provision of 50 mm Dense Bituminous Macadam (DBM) and 30 mm Semi Dense Bituminous Concrete (SDBC) was made against the specification of 55 mm and 25 mm respectively. Non-adherence to the MORT&H specifications while granting the TS by the Chief Engineer, PWD Zone Raipur led to avoidable extra cost of ₹ 10.05 lakh. In the exit conference (December 2017), Secretary, PWD stated that road was executed as per TS and design approved by the competent authority. The reply is not acceptable as the TS itself was granted in violation of the MORT&H specifications, which resulted in the avoidable extra cost.

²⁸ Askala-Ahirpar road

²⁹ Darima-Nawanagar Karra road

1	2	3	4
3	Pendra Road	Construction of Ratanpur-Manjhwani-Kenda-Kenvchi road	Work was awarded by the EE, PWD Division Pendra Road in April 2010 and clearance for execution in the forest land was given by the Forest Department in August 2014. Execution of SDBC over DBM was to be done immediately but it was done after three years in 11.42 km out of 42 km of the approved road length due to objections raised by the Forest Department on execution without forest clearance. This resulted in violation of MORT&H timelines for execution of the work and also led to substandard execution of works worth ₹ 3.92 crore. In the exit conference (December 2017), Secretary, PWD stated that additional layer of tack coat was executed over the DBM work before execution of SDBC. The reply is incorrect as execution of additional layer of tack coat was not recorded in the measurement book and hence, its execution was not substantiated. This needed investigation by some independent agency.
4	Korba	Construction of Pali-Tanakhar-Jalke-Pipariya road	The road crust was designed for 550 mm with 50 mm Bituminous Macadam (BM) and Mix Seal Surface (MSS) against specification of 580 mm thickness with 55 mm DBM and 25 mm of SDBC by the Chief Engineer, PWD Zone Bilaspur for reasons not in the TS files examined by Audit. This resulted in violation of the MORT&H specifications. In the exit conference (December 2017), Secretary, PWD stated that the road was a rural road, hence, BM and MSS works were executed instead of DBM and SDBC which resulted in saving of ₹ 24.99 lakh to the Government. The reply is not acceptable as at the time of granting the TS, which was in violation of MORT&H specification, no such reasons were put on record for deviations.

3.2.5.2 Irregular execution of works

i) Execution of additional work without inviting tender

As per para 2.075 of Works Department manual, tender must be invited for all works proposed to be given on contract, costing more than ₹ 50,000 and above.

Administrative approval for two works of black top (BT) renewal on Shyam Baba Mandir to PRA Nursery road and Ketka road Shabbir Aata Chakki to Shiv Mandir road was sanctioned (February 2017) by the Government for ₹ 55.41 lakh and ₹ 79.37 lakh respectively.

In violation of the manual, EE, PWD (B&R) Division Surajpur without inviting tenders for the works, awarded (June 2015) both these works to a contractor who was engaged in construction of Bhagvanpur-Anandpur road of Premnagar under another agreement. The contractor was paid ₹ 63.15 lakh for these works. However, the works were not completed till date (December 2017) against the schedule completion date of February 2016.

In the exit conference (December 2017), Secretary, PWD agreed that the works were executed without obtaining necessary sanction of the competent authority and stated that clarification has been sought in this regard and other action against the concerned officials was being taken at Department level. Further action was awaited (June 2018).

ii) Excess execution of works without approval

As per clause 13 of agreement read with clause 2.6 (a) of appendix 2.10 of the agreement executed between the contractor and the Department, prior written

approval of the next higher authority competent to sanction the tender or the Government as the case may be, shall be required for approving any variation beyond 25 *per cent* of individual item of the work.

Follow-up audit revealed that excess quantities of work of PCC/ RCC³⁰ in super structure Grade M-20 beyond 25 *per cent* of estimated quantity valued at ₹ 44.07 lakh was approved in the construction of Bilaspur-Ambikapur Road to Vitaranga via Sayer-Kedma under PWD (B&R) Division Ambikapur without obtaining sanction from competent authority.

The Secretary, PWD accepted the audit observation and stated (December 2017) that clarification has been sought and other action against the concerned officials was being taken at Department level. Further action was awaited (August 2018).

3.2.5.3 Recovery made at the instance of Audit

As per clause 51.1 of the agreement, mobilisation advance would be deemed as interest bearing advance at an interest rate of 10 *per cent* to be compounded quarterly.

Audit observed that the contractor engaged for construction of Champa-Seoni (via Seoni-Upreli-Jervay) road under EE, PWD (B&R), division, Champa under CRF was provided mobilisation advance of ₹ 1.99 crore (February and March 2012). The division recovered the advance, and recovered interest amounting to ₹ 37.51 lakh from the contractor at the instance of Audit (December 2017).

Thus, the specifications of works and provisions of the PWD manual were not found adhered to and the recommendation was not followed.

3.2.6 Conclusion

Two out of four recommendations made by Audit in the Audit Report 2012-13 and accepted by the Department for (i) utilisation of fund in time bound manner on earmarked projects and (ii) adherence to specifications and provisions of manual had not been implemented.

Repetitions of the violations against these recommendations included execution of works of ₹ 5.20 crore beyond specification and irregular execution of non-rural works of ₹ 46.36 crore from MNP fund.

The recommendation on overlapping of sanctions was partially implemented as preparation of list of priority roads for different schemes was still not prepared and the recommendation on taking up work only upon detailed survey, investigation and finalisation of land was also not fully implemented as works worth ₹ 5.42 crore were executed without detailed survey.

The Secretary, PWD again assured Audit that the recommendations would be implemented by the Department.

³⁰ Plain Cement Concrete (PCC)/Reinforced Cement Concrete (RCC)

3.3 Audit Paragraphs

Audit observed significant deficiencies in critical areas, which impact the effectiveness of the State Government. Some important findings arising out of Compliance Audit (seven paragraphs) are featured in the Report. The major observations relate to fraudulent payment, absence of compliance with rules and regulations, cases of expenditure without adequate justification and failure of oversight/administrative control. These are mentioned below:

Tribal and Schedule Caste Welfare Department

3.3.1 Fraud and misappropriation with possible collusion

Fraudulent payment of ₹ 1.40 crore to 21 non-functional private schools with possible collusion at various levels under the Assistant Commissioner Tribal Development and the District Education Officer Janjgir-Champa

Assistant Commissioner, Tribal Development (ACTD) Janjgir-Champa released pre-matric scholarships of ₹ 1.40 crore to 21 private schools under Block Education Officer (BEO), Baloda for 12,071 students during the period 2011-15 based on sanction orders by six nodal officers³¹. The amounts were withdrawn by the principals of the private schools from the bank accounts of the schools, but were not paid to the students, and were misappropriated.

Audit examination revealed the following:

- ✓ As per U-DISE³² data-base, these 21 schools were recorded as non-functional during 2011-15. Joint physical verification (November 2017) of these 21 schools by Audit with the concerned BEO and nodal officers revealed that 10 private schools had never functioned, while 11 schools, though operational earlier, were closed during 2011-15. The manner in which the District Education Officer (DEO), Janjgir-Champa gave recognition to these 21 non-functional schools without verifying their existence merits investigation from a vigilance angle.
- ✓ The State Scholarship Rule, 1972 stipulates that proposals for scholarship³³ shall be submitted by the principals of private schools to the nodal officer only after verification by the BEO. In the case of the above instances relating to the disbursement of ₹ 1.40 crore, however, the nodal officers approved the proposals and the ACTD released the funds without ensuring verification by the BEO.
- ✓ The Rules stipulate that the nodal officer shall examine the proposals and if possible, physically verify the students before sanctioning the scholarships. An identification register should be maintained and attested by the nodal officer and a copy should also be kept by the concerned school. Further, bank scroll for payment of scholarship in five copies shall also be submitted to the nodal officer by the head of private school. The nodal officer

³¹ Under the scheme, the principal of a Government School is appointed as nodal officer.

³² Unified District Information System for Education is a Central Government database of information about schools in India.

³³ Of girl students (SC and ST) for class three to five and all students (SC, ST and OBC) of class six to eight.

shall verify the bank scrolls with the attendance register and a verified copy shall be maintained. Though Audit requisitioned relevant records including admission and attendance registers, vouchers, scholarship disbursement registers etc., ACTD, the concerned nodal officers and BEO, failed to produce any record. Non-production of records is a red flag to presumptive fraud, misappropriation and collusion. The matter therefore, merits immediate investigation from a vigilance angle.

The Special Secretary, Tribal Department, accepted (September 2017) the facts. The ACTD, Janjgir-Champa intimated (February 2018) Audit that the District Collector, Janjgir-Champa had directed the filing of FIR which was lodged (August 2018) against 13 Principals/ Directors of private schools, six nodal officers and the then ACTD, Janjgir-Champa.

Public Works Department

3.3.2 Fraudulent payments

Executive Engineer, PWD Ramanujganj irregularly awarded supply orders valued at ₹ 39.16 lakh to a firm and fraudulently made inflated payment of ₹ 17.24 lakh to the firm

In terms of the Works Department (WD) Manual read with the Store Purchase Rules, purchases above ₹ 50,000 should be through open tender, and only from firms registered with the Commercial Tax Department (CTD).

Superintending Engineer (SE), PWD, Ambikapur Circle approved (January 2016) a proposal from Executive Engineer (EE), PWD (Building and Roads), Division Ramanujganj to purchase solar street lights. At the time of according approval, the SE enclosed a copy of a similar approval accorded to EE, Korea³⁴ for purchase of solar street lights Part-1³⁵ (for ₹ 49,990 per unit) and ₹ 4,790 per unit for solar street lights Part-2³⁶ (for ₹ 4,790 per unit).

