

Report of the Comptroller and Auditor General of India on

Economic Sector

for the year ended March 2014





Government of Odisha *Report No. 6 of the year 2014* Report of the Comptroller and Auditor General of India on Economic Sector

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Preface

This Report for the year ended March 2014 has been prepared for submission to the Governor of Odisha under Article 151 of the Constitution of India.

The Report contains significant results of the performance audit and/or compliance audit of the Departments of the Government of Odisha under the Economic Sector including Departments of Agriculture, Co-operation, Commerce and Transport, Energy, Employment and Technical Education and Training, Forest and Environment, Finance, Fisheries and Animal Resources Development, Industries, Micro Small and Medium Enterprise, Steel and Mines, State Excise, Textile Handloom and Handicraft, Tourism, Works and Water Resources. However, Departments of Food Supplies and Consumer Welfare, Finance, General Administration, Health and Family Welfare, Higher Education, Home, Housing and Urban Development, Information and Public Relations, Information Technology, Labour and Employment, Law, Panchayati Raj, Parliamentary Affairs, Planning and Coordination, Public Enterprises, Public Grievances and Pension Administration, Revenue and Disaster Management, Rural Development, School and Mass Education, Science and Technology, ST and SC Development and Minorities and Backward Classes Welfare, Sports and Youth Services and Women and Child Development are excluded and covered in the Report on General and Social Services.

The instances mentioned in this Report are those, which came to notice in the course of test audit for the period 2013-14 as well as those which came to notice in earlier years, but could not be reported in the previous Audit Reports; instances relating to the period subsequent to 2013-14 have also been included, wherever necessary.

The audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Chapter 1

Introduction

Chapter 1 Introduction

1.1 About this Report

This Report of the Comptroller and Auditor General of India (CAG) on Government of Odisha relates to matters arising from Performance Audit of Accelerated Irrigation Benefit Programme, Environment Audit on Air and Water Pollution in Odisha and Compliance Audit of Government Departments/Autonomous Bodies.

The primary purpose of the Report is to bring to the notice of the State Legislature, important results of audit. Auditing standards require that the materiality level for reporting should be commensurate with the nature, volume and magnitude of transactions. The audit findings are expected to enable the executive to take corrective action as also to frame policies and directives that will lead to improved financial management of the organisations, thus contributing to better governance.

Compliance Audit refers to examination of the transactions relating to expenditure, receipts, assets and liabilities of the audited entities to ascertain whether the provisions of the applicable Rules, Laws, Regulations, various orders and instructions issued by the competent authorities are being complied with.

Performance Audit examines the extent to which the objectives of an organisation, programme or scheme have been achieved economically, efficiently and effectively.

Environment Audit examines the extent to which the objectives of adequate measures for compliance to Environmental Laws, infrastructure and funding, effective monitoring mechanism framed for timely identification and remediation of sources of pollution, proper management information system for evaluating impact of pollution on environment and checking Water and Air Pollution in Odisha have been achieved.

This chapter provides the audited entity's profile, the planning and extent of audit and a synopsis of the significant audit observations. Chapter 2 of this Report deals with the findings of Performance Audit and Environment Audit and Chapter 3 deals with Compliance Audit of various departments.

The cases mentioned in the Report are among those which came to notice in the course of test audit of accounts during the year 2013-14 as well as those which had come to light in earlier years but could not be dealt with in previous Reports. Matters relating to the period subsequent to 2013-14 have also been included, wherever necessary.

1.2 Audited entity's profile

There were 38 departments in the State at the Secretariat level headed by Additional Chief Secretaries/ Principal Secretaries/ Commissioner-cum-Secretaries/ Secretaries, assisted by Directors and Sub-ordinate Officers. Of these, 17 Departments including PSUs/Autonomous bodies coming under these Departments are under the audit jurisdiction of the Principal Accountant General (Economic and Revenue Sector Audit).

1.3 Authority for Audit

The authority for Audit by the CAG is derived from Articles 149 and 151 of the Constitution of India and the Comptroller and Auditor General's (Duties, Powers and Conditions of Services) Act, 1971. The CAG conducts audit of expenditure of the departments of Government of Odisha under section 13¹ of the CAG's (DPC) Act 1971. In addition, the CAG conducts audit of Autonomous Bodies substantially funded by the State Government. Principles and methodologies for various audits are prescribed in the Auditing Standards and the Regulations on Audit and Accounts 2007 issued by the CAG.

1.4 Planning and conduct of audit

Audit process starts with the risk assessment of the Department / Organisation as a whole and that of each unit based on expenditure incurred, criticality/ complexity of activities, level of delegated financial powers, assessment of internal controls, concerns of stakeholders and the likely impact of such risks. Previous audit findings are also considered in this exercise. Based on this risk assessment, the frequency and extent of audit are decided. An Annual Audit Plan is formulated to conduct audit on the basis of such risk assessment.

After completion of audit of each unit, Inspection Reports (IRs) containing audit findings are issued to the Heads of the entities. The entities are requested to furnish replies to the audit findings within one month of receipt of the Inspection Reports. Whenever replies are received, audit findings are either settled or further action for compliance is advised. The important audit observations made in these Inspection Reports/Performance Audits are processed for inclusion in the Audit Reports which are submitted to the Governor of Odisha under Article 151 of the Constitution of India.

1.5 Significant observations on Performance Audit

This Report contains two Performance Audits. The focus has been on the audit of specific programmes/ schemes/ activities and offering suitable recommendations, with the intention to assist the Executive in taking corrective action and improving service delivery to the citizens. Significant audit observations are discussed below:

Audit of (i) all transactions from the Consolidated Fund of the State, (ii) all transactions relating to Contingency Fund and Public Accounts and (iii) all trading, manufacturing, profit and loss accounts, balance sheets and other subsidiary accounts.

1.5.1 Performance Audit of Accelerated Irrigation Benefit Programme

Performance Audit conducted for the period 2009-14 revealed that Department of Water Resources (DoWR) has mandate to plan, develop, utilise and manage water resources. Department implements irrigation projects with funds provided by Government of India (GoI) and State Government.

GoI launched Accelerated Irrigation Benefit Programme (AIBP) in 1996-97 to accelerate implementation of large irrigation projects which are beyond resource capability of State Government and expeditious completion of projects which were in advanced stage of completion. Implementation of AIBP funded irrigation project was last reviewed by Audit and findings included in the Report of Comptroller and Auditor General for the years ended March 2003 and March 2009. Persistent deficiencies pointed out in earlier Audit Reports prompted Performance Audit (May to July 2014) covering eight major/medium and 13 minor irrigation projects (MIPs). Broad objectives of audit were to assess effectiveness of planning process, financial management and execution of projects as per programme guidelines, manual provisions and approved Schedule of Rates (SoR).

Performance Audit revealed that despite being pointed out earlier, projects still suffered time and cost overrun due to delay in acquisition of land, finalisation of drawing and design and clearance of project site etc. With escalating expenditure on projects, proportion of benefits likely to accrue declined and some projects ran the risk of becoming unviable. Instances of calculation of Benefit Cost Ratios (BCRs) not holding good were also noticed.

Extra expenditure on account of estimates deviating from SoR, deficiencies in tendering process, etc. was noticed. Monitoring and internal control needed improvement. Financial implication by way of cost escalation and other deficiencies worked out to ₹ 3,157.97 crore. As a result of delay in completion of projects, people of the State were deprived of assured irrigation facility to that extent.

(Paragraph 2.1)

1.5.2 Environment Audit on Air and Water pollution in Odisha

Performance Audit of Environment conducted for the period 2009-14 revealed that environmental degradation, air and water pollution is of global significance. It was observed that Comprehensive Environmental Pollution Index scores remained at critical level at Angul-Talcher, Ib-Valley and Jharsuguda. Operation of Stone Crusher Units without Consent to Establish (CTE)/ Consent to Operate (CTO), delay in upgradation of Pollution Control Equipment (PCE) by Thermal Power Plants (TPPs) to achieve the desired stack emission norm were observed. State Transport Authority also failed to check vehicular pollution in the State.

There were deficiencies in monitoring of water quality. Untreated sewage of Urban Local Bodies (ULBs) of State were being discharged to nearby water

bodies accompanied with untreated effluents of industrial units due to absence of effluent treatment plants (ETPs). Water samples of three tributaries of Mahanadi near Cuttack and Bhubaneswar were checked in State Pollution Control Board (SPCB) laboratory and showed non compliance to norms in respect of Bio-chemical Oxygen Demand (BOD), Dissolved Oxygen (DO) and Total Coliform (TC). This apart, relaxation of norms in consent administration, non implementation of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) and Online Emission Monitoring Systems (OEMS) indicated areas for improvement by SPCB. Besides, absence of complete database of all sources of pollution, their timely monitoring and issue of conditional consents have resulted in need to put in far more concerted efforts.

(Paragraph 2.2)

1.6 Significant Audit observations on Compliance Audit

1.6.1 Functioning of Orissa University of Agriculture and Technology

Ten Agro Polytechnic Centres were created without ensuring teachers and basic infrastructure. As a result, infrastructure and establishment of KVKs were utilised for Agro Polytechnic Centres in violation of ICAR guidelines. Balance required land for KVKs was not provided, resulting in non achievement of KVKs objectives. Non filling up post of teachers in colleges/ research stations led to non utilisation of central assistance, besides non imparting of quality education to students in absence of faculty.

(Paragraph 3.1)

1.6.2Idle investment

Failure of Executive Engineer to ensure acquisition of land for canal systems before commencing project works led to idle investment of ₹ 5.50 crore on head works of five MIPs.

(Paragraph 3.2)

1.6.3 Undue benefit to contractors

Executive Engineer's adoption of rates for manual excavation of earth at rate of ₹ 33.48 to ₹ 43.77 per cum was in deviation to description of items of work to be done by mechanical means at an admissible rate of ₹ 15.38 per cum as per SoR. Adoption of unwarranted manual excavation rates for total quantity of 5.76 lakh cum of earth led to escalation of item rates from ₹ 18.10 to ₹ 28.39 per cum in three estimates. Total extra cost due to escalation of item rates was ₹ 1.79 crore which ultimately resulted in undue benefit to contractors.

(Paragraph 3.3)

1.6.4 Upgradation of Industrial Training Institutes through Public Private Partnership and Setting up of New Polytechnics

Government of India (GoI) launched scheme for upgradation of existing ITIs into Centre of Excellence (CoE) in 2004-05 through PPP mode with World Bank (WB) assistance and without WB assistance. Schemes were implemented as per Institute Development Plans (IDPs) in 11 ITIs of the state during 2004-05 to 2013-14 and 14 ITIs of State during 2007-08 to 2013-14 respectively. There was shortfall in trade/ CoE sector upgradation/introduction and funds allotted remained unutilised as of March 2014. Academic activities fell short of required target fixed because of shortage of instructors, inadequate infrastructure and delay in getting NCVT affiliation. Consequently, trainees had been deprived of quality training and better employment opportunity.

GoI launched scheme "setting up of new polytechnics" as a component of the Sub-mission on Polytechnics to be implemented in unserved and underserved districts in the country during 11th Plan period. Accordingly, 22 polytechnics were sanctioned to be set up in Odisha. Fourteen polytechnics had not been completed mainly due to non commencement of construction works, delay in handing over of land and lack of monitoring of implementation of scheme. There were shortfalls in equipment and enrollment of trainees depriving students of getting quality teaching for better employment.

(Paragraph 3.4)

1.6.5 Implementation and effectiveness of plantation

Plantation activities were being sometimes carried out by Divisions as per targets fixed by PCCF without fully checking site conditions. In some cases plantation activities were carried out on contract basis and not departmentally as required. In plantation activities, time schedules were not adhered to. Stumps and seeds were procured from private parties instead of collecting departmentally or obtaining from Silvicultural Divisions. Periodical supervisions by ROs, DFOs and higher authorities were not conducted to ensure successful plantation.

(Paragraph 3.5)

1.6.6Short realisation of Net Present Value

As against NPV realisable for \gtrless six crore from two user agencies, a sum of \gtrless 4.78 crore was realised resulting in short realisation of \gtrless 1.22 crore. Neither did the user agencies deposit the differential dues of NPV nor did the DFOs issue demand notices against the agencies for recovery of balance NPV.

(Paragraph 3.6)

1.6.7 Non disposal of timber

Timber and forest produce valued at ₹ 39.25 lakhs seized under 9,857 UD forest offence cases in 2011-12 to 2012-13 were lying undisposed (March 2014), which resulted in blockage of revenue of ₹ 39.25 lakh

(Paragraph 3.7)

1.6.8Implementation of Single Window Mechanism and Financial
Incentives under Industrial Policy Resolution 2007

The Industrial Policy Resolution (IPR), a policy framework for industrial promotion and investment facilitation including operationalisation of Single Window mechanism was introduced in the State with effect from 2 March 2007 to facilitate setting up of industries and extension of financial incentives to industrial units. Audit of implementation of the scheme revealed that the numbers of CAFs declined year after year. Further, the finalisation of CAFs received during the period 2007-14 was also delayed due to non holding of SLSWCA/ HLCA/DLSWCA and lack of monitoring on the part of IPICOL. Audit further, noticed deficiencies in implementation of various incentive schemes provided in the IPR such as exemption from stamp duty, reimbursement of value added tax, exemption of electricity duty which were extended to ineligible units. Monitoring and internal control required improvement.

(Paragraph 3.8)

1.6.9 Extra cost due to inflated rate in estimate

Unwarranted deviation in estimate of excavation work from mechanical to manual means inflated item rate involving extra cost and undue benefit of $\mathbf{\xi}$ 1.48 crore to contractor.

(Paragraph 3.9)

1.6.10 Non recovery of Government dues from the defaulting contractor

Contractor abandoned work leaving balance of works valued at ₹ 5.26 crore. As such a sum of ₹ 0.67 crore being 10 *per cent* of estimated cost as LD and penalty of ₹ 1.05 crore being 20 *per cent* of the value of left over work (total ₹ 1.72 crore) was recoverable from contractor as per terms and conditions of agreements. Only a sum of ₹ 19.80 lakh was forfeited and balance LD and penalty of ₹ 1.52 crore remained unrecovered.

(Paragraph 3.10)

1.6.11 Extra cost due to non finalisation of tender within extended validity period

Non finalisation of tender even during the extended validity period not only resulted in extra cost of \gtrless 1.11 crore but also delayed improvement of road.

(Paragraph 3.11)

1.6.12 Extra cost due to non execution of agreement within validity period

Delay at each stage of tender finalisation led to non execution of agreement within the extended validity period. The work was awarded (February 2014) on retender to a contractor at a cost of ₹ 23.96 crore to complete the work in February 2016 which resulted in extra cost of ₹ 4.73 crore.

(Paragraph 3.12)

1.6.13 Avoidable extra expenditure

It was observed from the records that though CBR values of subgrade soil were more than the required two *per cent* (i.e. three to 10 *per cent*) indicating adequate load bearing capacity, divisions provided capping layer of sand with thickness ranging from 150 mm to 500 mm. Unwarranted provision of capping layer of sand and reducing the thickness of GSB resulted in avoidable extra expenditure of ₹ 7.54 crore.

(Paragraph 3.13)

1.6.14 Response to Audit

A review of IRs issued upto March 2014 pertaining to 17 departments showed that 18,940 paragraphs relating to 5,471 IRs were outstanding at the end of June 2014. Of these, 1,848 IRs containing 5,222 paragraphs are outstanding for more than 10 years. Even first reply from the Heads of Offices which was to be furnished within one month was not received in respect of 1,115 IRs issued upto March 2014.

Serious irregularities noticed in audit are included in the Reports of the Comptroller and Auditor General that are presented to State Legislature. According to Finance Department instructions (December 1993), Administrative Departments are required to furnish explanatory notes on transaction paragraphs, reviews/performance audits, etc. included in Audit Reports within three months of their presentation to State Legislature. It was noticed that in respect of Audit Reports from year 1997-98 to 2011-12, seven² out of 17 departments, which were commented upon, did not submit explanatory notes on paragraphs and reviews as of March 2014.

² Works, Water Resources, Agriculture, Energy, Fisheries and Animal Resources Development, Industries and Forest Departments.

Out of 573 recommendations relating to Audit Report made by the PAC from first Report of 10th Assembly (1990-95) to 40th Report of 13th Assembly (2004-09), final action on 89 recommendations was awaited as on March 2014.

(Paragraph 3.14)

Chapter 2

Performance Audits

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Chapter 2 Performance Audit

Department of Water Resources

Performance Audit of Accelerated Irrigation Benefit Programme

Executive Summary

Department of Water Resources (DoWR) has mandate to plan, develop, utilise and manage water resources. Department implements irrigation projects with funds provided by Government of India (GoI) and State Government.

GoI launched Accelerated Irrigation Benefit Programme (AIBP) in 1996-97 to accelerate implementation of large irrigation projects which are beyond resource capability of State Government and expeditious completion of projects which were in advanced stage of completion. Implementation of AIBP funded irrigation project was last reviewed by Audit and findings included in the Report of Comptroller and Auditor General for the years ended March 2003 and March 2009. Persistent deficiencies pointed out in earlier Audit Reports prompted this Performance Audit (May to July 2014) covering eight major/medium and 13 minor irrigation projects (MIPs) over 2009-14. Broad objectives of audit were to assess effectiveness of planning process, financial management and execution of projects as per programme guidelines, manual provisions and approved Schedule of Rates (SoR).

Performance Audit revealed that despite being pointed out earlier, projects still suffered time and cost overrun due to delay in acquisition of land, finalisation of drawing and design and clearance of project site. With escalating expenditure on projects, proportion of benefits likely to accrue steadily declined and some projects ran the risk of becoming unviable. Instances of calculated BCR not holding good rendered projects viability questionable.

Extra expenditure on account of estimates deviating from SoR, deficiencies in tendering process, etc. was noticed. Monitoring and internal control needed improvement. Financial implication by way of cost escalation and other deficiencies worked out to ₹ 3,157.97 crore. As a result of delay in completion of projects, people of the State were deprived of assured irrigation facility to that extent.

2.1 Introduction

Major and Medium irrigation projects are Capital intensive in nature. The State Governments with limited resources find themselves unable to meet the desired fund required for all the projects. Project completion gets delayed and a large number of projects in the country have spilled over from one plan to another plan. Further, funds spent on these projects are locked up and the country is not able to derive the desired benefits. This was a matter of great concern for the Union Government. Against the above backdrop the Accelerated Irrigation Benefit Programme (AIBP) was launched by the Government of India (GoI) in the year 1996-97 to provide financial assistance to State Government for accelerating the pace of irrigation development in the country which are beyond the resource capability of the State Government and expeditious completion of the projects which were in advanced stage of completion.

2.1.1 Organisational set up

Department of Water Resources (DoWR) headed by Principal Secretary to Government of Odisha implemented AIBP funded projects in the State. Execution of the projects was supervised by Engineer-in-Chief (EIC) with assistance of five³ Chief Engineers and Basin Manager (CE&BM), nine⁴Chief Construction Engineers/Superintending Engineers (CCEs/SEs) and 32⁵ Executive Engineers (EEs).

2.1.1.1 Audit objectives

AIBP funded projects were reviewed earlier for periods from 1998-99 to 2002-03 and again for 2004-05 to 2008-09 and findings were included in Audit Reports of Comptroller & Auditor General of India for the years ended March 2003 and March 2009 respectively. Audit was again taken up and the present Performance Audit was intended to assess whether;

- Planning process comprehensively identified projects based on proper survey and consultation in implementation and accordingly prioritised works.
- Financial Management supported achievement of stated objectives of projects.
- Programmes were implemented in accordance with scheme guidelines/ manual provision/SoR and intended objectives were achieved.
- Monitoring and internal control systems were adequate.

2.1.1.2 Audit criteria

Audit criteria were sourced from the following:

³ CE & BM, Baitarani Subarnarekha Budhabalanga Basin, CE, Kanupur Irrigation Project, CE, Lower Indra & Lower Suktel Irrigation Project, CE, Minor Irrigation and CE&BM, RVN Basin.

⁴ CCE, Anandpur Barrage Project, CCE, Upper Kolab Irrigation Project, CCE, Lower Suktel Irrigation Project, SE, Subarnarekha Irrigation Project, SE, Kanupur Irrigation Project, SE, Sambalpur Irrigation Circle, SE, KBK Circle, SE, Southern Circle and SE, KBK (MI) Circle.

⁵ EEs, Jambhira Division No. I, Jambhira Division No. II, Subarnarekha Irrigation Division No. I, Subarnarekha Irrigation Division No. II, Betnoti Canal Division, Salandi Canal Division, Anandpur Barrage Division, Bidyadharapur Canal Division, Kanupur Head Works Division, Rehabilitation Camps & Building Division, Kanupur Canal Division, Telengiri Head Works Division, Telengiri Canal Division, Ret Irrigation Division, Rukura Irrigation Division, Lower Indra Canal Division No. I, Lower Indra Dam Division, Earth Dam Division, LSIP, Chhelegada Head Works Division, No. IV, RRC Division No. V, RIC Division No. V, Bhawanipatna and MI Division, Jeypore.

- Scheme guidelines, Annual Plans, Perspective Plans, Regulations, orders/instructions of GoI/Government of Odisha (GoO).
- Investment appraisals indicating Benefit Cost Ratio (BCR).
- Detailed project reports, standard specifications, SoR and contract conditions.
- Policy guidelines, master plan and norms for implementation of projects.
- Orissa Public Works Department (OPWD) Code and Manuals.

2.1.1.3 Scope and methodology

Performance Audit was conducted from May to July 2014 covering period 2009-14. Eight⁶ major/medium projects and 13 Minor Irrigation Projects⁷ (MIPs) were selected out of 12 major/medium and 60 MIPs respectively using Stratified Random Sampling method, taking into consideration allocation of funds under budget/actual expenditure on projects with geographical representation. Audit objectives, criteria as well as scope and methodology were discussed in an entry conference held with Principal Secretary to Government on 25 April 2014.

Draft Performance Audit Report was issued (August 2014) to Government and findings were discussed in an exit conference in November 2014. Views of Government have been considered while finalising report.

Audit findings

2.1.2 Planning and survey of projects

2.1.2.1 Target of irrigation

As against target of providing irrigation to 1.65 lakh hectares (ha) of culturable command area (CCA), Department could provide irrigation to 0.66 lakh ha (average 40 *per cent*) ranging from 11 to 68 *per cent* during period 2009-14 as detailed below.

			(In hectares)
Target fixed for	Achievement of	Shortfall in	Percentage of
Irrigation potential	Irrigation potential	achievement	achievement
29,500	18,766	10,734	64
38,550	26,100	12,450	68
41,046	10,080	30,966	25
37,030	4,179	32,851	11
19,000	7,035	11,965	63
1,65,126	66,160	98,966	40
	Irrigation potential 29,500 38,550 41,046 37,030 19,000 1,65,126	Irrigation potentialIrrigation potential29,50018,76638,55026,10041,04610,08037,0304,17919,0007,035	Irrigation potentialIrrigation potentialachievement29,50018,76610,73438,55026,10012,45041,04610,08030,96637,0304,17932,85119,0007,03511,9651,65,12666,16098,966

Table No. 2.1Percentage of irrigation achievement

Source: Data received from EIC (Water Resources)

⁶ Subarnarekha Irrigation Project, Kanupur Irrigation Project, Lower Indra Irrigation Project, Anandpur Barrage Project, Lower Suktel Irrigation Project, Ret Irrigation Project, Rukura Irrigation Project and Telengiri Irrigation Project.

⁷ Kankubadi, Ankamara, Mangolajore, Subarnarekha, Jarhiaguda, Budrapara, Suliabahal, Batharla, Daitarimunda, Andhiraijore, Tukuguda, Lakitigurha and Asanga.

The short fall in achievement of targets was mainly due to taking up of work without land acquisition, delay in preparation of drawings and designs, delay in payment of R&R assistance, large scale deviations due to improper survey and investigation and non synchronisation of various project works etc. as discussed in succeeding paragraphs. Non completion of these projects in time not only led to cost and time overrun but also deprived the people the benefit of assured irrigation facilities.

2.1.2.2 Construction of projects with improper planning

Under AIBP, GoI has been providing assistance in the form of grant to ensure timely construction of projects. Orissa Public Works Department (OPWD) code, provided that department conduct pre-construction survey, investigation and planned execution of projects in a systematic manner so that basic requirement such as land, forest and environmental clearance, ayacut planning⁸, designing of various components and resettlement and rehabilitation of people affected by projects in coordination with other departments are completed on time.

Audit noticed that due to improper planning, execution of projects was affected and this resulted in time and cost overrun as detailed below.

Sl.	Name of the	6	Driginal prop	osal	Present status	Impact of delay	Response/Remarks
No.	project	Year	Cost (₹	Year of			
			in crore)	completion			
1.	Subarnarekha Irrigation Project (SIP)	1996-97	1,013.68	2001-02	Project had not been completed due to problems in land acquisition, rehabilitation and resettlement of project affected persons, designing various components and large scale deviations on realignment of canal.	Projectcostincreasedto₹ 5,629.64crore(555per cent)in2012-13.Afterincurringexpenditureexpenditureof₹ 2,431.15crore(March2014),irrigation to only18,381ha(17per cent)asagainst the targetof1,09,627hahasbeenachieved.	Government stated (October 2014) that CWC has approved the revised cost and extended the target date of completion to March 2017 and beyond.
2.	Lower Indra Irrigation Project (LIIP)	1999-00	211.70	2003-04	Project had not been completed due to delay in land acquisition, defective design, passing of flood water due to closing of river gap without completion of	Project cost was increased to ₹ 1,624.49 crore (767 <i>per cent</i>) in 2012-13. Even after delay of 10 years over completion period and incurring an expenditure of ₹ 1,218.69 crore	Government stated (October 2014) that overtopped dam base is nearing completion.

Table No. 2.2 Details of projects taken up with revised cost

⁸ Estimated area to be irrigated.

<i>Sl</i> .	Name of the		Priginal prop		Present status	Impact of delay	Response/Remarks
No.	project	Year	Cost (₹	Year of			
3.	Lower Suktel Irrigation Project (LSIP)	1999-00	<i>in crore)</i> 217.13	<i>completion</i> 2003-04	spillway and subsequent scouring of dam base and defective execution of work by contractor. Displaced families in submerged area agitated due to non payment of	by March 2014, the project has not been completed and no irrigation could be achieved. Project cost revised to ₹ 1,041.81 crore (480 per cent) in 2008-09. After	Government stated (October 2014) that the works have been taken up since April 2013.
					compensation to them and hence the project works could not be started by contractors and contracts were closed and awarded to Orissa Construction Corporation (OCC). Besides, the project could not be completed due to delay in finalisation of canal	incurring expenditure of ₹ 428.36 crore up to March 2014, the project works remained at stand still.	
4.	Ret Irrigation Project	2003-04	86.14	2007-09	alignment. Due to delay in finalisation of design, project could not be completed.	The project cost revised to ₹ 433.39 crore (503 <i>per cent</i>) in 2012-13. After incurring expenditure of ₹ 182.30 crore up to March 2014, the project remained incomplete.	Government stated (October 2014) that the design of major portion of GAD of spillway have been received and the work is in full progress.
5.	Telengiri Irrigation Project	2003-04	106.18	2007-08	Project remained incomplete due to non finalisation of design of spillway. Further, mouth portion of main canal could not be completed due to non acquisition of land.	The project cost has been revised to \gtrless 474.04 crore (446 <i>per cent</i>) in 2009-10. After incurring expenditure of \gtrless 325.72 crore, the project remained incomplete.	Government stated (October 2014) that after finalisation of design of the spillway the work will be taken up.
6.	Rukura Irrigation	2009-10	155.48	2013-14	Due to delay in finalistion of	The project cost has been revised	Government stated (October 2014) that

Audit Report	(Economic	Sector)	for the	year ended	March 2014
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Sl.	Name of the	6	Original prop	osal	Present status	Impact of delay	Response/Remarks
No.	project	Year	Cost (₹ in crore)	Year of completion			
	Project				design of spillway and problems in rehabilitation of project affected people, project could not be completed.	to ₹256.09 crore (165 per cent) in 2012-13. Project could not be completed even after incurring expenditure of ₹119.77 crore as of March 2014.	the General Arrangement Drawing was received in March 2014. The project will be completed with extension of time upto March 2016.
7.	Kanupur Irrigation Project (KIP)	2003-04	428.32	2007-08	Due to delay in finalisation of design and large scale deviations, spillway of the project could not be completed. Earth dam execution was in haphazard condition.	The project cost has been revised to ₹1,801.25 crore (421 <i>per cent</i>) in 2013- 14. Till March 2014, an expenditure of ₹1,018.28 crore was incurred on project.	Government stated (October 2014) that the CWC have approved the revised cost with extension of time upto March 2017 and beyond.
8.	Anandpur Barrage Project (ABP)	2005-06	482.26	2009-10	Due to non finalisation of design and drawings, the Barrage across Baitarani river could not be completed. Main canal work had been taken up only in 9 km out of 73 km.	The project cost had been increased to ₹ 1,603.40 crore (332 <i>per cent</i>) in 2010-11. Till March 2014, an expenditure of ₹ 525.73 crore had been incurred.	Government stated (October 2014) that delay in completion of the Barrage need not be considered due to non finalisation of drawing as lot of inputs are required to be supplied to CWC for finalisation of design.

As may be seen from the above, projects could not be completed due to improper planning which not only led to cost overrun from \gtrless 2,700.89 crore to \gtrless 12,864.11 crore (average increase by 476 *per cent*) but also time overrun thereby depriving people of the benefit of irrigation even after incurring substantial expenditure.

2.1.2.3 Execution of works without land acquisition

As per Para 3.7.4 of OPWD Code, no work should commence unless land for the purpose was available. Department was to prioritise land acquisition in coordination with Revenue Department. Test check of two⁹ out of eight major/medium irrigation projects revealed as follows:

• Process for acquisition of land in 33 villages under submergence area of Ichha reservoir was initiated in 1987-88 by DoWR. Land Acquisitions of ten out of 33 villages were completed and compensation was paid at approved rate of 1987-88. Subsequently, based on proposal of EE, Rehabilitation Division (June 1996), Special LAO withdrew proposal as the lands were not required for works as

⁹ Subernarekha Irrigation Project and Lower Suktel Irrigation Project.

per decision of CE&BM, Baitarini, Subernarekha and Budhabalanga Basin.

However, scrutiny of records revealed that EE again requested (August 2012/May 2013) for acquisition of land in eight villages which were earlier withdrawn based on proposal of said EE. Accordingly, land was acquired in 2012-13 and LA compensation amounting to ₹ 8.24 crore was paid against the original required amount of ₹ 1.81 crore.

Thus, failure of EE to assess requirement of land correctly led to extra payment of \gtrless 6.43 crore.

Government assured (November 2014) that reasons for delay would be investigated.

• Executive Engineer, Lower Suktel Irrigation Project had submitted proposal for acquisition of 727.10 acre of land in village Garjan for construction of Lower Suktel Irrigation Project. Cost of the land was estimated at ₹2.88 crore. Revenue and Disaster Management Department (R&DM) issued notification for acquisition of land in November 2006.

Scrutiny of records revealed that EE subsequently (May 2010) requested for withdrawal of above notification and issue of fresh notification for acquisition of 331 acre of land (January 2011).

Based on this, revised notification was issued by R&DM Department in December 2010 and Special LAO requested DoWR to deposit ₹11.37 crore including additional items such as house and well. This was sanctioned by DoWR in December 2011 which includes 12 *per cent* interest, 30 *per cent* solatium, deposit of revenue and miscellaneous expenditure at 10 *per cent*. The estimated cost of 331 acre of land including the cost of house and well was ₹8.88 crore during initial period (November 2006).

Thus, improper assessment of requirement of land led to avoidable extra cost of \gtrless 2.49 crore¹⁰ towards LA compensation.

2.1.2.4 Non completion of work

Salandi Sanskar Project, one of the eight projects test checked, basically a flood protection scheme of river Salandi, a part of integrated Anandpur

Barrage Project was approved by Planning Commission in October 2003 at an estimated cost of ₹ 99.14 crore for completion by 2007-08. Project provided for raising and strengthening of embankment over a length of 67.4 km by 1.22 m over the maximum water level, widening the river bed to 98 m from RD.52.80 km to RD.61.10 km and



Encroachment of river Salandi

¹⁰ ₹ 11.37 crore - ₹ 8.88 crore.

to 52 m from RD.61.10 km to tail end and to restore two branches of Salandi river for stabilisation of 7,111 ha of Culturable Command Area (CCA).

Scrutiny of records revealed that against designed bed width between 98/52 m to discharge peak flood, actual execution was restricted to bed width between 70/30 m to pass only medium flood water for want of land. Even restricted bed width could not be achieved due to encroachment and construction of buildings inside river bed. Similarly, renovation to its branches could not be completed for want of land due to which stabilisation of ayacut had not been achieved. Besides, due to persistent problem, no provision of funds was made in the budget for the year 2014-15 to complete the work.

Thus, due to poor planning, the desired objective of Salandi Sanskar Project could not be achieved even after incurring expenditure of ₹ 73.11 crore.

Government stated (October 2014) that the river bed was excavated as per availability of Government land to pass medium flood water as short term measure in phase-I and full design section would be excavated after land acquisition process is completed. But project remained incomplete and there was no provision of fund to achieve full design section.

2.1.2.5 Execution of Head works pending acquisition of land for distribution system

Under AIBP, 60 MIPs were sanctioned during 2007-09 at a cost of \gtrless 137.65 crore for completion between 2009-10 and 2010-11. Of the 60 projects, only three projects were completed at a cost of \gtrless 3.02 crore. Of the balance 57

projects, head works for 27 projects sanctioned at an estimated cost of ₹ 53.93 crore were completed with an expenditure of ₹ 48.48 crore and distribution system to carry water for irrigation purpose could not be completed due to non acquisition of land. This resulted not only in blockage of ₹ 48.48 crore for more than one to three years but also deprived people of the area of benefit of irrigation. Further,



Semelmunda Diversion weir

22 projects with approved cost of \mathbf{E} 44.43 crore to provide irrigation to 5,715 ha though awarded could not be completed even after incurring expenditure of \mathbf{E} 46.40 crore on head works.

Similarly, three MIPs in KBK districts at estimated cost of \gtrless 12.26 crore though sanctioned to provide irrigation to 1,121 ha of CCA were dropped after incurring expenditure of \gtrless 44 lakh due to agitation by local people. Thus taking up of work without proper planning led to unfruitful expenditure of \gtrless 44 lakh.

In remaining five projects, civil works could not commence even after incurring expenditure of \gtrless 2.94 crore as the land had not been acquired even after payment.

While accepting factual position, Government stated (November 2014) that in most of the cases, head works had been completed and distribution works remained incomplete due to non completion of land acquisition.

2.1.2.6 Laxity in eviction of people in project area leading to non completion of works and extra payment of R&R assistance

OPWD Code provides that no work should commence unless land for the purpose was available. Further, in case the construction of project required displacement of families from the project area, payment of ₹ 1.08 lakh to displaced families was to be made as per Rehabilitation and Resettlement (R&R) Policy 1994 which was revised in May 2006 with enhancement of assistance from ₹ 1.08 lakh to ₹ 4.86 lakh per family with provision for enhancement of 20 *per cent* at interval of every two years, It was noticed that there were delays in identification and enumeration of project affected persons to release R&R assistance and department failed to evict people from submerged area leading to non completion of works and extra payment of R&R assistance as discussed in paragraph No.2.1.2.7.

2.1.2.7 Delayed/Avoidable payment of R&R assistance

- Detailed Project Reports (DPRs) of four¹¹ major/medium projects provided for payment of R&R assistance amounting to ₹ 41.77 crore to 3,868 displaced families as per R&R policy 1994. Payment was not made till May 2006 although projects were sanctioned during 2002-04. In the meanwhile, number of displaced families increased to 6,476 due to minors attaining age of 18 years who became eligible for R&R assistance as per policy. Accordingly, DoWR sanctioned ₹ 299.17 crore between August 2008 and March 2014 for payment to 6,476 displaced families. Project Director (PD) had not made payment within two years, Government sanctioned ₹ 27.78 crore between November 2012 and May 2013, towards 20 *per cent* enhanced rehabilitation assistance to 2,787 displaced families leading to avoidable payment of ₹ 285.18 crore.
- Subernarekha Irrigation Project was taken up under AIBP in 1996-97. During the above period, department had not identified displaced families. Survey was conducted in 2008-09 and 2,388 displaced families were identified and an amount of ₹ 155.90 crore was sanctioned by DoWR during 2008-14 towards R&R assistance.

Scrutiny of records revealed that amount of R & R assistance during initial period (1996-97) would have been ₹ 25.79 crore.

Thus, delay in payment of R&R assistance resulted in avoidable extra payment of \gtrless 130.11 crore¹² towards R&R assistance including \gtrless 6.44 crore towards 20 *per cent* hike for further delay in payment by more than two years by the Project Director.

¹¹ KIP, Rukura, Ret and Telengiri. ¹² \neq 155 00 arora \neq 25 70 arora

¹² ₹ 155.90 crore - ₹ 25.79 crore.

Government assured (November 2014) that reasons for delay and displacement of people from project area in phases would be investigated.

2.1.3 Deficiencies in survey and investigation

As per para 3.2.3 of OPWD Code survey and investigation is to be done for preparation of Detailed Project Reports (DPRs) before execution of any project for completion in a time bound manner and also to achieve efficiency, economy and effectiveness. Review of records on feasibility of projects revealed that there were deficiencies in survey and investigation resulting in time and cost overrun besides idle investment as detailed below;

2.1.3.1 Continuance of project with unresolved issues

Subarnarekha Main Canal of 46.50 kilometer (km) length is feeder channel for

SIP. Works of concrete lining of canal and restoration of canals with service road were awarded to six contractors between December 2006 and April 2011 for completion between June 2008 and December 2013. Though four completed (December 2013) their works within the extended time, two contractors stopped (June 2012/April 2013) work (after execution of 68 *per cent*



Collapsed portion of SMC from RD 7950 to 8720 M

of work) due to repeated collapse of canal since December 2006. The collapse of canal is because of presence of kaoline soil, which the Department had not identified initially due to improper survey and investigation. Despite the above problem, Department had not taken any action (March 2014) for completion of balance restoration and lining of canal works.

Government stated (October 2014) that during execution of the work the existence of kaoline soil underneath was found and the restoration work will be taken up after finalisation of design by Central Water Commission. But the work remained incomplete for more than eight years.

Similarly, construction of Jambhira Left Main Canal including structures with cement concrete lining and service road was awarded to a contractor at a cost of \gtrless 87.14 crore in January 2009 for completion by January 2011. Due to change in alignment of canal to accommodate permissible forest land, length of canal was increased by 555 m, contractor had not excavated the canal for 480 m and extension of time was granted up to June 2013. The Department closed the contract in March 2014 and made payment of \gtrless 108 crore to contractor.

Scrutiny of records (May 2014) revealed that at the time of closure of contract, contractor had not executed canal embankment for 1,065 m, Cement Concrete lining for 2,554 m, service road for 20 km and 22 structures. The contract was closed without levy of penalty as the delay was not attributable to the

contractor. No step was taken by department for completion of balance work even after lapse of one year. Since the balance works including the extra length will be executed as per current SoR, the increase in cost cannot be ruled out.

2.1.3.2 Execution of works without taking remedial action

The Geologist, while conducting the survey and investigation of Kanupur Irrigation Project (1991-94) pointed out to the Department that there exist two continuous persistence pebble layers in dam axis. Since, the layers were found highly pervious and seepage of water flow through buried channel would pose serious problem after impounding of water in the reservoir, it would have to be addressed before construction of dam. The project was approved for ₹ 428.32 crore to provide irrigation to 29,578 ha of CCA in 2003-04 for completion by 2007-08.

Scrutiny of records revealed that construction of earth dam of the project was taken up in September 2007 for completion in March 2010. The work was taken up without considering the above findings of the Geologist. The work was in progress (March 2014). The construction of spillway of the project was taken up in November 2007 for completion by May 2010. During excavation of foundation of spillway, EE found existence of above two continuous persistence pebble layers and requested (January 2012) Geologist to examine the same and suggest remedial measures to be taken. After visiting the site Geologist suggested various remedial measures (May 2013) including reservoir mapping for locating pebble layers. However, EE had not taken any remedial measure to rectify the defects (March 2014).

Government while accepting factual position stated (November 2014) that the observation of Geologist was not overlooked and the Senior Engineers of DoWR and the officers of Geological Survey of India inspected the site in April 2014 and suggested remedial measures for treatment of pebble layers. The treatment is under process. But the fact remains that Department had started construction of dam without remedial measures, though the existence of pebble layers was detected since 1991-94 by the Geologist.

2.1.4 Execution of project in different stages leading to extra cost

Construction of earth dam of KIP was taken up in November 2007 for completion by November 2010. Though work for Small Hydro Electric Project (SHEP) was included in Detailed Project Report (DPR), construction of head regulator and SHEP with a gap of 120 m of earth dam was not included in the estimate due to non finalisation of drawing and design and was subsequently awarded (March 2014) through a separate agreement after nearly six years. The execution of work through separate agreement after six years resulted in not only extra cost of ₹ 4.22 crore compared to the agreement rate of earth dam but also delayed the completion of project.

2.1.5 Non synchronisation of project work

In Kanupur Irrigation Project, excavation of spill channel was awarded to a contractor at a cost of ₹ 12.23 crore in March 2011 for completion by March 2013. This contract provided for disposal of excavated earth measured at 8.56 lakh cum at a distance of two km. At the same time, another contract for construction of earth dam from RD 00 m to RD 1,100 m was awarded to another contractor (September 2007) which required transportation of 14.86 lakh cum of earth from outside at the rate of ₹ 100 per cum. The contractor had transported 11.50 lakh cum of earth as of March 2014 for construction of dam for which the department paid an amount of ₹ 11.50 crore. On the other hand, first contractor had disposed of 6.35 lakh cum of earth dam as the distance between the two works was two km. Due to non utilisation of 6.35 lakh cum of earth obtained from spill channel in construction of dam, the second contractor was paid ₹ 6.35 crore towards utilisation of the above quantity of earth from burrow area.

Thus, non synchronisation of the project works resulted in non utilisation of useable earth obtained from excavation of spill channel for construction of earth dam and led to extra cost of \gtrless 6.35 crore. This is likely to increase further as the work was in progress.

Government stated (November 2014) that available excavated earth from spill channel would be utilised in river gap closing and assured synchronisation of project work in future.

2.1.6 Adverse Benefit Cost Ratio

Cost Benefit Analysis (CBA) estimate and total up equivalent money value of benefits and costs to community of projects to establish whether they are worthwhile. As per AIBP guidelines Benefit Cost Ratio (BCR) must be greater than one for a project to be viable. Analysis of costs incurred and benefits expected to accrue out of test checked projects indicated that above parameters were not fulfilled and some projects ran the risk of becoming unviable.

Scrutiny of records revealed that the department had not uniformly adopted parameters for calculation of BCR. While in seven test checked projects the department had included land development cost and two *per cent* depreciation of capital cost for calculating BCR, in one project, it had not included land development cost and taken depreciation of capital cost at one *per cent*. Further, value of Perennial crops over and above the benefits projected by Deputy Director of Agriculture (DDA) was also taken for calculation of BCR only in one case.

Contingencies such as cost escalation due to delay in land acquisition and finalisation of drawing and design were also not taken into account in all cases.

Bartansil MIP (the only completed MIP amongst test checked projects) had envisaged providing irrigation to 2000 hectares in Kharif and 428 hectares in Rabi. Based on this projection, the BCR as per final approval of the project worked out to 2.13. On verification annual irrigation until 2012-13 was found to be 780 hectares in kharif only. Considering this actual achievement the BCR would work out to 0.68. Accepting factual position Government stated (November 2014) that BCR for all MI projects would be reviewed critically and attempts may also be made to explore ways of enhancing benefits by exploring alternative and gainful uses of water.

2.1.7 Financial management

2.1.7.1 Budgetary control

AIBP Projects are being implemented with GoI's financial assistance in the form of grants. The State Government releases funds for implementation of projects first and submits claims to GoI for reimbursement. Details of budget provision for major/medium and MIPs during the period 2009-10 to 2013-14 besides re-appropriation, revised budget, expenditure and savings/surrender of funds are given below;

		01	1			(₹ in crore)
Year	Budget provision	Re-appropriation/ Appropriation	Revised Budget Provision	Expenditure	Unused funds	Percentage of unused funds
2009-10	1130	-51.03	1078.97	943.24	135.73	12.58
2010-11	1155	-8.61	1146.39	990.04	156.35	13.64
2011-12	1236	-81.46	1154.54	867.75	286.79	24.84
2012-13	1059	-55.40	1003.60	861.05	142.55	14.20
2013-14	1215.99	-41.43	1174.56	860.58	313.98	26.73
Total	5795.99	-237.93	5558.06	4522.66	1035.4	
C	D ('				10000	

Table No. 2.3 Budget provision vis-à-vis expenditure

Source:-Data received from EIC (WR) & CE (MI)

From the above statement following may be observed:

- Though DoWR had reduced budget provision by way of reappropriation, percentage of unused funds ranged from 13 to 27 even after this.
- As against revised budget provision of ₹ 5,558.06 crore for 2009-14 actual expenditure was ₹ 4,522.66 crore and the resultant savings were ₹ 1,035.40 crore. The savings or surrenders were mainly due to poor implementation of projects in view of delay in acquisition of land, non eviction of people from project areas, non finalisation of design and drawings, default in execution of works by contractors as discussed in the preceding/succeeding paragraphs.
- Project expenditure during 2009-14 included ₹ 578.92 crore kept in saving/current bank accounts or civil deposits.

Government stated (October 2014) that construction activities of the projects are disrupted frequently due to which proportionate progress could not be achieved resulting in savings in the allocated resources.

2.1.7.2 Non receipt of central assistance

The funds under AIBP scheme were to be released from year to year based on budget provision made by State Government. GoO submitted to GoI

reimbursement claims of ₹ 3,161.07 crore as against ₹ 3,364.77 crore for expenditure incurred in projects during 2009-14. Of the above, a sum of ₹ 1,822.87 crore was received till March 2014 and balance amount of ₹ 1,541.90 crore was not released by GoI. Reasons for non release were due to deficiencies in proposals such as extension of time and non compliance to the observation of Ministry of Finance (GoI).

It was further revealed that during 2013-14, GoO submitted claims for ₹ 193.81 crore in respect of five projects for Central Assistance (CA). CA for one project was not released as it required time extension and CA for four other projects namely AB Project, Upper Indravati, LIIP and Ret Irrigation Project could not be released due to applicability of Fiscal Responsibility and Budget Management (FRBM) norms. Moreover, reimbursement of arrears of CA on expenditure incurred by State Government in previous year was not permissible as per AIBP guidelines. Thus, GoO could not avail CA for the above amount.

Government stated (October 2014) that due to FRBM ceiling, central assistance proposal during 2013-14 processed for Odisha by MoWR could not be released by Ministry of Finance (GoI). Government further stated that there would be no deficiencies in sending proposal for release of CA in future and delay on the part of GoO would also be avoided.

2.1.7.3 Non availment of Central Assistance

As per AIBP guidelines, the completion period of MI Projects was two years and if projects were not completed within this stipulated period no CA is available for balance work. As mentioned in paragraph 2.1.2.5, fifty seven projects could not be completed within stipulated period of two years. Out of these, 18 projects were stipulated for completion in 2010 and 39 in 2011. However, all these projects were incomplete till the date of audit. As completion of projects were delayed by more than two years, DoWR could not avail CA amounting to ₹ 68.16 crore and balance work are to be completed from its own resources.

2.1.7.4 Excess establishment expenditure

As per conditions of AIBP guidelines, the establishment expenditure is to be limited to eight *per cent* of the cost of head works (excluding cost of land) and 10 *per cent* of the cost of distributaries. Scrutiny of records of seven test checked major/medium irrigation projects revealed that Department had incurred expenditure of ₹ 1,394.16 crore on works during 2009-14 excluding cost of land. As per guidelines, establishment expenditure should be ₹ 125.47 crore against which expenditure of ₹ 289.69 crore was incurred resulting in excess establishment expenditure of ₹ 164.22 crore. The excess would be borne by GoO.

2.1.7.5 Diversion of AIBP funds

CE&BM, Baitarani Subernrekha Budhabalanga Basin diverted AIBP fund of ₹ 20.65 crore during 2009-14 earmarked for SIP to three Drainage Divisions

and one Drainage Circle, to meet expenditure towards salaries. Since drainage divisions were not executing AIBP works, diversion of fund was irregular.

Government stated that the above amount was not reimbursed for the purpose of AIBP funding. But the fact remains that project cost was inflated to that extent.

2.1.7.6 Expenditure in excess of administrative approval

Note (I) below para 3.2.4 of OPWD code stipulates that no work is to be executed or liability created in absence or in excess of 15 *per cent* over the cost approved by Administrative Department. It was noticed that in MIPs¹³ approved for ₹ 32.07 crore, EEs incurred expenditure of ₹ 50.02 crore against admissible amount of ₹ 36.87 crore resulting in irregular expenditure of ₹ 13.15 crore. Though, the excess ranged between 22 and 114 *per cent*, no revised approval was obtained from CE (MI).

Government stated (November 2014) that revised estimates were under preparation by field offices, would be approved shortly. But the Department had already incurred expenditure in excess of administrative approval.

2.1.7.7 Non crediting of revenue to Government account

As per executive instructions issued by Revenue and Excise Department, GoO in September 1998, advance of compensation amount received from Government Departments including Departments of GoI be deposited under the Head "8443-Civil Deposits-111- other Departmental Deposits". Compensation amount when required is to be paid by withdrawing the same from the above heads of accounts. Further, Rule 25 of Chapter 3 of General Financial Rules (GFR) prescribed that any revenue earned should be credited to Government Account.

Scrutiny of records revealed that in violation of above instructions, AIBP fund of ₹ 357.20 crore was kept in SB Account by PD, R&R. Apart from this, though the department had earned interest amounting to ₹ 40.22 crore on SB Account as shown in closing balance of Cash Book, the same was not credited to Government Account till March 2014.

Government stated (October 2014) that interest was being credited to the Government account regularly. However, \gtrless 40.22 crore was not yet deposited.

2.1.7.8 Non submission of utilisation certificate

Department had deposited ₹ 45.64 crore of AIBP funds for construction of two high level bridges, one road, two railway crossings and heightening of 132 KV line with EEs of Roads and Buildings Divisions, South Eastern Railways and Odisha Power Transmission Corporation during 2009-14. EE,

¹³ Nagapada, Ankamara, Brahmanijore, Dabalajore, Karanjianalla, Kankubadi, Jagamguda, Badatema, Tunpar, Baghri, Jatakhalia, Dobenchecharnalla and Talijore.