In the meantime (November 2015), the CTD cancelled the registration of the firm which quoted the above rates. The EE, Ramanujganj, however, without verifying this fact, and without inviting tenders, placed (February 2016) supply orders for 80 units³⁷ of solar street lights valued at ₹ 39.16 lakh to the same firm. Audit found that against the price of ₹ 4,790 per Part 2 solar light quoted to EE Korea, the firm was fraudulently paid ₹ 47,900 per unit, resulted in overpayment of ₹ 17.24 lakh³⁸. This is a red flag and needs investigation.

The Secretary, PWD accepted (December 2017) the audit findings and stated that proposal for disciplinary action against the then EE, Ramanujganj had been forwarded (December 2017) to the Government. Further action is awaited (August 2018).

³⁴ For reasons not on record, EE Korea did not finally issue any purchase orders for the solar lights.

³⁵ Includes battery stand solar panel 3x11-75 V capacity, battery box size 15 x 12 x 12-75 V and LED light 20 V auto shut down system

³⁶ Includes pole pipe size (100 mm bottom, top 65 mm), panel frame (fitted on pipe), cable wire adjustable, clime solar pipe fitting, pole foundation agreement, complete solar poles and solar fitted bend pipe.

³⁷ 40 Part 1 solar lights and 40 Part 2 solar lights.

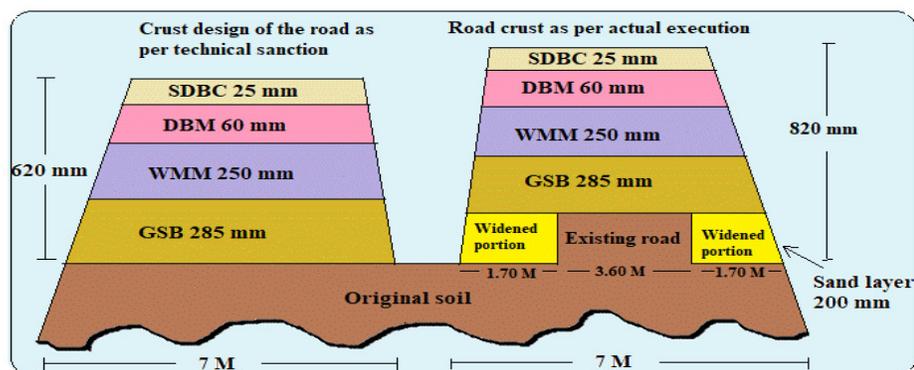
³⁸ ₹ 47,900 - ₹ 4,790 = ₹ 43,110 x 40 = ₹ 17,24,400

3.3.3 Avoidable extra cost

Execution of layer of inverted choke in the construction of a road in contravention of MORT&H specifications and IRC pavement design led to avoidable extra cost of ₹ 4.75 crore

Indian Road Congress (IRC) stipulates³⁹ that if water bound macadam is to be laid directly over the sub-grade, without any other intervening pavement course, a 25 mm course of screenings or coarse sand shall be spread on the prepared sub-grade before executing other layers. In case of a fine sand or silty or clayey sub-grade, it is advisable to lay 100 mm insulating layer (inverted choke) of screening or coarse sand on top of fine grained soil.

Executive Engineer (EE), Public Works Division, Pathalgaon executed (August 2012) an agreement for ₹ 46.86 crore with a contractor for widening and strengthening of Lailunga- Kotba- Lawakera road (44 km) for completion of the work by August 2014. The work included execution of 85,197.94 cum of 200 mm inverted choke in the widened portion of the road which was executed by the contractor at a cost of ₹ 4.75 crore⁴⁰ and was paid for between November 2012 and March 2017 as shown in figure below:



Audit observed the following:

- ✓ As the approved road crust included provision for an intervening layer of 285 mm granular sub-base (GSB) between the sub-grade and water mix macadam (WMM), the layer of inverted choke was not required in the light of IRC provision (section 404.3.2 of MORT&H specifications).
- ✓ Although as per the technical sanction⁴¹ (TS), the pavement was designed⁴² for a crust thickness of 620 mm⁴³ in the entire width of seven metres, inclusion⁴⁴ of additional layer of 200 mm thick inverted choke (sand layer) only in the widened portion⁴⁵ (3.40 metres) of the road resulted in

³⁹ As per section 404.3.2 (Inverted Choke/Sub-surface drainage layer) of specifications for road and bridge works

⁴⁰ 85,197.938 cum x ₹ 531 per cum = ₹ 4,52,40,105 + 4.89 per cent above = ₹ 4,74,52,346

⁴¹ Granted (November 2011) by CE, PWD zone Ambikapur for ₹ 44.67 crore

⁴² Adopting IRC 37:2001

⁴³ Granular sub-base- 285 mm, wet mix macadam- 250 mm, dense graded bituminous macadam- 60 mm and semi dense bituminous concrete- 25 mm

⁴⁴ By mentioning in the technical report of the TS

⁴⁵ As per the technically sanctioned estimate, carriage width of the road was to be increased from the existing width of 3.60 metres to seven metres

unequal crust thickness of the road, i.e., 820 mm for widened portion and 620 mm for the existing portion (3.60 metres). Thus, inclusion of inverted choke was not supported by the approved pavement design, which was not revised.

Hence, MORT&H specification and pavement design of the road was defied to execute the unwarranted layer of inverted choke, resulting in avoidable extra cost of ₹ 4.75 crore on the work.

The Engineer-in-Chief, PWD stated (August 2017) that most reaches of the road passes through paddy fields which were water logged area and hence provision for 200 mm thick inverted choke was provided in the estimate to not only to serve as insulating layers but also to serve the requirement of sand blankets in accordance with section 8.1 of IRC 34-1970.

The reply is not acceptable as (i) though inverted choke was not part of crust design of the road, it was not revised by revised TS; (ii) section 8.1 of IRC 34-1970 provides for application of sand blanket over the full width of embankment but it was provided only in the widened portion of the road; (iii) IRC 34-1970 recommends sand blanket only in the case of construction of road in waterlogged areas infested with detrimental salts such as sulphates and carbonates in the sub-grade soil. In this case, however, the pavement was designed in accordance with the specifications of IRC 37:2001 and nothing was mentioned about application of specifications of IRC 34-1970 or presence of any detrimental salt or waterlogged area either in the technical report or while granting TS to the work. Thus, laying of inverted choke was not aimed to prevent damage caused by salts and water logging, if any, on the road and was unwarranted.

The matter was reported to Government in July 2017 followed by reminders between September 2017 and March 2018. No reply had been received (August 2018).

3.3.4 Wasteful and Unfruitful expenditure

Sanction of a six lane road including service road in violation of MORT&H and IRC provisions besides execution of another road in Railway land in violation of works Department manual led to unfruitful expenditure of ₹ 61.29 lakh on incomplete service road and wasteful expenditure of ₹ 33.81 lakh on road works on Railway land

Six lane highways⁴⁶ are high speed corridors to carry high density traffic which involves upgradation of existing and recently constructed four lane highways. Further, Indian Road Congress (IRC) 86-1983⁴⁷, stipulates that the design of main traffic routes in built-up areas should be based on peak hour demands and not on the average daily traffic as in rural areas. The IRC also stipulates a recommended carriage width of 21.0 metres for a six lane road.

Widening of Vidhan Sabha Chowk-Dhaneli bypass road (length-9.50 kms) into a six lane road⁴⁸ in Raipur city was administratively approved (June 2013)

⁴⁶ According to manual of specifications and standards issued (2008) by Ministry of Road Transport and Highways (MORT&H)

⁴⁷ Geometric design standards for urban roads in plains published by the Indian Road Congress (IRC)

⁴⁸ Two lane carriage way of 8.5 metres on both sides and 5.50 metres service road on both sides of carriage way (total 28 metres)

for ₹ 68.60 crore and technically sanctioned (June 2013) for ₹ 65.87 crore by Public Works Department (PWD). The work was awarded (October 2013) to a contractor for ₹ 65.05 crore for completion of the work by October 2015.

Audit observed from records of the Executive Engineer (EE), PWD, Vidhan Sabha division, Raipur that the work was sanctioned in disregard to the MORT&H specification and IRC provisions on the ground that (i) the design of the road was made on average daily vehicular traffic instead of peak hour demands in violation of clause 6.2.3 of IRC 86 for design of six lane roads; (ii) the EE reported absence of high density traffic on the road, a precondition for constructing six lane road; (iii) the road was neither a National Highway (NH)/State Highway (SH) nor Major District Road (MDR) which are to be upgraded to six lane road; and (iv) the road was proposed to be widened to 28 metres including a service road of 5.50 metres on both sides of the main carriage way in violation of clause 6.2.4 of IRC which stipulates 21 metres as recommended carriage width for six lane road as shown below:

Crust design of the road as per technical sanction								
Moorum shoulder	SDBC 25 mm	Moorum shoulder and green belt 5.50 M	BC 50 mm	Wide median 2.0 M	BC 50 mm	Moorum shoulder and green belt 5.50 M	SDBC 25 mm	Moorum shoulder
	BM 50 mm		BM 170 mm		BM 170 mm		BM 50 mm	
	WMM 250 mm		WMM 250 mm		WMM 250 mm		WMM 250 mm	
	GSB 300 mm		GSB 300 mm		GSB 300 mm		GSB 300 mm	
	Sub grade (500 mm)		Sub grade (500 mm)		Sub grade (500 mm)		Sub grade (500 mm)	
Service road 5.50 M		Main carriage way 8.50 M + 8.50 M				Service road 5.50 M		
Actual execution of the road work								
Moorum shoulder	Other layers of service road not done	Moorum shoulder and green belt 5.50 M	BC 50 mm	Wide median 2.0 M	BC 50 mm	Moorum shoulder and green belt 5.50 M	Other layers of service road not done	Moorum shoulder
	Sub grade work done		Sub grade (500 mm)		Sub grade (500 mm)		Sub grade work done	
			WMM 250 mm		WMM 250 mm			
			GSB 300 mm		GSB 300 mm			
			Sub grade (500 mm)		Sub grade (500 mm)			
Service road 5.50 M		Main carriage way 8.50 M + 8.50 M				Service road 5.50 M		

The EE directed (July 2014) the contractor not to construct the service road in the absence of its present utility and lack of habitation on the road. By then, the contractor had already executed embankment and culvert works of the service road valued at ₹ 61.29 lakh. Thereafter, the contractor completed construction of the main carriage way at a cost of ₹ 33.23 crore and left the service road incomplete. The EE declared (November 2015) the work complete with four lanes. This resulted in unfruitful expenditure of ₹ 61.29 lakh on the incomplete service road which was avoidable had survey and traffic census data been properly analysed in the light of specifications of MORT&H and IRC before according approval to the six lane road.