R&B Division, Kantabanji submitted utilisation certificate only for \gtrless 10.48 crore.

Government stated (October 2014) that action was being taken to pursue the matter for completion of the works and submission of utilisation certificate.

2.1.7.9 Payment of additional cost

As per Land Acquisition Act, 1894 as amended from time to time, in case of payment made after one year of issue of preliminary notification for acquisition of land, interest at 12 *per cent* per annum towards additional compensation is to be paid to land owners.

DoWR sanctioned ₹ 292.52 crore for acquisition of 6,464.805 acre of land in 66 villages of two projects¹⁴ between January 2007 and July 2013 as detailed in *Appendix-2.1.1*. The Special LAOs working for the projects under DoWR could not disburse compensation amount to land owners within one year which warranted sanction of revised estimates by adding 12 *per cent* interest per annum amounting to ₹ 319.88 crore.

Thus, delay in disbursement of compensation by Special LAOs led to avoidable extra payment of ₹ 27.36 crore.

Government stated (October 2014) that estimates were revised and payment made accordingly.

2.1.7.10 Non recovery of Government dues

Instances of non-recovery of Government dues such as royalty and cess were noticed during review of records on execution of project works. Details in this regard are given in succeeding paragraphs;

As per GoO, Revenue Department circular of 2004, royalty on earth taken from burrow area should be recovered at ₹ 10 per cum which was to be increased by 40 *per cent* after completion of three years.

• For construction of canals of SIP and LIIP, Department awarded 19 works between 2007-08 and 2010-11. The contractors transported 81.29 lakh cum of earth from burrow area for construction of embankment of canals. For utilisation of 81.29 lakh cum of earth, royalty amounting to ₹ 15.93 crore was, however, not recovered resulting in loss of revenue to Government and also extension of undue benefit to contractors.

Government stated (October 2014) that as prorata was not included in estimate, royalty was not recovered. But contractor had quoted the rate including all taxes and duties payable by them.

• As per condition 9 (C) of the Detailed Tender Call Notice (DTCN) royalty will be deducted from the contractor's bill as applicable from time to time as amended by Government. Rates quoted by contractor shall be deemed to be inclusive of all taxes. In three packages of test

¹⁴ Kanupur Irrigation Project and Lower Suktel Irrigation Project.

checked projects, agreement provided for recovery of royalty at prevailing rate and any increase in royalty would be reimbursed to contractor separately. Accordingly, a sum of ₹ 3.01 crore was reimbursed. The above reimbursement was due to inclusion of defective conditions in agreement.

Government stated (October 2014) that reimbursement was made as per clause 23 of the special conditions of agreement. But this condition was contradictory to conditions of DTCN.

Further, as per GoO Gazette Notification of December 2008, one *per cent* of the work value was to be deducted from the bills of the contractor towards labour welfare cess. It was, however, noticed that in six works¹⁵ test checked, cess amounting to ₹ 1.34 crore was not recovered and ₹ 2.78 crore recovered from bills of contractor was refunded without any valid reason.

Government stated (October 2014) that cess was not recovered as the same was not included in the sanctioned estimate. But non recovery of cess was violation of Government order of December 2008.

2.1.7.11 Non recovery of compensation for delay in execution of work

As per conditions of contract the contractor shall pay compensation of an amount equal to 0.05 *per cent* per day for delay in execution of work subject to maximum of 10 *per cent* on the contract value.

Department had awarded 15 canal excavation works of three¹⁶ major/medium irrigation projects to different contractors at a cost of ₹ 152.44 crore between July 2003 and October 2011 for completion between October 2004 and April 2013. Although contractors could not complete the works within the contractual/EoT period, penalty as per conditions of contract amounting to ₹ 15.24 crore being 10 *per cent* of contract value was not levied, which resulted in extension of undue financial benefit to contractors.

Similarly, none of 10 works as discussed in paragraph 2.1.9.3 (fifth bullet) were completed even after expiry of extension of time and delay ranged between 24 and 112 months. Despite default in execution, no penalty was levied. Maximum penalty on ₹ 443.37 crore at the rate of 10 *per cent* would work out to ₹ 44.34 crore.

Government stated (October 2014) that action had been initiated to impose penalty for defaulting execution.

2.1.7.12 Release of payment without verifying interim reports

In May 2007, work of survey, planning, design and processing for land acquisition in respect of macro irrigation system in command area of Salandi Left Main Canal of Anandpur Barrage Project was awarded to three contractors for $\gtrless 2.48$ crore for completion in six months. Works were not

¹⁵ SIP Main Canal (one work) and Jambhira Left Main Canal (two works), Ret Irrigation Dam Project (one work) and Kanupur Dam (two works).

⁶ SIP, LIIP and Anandpur Barrage Project.

completed in any reach and EE, Salandi Canal Division paid ₹ 1.90 crore to contractors without verifying interim reports.

Scrutiny of records revealed that on verification of interim reports submitted by the contractors, CCE, Anandpur Barrage Project observed that the correctness of levels and alignment of canals have not been verified by the Junior Engineers/Assistant Engineers before making payment to the contractors. Further, though the contractors failed to complete the work within the scheduled time, the EE had neither taken any action for timely completion of the works nor levied penalty of ₹ 0.25 crore as per the provision of the contracts. Further, due to non submission of survey reports, land acquisition for project works were delayed resulting in extra cost of ₹ 2.53 crore in acquisition of 64.08 acre of land.

Accepting factual position Government stated (October 2014) that necessary action would be initiated shortly to close the contracts with levy of penalty for delay in submission of reports on land acquisition.

2.1.7.13 Non completion of deposit works

In 2006, \gtrless 13.70 crore was deposited with Divisional Forest Officer (DFO), Khariar to carry out catchment area treatment plan by 2008-09 before impounding of water in reservoir to prevent siltation in LIIP. Till May 2014, no work was done and matter was also not followed up by the DFO.

Similarly, a sum of \gtrless 5.28 crore was deposited with DFO, Khariar to take up canal bank plantation, wild life management plan and compensatory afforestation. Although more than eight years had passed no works were executed and deposit amount lay with DFO (July 2014).

Government stated (October 2014) that correspondence had been made with DFO, Khariar to take up the work immediately.

2.1.7.14 Non completion of tree felling work

A sum of ₹ 2.45 crore was deposited with Odisha Forest Development Corporation (OFDC), Khariar between August 2006 and August 2010 for felling and transportation of 28,025 trees from the reservoir area. OFDC felled 11,681 trees. Balance amount of ₹ 1.43 crore (proportionate expense for trees not felled) was not refunded by OFDC. No action was taken by Department for receipt of unutilised amount.

Government stated (October 2014) that the matter was being taken up with OFDC for early completion of work.

2.1.7.15 Release of undue payments

Notification for acquisition of 476.90 acre of different Kissam¹⁷ land in Chudapali village for Lower Suktel Irrigation Project was issued in January 2004 by Revenue and Disaster Management Department. Estimate was sanctioned for ₹ 12.88 crore in September 2006. As the Special LAO failed to

¹⁷ Kissam means – Types of land.

disburse the amount, revised estimate was sanctioned (January 2010) for \mathbb{Z} 15.41 crore. Further scrutiny of revised estimates revealed that Special LAO while preparing revised estimates changed kissam of 9.56 acre of Berna Mamuli land to gharabari (homestead) and cost of land increased by \mathbb{Z} 2.53 crore which was not scrutinised by DoWR.

Government stated (November 2014) that change in classification of kissam is not ordinarily allowed after 4(1) notification, unless there is an order from the Collector under town planning Act. In this case, classification of land from Berna Mamuli to gharabari does not fall within the ambit of law. The matter is under investigation.

2.1.7.16 Work remained incomplete due to non eviction of people even after payment of R&R assistance

R&R assistance was paid to 2,937 affected families of LIIP prior to 2006 as per R&R Policy 1994. Since these families could not be evicted even after payment of R&R assistance, DoWR sanctioned ex-gratia of ₹ 58.74 crore (November 2008) at ₹ two lakh to each family. Similarly, ex-gratia of ₹ five crore was paid to 250 families in Titilagarh Irrigation Project. Despite this, these families continued in reservoir area.

The number of displaced families increased to 9,412 as of March 2014. The department sanctioned ₹ 297.10 crore during 2008-14. Following irregularities were noticed in payment of R&R assistance.

• Project Director, LIIP submitted proposal (January 2012) for sanction of R&R assistance to 207 families. Of the above DoWR sanctioned R&R assistance of ₹ 10.76 crore to 145 families in February 2012.

Scrutiny of above payments (July 2014) revealed that despite Department's disallowance of claims, two ineligible families had been paid R&R assistance of ₹ 10.94 lakh by Project Director between May and August 2012.

Government stated (October 2014) that steps were being taken to recover the amount.

• The Department sanctioned ₹ 1.31 crore for payment of R&R assistance to 33 families of two villages. On further enquiry by PD (August 2012), before making payment to the families, it was found that all were ineligible. Despite this, neither were sanction orders cancelled (July 2014) nor was the amount refunded to CE.

Government stated (October 2014) that steps were being taken for cancellation of sanction order.

• Eleven families in two villages were paid compensation amount of ₹ 23.50 lakh between May and September 2011. During enquiry, PD found that the families were ineligible and they were directed to refund the amount. Though ₹ seven lakh was refunded, no concrete steps were taken for recovery of balance amount of ₹ 16.50 lakh till the date of Audit (July 2014).

• Displaced Families (DFs) after receipt of R&R assistance should vacate submerged area. Due to non eviction of DFs in time, R&R assistance of ₹ 24.40 lakh was paid in 2012 to beneficiaries who had attained the eligible age of 30 years in the interim although R&R assistance had already been paid to their families in August 2009.

Government stated (October 2014) that the matter is under investigation.

2.1.8 Implementation of projects

Review of records on implementation of projects revealed instances of inflated estimates leading to quoting of higher rates, deficiencies in tendering process and excess payment to contractors as discussed in following paragraphs.

2.1.8.1 Execution of works with incorrect estimates leading to extra cost

Para 3.4.10 of OPWD code stipulates that estimates should be prepared in most economical manner. Works Department prepares SoR and all departments including DoWR are required to prepare estimates based on SoR. Scrutiny of analysis of rates of estimates of eight projects revealed that the rates specified in the SoR were not taken while preparing the estimates. The EEs had also included excess quantity of materials, higher lead for transportation of materials, involving extra expenditure of ₹ 148.70 crore as detailed in *Appendix 2.1.2*.

Accepting factual position Government stated (November 2014) that specific approval from deviation from SoR/Analysis of Rates would be obtained from competent authority in future.

2.1.9 Deficiencies in tendering process

Scrutiny of records revealed that there was extra expenditure on account of various deficiencies in tendering process as discussed in following paragraphs.

2.1.9.1 Extra cost on retender

For excavation of Telengiri Main Canal, CCE, Upper Kolab Project (UKP) invited online item rate bids for three reaches in double cover system through *e*-procurement in March 2012. Estimated cost of the work in these reaches was ₹23.51 crore. After receiving bids, Tender Committee cancelled (June 2012) technical bids on ground that combined evaluation criteria had not been incorporated in bid documents as per condition of 3 (C) of prequalification bid. Subsequently, CCE invited fresh bids in October 2012, after incorporating such criteria with revised estimated cost of ₹ 26.34 crore. Increase in cost was due to revision of SoR.

Thus, failure of CCE, UKP to incorporate combined evaluation criteria in tender document in initial tender resulted in extra cost of \gtrless 2.83 crore at the tender stage.

Government stated (October 2014) that the tenders were cancelled by tender committee and the extra cost was due to revision of estimates as per latest revised cost.

For excavation of canals of three distributaries of left main canal of LIIP, the CE, LI & LS Irrigation Project invited online tender in September 2010, at an estimated cost of ₹ 15.23 crore. The tenders were cancelled by tender committee (March 2011) on ground of receipt of single bid in two cases and receipt of only two bids in one case. Fresh tenders were invited with revised estimated cost of ₹ 19.83 crore between November 2012 and November 2013 after delay of 19 to 31 months and the works were awarded at a cost of ₹ 18.94 crore. Thus, delay in finalisation of bid resulted in extra cost of ₹ 3.71 crore¹⁸ due to revision of SoR.

Government stated (October 2014) that tenders were cancelled by tender committee for non acquisition of land and non production of original documents. But the reasons attributed for cancellation of tenders by the tender committee were single/two response as seen from Tender Committee meeting proceedings.

2.1.9.2 Extra cost on execution of Balance works

Excavation of left main canal from RD 29.01 km to RD 36 km of LIIP was awarded to a contractor at a cost of ₹ 15.83 crore in February 2009 for completion by August 2011. During execution, there were deviations in quantity of cement concrete, earth work and random rubble stone dry packing and this was mainly due to inadequate survey and investigation at initial stage. Due to this, contractor could not complete the work and his contract was closed in January 2012 after executing works valuing ₹ 18.48 crore. Balance works estimated to cost ₹ 27.16 crore was awarded to another contractor at a cost of ₹ 23.34 crore in March 2014, after delay of more than two years.

Had the works been awarded after detailed survey and investigation the cost of the work would have been ₹ 18.29 crore as per the agreement rate of original contract and the department could have avoided extra cost of ₹ 5.05 crore (₹ 23.34 crore - ₹ 18.29 crore).

Government stated (October 2014) that during inspection of higher authorities it was proposed to provide additional structures, accordingly balance work was awarded to another contractor.

2.1.9.3 Extra cost on award of works to Odisha Construction Corporation (OCC)

• Works of earth dam and spillway of LSI Project were awarded to OCC at their offered rates of ₹ 140.73 crore and ₹ 59.90 crore in December 2011 and April 2013 respectively. Estimates for works were prepared as per prevailing SoR with enhanced cost of labour and materials. As such the cost of materials such as stone, chips and should have matched with SoR rates.

¹⁸ ₹ 18.94 crore - ₹ 15.23 crore.

Scrutiny of offered rates of OCC revealed that rates adopted by OCC for stone, chips and sand were more than departmental rates. Adoption of higher rates of materials than departmental rates by OCC and its acceptance by the department resulted in extra cost of ₹ 12.76 crore and extension of undue benefit to OCC.

Government stated (October 2014) that the work had been approved by tender committee on the basis of market rate. Justification for adoption of rates exceeding rates fixed by the Rate Board was, however, not on record.

For fabrication, erection and transportation of radial gates of Spillway of Telingiri Irrigation Project, OCC offered rate (May 2010) for ₹ 20.38 crore, on basis of request (February 2010) of CCE, UKP. As offered rate was inclusive of drawing and design charges, same was not accepted by CCE. Subsequently, OCC offered ₹ 22.88 crore in February 2012 excluding drawing and design charges and same was accepted. Acceptance of tender at a subsequent date resulted in extra cost of ₹ 2.50 crore.

Government stated (October 2014) that drawing and design charges were deleted resulting in savings to Government. Justification for higher cost involved on cancellation of original offer was, however, not furnished.

Work of supply, fabrication, erection and transportation of radial gates for KIP and Anandpur Barrage Project was awarded to OCC at their offered rate in March 2010. Work involved transportation of spillway gates weighing 8,524 MT. OCC adopted hire charges for crane at ₹ 3,200 per hour in their offered rate as against ₹ 825 per hour provided in SoR and the same was accepted by Department without negotiation Thus, adoption of excess hire charges than SoR rate resulted in extra cost of ₹ 2.40 crore.

Government stated (October 2014) that the rate \gtrless 825 per hour towards transportation was as per SoR. But the rate \gtrless 3,200 per hour was derived realistically. However, justification for adoption of hire charges exceeding rates fixed by the Rate Board was not on record.

For fabrication, erection, design, supply and transportation of radial gates for spillway of KIP and AB Project, Department accepted offered rate of OCC for ₹ 149.72 crore in March 2010 for completion by March 2013. Offered rate of OCC was inclusive of drawing and design charges at one *per cent*. Since offered rate of OCC in respect of Telengiri Irrigation Project was not accepted as it included drawing and design charges, acceptance of the above offer of OCC without exclusion of drawing and design charges resulted in excess payment of ₹ 1.72 crore to OCC including 15 *per cent* overhead charges.

Government stated that drawing and design charges was included in the offer which was approved by the tender committee. But no justification for inclusion of drawing and design charges was furnished.

• DoWR allotted 10 works to OCC between November 2001 and March 2012 for ₹ 443.37 crore and paid interest free works advance of ₹ 180.76 crore between March 2005 and March 2013. But OCC could not complete the work and executed works valuing ₹ 56 crore and submitted adjustment

bills and balance amount of ₹ 124.76 crore remained unadjusted with OCC (March 2014).

Government stated (October 2014) that advance to OCC is being regulated as per guidelines of DoWR. But advance amount paid to OCC was not being utilised as per time schedule and works were also not completed.

2.1.10 Inadmissible payment of escalation charges

For payment of escalation, percentages of different components were mentioned in agreement and totals of all components should be 100 *per cent*. Escalation payments were made to contractors as per above provisions. In Anandpur Barrage Division there was provision for payment of escalation on different components such as cement and steel at 57 *per cent*, other materials 23 *per cent*, labour 12 *per cent* and POL at eight *per cent*.

Scrutiny of records revealed that percentage of cement and steel adopted by EE was at 68 against 57 as provided in the agreement. As such EE had erroneously calculated percentages of different components for payment of escalation.

Thus, fixation of percentage of cement and steel at 68 *per cent* against 57 *per cent* provided in the agreement resulted in undue benefit of \gtrless 3.59 crore to contractor.

Government stated (October 2014) that fairly accurate percentage was mentioned in the agreement after due approval. But this did not seem to be the case for steel and cement.

2.1.11 Excess payment to contractor

(*i*) Technical specification forming part of agreements stipulated that excavation of compacted earth in vertical chimney shall be done mechanically. For construction of earth dam of four projects¹⁹ in respect of excavation for vertical chimney, manual means was adopted in the analysis of rates.

Scrutiny of records revealed that manual means of excavation was more expensive compared to mechanical means. The contractor adopted mechanical means for excavation of vertical chimney as per technical specification which was confirmed by EE.

Thus, unwarranted adoption of manual means in estimates despite provision of execution of work through mechanical means in the agreement led to extra cost of \gtrless 1.12 crore towards excavation of 5.36 lakh cum of earth and extension of undue benefit to the contractors.



Excavation of vertical chimney by mechanical means

¹⁹ SIP, KIP, Rukura and Ret Irrigation Project.

Government stated (October 2014) that as per BOQ for the purpose of vertical chimney, the earth work was to be excavated either manually or mechanically.

(*ii*) Construction of four works²⁰ was awarded between February 2009 and December 2010 for \gtrless 102.34 crore. Agreements were executed at lower tender premium ranging between 4.59 and 22.22 *per cent* of estimated cost.

Scrutiny of records revealed that during execution of works, extra items were found for which EEs entered into supplementary agreements at current SoR as per agreement condition. Had these items been included in agreements at initial stage and works awarded after detailed survey and investigation, extra items for ₹ 12.65 crore could have been included in the agreements and executed at lesser rate of ₹ 10.92 crore as per agreement rate. Thus, execution of works through supplementary agreements resulted in extra expenditure of ₹ 1.73 crore (₹ 12.65 crore - ₹ 10.92 crore).

Government stated (October 2014) that estimates were prepared based on the trial pit data. But during execution the classification was altered.

2.1.12 Provision of excess lead and transportation charges

OPWD Code stipulates execution of works in economical manner which warrants adoption of shortest and direct routes for collection of construction materials and also for disposal of unusable excavated materials at nearest available dumping yard. Instances of non-adherence of the above codal provisions and resultant extra expenditure are given in succeeding paragraphs;

(*i*) For construction of dam/canals of three projects²¹, estimates provided for 34.84 lakh cum of earth to be brought from nearby burrow areas with distance ranging between five and 10 km. It was, however, noticed from estimates of other reaches of the project that burrow areas were available within a distance ranging between one and five km. Despite availability of burrow area within one to five km the department provided excess lead ranging between four and five km. Thus, provision of excess lead not only inflated the estimate of projects by ₹ 18.37 crore towards transportation of 34.84 lakh cum but also undue financial benefit of ₹ 13.09 crore had already been passed on to contractors towards transportation of 31.09 lakh cum of burrow earth.

(*ii*) For construction of dams/spillways of three projects²² estimates provided for excavation and disposal of 11.46 lakh cum of excavated earth obtained from excavation of spillway and cut off trench of earth dam in the spoil bank/dumping yard at a distance ranging between two and three km. From estimates for other works of Division it was noticed that spoil bank was available within a distance of one and two km. Provision of excessive lead led to payment of excess transportation charges ranging between ₹ 13.49 and ₹ 22.97 per cum. Thus, provision of excess lead for disposal of excavated

²⁰ Kanupur Canal RD.39,450 to 50,790, Bongamunda Branch Canal, LI left Canal from RD.29 km to RD.36 km and Rukura Earth Dam.

SIP, Rukura and LIIP.
 KIP, Pat and Pulara

² KIP, Ret and Rukura.

earth obtained from excavation of spillway and cut off trench of earth dam in the estimates resulted in extra cost of ₹ 1.84 crore towards disposal of 11.46 lakh cum of excavated earth.

(iii) As per estimates, for construction of spillway/canal lining/ service road of three projects²³, 8.50 lakh cum of stone/chips/sand were required to be transported from distances ranging between 29 km and 105 km. It was noticed from the adjoining reaches of the projects that the above minor minerals were available within distance ranging from five to 42 km.

Thus, adoption of excess lead not only inflated the estimated cost by ₹ 11.15 crore for transportation of 8.50 lakh cum of materials but also led to undue benefit of ₹ 11.60 crore to contractors including tender premium, out of which an amount of ₹ 6.40 crore had already been passed on to them towards transportation of 4.07 lakh cum stone/chips/sand.

Government stated (November 2014) that identification and correctness of lead provided would be rechecked.

2.1.13 Avoidable expenditure

During review of execution of projects, instances of avoidable expenditure were also noticed. Details are given in following paragraphs.

(i) As per conditions of contract, earth and other materials obtained out of canal excavation were to be utilised for construction of canal embankments. After utilising available materials on site, earth from burrow area could be brought for completing balance works. In three²⁴ projects, 15 works were awarded to eight contractors for excavation of canals. It was, however, noticed that against the requirement of 53.27 lakh cum, Department burrowed 49.53 lakh cum and utilised 3.74 lakh cum of the excavated earth against availability of 19.30 lakh cum and the balance quantity of 15.56 lakh cum remained unutilised. Thus, non utilisation of 15.56 lakh cum of available earth obtained from canal excavation resulted in avoidable expenditure of ₹ 12.76 crore. Against this, contractors executed 18.41 lakh cum and utilised 3.74 lakh cum and balance quantity of 14.67 lakh cum remained unutilised resulting in extra expenditure of ₹ 11.80 crore.

Government stated (October 2014) that normally the cutting surplus suitable earth is utilised for construction of embankment. Unsuitable cutting surplus earth was dumped in the spoil bank as per suggestions of quality control authority. But no quality control report showing unsuitability for utilisation in embankment was shown to audit.

Estimate for AB Project provided requirement of 80 kg of steel per *(ii)* cum of CCM_{20}^{25} and 110 kg per cum of CCM_{25}^{26} .Contractor had executed 1.61 lakh cum of CCM₂₀ and 0.01 lakh cum of CCM₂₅. As per provision made in estimate, total requirement of steel was 1.30 lakh quintals. As against this,

²³ KIP, SIP and Ret.

LIIP, KIP and AB Project. 24

Cement concrete of strength M20. 25 26

Cement concrete of strength M25.

department paid for 1.47 lakh quintals. This resulted in extra expenditure of \gtrless 9.55 crore.²⁷

Government stated (October 2014) that the quantities provided in the estimate were not final. However, audit noticed that excess payment was not approved by competent authority.

2.1.14 Monitoring and internal control

In order to strengthen the monitoring mechanism of AIBP projects and other selected projects with the objective of expeditious completion of ongoing major and medium irrigation projects, a State Level Project Monitoring Committee was formed in June 2005 under the Chairmanship of the Secretary, Department of Water Resources.

The terms of reference of the committee were as follows:

- (i) Committee will review
 - implementation of programme vis-à-vis the progress in respect of different components of projects i.e. physical, financial etc.
 - creation of deployment of technical and supporting posts, etc. as per the requirement in the concerned projects.
- (ii) The committee will advise/recommend to the Government to take quick decision on different matter to remove bottlenecks. The recommendation of the committee on interdepartmental issues will be placed before the State Level Committee on Interdepartmental problem concerning Irrigation Projects. The committee will meet quarterly and render suitable advice to the Project Level Committee (PLC) and send its report to the Technical Committee at the national level.
- (iii) The committee or a sub-committee to be authorised by the committee will visit each project at least twice a year.
- (iv) The committee will review any other matter as felt important from time to time.

Scrutiny of the records revealed that SLC had not visited any project site. As per guidelines, committee was to meet twenty times (2009-14) to render advice to PLC and send reports to Technical Committee at National level. But it was noticed that only one meeting was held (October 2011) by the Committee. However, no action was taken by DoWR on the recommendation made by the Committee.

Government accepted (October 2014) that State Level Project Monitoring Committee had not visited the projects and not met quarterly.

2.1.14.1 Inaccurate reporting

As per information furnished by Chief Engineer (MI), 25 projects were shown as completed. Further, 23 projects were also shown as completed in the

^{27 {147112.148 - (161077.774} x 0.80+1379.462 x 1.10)} x (₹ 5708.40 per quintal).

Annual Report of 2012-13 of Department. However, as per the records of the divisional offices, only three projects were completed. This indicates mismatch of the projects shown as completed and projects actually completed.

While accepting factual position, Government stated (November 2014) that erroneous completion of 25 projects had been shown in the Annual Report.

2.1.15 Conclusion

Performance Audit revealed that though various deficiencies in implementation of the scheme were pointed out earlier effective steps and adequate remedial measures were not taken by the Department. As a result, GoI's objective of accelerating execution and completion of irrigation projects remain largely unfulfilled due to delay in land acquisition, laxity in clearing of project areas even after payment of R&R assistance, etc. Efficiency in expenditure by Department needed improvement as percentage of unused funds ranged from 13 to 27.

Delay and defects in design of various components of projects, preparation of estimates in deviation from SoR and deficiencies in tendering process had already escalated cost of projects. Contract management was ineffective in cases resulting in excess payment to contractors.

Delay in execution of projects deprived farmers of the benefits envisaged. Instances of calculated BCR not holding good rendered viability of projects questionable.

Monitoring and internal controls were inadequate since SLC or any subcommittee appointed by the SLC had not visited any project site. The time and cost overrun of projects indicate lack of effective monitoring.

2.1.16 Recommendations

- May consider adopting standard parameters transparently for calculation of BCR for the projects.
- Meetings of the SLC and project site visits etc. may be held regularly to ensure timely completion of the projects through monitoring and evaluation of the projects.

Department of Forest and Environment

Environment Audit on Air and Water Pollution in Odisha

Executive Summary

Among the environmental degradation, air and water pollution is of global significance. Air Pollution affects human life, flora and fauna, climatic changes to a great extent. Due to industrialisation and urbanisation, environment get contaminated, threatened, damaged and destroyed, which has a direct impact on quality of life of all living organisms.

It was observed that Comprehensive Environmental Pollution Index scores remained at critical level at Angul-Talcher, Ib-Valley and Jharsuguda. Operation of Stone Crusher Units without Consent to Establish (CTE)/ Consent to Operate (CTO), delay in upgradation of Pollution Control Equipment (PCE) by thermal power plants (TPPs) to achieve the desired stack emission norm were observed. State Transport Authority also failed to check vehicular pollution in the State.

There were deficiencies in monitoring of water quality. Untreated sewage of Urban Local Bodies (ULBs) of State were being discharged to nearby water bodies accompanied with untreated effluents of industrial units due to absence of Effluent Treatment Plants (ETPs). Water samples of three tributaries of Mahanadi near Cuttack and Bhubaneswar were checked in State Pollution Control Board (SPCB) laboratory and showed non compliance of norms in respect of Bio-chemical Oxygen Demand (BOD), Dissolved Oxygen (DO) and Total Coliform (TC). This apart, relaxation of norms in consent administration, non implementation of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) and Online Emission Monitoring Systems (OEMS) indicated areas for improvement by SPCB. Besides, absence of complete database of all sources of pollution, their timely monitoring and issue of conditional consents have resulted in need to put in far more concerted efforts.

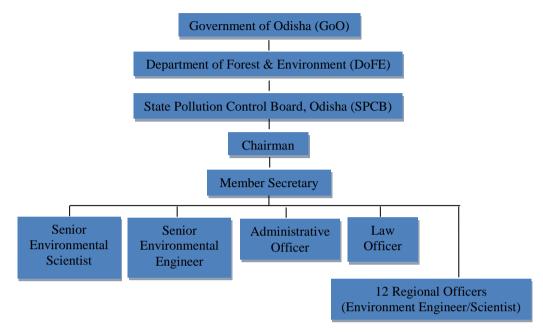
2.2 Introduction

National Environment Policy (NEP) 2006 expressed national commitment to a clean environment. Principal objectives of NEP include conservation of critical environmental resources and integration of environmental concerns into policies and projects for economic and social development. Further, one of the principles of this policy clearly states that environmental protection shall form an integral part of the developmental process to achieve sustainable development and cannot be considered in isolation.

The Ministry of Environment and Forests (MoEF) is the nodal agency in the administrative structure of the Government of India (GoI) for planning, promotion, co-ordination and overseeing the implementation of environmental and forestry programmes. In Odisha, State Pollution Control Board (SPCB) was constituted (15 July 1983) in pursuance of sub-section (1) of Section 4 of the Water (Prevention and Control of Pollution) Act, 1974 to implement

environment programmes under administrative control of Department of Forest and Environment (DoFE).

Organisational structure for regulation of environment in Odisha is outlined below:



2.2.1 Role of State Pollution Control Board

SPCB is mainly concerned with monitoring of water quality deterioration and responsible for prevention and control of pollution under Water Act, 1974. SPCB is entrusted with the responsibility of implementation of environmental laws including guidelines and instructions issued by MoEF and Central Pollution Control Board (CPCB) from time to time. SPCB monitors various industries/organisations/units through Consent Administration (CA) i.e. issue of Consent to Establish (CTE) and Consent to Operate (CTO) through its Head Office (HO) as well as its 12 Regional Offices²⁸ (ROs). Industries/units which run under CA were grouped into three categories i.e. Red, Orange and Green as per their pollution emission level. Red categories, which include 17 category of industries²⁹, are highly polluting industries, Orange categories are less polluting and Green category industries are low polluting industries. HO monitors 17 category industries, sponge iron plants, mines and industries having investment of more than ₹ 50 crore.

2.2.2 Rationale of selection of performance audit

With regard to air pollution, Odisha has been identified³⁰ as one of twentyfour (24) important hot spots of industrial pollution in the Country as average

²⁸ Angul, Balasore, Bhubaneswar, Berhampur, Cuttack, Jharsuguda, Kalinga Nagar, Keonjhar, Paradip, Rourkela, Rayagada and Sambalpur.

^{29 1.} Aluminium Smelter, 2. Cement, 3. Chlor Alkali, 4. Copper smelter, 5. Distillery including fermentation industry, 6. Dyes and Dye intermediates, 7. Fertilizer, 8. Iron and Steel, 9. Oil Refinery, 10. Pesticides, 11. Petrochemicals, 12. Pharmaceuticals, 13. Pulp and Paper, 14. Sugar, 15. Tanneries, 16. Thermal Power Plants and 17. Zinc Smelter.

³⁰ News letter published by International Centre for Environment Audit and Sustainable Development (iCED) for quarter ending December 2013.

concentration of Particulate Matter³¹ (PM) in the area is much higher in comparison to both World Health Organisation (WHO) and Indian Standards. Similarly, with regard to water pollution, discharge of effluents from industries, agricultural fields including municipal discharges has contaminated rivers of State causing serious health issues for human beings as well as posing threat to aquatic animals.

Thus, it was considered relevant to examine provisions of various environmental laws along with role of SPCB in prevention, control and abatement of air and water pollution in Odisha.

2.2.3 Audit objectives

Objectives of this Performance Audit were to assess whether:

- Adequate measures were taken for compliance to Environmental Laws for checking Water and Air Pollution;
- Proper Management Information System (MIS) was developed for evaluating impact of pollution on environment;
- Effective monitoring mechanism was framed for timely identification and remediation of sources of pollution; and
- Infrastructure and funding was adequate.

2.2.4 Audit criteria

Audit criteria adopted for assessing achievement of audit objectives were drawn from the following:

- Acts and Rules³² relating to prevention, control or abatement of air and water pollution;
- National/State Water Policies framed by GoI/GoO;
- National Environment Policy, 2006;
- National Green Tribunal Act, 2010;
- Directions issued by CPCB on air and water pollution;
- Scrutiny of minutes and agenda papers of meetings of SPCB, examination of files relating to consent administration;
- Examination of records of SPCB and various Departments namely DoFE, DoWR, Transport Department (TD), Agriculture Department (AD) and Housing and Urban Development Department (H&UDD);
- Media reports on air and water pollution;

³¹ Particulate Matter is one of the air pollutant along with other sources of pollutants like Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂), Ozone (O₃), Lead (P_b), Carbon Monoxide (CO), Ammonia(NH₃), Benzene(C₆H₆), Benzo(a) Pyrene (B_aP), Arsenic(As) and Nickel (Ni) for which standards has been fixed by the Government of India.

³² The Water (PCP) Act, 1974, The Air (PCP) Act, 1981, The Water (PCP) Cess, Act, 1977 and The Environment (Protection) Act, 1986.

• Study Reports prepared by CPCB/SPCB and other technical institutions like Indian Institute of Technology (IIT), National Environmental Engineering Research Institute (NEERI), etc.

2.2.5 Scope and methodology of audit

Environment audit of Air and Water pollution in Odisha was conducted during May to August 2014 covering overall functioning of SPCB during 2009-14 including its four³³ out of 12 ROs. Further, random sampling was employed to select red and orange category industries under selected four ROs including 100 *per cent* selection of industries falling under 17 category as well as having investment of more than ₹ 50 crore for scrutiny of records. Accordingly, 36 and 74 industries were selected for scrutiny of records at four ROs and SPCB respectively. Audit methodology included collection of data through examination of records, response to questionnaires and audit queries, joint physical verification alongwith departmental representatives and collection of water samples including photographic evidence.

Audit objectives, Audit criteria, scope and methodology were discussed with Principal Secretary to Government, DoFE and representatives from other departments namely Textiles, Industries, Energy, Water Resources, Transport and Steel & Mines during 'Entry Conference' held on 25 April 2014.

Subsequently, audit findings were reported to the State Government and SPCB in September 2014 and discussed in an Exit Conference held in November 2014. Views of the Government have been considered while finalising this report.

Audit findings

Air pollution

2.2.6 Assessment of air pollution

2.2.6.1 Identification of critical/severe polluted industrial clusters by CPCB

CPCB in association with IIT, New Delhi carried out (December 2009) environmental assessment of industrial clusters across the country based on Comprehensive Environmental Pollution Index (CEPI). As per CEPI, industrial clusters with score above 70 were identified as critically polluted and those between 60 and 70 were severely polluted. Total 88 industrial clusters were identified in India out of which 43 were critically polluted areas (CPAs) and 32 severely polluted. In Odisha two industrial clusters i.e. Angul-Talcher and Ib Valley-Jharsuguda were among 43 CPAs. MoEF instructed (January 2010) CPCB along with SPCB to submit a time bound Action Plan (AP) for improvement of the environmental quality in these identified 43 clusters/areas during which restriction was imposed on all projects requiring environmental clearance (EC).

Accordingly, SPCB prepared (December 2010) APs for abatement of pollution in these two CPAs and on approval of the same by CPCB, moratorium on

³³ Angul, Jharsuguda, Keonjhar and Paradip.

them was lifted (March-July 2011). However, SPCB failed to ensure strict adherence to deadlines fixed in APs for undertaking pollution control measures in both the CPAs as discussed under para 2.2.6.2, 2.2.7.6, 2.2.7.8, and 2.2.7.12. During subsequent monitoring (February-April 2013) of 43 CPAs, CPCB also indicated that CEPI scores in respect of eight CPAs including Jharsuguda area were increasing and accordingly moratorium was imposed (September 2013) on these CPAs till further orders. MoEF directed (June 2014) CPCB to reassess CEPI score in all the 43 CPAs in order to take decision on reimposing moratorium on any such CPAs.

2.2.6.2 Issue of CTO by SPCB without ensuring adherence to the prescribed PM emission norms

MoEF launched (March 2003) Charter on Corporate Responsibility for Environmental Protection (CREP) which enlisted action points for pollution control in Thermal Power Plants (TPPs). As per CREP, all TPPs were to reduce PM emissions to 100 mg/Nm³ by 31 December 2005 through installation of pollution control equipment. Further, as per APs prepared (December 2010) by SPCB for Angul-Talcher as well as Ib Valley-Jharsuguda areas, PM emission standard for TPPs located in these areas was revised to 50 mg/Nm³ to be achieved by 31 March 2012. SPCB did not issue timely directions to achieve the prescribed norms in following cases.

• SPCB granted (April 2007) CTO to National Aluminium Company Limited (NALCO)³⁴ with a condition to achieve emission norm of 150 mg/Nm³ even though it was to achieve 100 mg/Nm³ as prescribed under CREP. This CTO was valid upto 31 March 2011. Subsequently, SPCB while granting CTOs³⁵during 2013-14 fixed emission norm ranging from 80 to 100 mg/Nm³ against AP standard of 50 mg/Nm³. However, audit observed that actual stack emission from units 1 to 8 ranged from 114 to 576 mg/Nm³during 2009-12 and 54 to 274 mg/Nm³during 2012-14 against prescribed standard of CREP (100 mg/Nm³) and AP (50 mg/Nm³) respectively. It was also observed that NALCO operated all the units without CTO for two years (April 2011 to April 2013).

Government stated (October 2014) that CREP guidelines were meant for only voluntary compliance by corporate houses and target date fixed under AP was too ambitious considering time available for such retrofitting. But MoEF had launched CREP guidelines for highly polluting industries with the purpose to go beyond compliance of regulatory norms in order to ensure clean and safe environment through its implementation under a mutually agreed time targeted programme. Further, AP was prepared by SPCB as per instruction (January 2010) of MoEF to improve the environment quality by ensuring achievement of pollution control measures by concerned entities within target date specified in it.

NALCO is an aluminium producing Government Company located in Angul district of Odisha having 10 Captive Power Plants (CPPs) of 120 MW each.

³⁵ CTO dated 11.04.2013 valid upto 30.09.2013, CTO dated 28.09.2013 valid upto 31.03.2014 and CTO dated 04.04.2014 valid upto 30.06.2014.

• SPCB granted CTOs³⁶ valid upto 31 March 2011 in favour of Talcher Thermal Power Station (TTPS)³⁷with condition to achieve emission norm of 150 mg/Nm³even though it was to achieve 100 mg/Nm³ as prescribed under CREP. Subsequently, SPCB while granting CTOs³⁸ during 2012-14 fixed emission norm of 100 mg/Nm³ against AP standard of 50 mg/Nm³. However, audit observed that actual emission ranged from108 to 291 mg/Nm³ during 2009-12 and 64 to 291 mg/Nm³ during 2012-14 against prescribed standard of CREP (100 mg/Nm³) and AP (50 mg/Nm³) respectively. Further, TTPS operated unit five and six from 01 April 2009 to 09 February 2010 and unit one to six from 01 April 2011 to 29 May 2012 without obtaining CTO from SPCB.

Government stated (October 2014) that excess emission from unit one to four occurred due to non availability of good quality coal with low ash content, continuous operation of the plant at its rated capacity and ageing of units leading to overloading of dust on PCEs, thus affecting their performance. It also stated that retrofitting of unit five and six will be completed by December 2015 to achieve emission norm of 50 mg/Nm³. But, considering the above reasons for higher emission, SPCB should have ensured timely upgradation of PCEs attached to unit one to four. Further, retrofitting of PCEs of unit five and six could not be completed within target date (31 March 2012).

• Odisha Power Generation Corporation Limited (OPGC)³⁹ being located in Jharsuguda was to achieve emission norm of 50 mg/Nm³ by 31 March 2012 as per AP prepared (December 2010) by SPCB for Ib Valley Jharsuguda area. However, SPCB granted CTO to OPGC with condition to achieve emission standard of 100 mg/Nm³. Audit observed that actual emission from TPPs of OPGC ranged between 92 to 140 mg/Nm³ during 2012-14.

Government stated (October 2014) that upgradation/ retrofitting of PCEs in existing plants was a huge job which could not be completed within target date. But audit noted that timely compliance by OPGC to achieve emission norm of 50 mg/Nm³ was not achieved as it started upgradation work of respective PCEs after delay of two years and three years for unit one (August 2013) and unit two (July 2014) respectively from date of issue (February 2011) of such direction by SPCB.

2.2.6.3 Lack of uniformity in fixation of targets of emission standards

Bhushan Power and Steel Limited (BPSL) at Sambalpur and Bhushan Steel Limited (BSL) at Dhenkanal, which are integrated steel plants, obtained CTOs upto 30 June 2014 from SPCB. Both steel plants had production capacity of 500 tonnes of sponge iron per day. However, different emission standards

³⁶ Unit I to IV – CTO dated 12.01.2007 valid upto 31.03.2011, Unit V to VI – CTO dated 07.07.2008 valid upto 31.03.2009 and CTO dated 10.02.2010 valid up to 31.03.2011.

TTPS, owned by NTPC Limited (a Government Company), located in Angul district of Odisha has 6 units of Thermal Power Plants (TPPs) with total capacity of 460 MW.

³⁸ Unit 1 to 6 – CTO dated 30.05.2012 valid upto 31.03.2013, CTO dated 25.04.2013 valid upto 31.03.2014, CTO dated 31.03.2014 valid upto 30.06.2014.

³⁹ OPGC located in Jharsuguda District of Odisha is a Government Company and has 2 units of TPP of 210 MW each.

were fixed for BPSL (50 mg/Nm³) and BSL (100 mg/Nm³) in respect of PCEs attached to power plant. Subsequently, SPCB issued CTO (June 2014) to BSL with emission standard of 100 mg/Nm³ which was valid upto 31 March 2015.

Government stated (October 2014) that standard for PM emission from DRI kiln stacks could not be changed in the consent order of BSL due to oversight.

2.2.6.4 Air pollution due to non raising of stack height

As per CPCB recommendations (July 2007), minimum stack height should be 20 metre in case of cashew seed processing industries for better dispersion of pollutants into atmosphere resulting in minimum possible ground level concentrations. However, scrutiny of records in respect of one cashew processing industry under Keonjhar RO revealed that stack height of the unit was 11 metre from ground level.

While accepting the fact, Government replied (October 2014) that necessary directions have been issued by SPCB to the unit to raise stack height to 20 metre by 15 December 2014.

2.2.6.5 Ineffective Monitoring of vehicular pollution by State Transport Authority (STA)

Section 20 of Air Prevention and Control of Pollution (PCP) Act, 1981 prescribed standards for emission from automobiles. For plying of vehicles on road, the Central Motor Vehicle Rules, 1989 U/s 115 (7) and 116 provides for a valid "Pollution Under Control" (PUC) certificate to be issued by an agency authorised for this purpose by State Government every six months and checks to be exercised by Police/MV Department.

As of March 2013, 42.23 lakh transport and non transport vehicles plied in the State. Vehicles running more than 15 years were considered vintage and more polluting. Such vehicles constituted about 20 *per cent* of total number of vehicles in the State as on 31 March 2013. As on 31 March 2014, STA managed pollution testing by 73 sets of Pollution Testing Equipment (PTEs) deployed in 49 Regional Transport Officers (RTOs)/check gates along with 24 firms/individuals for checking of pollution standard of vehicles and issue of PUCs. This apart, 87 private testing centres (PTCs) were also authorised by STA for this purpose. During audit, it was noticed that eight⁴⁰ out of 31 RTOs had no PTC provision and 16 check gates⁴¹ were yet to receive PTEs. The department had neither fixed any targets for checking of pollution standards of vehicles nor maintained any records for issue of PUC in 49 RTOs/Check gates and 24 firms/individuals. The number of PUC certificates issued by private authorised agencies was also not monitored by STA.

Government stated (October 2014) that SPCB imparts training on vehicular emission monitoring and noise monitoring to the police personnel as and when required and also participates as technical expert in procurement process of the STA for such monitoring instruments.

⁴⁰ Boudh, Deogarh, Malkangiri, Rairangpur, Jajpur, Talcher, Bhubaneswar-II and Bhanjanagar.

⁴¹ Chikiti Balarampur, Surula, Upperjonk, Bileipada, Nalda, Champua, Borriguma, Chatwa, Raighar, Bahalda, Chakasulipada, Samardara, Taparia, Taparia(A), Telijhar and Laxmidunguri.

Water Pollution

2.2.7. Assessment of water pollution

Basic objective of Water (PCP) Act, 1974 is to maintain and restore wholesomeness of national aquatic resources by prevention and control of pollution. A summary of use based classification system developed by CPCB is given in *Appendix -2.2.1*. Audit observed following.

2.2.7.1 National Water Quality Monitoring Programme (NWMP)

CPCB established a network of monitoring stations on aquatic resources across the country since 1977-78 under Global Environmental Monitoring System (GEMS). SPCB monitors water quality of nine⁴² major river basins in Odisha through 92 water quality monitoring stations⁴³ (WQMS) as detailed in *Appendix -2.2.2*.

Audit observed deficiencies in respect of monitoring of water quality of above locations as discussed in following paragraphs.

2.2.7.2 Insufficient monitoring stations

Out of eleven river basins, SPCB carried out water quality monitoring of nine. SPCB did not monitor water quality of tributary rivers and streams. Though Water Quality Monitoring Guidelines of CPCB envisaged additional downstream stations to assess extent of influence of an outfall and locate point of recovery, audit observed that distance between monitoring locations was upto 144 km (Joda to Anandpur in river Baitarani) and 80 km (Bonaigarh to Rengali along river Brahmani). As there are major Iron and Manganese deposits of State in Joda to Anandpur and influence of industrial activities like Rourkela Steel Plant and domestic waste water discharge of Rourkela in patch of river Bonaigarh to Rengali, there was requirement of additional stations, as per above guidelines. Considering insufficiency of existing stations, CPCB asked (March 2011) SPCB to submit proposal for additional 50 WQMSs by SPCB. However, no such proposal was submitted by SPCB between 2011 and till date of audit against the additional 50 stations, reasons for which were not available on record.

Government Stated (October 2014) that CPCB sanctioned (January 2009) only 25 out of 42 stations against the proposals submitted in December 2007. Since proposals of other 17 stations were not considered, proposals for additional stations were not submitted during 2011.

2.2.7.3 Non monitoring of water quality of forty seven major ponds

It was observed that though SPCB identified (1993) 50 major ponds in the State for assessment of water quality on the basis of their use and importance, water quality of only three ponds (two in Puri and one in Bhubaneswar) was monitored. Hence, as of date (July 2014) monitoring of water quality of the rest could not be taken up.

⁴² Mahanadi, Brahmani, Baitarani, Rushikulya, Nagavali, Subarnarekha, Budhabalanga, Kolab and Vansadhara.

^{43 78} stations under National Water Monitoring Programme (NWMP) and 14 under State Water Monitoring Programme (SWMP).

Government stated (October 2014) that considering importance as well as size, water quality monitoring of above three ponds is being undertaken.

2.2.7.4 Functioning of Odisha Wetland Development Authority

GoI operationalised (1985-86) National Wetland Conservation Programme (NWCP) in collaboration with concerned State Government. Under NWCP, conservation and management of wetlands is primary responsibility of the States/UTs, who are custodians of the area. After identification of wetlands under the programme, State/UTs are required to submit long term comprehensive Management Action Plans (MAPs) for a period of three -five years, preferably five years, coinciding with five year plan period of GoI.

Odisha Wetland Development Authority (OWDA) was constituted (September 2010) under Societies Registration Act 1980 to facilitate conservation and management of wetland of State. Objectives of OWDA include catchment area treatment, protection measures, weed control and pollution abatement. As per information furnished (August 2014) by DoFE, though OWDA had prepared brief of MAPs in respect of all identified⁴⁴ wetlands, no detailed study for abatement of pollution was done till date as envisaged in NWCP guidelines to take intensive conservation measures.

2.2.7.5 Pollution in River Brahmani

Brahmani, second major river in Odisha, is formed by combined waters of South Koel and Sankh rivers at Vedvyasa near Rourkela in Sundargarh district. The river with a basin area of 22,516 Sq. Km. has become life line of 51.11 lakh population covering 461 km in nine districts⁴⁵ of State. It has 14 tributaries⁴⁶and a dependable water resource of 14,011 million M³. Major towns located on the bank of Brahmani river are Rourkela, Angul and Talcher.

As per AP, Talcher town generated effluent of about 10 Million Litre per Day (MLD). Further, AP fixed 31 December 2012 as target date for completion of Sewerage Treatment Plant (STP) for Talcher town. But, same was not completed till date. Untreated sewage of Talcher Municipality discharged to river Brahmani included excess quantity of suspended solids of 160 mg/l (Standard 100 mg/l) and BOD 52 mg/l (Standard 30 mg/l). SPCB issued show cause notice (SCN) during May 2011 to Executive Officer, Talcher Municipality.

Government stated (October 2014) that letters had been issued (May 2012/June 2013) to Talcher Municipality to take appropriate remedial measures to minimise pollution level of river Brahmani. But inspite of that, no such measures have been adopted by Talcher Municipality till date (November 2014).

2.2.7.6 Delay in upgradation of individual ETP in respect of chromite mines

CPCB instructed (January 2008) SPCB to submit its views on pollution due to chromite mining in Sukinda valley area. Accordingly, SPCB conducted

⁴⁴ Chilka, Kuanria, Kanjia, Daha and Ansupa.

⁴⁵ Sundergarh, Deogarh, Sambalpur, Angul, Keonjhar, Dhenkanal, Jajpur, Kendrapara and Cuttack.

⁴⁶ Koel, Kuradhi, Mankara, Samakol, Ramlala, Karo, Sankh, Rukura, Gohira, Tikira, Singdajhor, Nigra, Barjor and Nandira.

(January 2008) a study and identified improper surface runoff management from overburden areas and other areas of mines containing Hexavalent Chromium (Cr^{+6}) and improper operation of ETPs in said area. SPCB engaged (September 2010) IIT, Kharagpur to carry out a feasibility study on establishment of ETP in Sukinda valley. Based on recommendations (January 2012) of IIT, SPCB directed (March 2012) all chromite mine owners to submit time bound AP for upgradation of their individual ETPs. Accordingly, nine out of 11 working chromite mine owners agreed (May 2013) to upgrade their ETPs during period ranging from September 2013 to June 2014. However, only four out of nine have done so till date (September 2014).