The Secretary, PWD stated (September 2017) that survey and traffic census was done for design of the road which would be useful when service road would be constructed in future.

The reply is not acceptable as the six lane road was designed on a bypass road in violation of the MORT&H and IRC provisions without factoring in the peak hour load and traffic density which resulted in midway stoppage of the service road.

(b) Widening and improvement of Saddu-Urkura road (length- 5.95 kms) was awarded (September 2013) by EE, PWD Vidhan Sabha, Division Raipur to a contractor for ₹ 12.24 crore for completion of the work by September 2014. It was noticed that 2.35 kms of the road stretch was in Railway land. However, the EE without taking prior permission for construction of the road from Railways in violation of clause 2.110 (a) of works Department manual⁴⁹ issued (September 2013) work order for commencement of the work. The contractor completed the works in 3.60 kms at a cost of ₹ 7.08 crore up to October 2014. However, in the rest 2.35 kms, the contractor could execute only excavation, embankment and granular sub base works worth ₹ 33.81 lakh as Railways stopped (October 2014) further construction work in this stretch. The work was declared completed (October 2014) by the EE without execution of water bound macadam and bituminous works in this portion of the road and final payment of ₹ 7.42 crore (February 2015) was made to the contractor.

Further, Railways intimated (October 2017) Audit that it had proposed to hand over the land to the Railway Land Development Authority, New Delhi to construct rail track for high speed train and to install solar power plants.

Thus, commencement of road work without securing right of way for construction from the Railways led to wasteful expenditure of ₹ 33.81 lakh on Railway land.

Secretary, PWD stated (September 2017) that the road was already constructed under PMGSY and at that time no objection was raised by the Railways. Therefore, the work was executed on the same alignment and during execution Railways raised their objection, after which, the work was stopped.

The reply is not acceptable as (i) the work involved widening of the existing road in Railway land for which no permission was sought from Railways; (ii) PWD had no authority to commence fresh work on Railway land without their prior permission, just because the Railways had not objected when the road was constructed under PMGSY.

Hence, commencement of work without adhering to the norms of MORT&H, IRC and works Department manual by PWD led to unfruitful expenditure of ₹ 61.29 lakh on incomplete service road besides wasteful expenditure of ₹ 33.81 lakh on road works in Railway land.

Panchayat and Rural Development Department

3.3.5 Extra cost and excess payment

Execution of unwarranted sand layer despite upgrading the existing sub-grade by bringing soil from borrow pits led to avoidable extra cost of ₹ 78.64 lakh including excess payment of ₹ 49.01 lakh by inflating the rate of execution of sand layer work

Indian Road Congress (IRC):SP:72-2007⁵⁰ stipulates that for construction of road, a minimum of 100 mm capping layer of California Bearing Ratio (CBR)

⁴⁹ When land belonging to Indian Railways is required, State Government requests the Railways to relinquish the land and if they agree to do so, Government allots it to the Department concerned.

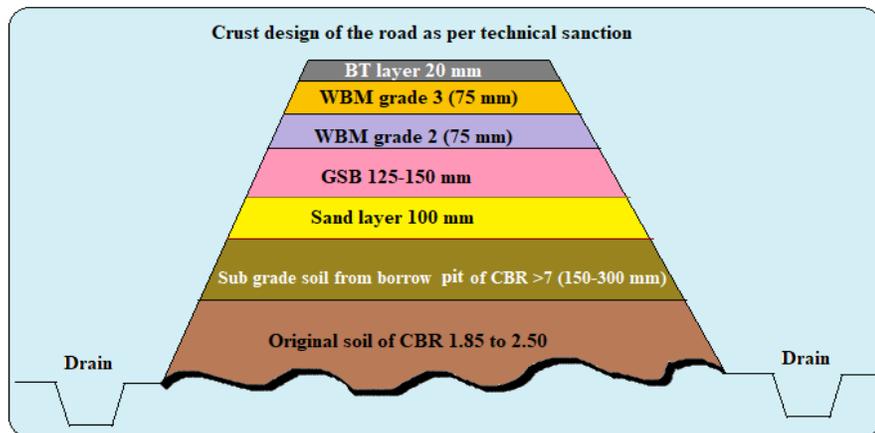
⁵⁰ Clause 4.3 and 8

not less than 10 is to be provided in cases where the CBR value of existing soil is between two and four and Equivalent Standard Axle Load (ESAL) between 60,000 and 1,00,000. Further, as per section 405.3.2 of the specifications for rural roads issued by the Ministry of Rural Development (MoRD), Government of India where Water Bound Macadam (WBM) layer is to be laid directly over the sub-grade and the sub-grade is fine-grained, it is advisable to lay 100 mm intervening layer of screening or coarse sand on top of the fine-grained soil.

Audit scrutiny revealed that the Executive Engineer (EE), Rural Development Division, Chhattisgarh Rural Road Development Authority (CGRRDA), Kawardha incurred an extra expenditure of ₹ 78.64 lakh⁵¹ on execution of avoidable drainage layer in the construction of two rural roads. This included excess payment of ₹ 49.01 lakh⁵² for execution of drainage layer at inflated rate of ₹ 706 per cum against the admissible rate of ₹ 266 per cum as per PWD Schedule of Rate (April 2010). Audit further observed as under:

✓ In the detailed estimate of construction of four⁵³ rural roads sanctioned (December 2012) for ₹ 5.66 crore under *Mukhyamantri Gram Sadak Yojna* (MMGSY), a NABARD sponsored scheme, the CBR of the existing⁵⁴ soil was increased to more than seven through laying of 150-300 mm sub-grade and earthen shoulder by obtaining earth from borrow pits.

✓ Although the CBR of sub-grade was improved and further intervention was not required, an avoidable 100 mm drainage (sand) layer was also provided and executed in violation of the IRC:SP:72-2007 specifications⁵⁵ as shown ahead:



✓ The execution of drainage layer was also not in accordance with the pavement design (Figure 3) which stipulates gravel base for CBR between

⁵¹ Quantity of sand layer x Rate of sand layer = (976.80+3890.89+3355.073+2915.9= 11138.66) cum x ₹ 706 per cum = ₹78,63,908.79

⁵² As per PWD SOR rates for 100 mm sand layer is ₹ 266 per cum (₹ 531/2) and excess cost = (706-266)*11138.66 cum = ₹ 49,01,010.40

⁵³ Package No. 05–Ramhepur to Vicharpur, Babai to Mohgaon, Bargaon to Mohgaon and Package No. 20–Chachedi to Fandatod.

⁵⁴ CBR of existing soil was between 1.85 and 2.5 per cent

⁵⁵ Figure 3 (Pavement Design Catalogue)

seven and nine and ESAL⁵⁶ between 60,000 and 1,00,000. This was already there in the form of 125-150 mm GSB.

✓ Moreover, the sand layer was also not required in the light of section 405.3.2 of the specifications for rural roads issued by MoRD, as the WBM layers were not laid directly over the sub-grade but over a layer of GSB.

✓ In two⁵⁷ out of the four roads, technical advisor of NABARD directed (August 2014) to delete the item of drainage layer on the ground that it was for cross drainage work and backfilling of sand behind abutment which was acceded by the EE. On the same grounds besides the points mentioned above, execution of drainage layer of the other two roads was also not required.

The Chief Engineer, MMGSY, Raipur stated (July 2017) that the CBR value of original embankment of roads was very low and hence it was necessary to provide filter media being the vital part of design of road crust there. So, 100 mm thick sand layer was provided in entire length and width as per provision given in various codes.

The reply is not acceptable as the original soil of low CBR was improved by topping it with a layer of 150-300 mm soil of CBR more than seven and so the drainage layer was not required on the road. Moreover, the EE agreed to delete the item upon advised by technical advisor, NABARD.

The matter was reported to the Panchayat and Rural Development Department in July 2017 and reminded between September 2017 and March 2018. No reply has been received (August 2018).

Water Resources Department

3.3.6 Unfruitful expenditure and undue benefit

Commencement of Mohar Project work without preparing land acquisition programme and ensuring its acquisition besides failing to obtain prior environment and forest clearance from Government of India led to unfruitful expenditure of ₹ 9.28 crore on the incomplete works which could not be put to intended use

The Forest (Conservation) Act, 1980 and the Works Department (WD) Manual of the State Government stipulate that diversion of forest land for non-forest purpose (including irrigation work) requires prior approval of the Government of India (GoI). The WD manual also stipulates that notification for acquisition of land required for any particular work must be submitted before the work is taken in hand, and that the concerned EE shall work out the requirement of land for work, quarries and draw up programme for land acquisition/land transfer to ensure transfer of required land before setting up target date for commencement of works.