Analysis report of SPCB revealed (April 2014) that presence of Cr^{+6} at ETP outlets of nine working mines, surface water of Dhamsala Nallah and ground water of Sukinda Valley area ranged between 0.002 to 0.01 mg/l, 0.05 mg/l and 0.01 to 0.304 mg/l respectively against prescribed standard of 0.001 mg/l.

Government stated (October 2014) that upgradation of ETPs in respect of balance five mines is expected between December 2014 and September 2015.

2.2.7.7 Pollution of Ib River

Jharsuguda and Brajaraj Nagar towns are situated near river Ib, a tributary of river Mahanadi. This area was one of Critically Polluted Industrial Clusters (CPIC) of Odisha. SPCB in AP estimated generation of sewage of 10 MLD and eight MLD respectively and discharge of untreated sewage of these Municipalities as one of the factors for pollution of Ib river. Accordingly, target date of 31 December 2012 was fixed for construction of sewerage line and STP. However, audit observed that the same was not taken up till date of audit.

While accepting the fact, RO, Jharsuguda stated that Odisha Water Supply and Sewerage Board (OWSSB) is preparing DPR for "Decentralised Sewerage System" and "Comprehensive Storm Water Drainage System".

2.2.7.8 Pollution of river Nagabali

As per NWP 2007, effluents should be treated to acceptable levels and standards before discharging them into natural streams. Minimum flow should be ensured in perennial streams for maintaining ecology and social considerations. Principle of polluter pays should be followed in management of polluted water.

Audit observed that one paper industry was allowed to draw water from river Nagabali for 31,960 M^3 per day against which it consumed about 37,000 M^3 of water per day which exceeded consented limit despite lean flow in river as identified by SPCB since 2007. Further, against permitted limit to discharge waste water of 23,800 M^3 per day to river, the industry discharged waste water of 36,000 M^3 per day in violation of consent condition. Thus, effluent discharged from paper mill was not likely to get diluted adequately due to lean flow.

To address this problem, industry was asked by SPCB to upgrade STP and retain effluent in retention ponds and discharge treated effluent after meeting

prescribed parameters to irrigation and plantation within their own premises. Further, instructions were issued (2007-10) to discharge effluent only at night so that the river water could be used by local people during day time. The industry, however, did not install STP on plea of fund crisis and sought permission for consumption of more water for higher production involving high volume of effluent discharge and waiver of installing of STP. Member Secretary, SPCB in his sanction order (January 2014) issued conditional CTO after receipt of Bank Guarantee (BG) for fulfillment of conditions stipulated by SPCB.

Thus, against mandate of NWP, industry disturbed normal flow of water and polluted river water affecting riparian rights of inhabitants in downstream.

Government stated (October 2014) that in order to prevent degradation of water quality of river Nagabali, industry should have diverted its treated effluent for irrigation purposes but it could not be implemented successfully in view of lack of efforts from Water Resources Department as well as the industry.

2.2.7.9 Pollution of river Kuakhai, Kathajodi and Daya

Joint physical verification was done of rivers Kuakhai, Kathajodi and Daya and water samples collected from locations of points before city, point where city sewage mixed with river and from downstream of river as per prescribed norm for BOD, Dissolved Oxygen (DO) and Total Coliform (TC), which are indicators of high levels of organic pollution in rivers and indicate whether water can sustain aquatic life and presence of harmful, faecal related bacteria, viruses and protozoa which cause illness.

Audit observed that two natural nallahs – Budu Nalla at Mancheswar and Gangua Nalla at Samantarapur were converted into sewer lines to carry untreated city sewage of Bhubaneswar to drain into rivers Kuakhai and Daya respectively. The sewage of Cuttack City was also found directly discharged to river Kathajodi near Khan Nagar without any treatment. Quality of water in these rivers after



Untreated waste water of Cuttack city being discharged to river Kathajodi at Khan Nagar



Gangua Nallah mixes with river Daya carrying waste water of Bhubaneswar city

they leave the cities should meet class B criteria (Bathing standards) as designated by CPCB. Water samples were collected and checked in SPCB laboratory which showed BOD, DO and TC in high quantities as detailed in *Appendix -2.2.3*.

Government stated (October 2014) that installation of sewerage network and waste water treatment system in both Cuttack and Bhubaneswar cities are in progress in which provisions have been made for collection and treatment of waste water.

2.2.7.10 Pollution of Kisinda Jhora as well as crop damage in nearby villages due to excess emission of fluoride by NALCO Smelter

Aluminium smelter of NALCO is the major source of fluoride emission generated mostly due to washings and surface runoff and floor washings. As per CREP (March 2003), fluoride consumption was to be achieved at 10 kg per tonne of aluminium produced by December 2005. AP also recommended (December 2010) precautionary measures for aluminium industries which included revamping Fluoride Treatment Plant (FTP) and construction of secured engineering landfill, which were to be implemented by 31 March 2012.

In the meantime, due to repeated incidence of damage of plants and crops in agricultural fields near NALCO smelter plant, GoO entrusted (July 2006) Environment Protection Training and Research Institute (EPTRI), Hyderabad to study reasons for such crop damage. The study established that higher level of fluoride in air, water and vegetation was main reason for crop damage and recommended developing proper work schedule for management of spillage at generating points to minimise fluoride contamination in air, surface and groundwater. Following lapses were observed in complying with deadlines prescribed under CREP and AP for minimising fluoride emission.

- Though eight years passed from CREP deadline (December 2005), NALCO could not achieve fluoride consumption standard of 10 kg/Tonne of aluminium produced. During 2012-13, consumption of fluoride was 12.90kg/Tonne of aluminium produced.
- SPCB fixed (April 2004) standards for emission of fluoride from bake oven and pot room at 0.10 kg and 0.30 kg per MT of aluminium produced respectively. But, excess emission ranging from 0.11 to 0.166 kg and 0.36 to 0.49 kg per MT of aluminium produced respectively was found during 2009-14.
- Though SPCB directed (April 2009) NALCO to install fume treatment centre (FTC) in bake oven-I by 31 March 2010, same was not done even after lapse of four years.
- NALCO constructed a landfill of inadequate capacity for disposing 40,000 Tons of spent pot lining (SPL⁴⁷) and another landfill for 50,000 Ton of SPL was under construction stage though AP fixed 31 March 2011 as target date for construction of secured engineering landfill. SPCB had also not assessed the required capacity of landfill for disposal of SPL till date (August 2014).

⁴⁷ SPL is contaminated graphite/ceramics cell waste generated in the primary production of aluminium. This waste has been identified as an extremely problematic hazardous waste because it contains concentrations of cyanide and fluoride and gives off noxious and flammable gases when in contact with moisture. These contaminants readily leach into surrounding soils and groundwater during both short term and long term storage and can cause potential contamination of drinking water reserves.

Even though NALCO was designed for zero discharge, SPCB had been granting permissions through CTOs (April 2009 onwards) to discharge effluents of 2640 KLD to Kisinda Jhora during rainy season. However, in absence of measuring device, actual volume of discharge was not available with SPCB. Further, NALCO had not implemented proper surface runoff management system (SRMS) and did not enhance capacity of defluoridation plant in order to cater to excess flow of surface runoff. As per analysis of SPCB, effluents contained fluoride component ranging from 4.20 to 8.00 mg/litre (standard-2 mg/litre). Similarly, fluoride content at inlet point of defluoridation plant ranged from 6.3 to 22 mg/litre. Besides this, PM emission from bake oven ranged from 50.55 -146 mg/Nm³ which was higher than prescribed limit of 50 mg/Nm³ to be achieved by December 2005.

Since NALCO failed to implement pollution control measures, SPCB issued (August 2011/ April 2014) SCNs for non compliance of various suggested measures. Inspite of specific conditions in EC to stop operation in case of failure of any pollution control system, NALCO continued to operate without installing FTP.

Government, while accepting unsatisfactory compliance by NALCO, replied (October 2014) that BGs have been obtained to ensure installation of FTC and implementation of SRMS by December 2014 and May 2017 respectively. But SPCB took belated action in obtaining BGs during 2014-15 though it was decided during March 2003 to obtain the same from defaulting industries to ensure timely compliance.

2.2.7.11 Discharge of effluents by TTPS to Nandira nallah

SPCB granted (June 2005) CTE to TTPS and revised the same (February 2009) with conditions that unit shall discharge entire ash slurry into abandoned mine pit of M/s Balanda Colliery of MCL and the unit shall install Ash Water Collection and Recirculation System (AWRS) at mine pit end for complete recirculation of decanted effluent through a dedicated pipeline to plant. As per AP, all TPPs were to adopt zero discharge by 31 March 2012. However, effluents from TTPS were discharged outside in violation of directions of SPCB as mentioned below:

• Ash pond overflow

TTPS had not commissioned AWRS at mine pit end which resulted in discharge of supernatant water of about 1200 m^3 /day to nallah.

• Industrial effluent

A drain from Jagannathpur village side and another drain below coal conveyor belt enter into factory premises and join industrial waste water drain. There was also discharge of sullage from E and F Type quarters to above two drains. This waste water along with treated water from STP was discharged to Nandira nallah. Further, plant runoff of TTPS about 2000 KLD near STP area were also discharged to nallah during monsoon. Though SPCB suggested (May 2012) diversion of Jagannathpur village drain from plant boundary, same was not implemented till date. No further action has been initiated by SPCB in this regard. Besides this, there were four unauthorised outlets along the boundary of plant which discharged industrial effluents to Nandira nallah. Effluent standards ranged from 128-532 mg/litre, 31- 44 mg/litre and 12.40 - 18 mg/litre in respect of SS, BOD and oil and grease (O&G) as against prescribed standard of 100 mg/l, 30 mg/l and 10 mg/l respectively.

Government replied (October 2014) that AWRS was installed and commissioned but could not be operationalised due to capacity inadequacy of return water storage. It also replied that discharges through unauthorised outlets were mostly domestic effluent and were of lesser significance. But, in absence of a system to measure actual quantity and quality of discharge from unauthorised outlets, SPCB's stand on lesser significance does not seem prima facie acceptable particularly when TTPS was to adopt zero discharge by 31 March 2012 as per AP.

Status of industrial waste water/effluent generated, treated and discharged by various industries, though called for by audit, has not been furnished by SPCB till date.

2.2.7.12 Discharge of fluoride and ash contaminated water to river Mahanadi

CPCB observed (September 2007) that effluent management system of a fertilizer plant at Paradip was very poor and seepage from guard pond needed to be controlled. Further, Inspection reports of SPCB during May 2013, July 2013 and March 2014 disclosed that contaminated storm water from internal drains in factory premises from all sections led to an earthen pond and there was provision of outlet for discharge of overflow to river Mahanadi. Water quality of pond was acidic in nature and contained high concentration of fluoride ranging from 33.6 mg/l to 1140.0 mg/l against standard norm of two mg/l. It had not provided adequate control measures to treat overflow of water to river Mahanadi or any treatment facility at contaminated storm water drain before entering into earthen pond.

Besides this, while granting (June 2008) CTO, SPCB stipulated that fly ash generated from TPP of industry should be suitably disposed off and it shall submit a detailed action plan for disposal of ash. However, during inspection (July 2013) by SPCB, it was revealed that the unit disposed off substantial quantity of fly ash on bank of river Mahanadi without providing any retaining wall and garland drain/settling pits thereby contaminating Mahanadi river due to washout from dump. The industry had also not submitted AP for proper disposal of ash. The facts were also confirmed during joint verification (July 2014) of industry by audit team with SPCB officials.

Government stated (October 2014) that industry has submitted (January 2014) BG to complete required pollution abatement measures by October 2014.

2.2.7.13 Discharge of mercury contaminated water to river Rushikulya

A chlor-alkali plant in Odisha manufactured liquid chlorine and caustic soda using mercury cell technology since 1967. Waste water from manufacturing process was treated and discharged to an earthen pond on bank of river Rushikulya known as guard pond. SPCB granted Consent (December 2006) to

the industry with a condition that all mercury bearing effluent should be totally recycled and in no case should treated effluent be discharged to Rushikulya river or nearby water bodies. Standard norm of mercury was fixed at 0.01 mg/l. However, during surprise check of this industry under Environment Surveillance Squad (ESS) programme, CPCB observed (February 2008) that water bodies around industry, especially area between river Rushikulya and industry were contaminated with mercury ranging between 0.018 mg/l and 0.052 mg/l. Thus, SPCB instructed (July 2008) industry to submit a time bound AP to switch over to membrane cell technology from existing process of mercury cell technology. Industry reported (January 2011) that existing mercury cell unit was permanently closed since December 2010. However, it was observed that mercury content was again found (January 2013) by CPCB at 0.72 mg/l in ETP outlet, 0.02 mg/l in pond water and 0.11 mg/l in tube well water. Further, SPCB did not prepare Draft Project Report (DPR) to determine technology for remediation of contaminated site of industry till date of audit even though it was decided so (September 2011) in its 103rd Board Meeting.

In reply, Government stated (October 2014) that remediation of mercury contaminated site is yet to be taken up for which CPCB had signed (August 2014) a contract with consultants. But appropriate safeguard measures were not taken by the industry to prevent access of public and animals and to prevent surface run off as was observed (January 2013) by CPCB.

2.2.7.14 Release of fluoride contaminated water

One industry in Angul operated under valid CTO up to 31 March 2003 and further CTO was not granted due to discharge of waste water to outside drain without treatment. It was noticed (November 2006) by SPCB that fluoride level was higher by 117 times against standard of 2 mg/l.

SPCB again refused (December 2008) to issue CTO for 2006-11 and requested Collector, Angul to take appropriate steps towards closure of industry. However, SPCB did not follow it up with District Administration for its closure and instead continued to issue SCNs from time to time.

Government stated (October 2014) that during inspection (September 2014) non compliance were observed and accordingly, direction of closure was issued (October 2014) with a request to the Collector & District Magistrate, Angul to ensure its closure. But the industry continued to operate without obtaining CTO since April 2003.

2.2.7.15 Water Pollution by ULBs

As per the National River Conservation Directorate (NRCD), out of total measurable pollution in rivers from various point sources, around 75 *per cent* is contributed by municipal sewage from towns located along banks of rivers and remaining 25 *per cent* by industrial effluents. There are 109 Urban Local Bodies (ULBs) in Odisha. Audit observed the following:

• To improve sewerage system and resultant abatement of environmental pollution, NRCD sanctioned improvement of sewerage system of Puri town during August 2002 under National River Conservation Plan (NRCP). Accordingly, fund amounting to ₹ 80.45 crore was provided

along with Administrative approval (October 2002) by H & UDD to complete work by March 2012. Sewer line of 123.07 km out of 134.29 km was laid (June 2014) and STP with a capacity of 15 MLD was commissioned during June 2013. However, system was not made operational till June 2014 due to non construction of a sewerage pumping station.

STP at Matgajpur, Cuttack with capacity of 33 MLD commissioned during January 2007 did not work properly due to inadequate sewerage flow owing operation to & maintenance problem resulting in discharge of untreated water to river Mahanadi. As per draft city sanitation plan of Cuttack projected waste water generation was 92.13 MLD in 2014 for which existing capacity of STP (33



Defunct Sewerage treatment plant at Matgajpur, Cuttack

MLD) was not adequate to treat waste water of city.

- Integrated sewerage system for Bhubaneswar city was estimated at ₹ 754.23 crore with provision of laying of 412.20 km of sewer line and construction of 6 STPs with total capacity of 190.7 MLD. Work was taken up during February 2008 and was scheduled for completion by March 2012. However. 167.52 km out of 412.20 km of sewer line were laid and out of six STPs, not a single one was constructed as of June 2014.
- Construction of STPs has not been started for Rourkela and Sambalpur even though DPRs with estimates of ₹ 582.66 crore and ₹ 448.33 crore respectively have been prepared for the said work.
- During August 2012, GoO accorded permission for preparation of DPRs for 13 towns⁴⁸ but not a single DPR was prepared as of July 2014.
- No action was taken for improvement of sewerage system and establishment of STPs for balance 91 ULBs.

Hence, improvement in sewage system and function of STPs for abatement of water pollution was not effective in a single ULB.

Accepting the fact, Government stated (October 2014) that regular monitoring and meetings are being conducted with authorities of ULBs and H&UDD to expedite the process of installation of STPs and proper treatment of waste water before release to water bodies.

2.2.7.16 Water pollution by hotels

As per Section 25 of Water (PCP) Act, 1974, no person shall, without previous consent of SPCB establish or take any steps to establish any industry, operation or process or any treatment and disposal system or any extension or addition thereto, which is likely to discharge sewage or trade effluent into a

⁴⁸ Jajpur, Balasore, Baripada, Joda, Keonjhar, Sonepur, Phulbani, Koraput, Rayagada, Bhawanipatna, Jharsuguda, Bolangir and Kendrapara.

stream or well or sewer or on land. Environment (Protection) Rules, 1986 also provided standards to be complied by hotel industries while discharging effluents to outside.

As per information furnished (September 2014) by RO, Bhubaneswar 300 hotels in Puri were discharging their sewage without any treatment for which SCN/directions were issued during May to August 2014. Besides, STPs did not exist in case of 35 hotels in Bhubaneswar.

CTO file of a hotel at Puri revealed that it was issued (August 2006) with SCN due to inadequate waste water treatment facility. Afterwards, closure notice was issued twice during November 2006 and March 2008. Audit observed that SPCB issued (May 2014) direction to apply for CTE/CTO without ensuring necessary compliance to previous closure directions. As a result the hotel continued to operate in violation of closure notices since last eight years.

Government stated (October 2014) that total 556 number of hotels are operating in Odisha out of which 485 number of hotels are running without CTO/ not brought under consent administration.

2.2.7.17 Water pollution by hospitals

As per Bio-Medical Waste (Management and Handling) Rules, 1998 every healthcare establishment (HCE) handling bio-medical wastes in any manner, except those providing treatment/service to less than one thousand patients per month, shall obtain authorisation from the competent authority. It also stated that liquid waste, being a category of bio-medical waste, generated during diagnosis, treatment or immunisation of human beings or animals or in research activities pertaining thereto shall be treated and disposed off in such a manner that it will comply with the standards prescribed in the said Rules.

SPCB advised (March 2014) HCEs having 100 beds and above to obtain consent for discharge of waste water. As per information furnished by SPCB, out of 75 hospitals in the State with bed capacity ranging from 100 to 1707, only two were operating under valid consent as well as having ETPs to treat liquid waste. Further, SPCB has not prepared the list of HCEs, which are providing treatment to one thousand or more patients in order to monitor them for disposal of liquid waste through grant of consent.

Government stated (November 2014) that instructions had been issued for inventorisation of hospitals for consent management to take pollution abatement measures.

2.2.7.18 Discharge of effluents by Animal Slaughter Houses/Meat Processing Industries

CPCB instructed (July 2002) SPCBs to issue directions regarding installation of ETPs by Animal Slaughter Houses (ASHs)/Meat Processing Industries (MPIs). Due to non compliance of the said directions, CPCB again directed (April 2011) SPCB to furnish status of ASHs/MPIs including details of ETPs installed and also to propose action plan to cover all ASHs under CA. In reply SPCB stated (May 2011) that these industries were very small in number and operating in an unorganised manner as a result of which those were not brought under CA.

GoO constituted (October 2012) a "State Committee for Slaughter Houses (SCSH)" to (i) identify and prepare a list of all ASHs/MPIs, (ii) recommend appropriate measures for dealing with solid waste and water/air pollution, (iii) carry out surprise and random inspections of ASHs/MPIs, and (iv) identify on an ongoing basis, unlicensed slaughter houses, however small it may be, in region and to close down the same.

SCSH conducted two meeting as on December 2013 but ASHs/MPIs had not been identified and brought into CA of SPCB.

Government stated (October 2014) that there were no ASH or MPI units operating in the State. In all urban areas there are vending zones where meat/non vegetarian food are sold and installation and operation of ETPs may not be practically feasible. It was also stated that water pollution of such activities cannot be tackled effectively unless those are housed in an organised manner by developing appropriate infrastructure.

2.2.8 Compliance of environmental laws in Odisha

2.2.8.1 Non compliance of Environmental (Protection) Act by mining industries

On the basis of provisions contained in Environment (Protection) Act, 1986, GoI issued Environment Impact Assessment (EIA) Notification (January 1994) which specified a list of projects which require prior Environmental Clearance (EC) because of its pollution load on environment. Mining projects having lease area of five ha or more are required to obtain EC from GoI as per said notification.

It was observed that SPCB did not bring mining industries into CA even though it was decided (September 2002) in its 71^{st} Board Meeting to fix minimum frequency for verification of different categories of industries. This resulted in operation of 198 mines without obtaining CTE/CTO of SPCB and without obtaining EC from GoI during 2000-2010. When Department of Steel and Mines, GoO asked SPCB (July 2011) to take action against these mines, SPCB confirmed (September 2011) operation of 180 mines without CTE/CTO. As there was no other option, SPCB levied (2011-12) pollution charges amounting to ₹ 3.29 crore against these mines but impact of pollution load on environment remained unnoticed. Realising importance of time bound inspection and monitoring of mines, SPCB decided (February 2014) to conduct inspection once in every quarter.

Thus, in absence of time bound inspection and monitoring of mines by SPCB impact of pollution load on environment could not be assessed upto February 2014.

Government stated (October 2014) that inspection of mines as per targets were difficult because of severe manpower constraint. It was also stated that after improvement in manpower position in ROs, a decision would be taken to conduct inspection of mines every quarter.

2.2.8.2 Non compliance to directions of National Green Tribunal

National Green Tribunal (NGT) Act was passed (June 2010) for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto. NGT, while issuing its order (May 2013) instructed CPCB and SPCB to take suitable action against industries running without CTO from Competent Authorities as they were treated as large scale dereliction of legal obligation.

But, as per information furnished (September 2014) by SPCB, 2,116⁴⁹ number of industries under different ROs operated without obtaining CTO.

Government stated (October 2014) that suitable actions are being taken in shape of show cause notices, closure directions and legal action against defaulting industries / organisations.

2.2.8.3 Utilisation of Fly Ash

In order to protect environment, conserve top soil and prevent dumping and disposal of fly ash discharged from coal or lignite based TPPs, GoI issued notifications (November 2009) for utilisation of 100 *per cent* fly ash within first five years for power plant already in operation before notification and within first four years for plants started operation after notification.

However, as per information furnished by SPCB, net accumulation of fly ash during 2005-06 to 2008-09 was 36.99 Million Metric Tonne (MMT) which was further increased by another 52.21 MMT during 2009-10 to 2013-14 resulting in total accumulation of fly ash to 89.2 MMT. Though utilisation of fly ash increased from 43.93 to 61.5 *per cent* during 2009-10 to 2013-14, average yearly accumulation of fly ash remain unchanged (ranged between 9.44 MMT to 10.78 MMT).

Audit observed that only 14 out of 33 TPPs in Odisha achieved 100 *per cent* utilisation of fly ash during 2013-14. Further, it was noticed that OPGC utilised only 16 *per cent* of 10.5 lakh MT fly ash generated during the year 2013-14. Thus, fly ash utilisation by TPPs had not been achieved as per instruction of GoI.

Accepting the fact, Government stated (November 2014) that with the insistence of SPCB, fly ash has been included (November 2014) in the schedule of rates by the Works Department, GoO and it was decided in the meeting chaired by Chief Secretary to maximise use of fly ash in canal lining and road works.

2.2.8.4 Issue of conditional CTO by SPCB

CPCB directed (June 1993) SPCB that CTO shall be granted to an industry only after complete installation of requisite PCEs and no conditional CTO

⁴⁹ Balasore-141, Berhampur-317, Bhubaneswar-175, Kalinga Nagar-395, Keonjhar-265, Paradip-56 and Sambalpur-767.

shall be issued basing on Notifications of 16 January 1991 and 12 February 1992 of GoI. This was again reiterated (February 2000) by CPCB.

Audit observed that SPCB issued conditional consent to industries /projects.

Government stated (October 2014) that SPCB had persuaded the violating industries to comply with the stricter norms by allowing them to operate through BG mechanism or through appropriate directions under consent administration. But the decision was not implemented in all cases till CPCB again directed (February 2014).

2.2.9 Performance of State Pollution Control Board

2.2.9.1 Non development of Management Information System

SPCB monitors 516 industries directly and 6999 industries through its ROs. In absence of computerised MIS, information like number of industries due for verification, number of industries verified, number of units running without obtaining CTE/CTO, number of units against which water cess was due etc. could not be verified in audit.

In RO, Angul there were 1180 different category of industries like Stone Crushing Units (SCUs), Hot Mix Plants (HMPs), Mineral Stack Yard (MSY)/Railway Sidings (RS), Aluminium Plants, etc. running under consent administration of SPCB as on 31 March 2014. However, present status of all above industries has not been furnished to audit till date.

Government stated (November 2014) that SPCB will very soon develop MIS software once resource persons will be in place for which process has been initiated.

2.2.9.2 Running of industries/units without CTE/CTO

Scrutiny of records in selected ROs revealed that industries as indicated below were running without obtaining CTE/CTO from SPCB.

• Out of total 12 Hot Mix Plants (HMPs) under Angul RO, four HMPs were running with a valid CTE/CTO. In respect of remaining eight HMPs, no information was available. In order to know status of plant (i.e. whether plant was running without a valid consent) a Joint Verification of one HMP at Badkera, Angul was conducted in July 2014 by audit team along with an officer of RO, Angul. Though, the unit was refused (June 2010) issue of CTE by RO because of its close proximity to National Highway (NH) No. 42 it was found prima facie to be running as materials like bitumen and chips were stocked in the premises.

Government stated (October 2014) that out of eight HMPs, six were not in operation since long, one HMP was dismantled and HMP at Badkera, Angul has been again directed to shift its unit.

• 15 out of 28 Mineral Stack Yards (MSYs) under Angul RO were running without a valid CTE/CTO. Further, inspite of specific condition in CTO for transportation of



Transportation of minerals through open Railway wagon at Mancheswar Railway Station, Bhubaneswar

material through wagons by covering them with tarpaulin sheets, it was seen during physical visit to Mancheswar railway station that transportation was made without covering wagons and thereby causing air pollution.

In reply Government stated (October 2014) that 22 out of total 28 MSYs were not in operation. But, SPCB did not close them down with the assistance of District Administration.

• GoO issued (August 2010) order to close down all Stone Crushing Units (SCUs) which were operating without complying with siting criteria and without approval of SPCB. In said order, District Administration was also directed to assist SPCB in effecting closure of all such SCUs. Scrutiny of records revealed that 744 out of 1932 SCUs were issued with closure notice. However SPCB sealed 159 SCUs till April 2014 and remaining 585 SCUs were operational. During Joint inspection (03 July 2014) to verify status of four sealed SCUs, it was noticed that two SCUs were in sealed condition. The third sealed SCU was operating a Hot Mix Plant (HMP) without obtaining CTE from SPCB. In case of fourth sealed SCU the unit was found to be in working condition as the seal was broken.

Government stated (October 2014) that role of District Administration is vital for implementation of closure direction.

• SPCB granted (April 2001) CTE in favour of one Community Health Centre (CHC) in Angul for one year with a specific condition that hospital shall have waste management facilities like incinerator/ autoclave/ microwave system by 31 December 2002. However, grant/ renewal of CTO could not be considered in favour of hospital due to inadequate waste management practice adopted for biomedical wastes. In this regard, SCNs were also issued twice (June 2004 / April 2008) to CHC. Despite this, CHC continued to operate for more than 12 years without obtaining CTO. No further action was taken by SPCB other than issue of SCN.

Government stated (October 2014) that the unit has been issued show cause notice in September 2014 for refusal of authorisation.

2.2.9.3 Renewal of CTOs despite issue of closure directions

• SPCB granted (July 2007) CTE to one unit for manufacture / production of Ferro Manganese of 11200 Tonnes per annum (TPA) and afterwards CTO was granted (November 2009) which was valid up to 31 March 2010. The unit applied (March 2010) for renewal of CTO till 31 March 2011. SPCB inspected (October 2010) the unit for renewal of CTO and issued (May 2011) directions for closure. In the meantime, the unit again applied (March 2011) for renewal of CTO up to 31 March 2013, which was granted (June 2011) with validity up to 31 March 2012 despite earlier issue of direction for closure. In the interim, the unit had continued operation without valid CTO during 2010-11 and no further action was initiated to find out present status even after lapse of two years since last inspection (April 2012).

Government stated (October 2014) that the unit has been directed (October 2014) not to resume its operation without obtaining valid CTO from SPCB.

• CTE was granted (April 2007) to one unit for manufacture/ production of KB bricks 10,000 numbers/ day with a condition to obtain CTO at least 3 months before commercial production. During inspection, SPCB found (December 2013) the unit operating without obtaining CTO and hence issued closure direction. However, the unit was not closed as on date of audit.

Government stated (October 2014) that a reminder has been sent (September 2014) to Collector, Angul to ensure closure of the unit.

2.2.9.4 Holding of inadequate number of Board Meetings by SPCB

As per section 8 of the Water (PCP) Act, 1974 and section 10 of the Air (PCP) Act, 1981 SPCB shall meet at least once in every three months and observe such rules of procedure in regard to transaction of business as may be prescribed.

It was observed that SPCB conducted 10 Board Meetings against requirement of minimum 20 during 2009-14. Further, out of total 17 members, five to 11 members remained absent in each meeting.

While confirming facts, Government stated (October 2014) that above issue was addressed in 107th Board Meeting (November 2013) to ensure participation of members in subsequent meetings. Reply, however, is silent regarding non holding of adequate number of meetings as per the relevant Acts.

2.2.10 Utilisation of grants and other funds

2.2.10.1 Assessment of water cess

The Water (PCP) Cess Act, 1977 came into existence for levy and collection of cess on water consumed by industries and local authorities, with a view to augment resources of CPCB and SPCBs, for prevention and control of water pollution. As per Section 3 read with Section 6(4) and Section 8 of the Act, the State Government shall collect the cess from the persons liable to pay and deposit the same to the Consolidated Fund of India. Time bound assessment and collection of water cess (WC) is required to initiate pollution abatement programme as per mandate.

Scrutiny of records revealed that SPCB had not maintained database of all industries with details of consumption of water. As a result WC was not levied on all industries consuming water in the State and after physical verification of limited numbers of industries/units, SPCB assessed WC of ₹ 25.91 crore only and collected ₹ 25.14 crore during 2009-14. Further, submission of WC return was also not being monitored by SPCB as envisaged in the Act. From scrutiny of records of one industry, it was observed that WC return was not being submitted since inception by the industry which implied that industry had not paid any WC.

Government accepted the fact of non availability of industry-wise database of WC and stated (November 2014) that information relating to industry-wise assessment and collection of WC would be available soon.

2.2.10.2 Utilisation of Odisha Environment Management Fund

In order to arrest environmental and ecological degradation through environmental amelioration activities in sustained manner, a corpus fund named OEMF was created (December 2006) by GoO. DoFE was the nodal department for management of OEMF fund.

Scrutiny of records revealed that out of total fund of ₹44.87 crore received from various industries/units as on 31 March 2014, only ₹4.60 crore was spent towards various plantation activities upto 2010-11. However, no pollution abatement measures were taken up by DoFE since 2011-12 which defeated purpose of creation of OEMF.

In reply, Government stated (November 2014) that recently a decision was taken to release funds from OEMF for taking up such measures like upgradation/installation of STPs in ULBs of small cities.

2.2.11 Adequacy of infrastructure

2.2.11.1 Failure of SPCB to bring CPCB identified activities / projects under consent administration

CPCB directed (June 2012) SPCB to maintain uniformity in categorisation of industries for grant of consent and inventorisation and provided modified list of red (85), orange (73) and green (86) categories of industries in order to revise old list available with it. However, audit observed that SPCB was yet to bring 124 industries⁵⁰ under CA.

Government stated (October 2014) that SPCB is awaiting final report of the working group which has been constituted (February 2014) by CPCB to review the categorisation in a more scientific manner.

2.2.11.2 Non inclusion of Building and Construction Projects into Consent Administration

MoEF issued a notification (September 2006) called Environment Impact Assessment (EIA) Notification 2006 which stipulated that building and construction projects having built up area of more than or equal to 20,000 M^2 and townships and area development projects covering an area of more than or equal to 50 hectares are required to obtain EC. Accordingly, SPCB in its 98th Board meeting (February 2009) decided to bring this under CA and formulated Policy guidelines to regulate such projects.

It was revealed that EC was granted to construction projects with conditions that (i) installation of STP was to be ensured before project was commissioned for operation, (ii) necessary measures should be taken to mitigate odour problem from STP and (iii) green belt and avenue plantation of trees over at least 20 *per cent* of area shall be done.

^{50 13} Red, 53 Orange and 58 Green category.

Though CTE was issued to different construction projects, CTO was not issued (July 2014) to these projects due to non fixation of fee structure by SPCB. This resulted in non-verification of compliances relating to pollution made by these projects.

Government stated (October 2014) that issue of CTOs to these projects is now under active consideration of SPCB.

2.2.11.3 Interlocking of production system with pollution control devices

CPCB directed (23 June 1999) SPCB to issue necessary directions to all industries located in the State to report on arrangement made for interlocking production system with pollution control devices and to install separate meters for consumption of electricity for operation of such devices.

It was noticed that SPCB had not issued such direction to industries. Further, though CTO provided for installation of energy meters and maintenance of records for verification, SPCB did not mention this aspect in the inspection reports.

In reply Government stated (October 2014) that deliberate operation of large sized process units without operation of PCEs were hardly observed and hence, condition of interlocking of PCEs with process equipment is gradually losing its relevance. It was also stated that relying on energy meter reading to ascertain operation of PCEs was not feasible since the system was not tamper proof and also it was difficult to cross check huge meter reading data. GoO also assured that this problem will be solved by 31 March 2015.

2.2.11.4 Non implementation of Continuous Ambient Air Quality Monitoring Stations and Online Emission Monitoring Systems

CPCB advised (January 2009) SPCB to incorporate conditions in CTE/CTO like (i) establishment of well equipped laboratory facilities including Air Quality and Water Quality Monitoring Stations and (ii) uploading of data about key parameters like critical pollutants and local ambient air / water quality on websites of industrial units falling in Category "A" of EIA Notification 2006 and further directed (12 January 2011) SPCB to instruct all large and medium industries, which are either located in identified critically polluted areas or falling in 17 category of highly polluting industries to install continuous stack emission/effluent quality monitoring systems by March 2011 with a portal to CPCB and SPCB.

Government stated (October 2014) that in line with recent directions (February 2014) from CPCB, SPCB has obtained BGs from 17 category industries to ensure commissioning of such online systems by 31 March 2015.

2.2.11.5 Delay in operationalisation of Online Consent Management and Monitoring System

MoEF awarded project of "Online Consent Management & Monitoring System" (OCMMS) to National Informatics Centre (NIC) to be implemented by SPCBs. Project was meant for online processing of CTE/CTO applications for all categories of industries/entities/operations falling under purview of Water and Air Act. Accordingly, SPCB entered into an agreement with NIC for implementation of said project. Estimated time for complete operationalisation of project was four months.

SPCB while implementing the system faced various constraints such as uploading accompaniments to applications, non processing of both air and water consent applications simultaneously, non acceptance of special characters (<, >, @, #, \$, etc.) and tables. In order to solve these issues, NIC proposed (February 2014) further upgradation of system within one year.

Government replied (October 2014) that action has been initiated to improve specific areas like computer infrastructure, manpower, training and user awareness.

2.2.12 Conclusion

CPCB identified Angul-Talcher and Ib Valley-Jharsuguda area as CPAs for which time bound APs were prepared by SPCB for increasing the quality of the environment. But as observed by CPCB, air/water quality could not be improved in those areas. SPCB needed to take concerted action to ensure timely installation of PCEs and STA left several gaps in checking vehicular pollution in the State leading to air pollution. Similarly, non installation of STP/ETP by ULBs/Hotels/ Hospitals/Industries etc. also contributed to water pollution in various water bodies. Further, in absence of complete database of all sources of pollution and proper MIS, SPCB could not discharge its role effectively in taking appropriate pollution abatement measures and some industries/units were found operating without CTE/CTO.

2.2.13 Recommendations

Audit recommends coordinated action to consider:

- Development of a complete and up to date database of all sources of pollution and pollutant industries for effective monitoring by bringing them under consent administration;
- Implementation of real time based air quality and water quality monitoring stations.

Chapter 3

Compliance Audits

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Chapter 3

Compliance Audit

Compliance audit of Departments of Government and their field formation brought out instances of lapses in management of resources and failure in observance of regularity and propriety. These have been discussed in the succeeding paragraphs.

DEPARTMENT OF AGRICULTURE

3.1 Functioning of Orissa University of Agriculture and Technology

3.1.1 Introduction

The Orissa University of Agriculture and Technology (OUAT) was established in August 1962 by the Orissa Act 20 of 1961 at Bhubaneswar for discharging functions of Education, Research and Extension Education Programme in the field of Agriculture and allied sciences in an integrated manner. The Governor of the State is the Chancellor of the university and also the Honorary Chairman of the Board of Management (BOM). The Vice-Chancellor is the Principal Executive and Academic Officer.

Audit covered activities of OUAT for the period 2009-14 and records of six controlling offices⁵¹ were test checked. Besides, four⁵² out of 10 Course Colleges, four⁵³ out of 14 Regional Research Technology Transfer Stations /Sub stations (RRTSs) and 10⁵⁴ out of 31 Krishi Vigyan Kendras (KVKs) located in different districts were also test checked. Sample units were selected using Stratified Random Sampling method based on annual expenditure incurred during 2009-14.

Audit objective was to assess effectiveness of academic, extension, research activities and efficiency of financial management.

Audit Findings

3.1.2 Academic Activities

3.1.2.1 Inadequate teacher strength

Indian Council of Agriculture Research (ICAR) and Veterinary Council of India (VCI) prescribed teacher student ratio of 1:8 for Agricultural Colleges and 107 teaching staff for admission of 60 students annually for Veterinary Science and Animal Husbandry (V&AH) Colleges of OUAT respectively. It was observed in audit that against the above norm, teacher student ratio of College of Agriculture, Bhawanipatna was 1:11 and in case of College of V&AH it was 62 teachers despite increase in average numbers of students

⁵¹ Registrar, Comptroller, Dean Research, Dean Extension and Education (DEE), Director Physical Plants (DPP) and Dean Student Welfare.

⁵² College of Agriculture and Horticulture Chipilima, College of Agriculture, Bhawanipatna, College of Fishery, Rangeilunda and College of Veterinary Science and Animal Husbandry, Bhubaneswar.

⁵³ Bhubaneswar, Semiliguda, Chipilima and Jeypore.

⁵⁴ Dhenkanal, Keonjhar, Ganjam-I, Semiliguda, Gajapati, Bargarh, Kalahandi, Nuapada, Kandhamal and Sambalpur.

from 60 to 77 as of March 2014. In college of V&AH, teacher strength ranged between 53 and 62 during 2009-14. Though VCI communicated possible derecognition of the college if sanctioned strength was not increased, neither were more posts sanctioned nor were vacant posts filled up.

Further, it was noticed that though 841 posts were approved by ICAR, VCI and Government of Odisha (GoO) for various cadres of teaching staff, only 576 posts were filled up as of 31 March 2014 leaving shortfall of 265 (32 *per cent*) teachers as detailed in *Appendix-3.1.1*.

Government stated (October 2014) that, vacancies in the cadre of teachers had arisen due to retirements, leaving of posts by appointed persons and non availability of SC/ST candidates for selection. Despite availability of funds, vacancies in various cadres were not filled up resulting in non utilisation of central assistance as mentioned in Paragraph 3.1.6.2.

3.1.2.2 Campus placement of students

The University appointed a Placement Officer in June 2010 to provide and monitor employment opportunity for pass out students. Responsibility of the officer included contacting private and public undertakings, Corporate Houses, Pharmaceutical Industries, I.T. Industries, Agro Industries, Nationalised banks and other Government and non-Government organisations for conducting on campus and off campus interviews of students for employment. Scrutiny of records showed that average percentage of placement of students in MCA, M. Sc. Bio Informatics, M. Sc. Micro Biology and ABM courses showed a decreasing trend ranging from 46 to 23 *per cent* during 2009-14. There was no placement in one stream (MSc. Micro Biology) during 2012-14. Although placement fee at the rate of ₹ 100 was collected annually from each student in every college, there was no placement of students from other courses⁵⁵ during 2009-14.

Comptroller stated (July 2014) that as a Government Institution, OUAT could not compete with private institutions to spend for bringing companies for placement of students. But clearly more efforts were required to be made in this regard.

3.1.2.3 Inadequate hostel accommodation

For all students admitted in OUAT, accommodation in hostel is compulsory. It was noticed that in three hostels⁵⁶ for girls and one boy's hostel, more students than intake capacity were being accommodated. Excess ranged from 38 to 42 *per cent* in college of Horticulture, Chipilima, one to 37 *per cent* in college of Agriculture, Chipilima, 24 to 106 *per cent* in college of Fisheries, Rangeilunda and 10 to 17 *per cent* in case of college of Agriculture, Bhawanipatna as detailed in *Appendix-3.1.2*. Although actual admissions in these colleges increased, intake capacity in their hostels was not augmented resulting in overcrowding.

Master Programme in Agriculture, Agricultural Engineering, Veterinary Science, Fishery Science and Micro Biology and Home Science.

⁵⁶ College of Horticulture, Chiplima, College of Agriculture, Chiplima, College of Fishery, Rangeilunda and College of Agriculture, Bhawanipatna (Boys).

Government replied (October 2014) that majority of students come from different corners of State as well as outside the State and these needy students were accommodated in the hostels.

3.1.2.4 Commencement of Agro Polytechnic Centres

GoO created ten Agro Polytechnic Centres⁵⁷ (APCs) in May 2012 in different agro climatic zones of State under administrative control of OUAT to impart two year diploma course in Agriculture and Allied Sciences and Certificate Courses in modular form of six months/ one year duration as per market demand and need of the locality. The objective of project was to provide vocational education (diploma course) to aspirant rural youths who desire to take agriculture and allied activities as profession. These centres started to function from 1 September 2012 and 200 students (20 in each centre) were admitted till 2014.

Scrutiny of records revealed (May and June 2014) that though the centres were started from 1 September 2012 they were running without basic needs like regular teaching and non teaching staff, library, office building, class rooms, necessary equipment, laboratory and hostel for students for want of budget provision. In absence of teachers and other infrastructure, KVKs were being utilised for carrying out activities of APCs although the same is not permissible as per ICAR guideline.

Further, it was noticed that against budget proposal of \gtrless 68.65 crore for five years, GoO approved \gtrless 46.85 crore (for 1st to 4th years). Against \gtrless 33.64 crore meant for 1st year for infrastructure, equipment and establishment expenses, GoO released only \gtrless 3.28 crore (9.80 *per cent*) in 2013-14. Consequently no admission for academic year 2013-14 was made in ten APCs.

Government stated (October 2014) that due to inadequate budget provision, posting of staff and provision of necessary infrastructure in APCs were not done and OUAT was taking steps to fill up the posts in respective APCs. Thus, objective of project to provide vocational education to aspirant rural youth was largely defeated.

3.1.3 Extension activities

KVKs are district level institutions created for transfer of technological knowledge to farming community. Several programmes like capacity building of farmers, on-farm testing, seed production, front line demonstration and publication of farm literature are undertaken by KVKs.

3.1.3.1 Acquisition of land for KVKs

As per guidelines of ICAR, minimum 20 hectares of cultivable plain land was required to provide infrastructure, instructional units for demonstration of

⁵⁷ Fishery Science – (College of Fishery, Rangeilunda), Agriculture Science (KVK, Dhenkanal), Horticulture Science (KVK, Keonjhar), Agriculture Science (KVK, Bhadrak), Horticulture Science (KVK, Koraput), Agriculture Science (KVK, Deogarh), Animal Science (KVK, Sambalpur), Agriculture Science (KVK, Boudh), Agriculture Science (KVK Sundargarh) and Agriculture Science (KVK, Bolangir).

various activities, farm forestry and field crops etc. for KVKs. It was noticed that, 18 out of 31 KVKs have required minimum cultivable land of 20 ha. Shortfall in possession of land in other 13⁵⁸ KVKs ranged between four and 72 per cent. In the test checked two⁵⁹ out of 10 KVKs, shortfall ranged between nine and 33 per cent. In absence of such required land, activities like Front Line Demonstration (FLD), On Farm Testing (OFT) and seed production programmes were hampered. Against target of 1,950 FLDs in a year shortfall ranged from 79 to 87 *per cent*, and against target of 312 OFTs⁶⁰ per year, shortfall ranged between 37 and 66 per cent. As regards seed production programme, against target of 30 quintal seeds per hectare, shortfall ranged between six and 30 per cent in these 13 KVKs during 2009-13.

Further, following deficiencies were also noticed in implementation of KVKs.

As per ICAR guideline, farm area should have permanent source of water supply and be well drained.

- Sites for five KVKs⁶¹ did not have permanent source of water supply restricting crop demonstrations to Kharif season only.
- Four KVKs⁶² did not develop drainage channel as of March 2014 and faced water logging problems in rainy season causing crop damage.

Government stated (October 2014) that Agriculture Department had provided land available with them and this was accepted by site selection committee appointed by ICAR. OUAT was not involved in selection of land as decision depends on site selection committee. But as per ICAR guideline, site of KVK is selected by a committee which consists of representatives of concerned State Agricultural University, Department of Agriculture and Zonal coordinator and Dean Extension Education from the University. No follow up action was taken by Government to provide required land to above 13 KVKs.

3.1.3.2 Soil and water testing laboratory

As per ICAR guidelines, each KVK should be provided with one soil and water testing laboratory for conducting soil analysis prior to FLDs. Scrutiny of records of DEE, OUAT revealed following deficiencies.

• 18 out of 31 KVKs had no soil testing laboratories. Though 13 KVKs⁶³ had soil testing laboratories, five of these KVKs⁶⁴ did not have Soil Scientists rendering laboratory equipment unfruitful. In absence of soil testing analysis, proper recommendation to farmers on suitability of technology/ crop could not be ensured.

Angul -16 ha, Balasore -7.92 ha, Bolangir -16 ha, Boudh -17.9 ha, Jagatsinghpur-13.22 ha, Jharsuguda - 5.7 ha, 58 Kandhamal-18.14 ha, Kendrapara 16 ha, Nuapada -13.36 ha, Puri -15.2 ha, Rayagada-12.5 ha, Sonepur - 15.45 ha and Sundargarh -II - 19.12 ha.

Nuapada (13.36 ha) and Kandhamal (18.14 ha). 50

As per ICAR norms each KVK should have six scientists and each scientist was to conduct two numbers of OFTs in Kharif and two numbers in Rabi.

Koraput, Kendrapara, Dhenkanal, Boudh and Deogarh.

Bolangir, Rayagada, Balasore and Jajpur. 62

Angul, Balasore, Bargarh, Bhadrak, Dhenkanal, Ganjam-I, Kalahandi, Kandhamal, Keonjhar, Kendrapara, 63 Koraput, Nawarangpur and Jajpur. 64

Angul, Bargarh, Ganjam-I, Kendrapara and Koraput.

• It was further noticed that one Soil Scientist was posted to KVK, Ganjam - II though no soil testing laboratory was set up indicating irrational deployment of staff.

3.1.3.3 Planning and implementation of training programme

As per ICAR guidelines, KVKs had prepared five years (2007-12) Perspective Plan (PP) and also Annual Action Plan (AAP) for each year for imparting training to farmers.

Following was observed on implementation of training programme:

- Each KVK was to conduct 150 FLD each year so that farmers could realise advantages of newly introduced high yielding varieties of crops and also latest technologies. Shortfall against target ranged between 80 and 87 *per cent* in 31 KVKs during 2009-13. In test checked 10 KVKs shortfall ranged between 83 and 87 *per cent*. The Programme Coordinators of KVKs attributed shortfall to shortage of Scientists and staff. Shortfall in FLD deprived farmers, access to better crops and technology.
- Only latest varieties of crops/technologies were required to be demonstrated in FLDs. In 10 test checked KVKs, crop varieties such as Rajalaxmi, Manaswani (Paddy), Sunflower, Tarini (Brinjal), Devi (Groundnut), etc. released between 1992 and 2009 were demonstrated by KVKs during 2009-14. The Project Coordinators of KVKs stated that due to non availability of latest varieties some old varieties were selected for the programme.

3.1.3.4 Monitoring and evaluation of KVKs

At KVK level, activities were to be monitored by a Scientific Advisory Committee (SAC) consisting of 23 mandatory members⁶⁵ and were required to meet twice a year. It was observed in audit that:

- Against requirement of SAC to meet twice in a year, only one meeting was held in each of the 31 KVKs except one KVK at Bolangir where no meeting was held in 2009-10. This resulted in shortfall of 50 *per cent* during 2009-13.
- KVKs had been transferring technologies to farmers in adopted villages through FLD and OFT. To assess its impact in terms of productivity of crops, earning of additional income, evaluation by an independent agency was needed as per ICAR guidelines. No such evaluation was made in the State.

⁶⁵ Head of the host institution, Director Extension, Zonal Coordinator of the zone, Representative of the ICAR, Associate Director Research, District officers of line departments i.e Agriculture, Horticulture, Animal Husbandry, Soil Conservations, Social/Agro forestry, Sericulture, Fisheries, Irrigation, Social Welfare, Small Scale Industries, Representative of the Lead Bank of the district, Farm Radio officer in which KVK is located, two representative of farmers, two representatives of farm women and training organiser of KVKs.

3.1.4 Research activities

OUAT has 14 Regional Research and Technology Transfer Stations (RRTTSs) throughout the State for purpose of carrying out all research activities related to agriculture and allied sciences.

3.1.4.1 Seeds production programmes

The University released high yielding varieties of paddy, mustard and sesamum crops during 2009-13 for seeds production programmes under research activities. The average yield of crops per hectare for paddy decreased in 2012-13 compared to 2009-10 and Mustard and Sesamum decreased in 2011-12 compared to 2010-11.

							(.	In quintal)
Name of the crop	Year	Quantity	Year	Quantity	Year	Quantity	Year	Quantity
Paddy	2009-10	27.07	2010-11	19.98	2011-12	23.12	2012-13	25.09
Mustard	2009-10	1.66	2010-11	3.48	2011-12	3.30	2012-13	2.04
Sesamum	2009-10	Not taken up	2010-11	3.75	2011-12	1.56	2012-13	2.95

Table No. 3.1Average yield of seeds per hectare

Source : Information furnished by OUAT

Government attributed (October 2014) low yield to lack of assured irrigation facility, proper fencing for safeguarding from stray cattle, degradation of land over the years and absence of drainage facility during incessant rainfall.