Water Resources Department (WRD) accorded administrative approval (December 2009) for ₹ 228.23 crore and technical sanction (February 2010) for ₹ 125.04 crore to the construction of Mohar Reservoir project. The work

⁵⁶ ESAL of the road was 72,046 and 90,275

⁵⁷ Ramehpur to Vicharpur and Babai to Mohgaon

was awarded (March 2012) to a contractor for ₹ 94.45 crore on lump sum⁵⁸ tender for completion by September 2014 extended up to December 2016. The work envisaged construction of an earthen dam and canal systems.

In this connection, Audit observed the following:

✓ At the time of awarding the work in March 2012, the contractor's quoted rate was 21.82 *per cent* below the schedule of rate (SOR) of 2008 (which was already four years old). Hence, workability of the offered rate by the lowest bidder was not ascertained by Chhattisgarh Irrigation Projects Board which approved the rate. Incidentally, another contractor had quoted 44 *per cent* above SOR of 2008 for executing the work.

✓ Since the project traversed both tribal and forest areas, the Tribal and Scheduled Caste Welfare (TSCW) Department whose concurrence was secured (September 2009) stipulated that the work would commence only after obtaining permission from the Ministry of Environment and Forest (MoEF), GoI and also upon payment of compensation to the people whose private land would get affected by the project.

✓ Instead of securing the necessary environment clearances itself as it was required to do, WRD entrusted the task of preparing the environment impact assessment (EIA) report and environment management plan (EMP) to the same contractor who was to execute the work. The contractor was also entrusted with the responsibility of obtaining clearance from MoEF for non-forest use of forest land and environment clearance.

✓ The Department did not draw any programme to acquire the 315.66 hectare (ha) forest land, 310.69 ha revenue land and 653.53 ha private land required for the project. Consequently, though the required revenue land and private land were acquired between June 2013 and June 2017, the EE inordinately delayed the identification of revenue land for afforestation due to non-compliance to revised GoI norms of providing double revenue land for afforestation, absence of joint verification of identified land by Revenue, Forest and Irrigation Departments, non-issue of no objection certificate by concerned Collector for use of revenue land for afforestation. The proposal for afforestation of the revenue land was submitted (April 2017) to the Divisional Forest Officer, Balod for clearance. The land was, however, not cleared by the Forest Department till date (August 2018).

✓ Though none of the above mandatory permissions/ clearances had been received, the contractor commenced (March 2012) the works. However, after executing 55 *per cent* works of feeder canal valued at ₹ 9.28 crore, the contractor stopped the work (March 2015) and expressed (July 2016) his inability to execute further work citing financial loss. The EE terminated (September 2016) the contract under the clause 4.27⁵⁹ of the agreement. The contractor did not execute the earthen dam, saddle dams, canal sluice, waste weir, tunnel and irrigation canal. These works were not resumed as of August

⁵⁸ Lump-sum contract is used when the whole of the work as described in the given drawings and specifications are to be entrusted to single contractor for a fixed sum.

⁵⁹ If the contractor fails to take corrective action within 14 days after receipt of notice (issued by EE for deficiency in performance by the contractor and demanding corrective action), the EE will terminate the contract and forfeit to Government the amount of security deposit together with the value of work done but not paid for.

2018. Moreover, the contractor also did not prepare the EIA and EMP as stipulated in the conditions of contract while forest and environment clearance have not been obtained as of August 2018.

A joint physical inspection (September 2017) of the work site by Audit and the Departmental officials revealed that the incomplete structures were not put to any use and were subjected to onslaught of weather.



Photographs showing damage to work executed on the project

The Department stated (October 2017) that it decided to commence the work and acquire land simultaneously but due to change (June 2013) in policy by MoEF, required permissions were yet to be granted while the proposal for deforestation of forest land was pending with Forest Department.

The reply is not acceptable as the Department, in violation of WD Manual, Forest Conservation Act, 1980 and concurrence conditions of the Project by TSCW Department commenced the work which got stuck midway in the absence of land and necessary forest and environment clearance from GoI for construction.

3.3.7 Non-recovery of Government revenue

Recovery of water charges at lower rate due to application of wrong tariff from two companies besides failure to recover outstanding water charges from another company led to non-recovery of Government revenue of ₹ 1.31 crore

As per order issued (May 2010) by Water Resources Department (WRD), Government of Chhattisgarh (GoCG), rate of utilisation of water from natural sources was fixed at ₹ two per cubic meter (cum) with increase at the rate of 15 per cent every year. The Department replaced (April 2015) the order with rate fixed by Government from time to time and from February 2016, it was fixed at ₹ 3.51 per cum.

Scrutiny of records of Executive Engineer (EE), Water Resources Division Dantewada revealed that National Mineral Development Corporation (NMDC) and Essar Steel Limited (Essar) utilised 213.17⁶⁰ lakh cum water for their projects and plants in Dantewada district. The EE charged (May 2014) water tax at the rate⁶¹ of ₹ 3.10 per cum instead of applicable ₹ 3.50 per cum

⁶⁰ NMDC (Bacheli + Dantewada) = 44.35 lakh cum + 47.72 lakh cum (total 92.07 lakh cum) and Essar Steel (Kirandul) = 105.47 lakh cum + 15.63 lakh cum (total 121.10 lakh cum) = 213.17 lakh cum

⁶¹ In anticipation of approval of this rate proposed (May 2013) by the Engineer in Chief to the Department

giving undue benefit to the companies. This resulted in underassessment of water charges and loss of revenue worth ₹ 85.27 lakh to Government.

Engineer-in-Chief, WRD accepted the audit findings and stated (September 2017) that revised demand for difference amount had been issued to the companies against which ₹ 20.94 lakh had been recovered and efforts were being made to recover the balance amount.

Similarly, EE, Water Resources Construction Division, Kasdol requested (June 2014) the Collector, Balodabazar to issue Revenue Recovery Certificate (RRC) against a company (M/s South Asian Agro Industries Ltd.) for non-payment of outstanding water charges of ₹ 67.01 lakh between February 2011 and April 2014 against supply of 22,500 cum water per month from Kesala Anicut for use in the Company's power generation plant.

After three years of intimation and upon reminded by Audit (January 2016), the Collector Balodabazar directed (March 2017) the Sub-Divisional Officer (Revenue) Bhatapara to take appropriate action. The SDO sought information from the EE and upon receiving (July 2018) it after one year and four months issued (July 2018) the RRC against the firm. The recovery is yet to be made (August 2018).

Thus, wrong application of water tariffs and delayed issue of RRC by the Collector led to non-recovery of water charges of ₹ 1.31 crore from three companies.

The matter was brought to the notice (August 2017) of the Government followed by reminders between October 2017 and March 2018. However, no reply had been received (August 2018).

Raipur
The 26 November 2018


(BIJAY KUMAR MOHANTY)
Pr. Accountant General (Audit), Chhattisgarh

Countersigned

New Delhi
The 27 November 2018


(RAJIV MEHRISHI)
Comptroller and Auditor General of India

APPENDICES

Appendix 2.1.1*(Referred to in paragraph 2.1.5; page 8)***Scope and coverage of Audit**

District (DH)	CHC	PHC	Sl. No.	SHC
Bilaspur	Bilha	Bodsara	1	Bundela
			2	Mangla
			3	Sardha
		Hardikala	4	Pondi
			5	Hardikala
			6	Silpahari
	Kota	Chapora	7	Chapora
			8	Kanchanpur
			9	Pudu
		Pondi	10	Kalmitar
			11	Mohda
			12	Ranigaon
Jashpur	Lodam	Paiku	13	Galonda
			14	Neemgaon
			15	Pidi
		Gholeng	16	Gamhariya
			17	Kere
			18	Lokhandi
	Manora	Asta	19	Baherna
			20	Harri
			21	Karadiri
		Ghaghra	22	Fatehpur
			23	Patiya
			24	Sogda
Rajnandgaon	Khairagarh	Mudhipar	25	Chichola
			26	Mudhipar
			27	Tolagaon
		Pandadah	28	Achanaknawagaon
			29	Devari
			30	Itar
	Ghumka	Somni	31	Baghera
			32	Sankra
			33	Thakurtola
		Surgi	34	Bharregaon
			35	Kanharpuri
			36	Surgi
Mahasamund	Bagbahara	Hathibahra	37	Hathibahra
			38	Kasekera
			39	Kosmarra
		Komakhan	40	Bindrawan
			41	Boirgaon
			42	Komakhan
	Tumgaon	Birkoni	43	Birkoni
			44	Ghodari
			45	Nandgaon
		Khatti	46	Kanekera
			47	Khatti
			48	Labhrakala

District	CHC	PHC	Sl. No.	SHC
Korea	Patna	Nagar	49	Shivpur
			50	Bishunpur
			51	Ratga
		Mansukh	52	Chilka
			53	Majhgawa
			54	Saraigahna
	Manendragarh	Biharpur	55	Tarabahra
			56	Mahai
			57	Pendri
		Kelhari	58	Pahadhanswahi
			59	Ghaghra
			60	Kelhari
Raipur	Arang	Bhansoj	61	Malidih
			62	Nara
			63	Tekari
		Pharphaud	64	Banrasi
			65	Kosrangi
			66	Pharphaud
	Abhanpur	Khorpa	67	Sarkhi
			68	Belar
			69	Chandi
		Manikchauri	70	Pipraud
			71	Manikchauri
			72	Girola
Kanker	Bhanupratappur	Hatkarra	73	Khadga
			74	Baskund
			75	Barvi
		Kenwati	76	Asulkhar
			77	Birkondal
			78	Kenwati
	Dhanelikanhar	Bagodar	79	Dumali
			80	Hatkongera
			81	Makrikhuna
		Mardapoti	82	Kodabhat
			83	Patod
			84	Vyaskongera

Appendix 2.1.2*(Referred to in paragraph 2.1.9.8; page 25)***Details of short supply of drugs by Corporation in the test checked health centres**

Name of health facility	Period of test check	Occasions of short supply against demand	Number of items demanded	Number of items supplied	Items short supplied	Range of short supply in percentage
DH Bilaspur	01/2014-03/2017	44	2,107	640	1,467	8.33- 95.29
CHC Bilha	10/2013-02/2017	34	2,482	995	1,487	23.33- 88.24
CHC Kota	12/2013-03/2017	18	1,143	543	600	17.91- 79.85
CHC Lodam	09/2013-03/2017	26	1,899	1,369	530	3.33.- 86.70
DH Jashpur	04/2015-03/2017	21	942	820	122	1.72-41.89
CHC Manora	01/2016-02/2017	3	135	100	35	25.33-27.59
DH Kanker	11/2013-03/2017	36	4,408	919	3,489	8.11- 98.79
CHC Dhanelianhar	02/2014-03/2017	28	2,124	651	1,473	6.06- 88.74
CHC Bhanupratappur	09/2013-02/2017	32	3,272	1,101	2,171	5.00- 90.44
DH Korea	07/2014-02/2017	24	1,084	602	482	2.08- 74.47
CHC Manendegarh	04/2013-03/2017	40	2,619	1,301	1,318	17.78- 70.69
CHC Patna	11/2013-03/2017	33	1,429	978	451	3.77- 76.92
DH Mahasamund	08/2016-03/2017	8	548	131	417	56-90.32
CHC Bagbahara	09/2013-03/2017	39	2,750	1,117	1,633	3.85- 99.04
CHC Tumgaon	05/2016-03/2017	7	792	115	677	73.86- 96.39
DH Raipur	09/2013-03/2017	79	1,476	1,042	434	2.78-85.71
CHC Abhanpur	04/2014-03/2017	29	1,283	808	475	9.26-78.52
DH Rajnandgaon	01/2015-11/2016	12	955	655	300	1.82- 59.26
CHC Khairagarh	04/2016-03/2017	11	467	352	115	4.35-60.87
CHC Ghumka	06/2015-03/2017	12	689	442	247	8.33- 77.19
CHC Arang	12/2013-03/2017	24	1,173	960	213	6.00-56.41
Total			33,777	15,641	18,136	53.69

Appendix 2.1.3*(Referred to in paragraph 2.1.10.1 (i); page 26.)***Details of Ante Natal Check-up of pregnant women in test checked districts**

Year	Registered pregnant women (As per CMHO data)	Registered pregnant women under ANC in first trimester (per cent) as per HMIS data	Three checkups (per cent) as per HMIS data
2012-13	2,22,621	98,521 (44.26)	1,49,353 (67.09)
2013-14	2,50,637	1,22,014 (48.68)	1,83,292 (73.13)
2014-15	2,38,599	1,44,808 (60.69)	1,96,062 (82.17)
2015-16	2,21,541	1,72,539 (77.88)	2,07,876 (93.83)
2016-17	2,19,054	1,93,620 (88.39)	2,08,500 (95.18)
Total	11,52,452	7,31,502	9,45,083 (82.00)

Appendix 2.1.4

(Referred to in paragraph 2.1.10.1 (ii); page 27.)

Details of registered pregnant women and IFA tablets provided in test checked districts

Year	ANC as per CMHO	No. of women given 100 IFA as per HMIS	Percentage of women given 100 IFA	Required quantity of IFA as per HMIS	Total IFA available at district (received from DHS, CGMSC and procured by CMHO)	Shortage/ Excess	Total number of women for whom the available IFA tablets were sufficient	Excess shown in the data
2012-13	2,22,621	1,58,646	71.26	1,58,64,600	2,31,31,953	(-)72,67,353	2,31,320	-
2013-14	2,50,637	1,97,460	78.78	1,97,46,000	41,33,180	1,56,12,820	41,332	1,56,128
2014-15	2,38,599	1,96,677	82.43	1,96,67,700	75,97,700	1,20,70,000	75,977	1,20,700
2015-16	2,21,541	2,13,301	96.28	2,13,30,100	68,64,250	1,44,65,850	68,643	1,44,659
Sub-Total	9,33,398	7,66,084	82.07	7,66,08,400	4,17,27,083	3,48,81,317	4,17,272	4,21,487
2016-17	2,19,054	2,13,908	97.64	2,13,90,800	5,34,66,260	(-) 3,20,75,460	5,34,663	--
Total	11,52,452	9,79,992		9,79,99,200	9,51,93,343	28,05,857	9,51,935	4,21,487

Appendix 2.1.5

(Referred to in paragraph. 2.1.10.1 (iv)(b); page 29)

Details of institutional and home deliveries in the test checked districts

Year	Pregnant women registered for Ante Natal Care	Targets for institutional deliveries	Institutional deliveries done	Home deliveries done	Total deliveries	Percentage of institutional delivery	Percentage of home delivery	Home deliveries conducted by Non-SBA trained (as per HMIS)	Percentage of home delivery conducted by non- SBA
2012-13	2,22,621	1,71,130	1,09,042	57,340	1,66,382	65.54	34.46	39,946	69.67
2013-14	2,50,637	1,78,054	1,25,624	52,734	1,78,358	70.43	29.57	38,940	73.84
2014-15	2,38,599	1,72,249	1,35,146	42,512	1,77,658	76.07	23.93	33,064	77.78
2015-16	2,21,541	1,82,284	1,49,177	23,064	1,72,241	86.61	13.39	12,459	54.02
2016-17	2,19,054	1,75,687	1,63,520	8,816	1,72,336	94.88	5.12	3,952	44.83
TOTAL	11,52,452	8,79,404	6,82,509	1,84,466	8,66,975			1,28,361	

(Source: CMHOs and HMIS)

Appendix 2.2.1

(Referred to in paragraph 2.2.9.2 D; page 52)

Physical and financial target and achievement under various items implemented under IPM

(Quantity in ha and amount in ₹ crore)

Name of the item	State						Selected districts					
	Target (in ha)	Achievement (percentage) (in ha)	(-) Excess/ short achievement (in ha)	Provision	Expenditure	Unutilised amount	Target	Achievement (percentage) (in ha)	(-) Excess/ short achievement (in ha)	Provision	Expenditure	Unutilised amount
Liming in acidic soil	25,710	11,796.70 (46)	13,913.30 (54)	2.29	0.83 (36)	1.46 (64)	7,945	2,366 (30)	5,579 (70)	0.81	0.25 (31)	0.56 (69)
PP chemicals and bio agents	2,16,267	1,52,320 (70)	59,947 (30)	10.81	7.57 (70)	3.24 (30)	1,24,793	86,729 (70)	38,064 (30)	6.17	3.58 (58)	2.59 (42)
IPM Package	33,000	29,094 (88)	3,906 (12)	2.48	1.19 (48)	1.29 (52)	12,850	12,145 (95)	705 (05)	0.97	0.75 (77)	0.22 (23)
Distribution of NPV	3,300	1,962 (59)	1,338 (41)	0.08	0.05 (63)	0.03 (37)	1,500	1,104 (74)	396 (26)	0.04	0.03 (78)	0.01 (22)
Weedicides	90,000	58,210 (65)	31,790 (35)	4.50	2.57 (57)	1.93 (43)	55,645	34,299 (62)	21,346 (38)	2.81	1.33 (47)	1.48 (53)
Total	3,68,277	2,53,382.70 (69)	1,10,894.30 (31)	20.16	12.21 (61)	7.95 (39)	2,02,733	1,36,643 (67)	66,090 (33)	10.80	5.94 (55)	4.86 (45)

(Source: Information given by Department and compiled by Audit)

Appendix 3.1.1

(Referred to in paragraph 3.1.2.1; page 61)

Partial functionality of e-Procurement system in Mjunction

Sl. No	Module	Functions of module	Audit observation
1	Vendor registration	<ul style="list-style-type: none"> e-Registration of contractors done by PWD to participate in the bidding process. After registration at PWD, vendor has to apply for user ID and password at CHiPS. Vendor must also obtain a digital signature certificate (DSC) from a registering authority 	<ul style="list-style-type: none"> e-Registration is being done in a different portal (e-Works) (www.cg.nic.in/pwdraipur) which is not integrated with online e-Procurement system leading to failure of real time checking/ verification of vendor details while registering at CHiPS.
2	Indent management	<ul style="list-style-type: none"> Manages flow of documents during the course of preparing a tender Prepares plan for work and calculates final probable amount of contract (PAC). Uploading of SOR for calculation of PAC 	<ul style="list-style-type: none"> Work plan and calculation of PAC was not being done through the module due to non-uploading of SOR and instead was done manually by the concerned departments.
3	e-Tendering	<ul style="list-style-type: none"> Prepares and publishes detailed NIT and tender document directly on the e-Procurement portal Sends electronic alerts in the form of e-mail to the relevant registered bidders. Interested bidders prepare and submit the bids online. Evaluates bids submitted by the bidders and selects the eligible bidders for awarding contract and issue of work order. 	<ul style="list-style-type: none"> Executive Engineers were not able to perform online functions like checking of records, online issue of work order etc., as Digital Signature Certificate, user-ID and password were not provided to them. Tender activities were being carried out initially on https://pwd.cge-procurement.gov.in (NexTenders) and subsequently on https://eproc.cgstate.gov.in (Mjunction) through e-Procurement system and due to non-integration of data of both the systems, online assessment of vendors in respect of work in hand, financial capacity, bid capacity etc., were not assessed.
4	e-Auction	<ul style="list-style-type: none"> Allows suppliers to dynamically out-bid their competitors within a time-frame specified by a buying agency 	<ul style="list-style-type: none"> This module was not being used by the departments.
5	Contract management	<ul style="list-style-type: none"> Module prepared to bridge the gaps between issue of work order and completion of work. Objective is to monitor works in progress. Possess features of online billing for works already completed, approval of bills , etc. 	<ul style="list-style-type: none"> Issue of work order and other related activities were not being carried out.
6	e-Payments	<ul style="list-style-type: none"> Facilitates online transfer of funds both inflows and outflows like sale of tender documents, online transfer of EMD, payments to supplier/contractors for purchase of goods/completion of works, etc. 	<ul style="list-style-type: none"> Payment to contractors/supplier was being done through e-works portal and not through e-Procurement system.
7	Accounting	<ul style="list-style-type: none"> Account of payments made to the contractors/suppliers for completion of works and for purchase of goods. 	<ul style="list-style-type: none"> Departments were not using the accounting module.