3.1.4.2 Loss due to sale of seeds as non seeds

Research Stations were required to produce high yielding varieties of seeds which were to be sold to farmers by Odisha State Seed Corporation (OSSC). It was noticed that out of 8,222.08 quintal of seeds produced during 2009-14 by research stations, 3,109.01 quintal were not lifted by OSSC. In the absence of conditional store houses, seeds already produced were kept in godowns for a long period leading to failure in germination. As a result, 3,109.01 quintals were sold as non seeds and thereby OUAT sustained loss of ₹ 35 lakh as detailed in *Appendix-3.1.3*.

Government stated (October 2014) that OUAT should have ensured and if needed the matter could have been brought to notice of Government. It further, stated that plea of OUAT, "due to non lifting of seeds by OSSC, quality deteriorated due to prolonged storage and seeds were sold as non seed causing loss to University" is not tenable. Apart from loss, farmers were deprived of getting high yielding varieties of seeds to that extent.

3.1.5 Activities of Engineering Wing

The University has an Engineering Wing headed by Director Physical Plants (DPP), assisted by 11 Engineers to execute various construction and maintenance works of buildings and roads. Review of records of planning and execution of construction works revealed following deficiencies.

3.1.5.1 Construction of Veterinary Clinic-cum-Hospital Complex

DPP prepared (January 2008) an estimate for ₹ 3.58 crore for construction of Veterinary Clinic-cum-Hospital Complex with provision for earthquake resistance based on State Schedule of Rates 2007. DPP instead of executing this, entrusted the work (June 2008) to CPWD for ₹ 6.45 crore based on their estimate on deposit work basis which resulted in extra cost of ₹ 2.87 crore.

Government stated (October 2014) that DPP section could not execute the work as adequate engineering personnel having specialisation in design and planning were not available. But, it was noticed from earlier tender committee proceedings of OUAT that DPP had already executed various works of similar nature for different institution of OUAT.

3.1.5.2 Splitting up of works in violation of codal provision

As per Appendix VII of OPWD code Vol. II, tenders should be invited for all works costing more than \gtrless 50,000. In case of emergent situations such as relief works, repairs required due to damage by flood, closing of breaches in embankments on road, splitting up of work may be done in public interest for smooth and expeditious execution.

It was noticed that in violation of OPWD code, 743 construction/ special repair/improvement to building works valuing ₹ 25.02 crore were split into 5,223 F₂ agreements⁶⁶ during 2009-14 limiting value of each agreement to ₹ 50,000 thereby obviating approval of higher authority and resultantly wide publications of tenders was also not resorted to. Consequently, competitive rate for these works could not be ensured. The percentage of split up agreements to total number of agreements executed during 2009-14 ranged between 44 and 70.

Government stated (October 2014) that usually a major portion of funds is received by OUAT during later part of the financial year from ICAR for utilisation during the same year and submission of UC. So some of the repair and renovation works costing less than ₹ five lakh were executed by splitting as per provision of para 3.5.24 of OPWD Code obtaining due approval of VC on emergent basis for utilisation of funds. But records showed that OUAT had not taken up/pursued the matter with ICAR vigorously for provision of funds at the beginning of the financial year.

3.1.6 Financial management

3.1.6.1 Inadequate budget provision in State Sector

OUAT is financed through grants in aid (plan and non-plan) from Central Government, State Government, ICAR and its own resources by way of fees and fines from students, sale proceeds of publications and study materials, lease rent, etc. The details of funds received and expenditure incurred for the period from 2009-10 to 2013-14 is as detailed below:

 $[\]label{eq:F2} \begin{array}{ll} & F_2 \mbox{ Agreement- Standard contract form as per OPWD code.} \end{array}$

Name of scheme	Year	Opening	Total receipt of funds Expen-				₹ in crore) Closing
		balance	Grants	Other receipts/ interest	Total funds available	diture	balance
State Sector	2009-14	-2.03	431.17	57.19	486.33	499.24	-12.91
RKVY	2009-14	0.92	40.36	0	41.28	34.67	6.61
Central Plan ICAR/ GoI schemes	2009-14	13.82	301.14	0	314.96	309.73	5.23
Others - Self finance schemes	2009-14	9.36	2.51	22.77	34.64	22.33	12.31
Grand tota	22.07	775.18	79.96	877.21	865.97	11.24	

Table No.3.2Total Receipt and Expenditure funds during 2009-10 to 2013-14

Source : Figures for the year 2013-14 are provisional

Deficits mentioned above in State Sector were due to inadequate budget provisions by State Government to meet expenditure towards salaries of teaching and non teaching staff which were met from internal receipts and temporary loan from revolving fund for which OUAT depends on ICAR/GoI grant for developmental activities in different institutions and research stations. Each year's unspent balances of funds received under GoI schemes, ICAR, RKVY and self finance schemes were carried over to next financial year.

Government stated (October 2014) that OUAT had requested for adequate budget provision for payment of salaries in Plan and Non Plan.

3.1.6.2 Non utilisation of central assistance

As per sanction orders of ICAR, grant in aid released in a year had to be utilised in same year for salaries of staff and research/developmental activities and any unspent balance was to be either refunded or adjusted against grants of succeeding year. It was noticed that ICAR had adjusted ₹ 59.26 crore being unspent balances during periods from 2009-14 due to non filling up of scientists/ Professors/ Associate professors and Assistant professors in various research stations/ educational institutions as mentioned in Paragraph 3.1.2.1. OUAT had not taken steps to fill up vacancies as of March 2014 resulting in non utilisation of Central Assistance, besides non imparting quality education to students.

Government stated (October 2014) that due to vacancies in Professors and Associate Professors/ equivalent and Scientist posts, ICAR/GoI grant could not be utilised.

3.1.6.3 Non release of matching share by State Government

As per Memorandum of Understanding between ICAR and OUAT, All India Research Coordinated Programmes (AIRCP) are implemented on cost sharing basis between GoI and GoO (75:25). It was noticed that, Grants in aid of ₹ 81.69 crore were received from ICAR for salary/research activities during period 2009-14, but State Government had not released its matching share of ₹ 27.23 crore.

Government stated (October 2014) that in case of shortfall in State matching share, OUAT should have been more diligent in proposing requirement of funds.

3.1.6.4 Diversion of revolving fund

As per guidelines of ICAR, KVKs were to open a separate Bank Account for purpose of revolving fund and profits of that account would be utilised for various institutional programmes like supply of agricultural inputs, wages for agricultural activities, etc. Similarly, sale proceeds of crops and other produce were to be deposited in the same fund. In violation of above guidelines, ₹ 1.26 crore received (2009-14) from 28 KVKs (which includes ₹ 0.51 crore of test checked ten KVKs) from the above sales was retained by DEE⁶⁷ in current account. Out of these amounts, DEE released (July 2010 to March 2014) ₹ 0.60 crore to Comptroller in violation of ICAR Guideline.

3.1.6.5 Delay in utilisation of scheme funds

DPP received (2009-14) ₹ 30.44 crore⁶⁸ from OUAT under Rastriya Krishi Vikas Yojana (RKVY) for creation of infrastructure in Research Stations, KVKs and Colleges located in different districts during 2009-14. The DPP stated that out of ₹ 30.44 crore, ₹ 19.18 crore was spent and utilisation certificates (UCs) for ₹ 9.98 crore⁶⁹ only was furnished as of March 2014. It was noticed further that out of ₹ 11.99 crore received during 2013-14, ₹ seven crore was received during January to March 2014 for construction of boundary wall for KVKs. Further, it was noticed that against ₹ 1.73 crore spent over entire period of 2013-14, UCs for ₹ four crore were submitted (April 2014) by Comptroller to GoO.

Government stated (October 2014) that funds under RKVY grants for 2013-14 were received during February and March 2014. Although, work orders were issued during March 2014, the works were delayed due to code of conduct for General Election of 2014. However, reply is silent on mismatch in figures of UCs.

3.1.6.6 Irregular appointment and inadmissible payment

GoO approved creation of 27 Programme Coordinators (PCs), 162 Subject Matter Specialists (SMSs) and 81 Programme Assistants (PAs) in existing KVKs with stipulation that incumbents who were continuing on contractual basis but in regular scale of pay without getting any increment and other service benefits shall continue on probation till completion of six years of contractual appointment. On completion of six years, incumbents shall move over to corresponding time-scale of pay in newly created posts and their services will not be counted for purposes of any service benefits including terminal benefits. All posts and appointments were stated to be prospective

⁶⁷ Dean Extension Education (DEE) – 31 KVKs function under direct control of DEE who is declared as controlling head of the KVKs for controlling, monitoring and supervising extension activities of KVKs functioning under OUAT.

^{68 2009-10 ₹ 1.30} crore, 2010-11 ₹ 6.04 crore, 2011-12 ₹ 6.78 crore, 2012-13 ₹ 4.33 crore and 2013-14 ₹ 11.99 crore.

^{69 2010-11 ₹ 1.75} crore, 2012-13 ₹ 4.23 crore and 2013-14 ₹ 4 crore.

and hence regularisation of previous appointments was not possible. It was noticed that OUAT regularised 128 contractual employees i.e 84 SMSs (December 2010) and 44 PAs (December 2010) from date of their contractual appointment with pay protection and other service benefits with retrospective effect in violation of conditions of contractual appointment. This resulted in inadmissible payment of ₹ 70 lakh towards arrear payments of pay and allowances of contractual period. Though Finance Department (FD) had directed (July 2011) Department of Agriculture for necessary rectification in this regard, neither did Department of Agriculture nor OUAT carry it out and incumbents were allowed to draw pay and allowances in their regular scale of pay.

Government stated (October 2014) that contractual staff of KVKs were regularised as per the communication made by Agriculture Department during October 2010. But the fact remains that payments were made in disregard to instruction of FD and no steps were taken so far for rectification of the same.

3.1.6.7 Excess payment of arrear to KVK staff

As per order of ICAR (November 2010), the University would not make any arrear payment to staff of KVKs or any other staff not covered under this scheme towards arrear payments due to revision of Central Sixth Pay Commission. The sanction was also subject to condition that liability of arrear payment was limited to posts which were filled up prior to 1 January 2006. As such, arrear payments for posts filled up after 1 January 2006 is inadmissible.

It was noticed that arrear payment of \gtrless 2.21 crore was made to 89 employees of KVKs though those posts were filled up after 1 January 2006.

Government stated (October 2014) that as intimated by Zonal Project Director, JNKVV, Jabalpur during March 2011 as per MOU, OUAT may treat KVKs staffs at par for the purpose of privileges, amenities and facilities permissible to other staffs of OUAT. As KVK is funded cent *per cent* by ICAR, all KVKs staff had been paid at par without liability to State Government. However, payment of arrears to KVKs staffs was not admissible as these staff had joined after 1 January 2006.

3.1.6.8 Improper maintenance of Main Cash Book

As per Financial and Accounts Manual of OUAT, Cash Book shall be maintained as per OUAT Form I. All transactions through bank as well as cash will be incorporated in Cash Book and closed daily recording closing balance. Besides, only sum total for cash transactions made in Subsidiary Cash Books for each day should be entered in Main Cash Book to avoid any repetition. At the end of each week, a bank reconciliation statement should be drawn up and appended to the cash book itself showing dates and difference if any existing between actual bank balance and bank balance shown in Cash Book. It was noticed that:

- Main Cash Book of Comptroller was closed only up to March 2013 as on date of audit (July 2014) in violation of above provisions of Finance and Accounts Manual.
- Reconciliations were not made with bank statements at the end of each week or each month and there were discrepancies to the tune of ₹ 22.86 crore noticed in five bank accounts of Main Cash Book at the end of March 2013.
- Internal Audit wing had not conducted physical verification of cash for which main cash book was not closed since April 2013.

Government stated (October 2014) that steps were being taken for reconciliation of cash books.

But since Cash Books were not maintained as required and reconciliation with bank balances was in arrears, possibility of misappropriation of funds cannot be ruled out.

3.1.7 Conclusion

Non filling up post of teachers in colleges/ research stations led to non utilisation of central assistance, besides non imparting of quality education to students in absence of faculty. Ten Agro Polytechnic centres were created without ensuring teachers and basic infrastructure. As a result, infrastructure and establishment of KVKs were utilised for Agro Polytechnic centres in violation of ICAR guidelines. Balance land required for KVKs was not provided, resulting in non achievement of KVKs objectives.

DEPARTMENT OF WATER RESOURCES

3.2 Idle investment

Execution of head works of Minor Irrigation Projects without acquiring land for distribution canal systems led to idle investment of ₹ 5.50 crore

As per Para 3.2.1 of OPWD code, there are three essential pre-requisites for commencement of public works, namely (i) administrative approval, (ii) technical sanction and (iii) allotment of funds. For obtaining administrative approval, Detailed Project Report (DPR) has to be prepared and accordingly steps should be taken for land acquisitions (LA), forest clearances, detailed alignment drawings and estimates. For any project requiring land, the Divisional Officer should submit the matter to competent Revenue Officer for acquisition of land under LA Act and only with probable cost of land can estimate be sanctioned.

Check of records of Executive Engineer (EE), Kalahandi Minor Irrigation (MI) Division, Bhawanipatna revealed that five MIPs had been sanctioned during 2007-08 and 2008-09 at a cost of ₹ 8.45 crore to be funded with loan assistance from National Bank for Agriculture and Rural Development (NABARD) under Rural Infrastructure Development Fund XIII and XIV to provide irrigation facilities to 752 hectares of ayacut, but processes for acquisition of land for distribution canal systems commenced only in 2011-12,

2012-13 and 2013-14 as detailed in *Appendix - 3.2.1*. It was also noticed that the above land acquisition processes were at initial 4 (i) notification stage of LA Act, 1894 as of June 2014. The civil works for head works in the above five MIPs were completed between August 2009 and January 2011 at a cost of ₹ 5.50 crore. The head works could not be brought to beneficial use for over three years due to non completion of distribution canal systems for want of acquisition of land.

Thus, failure of EE to ensure acquisition of land for canal systems before commencing project works led to idle investment of ₹ 5.50 crore on head works of five MIPs.

Government stated (October 2014) that head works of projects were completed in all respect and progress of achievement in LA also depends on cooperation of other departments. Expeditious steps were being taken to finalise LA cases and complete projects shortly to achieve targeted irrigation.

3.3 Undue benefit to contractors

Unwarranted provision of manual excavation instead of mechanical means led to undue benefit of ₹ 1.79 crore to contractor

Para 3.4.10 (i) of OPWD Code stipulates that estimates should be prepared on the basis of Schedule of Rates (SoR) and provision of the item rates in estimate should be prepared in economical manner.

Estimates for the work "Rehabilitation, extension and modernisation of minor canals of Taladanda canal system from RD 41.935 km to 79.020 km" (two reaches) and "Improvement and flood protection to OAE No 95(B) on Surua left embankment from RD 00 km to 16.00 km" were sanctioned (between September 2010 and May 2012) by the CE&BM, Lower Mahanadi Basin for $\overline{\xi}$ 21.10 crore as detailed in *Appendix - 3.3.1*. The projects were to be funded by Asian Development Bank (ADB) and NABARD respectively. The works were awarded (between December 2012 and February 2013) to two contractors for $\overline{\xi}$ 25.81 crore for completion between January 2014 and August 2014. The works were in progress (November 2013) with expenditure of $\overline{\xi}$ 10.13 crore.

Check of records of EE, Mahanadi South Division, Cuttack revealed (December 2013) that estimates for above works provided an item "excavation of any approved type of soil in burrow area" and specification of the item stipulated that both excavation and transportation of earth were to be done by mechanical means and earth to be obtained from burrow areas was to be arranged by contractors at their own cost and risk. But, it was noticed from analysis of item rates of estimates that rates for excavation of earth were derived with costs applicable for engagement of labourers and transportation by mechanical means. EEs adoption of rates for manual excavation of earth at the rate of ₹ 33.48 to ₹ 43.77 per cum was in deviation to description of items of work to be done by mechanical means at an admissible rate of ₹ 15.38 per cum as per SoR. Adoption of unwarranted manual excavation rates from ₹ 18.10 to ₹ 28.39 per cum in three estimates. The total extra cost due to such

escalation was ₹ 1.79 crore which resulted in undue benefit to contractors. For execution of 3,62,393.17 cum of earth work as of December 2013, ₹ 1.11 crore had already been paid on to contractors.

Government stated (August 2014) that provision of excavation of earth work by manual means and transportation by mechanical means from burrow area was made in estimates due to non identification of burrow area as no Government land was available in nearby areas. Earth was also required to be arranged from paddy fields where cultivators did not allow deep cutting by machinery. In view of such constraint, excavation of earth work by manual means was provided in estimates.

But the contractors were responsible for arranging earth from burrow areas at their own cost and risk as per the agreement.

EMPLOYMENT AND TECHNICAL EDUCATION AND TRAINING DEPARTMENT

Upgradation of Industrial Training Institutes through Public Private Partnership and Setting up of New Polytechnics

3.4.1 Introduction

3.4

Government of India (GoI) sponsored (2004-05) schemes (i) to upgrade existing Industrial Training Institutes (ITIs) into Centers of Excellence for producing multi skilled workforce of world standard and (ii) to improve the employment outcomes of graduates from vocational training system (VTS), by making design and delivery of training more demand responsive all over India through Public Private Partnership (PPP) mode. Out of 30 existing ITIs in Odisha, 11 ITIs were to be funded (2004-05) by GoI with World Bank Assistance (WBA) and Government of Odisha (GoO) in the ratio 75:25 and 14 ITIs were to be funded (2007-08) by GoI without WBA through PPP mode with an outlay of ₹1.60 crore and ₹2.50 crore respectively per ITI. Vocational Education and Scheme Development (VE&SD) Mission was launched in August 2007 by GoI comprising four sub-missions including one on Polytechnics viz., "Setting up of New Polytechnics". Under this Sub-mission 22 new polytechnics were to be set up throughout the State.

Director of Technical Education & Training (DTE&T) under the administrative control of Employment and Technical Education & Training Department (E&TE&T) implements various schemes for promotion of technical and vocational education in State.

Audit of upgradation of ITIs through PPP and setting up of New Polytechnics was conducted during April to June 2014 covering a period of five years ending 2013-14 to assess whether upgradation/introduction/abolition of trades were made as per Institute Development Plan (IDP); utilisation of fund was optimum; employment of graduates from the VTS and adequate monitoring and internal control system was in place. Besides, E&TE&T Department and DTE&T, records of 25 out of 30 ITIs and 22 Polytechnics were test checked.

Audit Findings

3.4.2 Upgradation of ITIs through World Bank Assistance

The objective of the scheme was to upgrade existing ITIs into "Centres of Excellence (CoE)" for producing multiskilled workforce of World standard. For this purpose, courses like Broad Based Basic Training (BBBT) of one year duration followed by advanced/specialised modular courses by adopting industry wise cluster approach, multi entry and exit provisions and PPP in the form of Institute Management Committees (IMCs) to ensure greater and active involvement of industry in all aspects of training was attempted. Scheme for upgradation of ITIs into CoE through domestic funding and World Bank assistance was implemented in 11 out of 30 ITIs of State during 2005-10 in various multiskill industrial sectors.

3.4.2.1 Planning

All ITIs which met eligibility criteria set out in Memorandum of Understanding (MoU) signed with GoI and selected for upgradation into CoE were required to submit IDP. These were developed by respective IMCs in consultation with stakeholders including local business chambers, faculty members, students and the community. Each IDP defined long-term goals of institution, issue and challenges facing the institution and strategies for dealing with them. IDP also set targets for institutional improvement, performance indicators and details of financial requirement. As per IDPs approved by Directorate General of Employment and Training (DGE&T) of GoI, for nine out of 11 ITIs, it was planned to upgrade 40 existing trades and introduce 17 trades in these selected ITIs during 2005-10 as detailed in *Appendix-3.4.1*.

As against planned upgradation of 40 trades, only 22 trades were upgraded that too after delay of seven to 43 months and the remaining 18 trades (45 *per cent*) were yet to be upgraded. Out of 17 envisaged trades, only nine trades could be introduced with delay ranging from one to 36 months as of March 2014. Shortfall in achievements was attributed mainly to non completion of civil works and non affiliation of trades by DGE&T as discussed in paragraphs 3.4.2.3 and 3.4.2.5.

DTE&T stated (October 2014) that some trades though not proposed in IDPs had been introduced/ upgraded based on local area demand. But the reply is silent regarding non achievement of planned trades in these ITIs.

3.4.2.2 Financial Management

DGE&T had released 75 *per cent* of required funds and matching State share of 25 *per cent* was released by GoO. State Project Implementation Unit (SPIU) under DTE&T had drawn and released funds to related Roads and Building (R&B) divisions of Public Works Department for civil works and procured equipment through Odisha Small Industries Corporation Limited (OSIC). Funds released and utilised as on March 2014 are detailed in *Appendix-3.4.2*.

Against allocation of ₹ 7.55 crore for civil works, ₹ 26.07 crore for equipment and ₹ 9.69 crore for other charges, GoI and GoO jointly released ₹ 7.55 crore, ₹ 26.13 crore and ₹ 6.61 crore respectively for these purposes as on March 2014. Of these, ₹ 7.35 crore (97 *per cent*) was spent for civil work, ₹ 17.97 crore (69 *per cent*) for procurement of equipment and ₹ 5.64 crore (85 *per cent*) was utilised towards other charges. Tools and equipment valuing ₹ 1.02 crore procured for introduction of Instrument Mechanics trade at ITI Bolangir remained unutilised since 2011 due to non affiliation of trade planned in IDP leading to blockage of funds. Short release of ₹ 3.02 crore against the allocation of ₹ 43.31 crore was due to non submission of utilisation certificate by SPIU.

DTE&T stated (October 2014) that utilisation of available funds would be made by November 2014.

3.4.2.3 Civil Works

Though, SPIU was provided funds during 2005-06 to 2009-10, release of funds to Phulbani R&B division for taking up civil works like workshop class room and library cum reading room was delayed by 20 months. Civil works like CoE for advance module and building for trade upgradation at ITI, Bhubaneswar was not completed (March 2014) even after lapse of 51 months of release of funds (December 2009). Further, 17 civil works like construction of hostel, driving field with traffic signal, library cum reading room, conference hall, auditorium, audio visual conference hall, etc. of six ITIs though planned in IDP for execution were not taken up as of March 2014 either through balance scheme funds or State funds thereby depriving trainees of proper infrastructure.

DTE&T in its reply stated (October 2014) that in case of ITI, Phulbani there was no delay in release of fund to the executing agency. In case of ITI, Bhubaneswar, Management while accepting facts stated that civil works were being carried out as per IDP approved by National Project Implementation Unit (NPIU).

3.4.2.4 Academic Performance of ITIs

Objective of the scheme was to improve employment outcomes of graduates from VTS by making the design and delivery of training more demand responsive. Key Performance Indicators (KPIs) as per scheme were to:

- improve internal efficiency by 20 *per cent* increase over five years in proportion of pass outs from a baseline of 61 (2006) to 73 *per cent* and
- improve external efficiency by 56 *per cent* increase over five years in proportion of pass outs who find employment within one year of finishing training from a baseline (2006) of 32 to 50 *per cent*.

It was noticed that eight ITIs achieved target pass out rates which ranged from 73 to 100 *per cent* for all the years. Three ITIs failed to achieve target pass out rates for one to two years.

Similarly, 50 *per cent* employment was to be achieved by 2011-12. Six ITIs⁷⁰ failed to achieve targeted employment and shortfall ranged from 30 to 50 *per cent*. While three ITIs failed to achieve base line value of 32 *per cent* for four years, two ITIs failed for three years and one ITI failed for six years indicating lack of improvement in performance as detailed below:

						(In p	ercentage)
Sl. No.	Name of the ITI	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1.	Hirakud	22	27.47	42.17	29.51	42.16	20
2.	Balasore	21.88	32.61	51.16	18.39	24.14	0
3.	Bhubaneswar	0	0	0	0	0	14.71
4.	Rourkela	6.41	10	17.05	24.66	16.22	12.90
5.	Cuttack	39.47	26.88	18.18	32.29	7.95	5.32
6.	Ambaguda	0	0	15.91	24.35	18.44	18.90

Table No.3.3 Non achievement of targeted employment rates

Source : Information furnished by ITIs

Thus, employment as envisaged in the scheme guidelines could not be achieved due to lack of active and effective industry participation through signing of MoU.

DTE&T stated that shortfall in employment rate was mainly due to delay in operationalisation of mega industries and outsourcing of various activities by operational industries.

3.4.2.5 Affiliation Status

As per National Council for Vocational Training (NCVT) norms, an ITI seeking affiliation for starting a new trade had to ensure availability of necessary infrastructure and Instructors.

Scrutiny of records of 11 ITIs relating to BBBT, Advance Module (AM) courses and trades started and affiliated revealed that although ITI Hirakud started AM courses since August 2007, affiliation was not obtained till March 2014. There was delay in getting affiliation in BBBT courses ranging from 29 to 72 months in respect of eight ITIs⁷¹ and 24 to 60 months for AM courses from their starting year due to non creation of required infrastructure. Consequently, trainees who passed during these years were deprived of getting NCVT certificates resulting in loss of better employment opportunity outside State.

Accepting audit observation, DTE&T stated that State Council of Technical Education and Vocational Training (SCTE&VT) Odisha had been requested to take appropriate action in the matter of award of National Trade Certificate to trainees.

⁷⁰ Ambaguda, Balasore, Bhubaneswar, Cuttack, Hirakud and Rourkela.

⁷¹ Cuttack, Rourkela, Berhampur, Bhawanipatna, Talcher, Balasore, Bhubaneswar and Hirakud.