(Source: Information furnished by CHiPS and compiled by Audit)

Appendix 3.1.2

(Referred to in paragraph 3.1.3.1; page 63 and 64)

Department wise tenders where same computers were used by the Department officials and the bidders

Sl. No.	Name of department/ entity	No. of bidders	No. of tenders	Estimated value (₹ in crore)	No. of bidders securing L1 status	Mac-id numbers	Estimated value of tenders where bidders secured L1 status (₹ in crore)
1	Chhattisgarh Housing Board (CGHB)	69	46	99.06	22	00:22:20:06:B8:F7, 10:78:D2:46:A7:0E, 20:41:53:59:4E:FF, 50:50:54:50:30:30, 78:84:3C:F1:62:54, AC:F1:DF:15:82:15, CA:FF:03:1D:3B:39, CA:FF:0D:1D:48:95, CA:FF:11:1D:80:18, CA:FF:1B:1D:45:12, CA:FF:64:1D:B7:C8, CA:FF:7A:1D:87:01, CA:FF:8A:1D:AC:00, A:FF:C1:1D:7B:7A, CA:FF:C4:1D:2F:58, CA:FF:D5:1D:B8:8C, CA:FF:EB:1D:98:7A	66.57
2	Chhattisgarh Infotech Promotion Society (CHiPS)	4	4	75	0	90:48:9A:99:85:5B, E8:40:F2:CC:17:01, 20:41:53:59:4E:FF	0
3	Chhattisgarh Medical Services Corporation Limited (CGMSC)	94	64	60.32	9	00:E0:4A:0A:6E:35, 10:78:D2:46:A7:0E, 20:41:53:59:4E:FF, 20:CF:30:CB:36:8A, 50:50:54:50:30:30, 70:F1:A1:D7:06:5F, 78:84:3C:F1:62:54, 90:48:9A:99:85:4B, E8:40:F2:7F:84:D5, F8:BC:12:87:8A:00	1.79
4	Chhattisgarh Police Housing Corporation Limited (CGPHC)	39	31	248.57	11	20:41:53:59:4E:FF, 50:50:54:50:30:30, 78:84:3C:F1:62:54, CA:FF:03:1D:3B:39	108.49
5	Chhattisgarh State Civil Supplies Corp. Limited (SCSC)	76	61	0	8	00:1E:10:1F:00:00, 10:78:D2:4A:D6:4B, 20:41:53:59:4E:FF, 20:CF:30:CB:36:8A, 38:60:77:87:2F:AD, 50:50:54:50:30:30	0
6	Chhattisgarh State Co-Operative Marketing Federation Limited (CGMARKFED)	24	21	0	6	00:1E:10:1F:00:00, 00:E0:4C:50:AD:70, 20:41:53:59:4E:FF, 20:CF:30:CB:36:8A, 50:50:54:50:30:30, 6C:19:8F:9A:10:F7, E8:DE:27:1A:1E:3E	0
7	Chhattisgarh State Industrial Development Corporation (CSIDC)	44	29	22.96	6	00:E0:4C:59:7B:BD, 1C:39:47:2A:78:A6, 20:41:53:59:4E:FF, 50:50:54:50:30:30, CA:FF:8A:1D:AC:00, D8:CB:8A:2B:31:0C, EC:A8:6B:5C:80:D6	0

Audit Report on General, Social and Economic Sectors for the year ended 31 March 2017

Sl. No.	Name of Department/organisation	No. of bidders	No. of tenders	Estimated value (₹ in crore)	No. of bidders securing L1 status	Mac-id numbers	Estimated value of tenders where bidders secured L1 status (₹ in crore)
8	Chhattisgarh State Mandi Board (CGSMB)	100	53	38.86	17	00:17:7C:2F:BB:80, 00:E0:4A:0A:6E:35, 20:41:53:59:4E:FF, 20:CF:30:CB:36:8A, 50:50:54:50:30:30, AC:F1:DF:15:82:15, CA:FF:7A:1D:87:01, CA:FF:8A:1D:AC:00, E0:69:95:3F:EE:9B	11.77
9	Chhattisgarh State Warehousing Corporation (CGSWC)	37	24	58.76	8	10:78:D2:46:A7:0E, 20:41:53:59:4E:FF, 50:50:54:50:30:30, 64:5A:04:74:5F:A5, 90:48:9A:99:85:4B, C8:FF:28:1D:54:35	18.78
10	Department of Women and Child Development (WCD)	1	1	11.00	0	D0:53:49:89:92:A0	0
11	Panchayat and Rural Development (PARD)	370	302	750.48	84	10:78:D2:46:A7:0E, 20:41:53:59:4E:FF, 20:CF:30:CB:36:8A, 48:E2:44:BD:CB:4D, 50:50:54:50:30:30, 70:F1:A1:D7:06:5F, B8:AE:ED:F8:51:45, C8:1F:66:2E:8D:3C, E0:06:E6:43:F8:AB, F8:BC:12:87:8A:00,	216.85
12	Public Health Engineering Department (PHED)	129	97	233.16	25	10:78:D2:46:A7:0E, 20:CF:30:CB:36:8A, 50:50:54:50:30:30, B8:AE:ED:3A:7F:88, D0:BF:9C:1C:0F:BB, D8:5D:E2:C7:6E:33, D8:CB:8A:41:9E:18, D8:CB:8A:41:A3:A9, E0:69:95:3F:EE:9B, EC:A8:6B:5C:80:D6, F8:BC:12:87:8A:00	44.47
13	Public Works Department (PWD)	857	597	1,954.13	150	00:E0:4A:0A:6E:35, 00:E3:74:27:04:9D, 02:0C:E7:0B:01:02, 10:78:D2:46:A7:0E, 14:2D:27:9A:E8:24, 1C:39:47:2A:78:A6, 20:41:53:59:4E:FF, 20:CF:30:CB:36:8A, 4C:BB:58:1D:28:10, 50:50:54:50:30:30, 64:5A:04:74:5F:A5, 78:84:3C:F1:62:54, 90:FB:A6:9C:68:F3, 90:FB:A6:9C:75:BB, A0:B3:CC:FC:0A:DF, 8:97:5A:16:11:DB, B8:AE:ED:3A:7F:88, B8:AE:ED:F8:51:45, C8:1F:66:2E:8D:3C, CA:FF:8A:1D:AC:00, CA:FF:C1:1D:7B:7A, CA:FF:C8:1D:C8:0C, CA:FF:D0:1D:85:6E, CA:FF:E5:1D:CC:BB, E8:40:F2:7F:84:D5, F8:BC:12:87:8A:00	399.61

Sl. No.	Name of Department/ organisation	No. of bidders	No. of tenders	Estimated value (₹ in crore)	No. of bidders securing L1 status	Mac-id numbers	Estimated value of tenders where bidders secured L1 status (₹ in crore)
14	Raipur Development Authority (RDA)	2	2	125.20	0	50:50:54:50:30:30	0
15	Rural Engineering Services (RES)	131	93	28.54	25	10:78:D2:46:A7:0E, 20:41:53:59:4E:FF, 50:50:54:50:30:30, 70:54:D2:1D:23:CC, 70:F1:A1:D7:06:5F, A0:B3:CC:FC:0A:DF, C8:1F:66:2E:8D:3C, E8:40:F2:7F:84:D5	6.13
16	Urban Administration and Development Department (UADD)	496	316	359.32	105	00:1E:10:1F:00:00, 00:22:20:06:B8:F7, 00:E0:4A:0A:6E:35, 00:E0:4C:57:0D:B7, 04:7D:7B:22:B8:43, 14:2D:27:9A:E8:24, 1C:39:47:2A:78:A6, 20:16:D8:74:85:3F, 20:41:53:59:4E:FF, 20:CF:30:CB:36:8A, 30:0E:D5:BF:1C:B7, 3C:97:0E:16:44:09, 50:50:54:50:30:30, 64:5A:04:74:5F:A5, 90:FB:A6:9C:75:BB, AC:D1:B8:C3:E0:32, B8:97:5A:16:11:DB, B8:AE:ED:3A:7F:88, C8:FF:28:1D:54:35, CA:FF:11:1D:80:18, CA:FF:D0:1D:85:6E, D0:27:88:E2:07:C9, D8:50:E6:B8:A8:A5, E0:69:95:3F:EE:9B, E8:39:35:55:98:F1, EC:A8:6B:5C:80:D6, EC:B1:D7:58:8C:9E, F8:BC:12:87:8A:00,	86.63
17	Water Resources Department (WRD)	252	180	535.21	1	00:23:24:1B:9B:85, 10:78:D2:46:A7:0E, 14:2D:27:9A:E8:24, 20:16:D8:74:85:3F, 20:41:53:59:4E:FF, 20:CF:30:CB:36:8A, 3C:97:0E:16:44:09, 50:50:54:50:30:30, 64:5A:04:74:5F:A5, 70:F1:A1:D7:06:5F, 78:E4:00:F2:53:B8, 90:FB:A6:9C:68:F3, C8:1F:66:2E:8D:3C, CA:FF:8A:1D:AC:00, E0:69:95:3F:EE:9B	0.17
	Total	2,725	1,921	4,600.57	477		961.26

(Source: Information furnished by CHiPS and compiled by audit)

Appendix 3.1.3

(Referred to in paragraph 3.1.3.2; page 65)

Contractors using two different PAN numbers for registration in 'e-Works' portal and e-Procurement system

Contractor Id	Name of contractor	PAN (PWD)	PAN (CHIPS)	Vendor ID	First name	Last name	No. of tenders in which L1 awarded	Total amount of PAC	Total quoted amount
1	2	3	4	5	6	7	8	9	10
CGeR03634	Ajay Kumar Yadav	AAZPY4002H	AKFPY0659J	15125	Ajay Kumar	Yadav	0	0	0
CGeR01682	Anil Kumar Pandey	ASKPP3034H	AOYPP7394C	8719	Anil	Kumar Pandey	1	25,00,000	16,41,500
CGeR06914	Anil Kumar Sahu	CILPS0387K	AJKPS7515D	17284	Anil Kumar	Sahu	6	1,02,34,000	88,51,041
CGeR01215	Anil Tiwari	ACWPT9013E	AFKPT6787Q	13195	Anil	Tiwari	0	0	0
CGeR05426	Ankush Rathor	ARPPR5682P	AVVPR9755M	8419	Ankush	Rathor	0	0	0
CGeR02527	Avinash Singh	DFJPS9017G	DAAPS9644M	22467	Avinash	Singh	0	0	0
CGeR02041	Ajay Kumar Sharma	ATKPS7310L	AKTPS7310L	12734	Ajay Kumar	Sharma	1	23,63,021	22,21,239.74
CGeR04719	Akash Agrawal	AIEPA6255D	BEUPA5038M	7357	Akash	Agrawal	0	0	0
CGeR02503	Arun Kumar Gupta	AXRPG3976B	ADBP3037H	9429	Arun	Kumar Gupta	2	2,49,23,276	2,09,25,501
CGeR01296	Ashish Agrawal	AJAPA6121D	AFQPA1424H	9814	Ashish	Agrawal	2	4,34,04,892	3,60,94,000
CGeR05803	Ashok Kumar Sharma	BCWPS3131D	AJFPS6980H	14430	Ashok	Kumar Sharma	0	0	0
CGeR05648	Bhupendra Kumar Baghel	AQJPB1083B	ADEPB0232A	18452	Bhupendra Kumar	Baghel	10	2,71,90,000	2,53,22,326
CGeR02667	Bajrang Lal Agrawal	ALZPA0353N	AEZPA6493G	6979	Bajrang Lal	Agrawal	0	0	0
CGeR05940	Dilip Singh	BWUPS1758Q	ATUPS1169F	7500	Dilip	Singh	0	0	0
CGeR00756	Dewnandan Dilip	AAEFD6906C	AGPPD2942K	14557	Dewnandan	Dilip	0	0	0
CGeR00396	Hira Singh	AZTPS1088C	AJTPS1088C	20253	Hira	Singh	0	0	0
CGeR05458	Jai Prakash Agrawal	ACIPA0667M	AHRPA4737G	7493	Jai	Prakash Agrawal	0	0	0
CGeR02442	Kishan Lal Yadav	AKLPY6813E	ALVPY6578K	12463	Kishan Lal	Yadav	0	0	0
CGeR02179	Kiran Singh	BUKPS0944L	EVYPS6400D	9845	Kiran	Singh	0	0	0
CGeR03580	Lalit Kumar Dewangan	CALPD7643B	BKGPD7749Q	12442	Lalit	Kumar Dewangan	3	35,84,000	34,56,783.06
CGeR05017	Mahendra Singh Thakur	AHJPT3877G	AWAPT0548A	10233	Mahendra Singh	Thakur	0	0	0
CGeR00378	Mahendra Soni	CTXPS3874E	CTXPS3374E	19089	Mahendra	Soni	2	32,65,436	26,72,100
CGeR03566	Manoj Kumar Yadav	ADBPY3579N	ALSPY0024B	12412	Manoj Kumar	Yadav	2	92,11,927	63,63,910.26
CGeR06268	Mithilesh Singh	BBTPS7823L	CWPPS0617E	23064	Mithilesh	Singh	0	0	0
CGeR04970	MohamadLukman Ansari	BAVPA4675B	ANSPA2802K	11038	MohamadLukman	Ansari	0	0	0
CGeR02981	Mukesh Kumar Sahu	AZHPS1302F	DAKPS0055N	21992	Mukesh Kumar	Sahu	0	0	0
CGeR06695	MukeshPandey	BGXPP6660B	BXTPP6136P	19875	Mukesh	Pandey	0	0	0
CGeR03329	Manoj Kumar Mishra	BLYPM0044E	AMUPM8357J	11980	Manoj	Kumar Mishra	3	45,81,000	44,00,226
CGeR03977	Manoj Kumar Singh	AJSPS7125B	AJNPS3546F	11938	Manoj	Kumar Singh	0	0	0

1	2	3	4	5	6	7	8	9	10
CGeR07920	Narayan construction	BQLPM9068E	AEUPV7965B	18465	Narayan	Prasad Verma	0	57,41,000	65,79,990
CGeR04038	Narendra Kumar Sahu	BEGPS3201C	DGUPS0341P	20078	Narendra Kumar	Sahu	0	0	0
CGeR00422	Pawan Kumar Agrawal	AGKPA0082G	AETPA1351H	8685	Pawan	Kumar Agrawal	3	1,68,30,000	2,15,98,395
CGeR05295	Pawan Sharma	ALQPS1577H	AJEPS8660F	7090	Pawan	Sharma	0	0	0
CGeR00053	Praveen Kumar Dixit	AGSPD2439A	AGOPD7180Q	11905	Praveen	Kumar Dixit	0	0	0
CGeR03353	Raj Kumar Agrawal	AZMPA2826K	AFAPA5321H	13936	Raj	Kumar Agrawal	0	0	0
CGeR01479	Rajesh Kumar Rathore	AGZPR6748P	AKLPB5239O	14751	Rajesh	Rathore	0	0	0
CGeR01793	Rajesh Kumar Tiwari	AGKPT3084D	ABKPT2473M	9432	Rajesh	Kumar Tiwari	1	75,00,000	55,79,250.01
CGeR00223	Rajesh Mishra	AIOPM5023B	AINPM8835C	15964	Rajesh	Mishra	1	39,16,000	35,63,560
CGeR00867	Rajesh Sahu	BQVPS8354P	BBWPS3983G	9836	Rajesh	Sahu	0	0	0
CGeR06025	Rakesh Kumar Chhajed	ADLPC4785E	ACLPC4005C	22386	Rakesh	Kumar Chhajed	0	0	0
CGeR08938	Ram Kumar Nayak	AGVFN9407D	APEPN3063K	23462	Ram Kumar	Nayak	1	25,43,000	26,44,720
CGeR02722	Ramesh Singh	CEIPS9449M	BASPS6484H	8252	Ramesh	Singh	0	0	0
CGeR02825	Ravi Agrawal	ATUPA6182C	AMXPA5240R	7799	Ravi	Agrawal	0	0	0
CGeR05590	Rishabh Gupta	ASBPG0465E	BUBPG4352F	12988	Rishabh	Gupta	1	28,10,298	20,71,189.61
CGeR00658	Rakesh Kumar Gupta	ALCPG5473C	AHPPG4764R	16460	Rakesh	Kumar Gupta	1	22,52,000	18,66,457.6
CGeR02378	Ram Kumar Gupta	ARXPG1366K	ALJPG9570H	9074	Ram	Kumar Gupta	0	0	0
CGeR00288	Rana Satish	BCHPS6605K	BHCP6605K	8029	Rana	Satish	2	42,00,000	23,32,039.97
CGeR00024	Rupesh Kumar Jha	ALYPJ6688G	AENPJ1459B	9620	Rupesh	Kumar Jha	8	11,42,90,800	16,28,32,170
CGeR08563	Saket Kumar Sinha	PHKPS3058E	FHKPS3058F	20184	Saket	Sinha	0	0	0
CGeR05092	Sanjay Kumar Patel	AOIPP2717D	BMFPP7857M	12284	Sanjay Kumar	Patel	0	0	0
CGeR02098	Sanjay Kumar Soni	AJGPS9871E	ATGPS9871E	12295	Sanjay	Kumar Soni	0	0	0
CGeR00695	Sanjay Singh	AVDPS6199N	CILPS0058K	15414	Sanjay	Kumar Singh	0	0	0
CGeR02445	Santosh Kumar Rathi	AGDPR5070L	AFRPR9675Q	7497	Santosh Kumar	Rathi	0	0	0
CGeR01696	Santosh Kumar Sahu	ARMPS4110L	ADFPS0293J	9678	Santosh	Kumar Sahu	0	0	0
CGeR03178	Santosh Kumar Tiwari	AEQPT4983F	AISPT8515D	10373	Santosh	Kumar Tiwari	0	0	0
CGeR03674	Satish Kumar Agrawal	AFRPA8393J	AGVPA0953B	8067	Satish	Kumar Agrawal	0	0	0
CGeR03323	ShashiRanjanPrajapati	AKGPR8878R	AAIPQ5339E	7318	Shashi	RanjanPrajapati	1	63,80,000	57,45,190.01
CGeR00180	ShivnathDiwan	AWIPO2534N	AWIPD2534N	16841	Shivnath	Diwan	0	0	0
CGeR01534	Sunil Kumar Gupta	AHKPG1707H	AGHPF4407E	16351	Sunil	Gupta	0	0	0
CGeR01851	Sunil Singh	CKNPS5578N	BBDPS3796J	15752	Sunil	Singh	0	0	0
CGeR01653	Suresh Kumar Sahu	AUAPS0165L	EADPS8830P	20290	Suresh	Kumar Sahu	0	0	0
CGeR01272	Sanjay Agrawal	AGSPA9535A	AMMPA7745G	8181	Sanjay	UmendralAgrawal	0	0	0
CGeR00753	Sanjay Kumar Agrawal	ACIPA0259K	AFDPA6944B	8752	Sanjay Kumar	Agrawal	2	14,17,72,748.9	13,20,70,000
CGeR00911	Sanjay Kumar Gupta	ALGPG0887Q	AJBPG1895P	12080	Sanjay	Kumar Gupta	0	0	0
CGeR04199	Sanjay Kumar Pandey	CBDPP4276K	ALIPP4546R	10160	Sanjay	Kumar Pandey	0	0	0
CGeR02682	Sanjay Rathore	AGHPR0516K	BWYPR5698J	15165	Sanjay	Rathore	1	33,75,000	31,32,000.14

1	2	3	4	5	6	7	8	9	10
CGeR00949	Santosh Kumar Agrawal	ADIPA6512G	AGFPA1641N	11224	Santosh	Kumar Agrawal	13	2,49,77,000	1,84,23,905.51
CGeR04507	Shri Rajesh Singh	AKBPS4523P	BJOPS2459B	15040	Rajesh	Singh	0	0	0
CGeR01308	ShubhamAgrawal	BDBPA2587B	BWVPA9447H	17331	Shubham	Agrawal	0	0	0
CGeR00425	Sujit Kumar Singh	BMXPS0944F	BRMPS9719Q	16036	Sujit	Kumar Singh	0	0	0
CGeR00198	Sunil Kumar Agrawal	AZYPA8918N	ACIPA0138M	9055	Sunil	Kumar Agrawal	8	1,62,26,67,747	1,39,98,18,388
CGeR05885	Suresh Kumar Agrawal	AFFPA5390B	ABDPA3902F	11339	Suresh	Kumar Agrawal	0	0	0
CGeR01849	Tuka Ram Sahu	BFEPS7690A	HASPS8516N	19019	Tuka Ram	Sahu	0	0	0
CGeR00134	Varun Kumar Sahu	CJDPS3157E	FRKPS8061R	16248	Varun Kumar	Sahu	0	0	0
CGeR01392	Vijay Kumar Sharma	AVGPS4608D	AWKPS9197G	7432	Vijay Kumar	Sharma	0	0	0
CGeR00931	Vijay Patel	BVPPP1273B	BLGPP4772N	15112	Vijay	Patel	1	45,18,000	30,57,330.61
CGeR02647	Vinod Kumar Jaiswal	AFAPJ0433P	AFHPJ2845J	14251	Vinod	Kumar Jaiswal	0	0	0
CGeR02538	Virendra Kumar Gupta	AGIPG7651H	AHGP8063N	13110	Virendra	Gupta	0	0	0
CGeR01133	Vikram Singh	ANTPG4589Q	AVSPS3159F	10520	Vikram	Singh	0	0	0
79	Total						76	2,09,50,31,146	1,88,32,63,214

(Source: Information furnished by CHiPS and compiled by Audit)

Appendix 3.1.4

(Referred to in paragraph 3.1.3.4; page 66)

Tenders awarded to ineligible contractors

Tender ID	Department	Tender Value (in ₹)	Eligibility class (who can apply)	Class of vendors who secured L1	Vendor ID of L1	Quoted Price of L1 (₹)
19029	CGMSC	2,17,42,000	B and above	C	14469	1,75,52,317
12060	UADD	1,18,20,000	C and above	D	9034	1,10,98,980
16578	UADD	9,70,94,000	C and above	D	13061	8,63,36,000
19009	CGMSC	1,37,00,000	C and above	D	11410	1,63,13,960
19236	PWD	1,00,00,036	C and above	D	9115	80,01,029

As per the orders issued by PWD vide F-21-8/T/12/19/tender dated 24/01/2014 regarding e-Registration of bidders, the categorisation of contractors based on their class to participate in the bidding process are as under:

1. A Class contractor – Unlimited value to tender.
2. B Class contractor – Tender valuing upto ₹ 10 crore.
3. C Class contractor - Tender valuing upto ₹ 2 crore.
4. D Class contractor - Tender valuing upto ₹ 1 crore.

Appendix 3.1.5

(Referred to in paragraph 3.1.3.5; page 67)

Irregular acceptance of bids on grounds of improper/incorrect submission of income tax returns

Division	Tender -id	Agreement Nos.	PAC (₹ in Lakh)	Lowest bidder (L1)	Audit observations
PWD (B/R) division Bhanupratappur	15709	09/DL/ 2017-18	683.69	M/s G. C. Jain	Income tax assessment report not submitted by the bidder
	17536	23/DL/ 2017-18	1,314.98	M/s B. B. Verma	Income tax assessment report not submitted by the bidder
	15433	18/DL/ 2017-18	2,415.59	M/s Mallikarjun construction company	Income tax assessment report not submitted by the bidder
PWD (E/M) divisionn. Jagdalpur	13912	260/DL/ 2016-17	38.15	Shri Krishna infra developers	Income tax assessment report not submitted by the bidder
WRD Ambikapur	8719	20/DL/ 2016-17	761.09	M/s Sunil Kumar Singh	Income tax details of four years i.e. 2011-12 to 2014-15 (assessment year) was submitted in capacity of Firm (PAN-AABFS3007P) and details of the other one year (assessment year 2015-16) was submitted in personal capacity having PAN - APBPS7314D.
	4309	01/DL/ 2016-17	NA		Income tax details of four years i.e. 2011-12 to 2014-15 (assessment year) was submitted in capacity of Firm (PAN - AABFS3007P) and details of other one year (assessment year 2015-16) was submitted in personal capacity having PAN - APBPS7314D.
	4308	04/DL/ 2016-17	677.10		Income tax details of four years i.e. 2011-12 to 2014-15 (assessment year) was submitted in capacity of Firm (PAN - AABFS3007P) and details of other one year (assessment year 2015-16) was submitted in personal capacity having PAN - APBPS7314D.
	4307	11/DL/ 2016-17	NA		Income tax details of four years i.e. 2011-12 to 2014-15 (assessment year) was submitted in capacity of Firm (PAN - AABFS3007P) and details of other one year (assessment year 2015-16) was submitted in personal capacity having PAN - APBPS7314D.
WRD Kawardha	7680	11 DL/2016-17	606.16	M/s Yadav construction company	Income tax details of only four years have been submitted by the bidder and not five years as required.
	7681	12 DL/ 2016-17	749.85		Income tax details of only four years have been submitted by the bidder and not five years as required.
	7682	13 DL/ 2016-17	710.75		Income tax details of only four years have been submitted by the bidder and not five years as required.
	10954	16 DL/2016-17	977.00	M/s Raj construction	Bidder had not submitted the income tax details of last five years.
Total			8,934.36		

(Source: Information furnished by PWD, WRD and compiled by audit)

Appendix 3.2.1

(Referred to in paragraph 3.2.4.1; page 73)

Execution of non-rural road works from MNP fund

(₹ in lakh)

Sl. No.	Name of division	Name of work	Type of road	Date of sanction	Amount of sanction (₹ in lakh)	Status of work	Up to date expenditure (July 2018)
1	Raipur division no.1	Internal road at Deendayal Upadhyay Nagar Raipur	Internal city road	September 2015	1,166.73	Completed	809.70
2	Raipur division no.1	CC road at Avanti Vihar Colony Sector 2 of Bramhadeo Nagar Mahrshi Valmiki ward Raipur	Internal city road	October 2015	557.28	Completed	205.84
3	Raipur division no.1	CC road at Sitanagar Gogaon of Sant Kabirdas Ward no. 3 Raipur	Internal city road	October 2016	198.20	Completed	136.70
4	Raipur division no.1	CC road from canal to Shitla Mandir at Yatiyatan lal ward no.4 Raipur	Internal city road	October 2016	162.84	Completed	117.64
5	Pendra Road	Kota-Belgahna road	MDR	March 2016	1,158.56	Under progress	529.63
6	Surajpur	Bhagwanpur-Anandpur road of Premnagar	MDR	September 2014	813.21	Under progress	211.84
7	Surajpur	Ghat cutting and construction of road from Chandaura-Ghat Pendari Banaras main road	Interstate major road	December 2014	294.43	Under progress	85.06
8	Surajpur	Shyam Baba Mandir to PRA nursery	Internal city road	February 2016	55.41	Under progress	211.83
9	Surajpur	Ketka road Shabbir aata chakki to Shiv mandir	Internal city road	February 2016	79.37	Under progress	
10	Surajpur	Pawanpur-Bithiyapara-Parmeshwarpur road of Premnagar	MDR	September 2014	383.08	Completed	349.17
11	Gariyanbandh	Rajim-Gariyaband-Bardula-Deobhog road	Interstate main road	September 2013	179.12	Completed in June 2015	154.31
12	Durg	Construction of CC road in four-way direction of Durg city.	Internal city road	February 2014	590.48	Completed in November 2015	440.71
13	Rajnandgaon	Approach road of Medical College	City road	May 2015	297.87	Completed in August 2016	169.35
14	Rajnandgaon	Construction of Bawarmara Bhothali bypass road	Important bypass road	March 2017	314.46	Tender stage	2.27
15	Champa	Sakti-Barpali-Basinpat Road KM 11 to 15	MDR	July 2016	1,058.95	Under progress	663.90
16	Champa	Approach road for administrative building of SP Office	Internal city road under municipality	March 2016	14.99	Completed	13.70
17	Korba	Darri-Gabraghat road length 4.329 km	Bypass road	April 2016	1,899.49	Under progress	533.88
		Total			9,224.47		4,635.53

©
**COMPTROLLER AND
AUDITOR GENERAL OF INDIA
2018**
www.cag.gov.in

Email: agauchhattigarh@cag.gov.in