3.4.3 Upgradation of ITIs without World Bank assistance

As per GoI announcement (2007-08), 14 ITIs of State were to be upgraded into CoE through PPP without WBA. Salient features of Scheme included constitution of IMC led by Industry Partner, entering into Memorandum of Agreement (MoA) with GoI and Industry Partner, extension of interest free loan by GoI to IMC, manpower management of ITIs and improving quality of training leading to better employability.

3.4.3.1 Planning for implementation of programme

Each IDP sets targets for institutional improvement, KPIs and details of financial requirement. Accordingly, as per IDPs approved by DGE&T in respect of 14 ITIs, it was planned to upgrade 50 trades and introduce 56 new trades during 2007-14 as detailed in *Appendix-3.4.3*.

It was seen that as against planned upgradation of 50 trades, 22 trades (44 *per cent*) were upgraded and out of 56 new trades, only 10 trades (18 *per cent*) could be introduced leading to shortfall in achievement of target. The reasons for shortfall were mainly due to non completion of civil works, non affiliation of trades by DGE&T, etc.

DTE&T in reply (October 2014) stated that some trades though not proposed in IDPs, had been introduced/upgraded based on local area demand. The reply is silent on shortfall in upgradation/introduction of trades planned in IDPs.

3.4.3.2 Financial Management

DGE&T released (February 2008 to June 2011) interest free loans for 14 ITIs (100 per *cent*) at the rate of ₹ 2.50 crore each directly to IMCs electronically, based on MoA signed between Industry Partner, GoO and GoI. Of these funds, 25 *per cent* was for civil works, 25 *per cent* for equipment and 50 *per cent* was to be kept in any Nationalised Bank as long term deposits for earning interest. The funds released and utilised as on March 2014 are detailed in *Appendix-3.4.4*.

It was noticed that as against release of ₹ 17.50 crore for civil works and procurement of equipment during 2007-12, only ₹ 11.06 crore (63 *per cent*) could be utilised as of March 2014. This was mainly due to non commencement of civil works in four ITIs⁷². Further, ₹ 17.50 crore being 50 *per cent* of released amount was not invested in fixed deposits immediately after release by 13 IMCs. Delay in deposits ranged from 39 to 566 days and this resulted in loss of interest amounting to ₹ 0.48 crore as detailed in *Appendix-3.4.5*.

Accepting audit observation, DTE&T stated that revised guidelines for implementation of scheme had been issued (July 2014) by DGE&T which had been taken up for implementation.

⁷² Baripada, Boudh, Umerkote and Malkangiri.

3.4.3.3 Civil works

GoI released (2007-12) ₹ 8.75 crore to 14 ITIs for civil works (₹ 62.5 lakh for each) for completion in initial two years. Delay in completion of these works is detailed below:

- In case of three ITIs⁷³, ₹ 1.88 crore released to IMCs during March 2009 to October 2010, were not passed on to R&B Divisions for civil infrastructure works even after lapse of 41 to 60 months.
- Funds released to eight ITIs⁷⁴ during February 2008 to June 2011, were passed on to R&B divisions with delay ranging from 14 to 71 months.
- Though funds were released by IMCs during June 2010 to October 2013 to R&B Divisions, civil works of four ITIs⁷⁵ could not be completed till March 2014 even after lapse of five to 45 months due to inadequate coordination by IMCs.

Thus, due to delay in release of funds by IMCs and non completion of works by R&B divisions, trades upgradation / introduction could not be taken up in time. Benefits of training programmes and generation of revenue for repayment of loan as envisaged in IDPs remained unachieved.

DTE&T while accepting the audit observation stated that IMCs have been sensitised to pay proper attention for completion of civil works under the scheme without any further delay.

3.4.3.4 Academic Performance of ITIs

As per IDPs, pass and employment rates were to be achieved as per year-wise targets fixed.

- As against targeted pass rate ranging from 75 to 100 *per cent* for a period of five years, achievements ranged from 19 to 98 *per cent* except in ITI, Chhatrapur where the achievement was 100 *per cent* during 2008-09. Three ITIs failed to achieve pass rate in all five years, four ITIs failed in four years, four ITIs in three years and one ITI in one year whereas two ITIs achieved target for all the years.
- Achievement of employment rate was between five to 94 *per cent* as against targeted employment rate of 40 to 100 *per cent* for five years. While three ITIs failed to achieve employment rate for all five years, three ITIs failed for four years, four ITIs failed for three years and three ITIs for two years whereas GITI, Bolangir achieved target for all the years.

DTE&T stated in reply that shortfall in employment rate was mainly due to delay in operationalisation of mega industries and outsourcing of various activities by operational industries.

⁷³ Boudh, Malkangiri and PCITI, Baripada.

⁷⁴ Umerkote, Puri, Bolangir, Anandpur, Khariar Road, Dhenkanal, Barbil and Takatpur.

⁷⁵ Khariar Road, Takatpur, Anandpur and Bolangir.

• As per IDPs, 74 trades remained unaffiliated with NCVT for want of required facilities like tools and equipment, infrastructure, etc. in 14 ITIs.

Thus, several ITIs covered under the scheme failed to achieve targeted KPIs. This was mainly attributed to lack of improvement in qualitative training in absence of required instructors, tools and equipment as discussed in subsequent paragraphs.

3.4.4 Shortage of tools and equipment

ITIs were required to maintain tools and equipment as per standard lists prescribed by NCVT. As per NCVT norms, for each trade, 17 set of tools were to be provided to trainees including one set for instructor. It was noticed that there was shortfall in availability of tools and equipment in four ITIs⁷⁶ ranging from four to 71 *per cent* mainly due to non procurement of equipment despite availability of funds. Training without required tools and equipment deprived trainees of quality training.

DTE&T stated that steps have been taken for procurement of tools and equipment conforming to the standard prescribed by NCVT for different trades/units.

3.4.5 Non Abolition of trades

As per IDP, six ITIs⁷⁷ proposed abolition of 16 unpopular trades. Against this, only six trades in four ITIs⁷⁸ were abolished and the remaining 10 trades were not abolished as of March 2014. Further, tools and equipment in these ITIs remained unused due to lack of initiative by Principals either to dispose or transfer them where such trades were available as detailed in *Appendix-3.4.6*.

While accepting the fact, DTE&T in reply stated that steps had been taken to keep admission in abeyance against trades of redundant nature. But the reply is silent on non abolition of trades.

3.4.6 Revenue generation

For fulfilling of objectives of the scheme, IMCs were to generate sufficient funds for purchase of consumables and materials for training and for repayment of loan received. The main source of revenue generation was production and job works, self finance based short term training modules, tailor made/customised training programmes for turnkey projects, testing and certification charges, etc.

Audit noticed that 14 ITIs who availed loan assistance of ₹ 35 crore from GoI for upgradation without WBA had earned revenue of ₹ 6.74 crore during 2007-14 which included ₹ 6.52 crore interest earned on the funds available for upgradation of ITIs. While seven ITIs had earned revenue of ₹ 22.83 lakh,

⁷⁶ Bolangir, Bhawanipatna, Khariar Road and Malkangiri.

⁷⁷ Takatpur, Cuttack, Anandpur, Puri, Rourkela and Bargarh.

⁷⁸ Cuttack, Puri, Rourkela and Bargarh.

seven others had not undertaken any revenue generation activity. Low revenue generation was mainly due to non commencement of new trade and failure to upgrade existing trades as per IDP as discussed in the preceding paragraph No. 3.4.3.1. Due to lack of revenue generation repayment of loan after expiry of moratorium period would pose a problem.

Accepting the point, DTE&T stated that ITIs had been advised to conduct various short term MES courses, undertake production activities as Trainingcum-Production Centre with DIC registration to generate sufficient internal revenue for such repayment of loan.

3.4.7 Manpower

As per schemes guidelines, State Government was to ensure that sanctioned strength of instructors in ITIs were always filled up and in no case were the vacancies to exceed 10 *per cent* of sanctioned strength at any point of time.

Audit noticed that there were vacancies as detailed in *Appendix-3.4.7* in technical cadre in 25 ITIs and percentage of vacancy ranged from 50 to 100 which affected quality of training imparted and achievement of KPI to some extent as discussed in para 3.4.3.4.

DTE&T stated that filling up of ATO post (contractual) for VTIP and other ITIs through OSSC Bhubaneswar was in process.

3.4.8 Monitoring

As per WBA scheme the project is guided by a State Steering Committee (SSC), headed by Principal Secretary/Secretary/Commissioner for vocational training which include significant senior level representation from industry. SSC will review project implementation throughout the life of the project. SSC is assisted by a SPIU with adequate fulltime officials/consultant and support staff. The same committee may be used for scheme without WBA with additional role and responsibility. According to the WBA scheme GoO should conduct SSC meeting every quarter to take stock of the scheme. For the scheme without WBA, GoO should conduct regular SSC meeting every two months to sort out issues related to low utilisation, coordination between Principal and Industry partner, vacancy position and monitor the performance of ITIs with respect to KPIs as specified in MoAs/IDPs. Audit observed various deficiencies in monitoring of schemes as described below:

• SSC constituted for the scheme was formed by GoO in March 2005. Subsequently it was reconstituted (July 2007) as required for upgradation of ITIs into CoE. First meeting of SSC was held in March 2005 and after that, six more meetings were held (October 2006, July 2007, October 2008, May 2009, September 2010 and March 2012). Thus, only seven meetings were conducted as of March 2014 for WBA scheme against required 36 meetings and against requirement of 42 meetings as per the scheme without WBA, only four meetings were conducted as of March 2014.

- GoO established (November 2008) SPIU under DTE&T to function in conformity with Project Implementation Plan (PIP) of GoI as outlined in different schemes with objectives to *inter alia* monitor and review implementation of GoI Schemes at institutes and take remedial measures, to receive funds from GoI and other sources and maintain proper books of accounts, etc. For above purpose, GoI and GoO released ₹ 46.40 lakh but only ₹ 14.12 lakh was utilised as of March 2014.
- The Governing Body (GB) and Executive Committee (EC) of SPIU were to meet at least once in every six months and three months respectively to review the implementation of schemes in institutes and take remedial measures. Since the formation of SPIU, no meetings of GB and EC had been convened (March 2014). Thus, purpose of creation of SPIU for close monitoring and speedy implementation of different Schemes of GoI was defeated.

DTE&T while accepting this stated that action was being taken to convene meetings of Managing Committee and Governing Body of SPIU Society at regular intervals as per provisions contained in Bye Law of the Society.

3.4.9 Management Information System

Management Information System (MIS) was to link all ITIs, Central Institutes, State Directorates at State level and NPIU at National level. Various modules viz., ITI, State Directorate, Placement, Apprenticeship Training, Affiliation, System Administration, Central Institution and DGE&T were part of the MIS. GoI sanctioned (March 2011) ₹41.53 lakh for implementation of MIS application for reforms and improvement in Vocational Training Services rendered by the State and Central Government under WB assisted VTIP at project and non project ITIs. An amount of ₹34.14 lakh was drawn (May 2011 and October 2011) by SPIU for procurement of computers and its accessories for implementation of MIS application at 27 ITIs and at SPIU of DTE&T.

Audit observed that though hardware was purchased and installed in different ITIs, web based portal was not developed (March 2014) defeating purpose of creation of MIS.

DTE&T stated that a Nodal Team had been created (September 2014) for MIS Application.

3.4.10 Internal Control

As per scheme guidelines, IMC constituted for each ITI was required to submit quarterly report on implementation of Scheme to SSC through SIC (SPIU), which in turn was to submit a consolidated report to NSC about all ITIs covered under scheme. In case of unsatisfactory performance in achieving KPIs, IMC was to submit a detailed report to SSC within 30 days of receipt of a notice in this regard, indicating reasons for failure and measures required to be taken. SSC was to forward this report to NSC with their comments. NSC was to fix responsibility for such failure and ensure that necessary corrective action was taken. Additional Director (SPIU) further instructed (July 2011) the Principal of these ITIs to ensure submission of the quarterly progress report by 5th day of the succeeding month of every quarter. Audit observed that none of the test checked ITIs were regular in submitting quarterly progress reports.

DTE&T had accepted the fact and noted observation for future guidance.

3.4.11 Setting up of new polytechnics

GoI decided to establish new polytechnics as a component of the Sub-mission on Polytechnics in unserved and underserved districts in the country during 11th Plan period with financial assistance of ₹ 12.30 crore per polytechnic of which ₹ eight crore would be spent on civil works and ₹ 4.30 crore would be spent on equipment, machinery, furniture, transport and learning resource materials. The objective of scheme was to enhance employment oriented skilled manpower through polytechnics. Land required for the projects with development charges as well as 100 *per cent* recurring expenditure was to be borne by State Government. Sanctioned strength of teachers in polytechnics was to be filled up and in no case would vacancies be allowed to exceed five *per cent* of sanctioned strength.

Based on the proposal of GoO, Ministry of Human Resources Development (MHRD) sanctioned 22 polytechnics in 22 unserved districts⁷⁹ of Odisha in three phases during 2008-09 to 2009-10. The projects were to be executed through DTE&T. As against project cost of ₹ 270.60 crore, GoI released (2010-14) ₹ 181.47 crore to GoO which was subsequently released (2010-14) to DTE&T. As of March 2014, DTE&T submitted UCs for ₹ 98.16 crore for civil works and ₹ 5.30 crore for procurement of equipment leaving an unspent balance of ₹ 78.01 crore. Out of 22 new polytechnics only eight⁸⁰ were operational during the academic session 2013-14 in four trades (60 students in each of four trades of each polytechnic). As against intake capacity of 1,920 students (240 students for each of the eight polytechnics), 1,413 students were admitted in different trades of above polytechnics resulting in shortfall in enrollment of students ranging from 6.67 to 100 *per cent*.

DTE&T stated that shortfall in enrolment was due to lack of awareness among DET aspirants. However, the department had not created any awareness among DET aspirants.

3.4.11.1 Civil works

As against ₹ 161.47 crore released for 22 polytechnics by GoI for civil works, DTE&T released sum of ₹ 152.47 crore to executing agencies (Roads & Building Divisions, Industrial Infrastructure Development Corporation of Odisha and Odisha Small Industries Corporation) during 2010-11 (₹ 138.72

⁷⁹ Phase-I:Gajapati, Boudh, Sambalpur and Malkangiri vide letter dated 31.12.2008. Phase-II Deogarh, Nabarangpur, Jajpur, Nayagarh, Kalahandi, Nuapada, Sonepur, Kendrapara, Jagatsinghpur, Puri vide letter dated 23.07.2009. Phase-III Angul, Bolangir, Mayurbhanj, Bargarh, Koraput, Bhadrak, Balasore, Kandhamal vide letter dated 29.09.2009.

⁸⁰ Government Polytechnics, viz. Bolangir, Balasore, Gajapati, Kandhamal, Kendrapara, Nabarangpur, Sambalpur and Sonepur.

crore), 2012-13 (₹ 11.25 crore) and 2013-14 (₹ 2.50 crore). As of March 2014, ₹ 54.31 crore was lying with those agencies and ₹ nine crore remained with DTE&T. In this connection, Audit observed the following;

• In three polytechnics⁸¹, the concerned agencies (OSIC and R&B) had not started construction works till June 2014 even after lapse of 15 to 34 months of handing over of the land. In other 19 cases, the percentage of utilisation of fund ranged between two and 88 as detailed in *Appendix-3.4.8*.

DTE&T replied that lands at Deogarh and Mayurbhanj were challenged in Court and land at Bhadrak was encroached by local people.

• In Deogarh and Jagatsinghpur, lands were handed over to executing agencies (March and May 2013) after scheduled date of completion (2011-12).

DTE&T replied that handing over of land in case of Jagatsinghpur was due to different opinions from various quarters.

- There was cost overrun of ₹ 11.04 crore in case of nine⁸² out of 22 polytechnics due to change in scope of work, tender premium, etc.
- In 11 out of 22 polytechnics, DTE&T released ₹ 56 crore to executing agencies during 2010-11 before handing over land for construction of civil works resulting in undue benefits to these agencies as detailed in *Appendix-3.4.9*.

DTE&T stated that funds were to be kept in current account which fetches no interest. The reply is however, silent on release of funds before handing over of land.

3.4.11.2 Procurement of equipment

GoI released ₹ 20 crore upto March 2014 for 10 polytechnics⁸³. DTE&T issued purchase orders worth ₹ 15.49 crore during 2012-13 and 2013-14 for procurement of equipment for eight polytechnics⁸⁴ proposed to be operational during Academic Session 2013-14. However, materials valuing ₹ 5.30 crore only were received till March 2014 although these Polytechnics were made operational since 2013.

DTE&T stated that equipment for 1st year would be procured and procurement for subsequent years would be made later. The fact remains that procurement of equipment was not made before commencement of courses which led to training being imparted without required equipment.

⁸¹ Bhadrak, Deogarh, and Mayurbhanj.

⁸² Balasore, Bolangir, Boudh, Gajapati, Kandhamal, Malkangiri, Kendrapara, Nayagarh and Puri.

⁸³ Balasore, Bolangir, Gajapati, Nayagarh, Nabarangpur, Sonepur, Kendrapara, Kandhamal, Sambalpur and Malakangiri.

⁸⁴ Bolangir, Balasore, Gajapati, Kandhamal, Kendrapara, Nabarangpur, Sambalpur and Sonepur.

3.4.11.3 Manpower

The sanctioned posts of the eight operational polytechnics and men in position were as follows;

Sl. No.	Staff category	Sanctioned post	Men in position	Vacancy	Percentage of vacancy
1	Principal	08	Nil	08	100
2	Senior Lecturer	56	18	38	68
3	Lecture	120	28	92	77
4	Junior Clerk (Contractual)	24	Nil	24	100
5	Junior Librarian (Contractual)	08	Nil	08	100
6	Laboratory Assistant (Contractual)	56	Nil	56	100

 Table No.3.4
 Vacancy position in operational polytechnics

Source : Information furnished by DTE&T

As could be seen from the above, percentages of vacancies in different posts ranged from 68 to 100 which is not in consonance with GoI stipulation that extent of vacancies shall not exceed five *per cent* of sanctioned strength. Despite this, State Government had not initiated any step for filling up the vacancies.

DTE&T replied that Principals in charge had been deployed.

3.4.11.4 Monitoring

As per the scheme guidelines issued by MHRD, for effective monitoring and implementation, each State was to constitute a SLC comprising Secretary (Technical Education) as Chairman, DTE, two experts to be nominated by MHRD and Director/ DEA (T), MHRD as members to oversee utilisation of grants sanctioned by MHRD and monitoring the scheme. Though the scheme was implemented since 2008-09, no such committee was constituted till the date of Audit (June 2014).

DTE&T replied that no instructions/guidelines were issued by GoI. But guidelines issued by MHRD stipulate constitution of SLC.

DEPARTMENT OF FOREST AND ENVIRONMENT

3.5 Implementation and effectiveness of plantation

3.5.1 Introduction

One of the basic objectives of National Forest Policy 1988 was to increase substantially forest/tree cover in the country through massive afforestation and social forestry programmes, especially on denuded, degraded and unproductive lands. Forest cover of Odisha was 50,347 square kilometre constituting 32 *per cent* of geographical area based on India State of Forest

Report 2013. Forest Department had taken up various plantation programmes such as economic plantation, plantation under 13th Finance Commission grant, bald hill plantation, Avenue Plantation, Urban tree plantation, besides afforestation programmes under different deposit schemes. Audit examined effectiveness of planning, implementation and monitoring of plantation programmes, from May to July 2014 in 13⁸⁵ out of 50 Forest Divisions (FDs) covering period from 2011-12 to 2013-14. Records of Principal Chief Conservator of Forest (PCCF), Odisha and Department of Forest and Environment were also test checked.

Audit findings

3.5.2 Planning

3.5.2.1 Plantation target

Under Rule 16 of Forest Plantation Manual, plantation areas covered by working plans or schemes shall be carried out strictly in accordance with prescriptions in such plans or schemes. Under Rule 17, where plantations are taken up in areas not covered under working plans sanctions to deviation from the working plan prescription shall be obtained from the appropriate authority. Under Rule 195, DFO shall submit his budget for plantation works for the following year and a revised estimate for the current year which will be forwarded by the Chief Conservator of Forest (CCF)/Regional Chief Conservator of Forests (RCCF) to PCCF for release of funds.

Scrutiny of records revealed that PCCF had fixed targets for plantation for FDs during 2011-14 without getting any specific proposal or feasibility report. Due to non availability of reserve forest area, four divisions⁸⁶ expressed their inability to carry out economic plantations during 2012-14. Despite this, PCCF instructed FDs to take steps to achieve targets. As a result, FDs carried out plantation in unsuitable places.

Scrutiny of records in test checked divisions revealed the following:

- Economic Plantation was to be done in Reserve Forest (RF). However, in three FDs⁸⁷ plantations were carried out in Protected Forests (PF) and Demarcated Protected Forest (DPF).
- In three divisions⁸⁸ urban plantations were to be carried out in and around City. However, plantations were done in hilly area and RFs.
- Block plantation is to be carried out in contiguous patches in vacant areas. However, in four divisions⁸⁹ block plantations⁹⁰ were carried out in areas where valuable old species already existed.
- As per Rule 179 of Forest Plantation Manual, 1977, a plantation watcher is provided for each 25 hectares of new plantation. In two divisions⁹¹

⁸⁵ Athagarh, Cuttack, Dhenkanal, Sonepur, Sambalpur (South), Jharsuguda, Berhampur, Ghumsar (North), Phulbani, Baliguda, Rayagada, Koraput and Puri (Wild Life).

⁸⁶ Rairangpur, Bhubaneswar, Baripada and Ghumusar (S).

⁸⁷ Berhampur, Jharsuguda and Cuttack.

⁸⁸ Berhampur, Rayagada and Koraput.

⁸⁹ Sambalpur, Jharsuguda, Athagarh and Sonepur.

⁹⁰ Plantation of 1600 plants in a hectare.

⁹¹ Baliguda and Phulbani.

plantations in small areas of three to 10 hectares were carried out to achieve targets and in view of smaller size plantations, watch and ward could not be provided throughout the year.

While accepting the audit observation Government stated (October 2014) that there was no scope for taking up of economic plantations in RFs as there was no vacant space. Out of three FDs, in Berhampur urban plantation were carried out in shape of block plantation mode, in Koraput it was taken up within the Notified Area Council and in Rayagada the plantation was taken up in a portion of Barijhola RF which comes under Rayagada Municipality. The block plantations were carried out in vacant spaces within forest areas, as contiguous suitable forest patches were not available.

But, the fact remains that plantations were carried out in unsuitable places to achieve targets in violation of plantation norms.

3.5.3 Implementation of plantation programme

Review of records of 20 point programme files on target and achievement, plantation journals and monthly accounts on implementation showed the following:

3.5.3.1 Shortfall in achievement of targets

In order to increase forest and tree cover as envisaged in National Forest Policy, Ministry of Forest and Environment (MoEF) fixed targets State-wise under 20 point programme. Details of targets fixed for afforestation and actual achievements during 2011-12 to 2013-14 are given below:

Year	Targets fixed by MoEF	Actual	Shortfall in achievement	
	for afforestation in hectare	achievement in hectare	In hectare	Percentage of shortfall
2011-12	215000	182186	32814	15
2012-13	173300	107287	66013	38
2013-14	172920	117667	55253	32

Table No.3.5 Shortfall in targets fixed for afforestation

Source: Information furnished by DoFE

The State Government achieved 85 *per cent* during 2011-12. In subsequent year shortfall increased. Reasons for shortfall were not on record. However, target could not be achieved even after full utilisation of funds allotted under various schemes except in Compensatory Afforestation Fund Management and Planning Authority (CAMPA) as discussed in para 3.5.4.

While accepting the fact, Government stated (October 2014) that shortfall in achieving plantation target was due to late approval of proposal, delay in release of funds and issue of muster rolls and non availability of job card holders under MGNREGS.

3.5.3.2 Plantations in deviation of conditions of grant

Grants received under 13th Finance Commission (FC) envisaged Artificial Regeneration (AR) Plantation of 1,600 seedlings per hectare over 5,500 hectares every year from 2011-12 to 2014-15. As such 16,500 hectares were to be covered during 2011-14. Plantations were to be implemented in Plantation Working Circle (PWC) only. During audit following irregularities were noticed.

- PCCF fixed targets for block plantation as well as gap plantation during 2011-14 instead of AR plantation.
- Divisional Forest Officers (DFOs) implemented AR plantation in 10,587 hectares (i.e block plantation providing 1,600 seedlings per hectare). Besides this, DFOs carried out plantation of 9,242 hectares as Assisted Natural Regeneration (ANR) plantation providing gap plantation of 200 seedlings per hectare.
- Further, instead of carrying out plantations in plantation working circle, maintenance with gap plantation was also done in rehabilitation working circle.

While accepting the fact, Government stated (October 2014) that as per the prescription of working plan palatable forest area was not found due to massive plantation taken up under Odisha Forestry Sector Development Project (OFSDP) and MGNREGS. Hence, plantation under 13th FC grant was reduced to 12,075 hectares and the balance target of plantation was achieved in degraded forest areas of rehabilitation working circle and podu rehabilitation working circle under ANR with gap plantation of 200 plants per ha.

3.5.3.3 Execution of plantation works through contractors

Rule 329 (6) of Odisha Forest Department Code do not permit plantation activities through contracts, which are to be done departmentally through labour. Scrutiny of records revealed that in test checked FDs various plantation activities like raising nursery, alignment, stacking, pitting, watering, soil working, weeding, soil moisture conservation, watch and ward were executed through contractors and payment of ₹4.34 crore made during 2011-14 as detailed in *Appendix-3.5.1*.

Government stated (October 2014) that due to shortage of staff and acute labour problem, works were executed by engaging labour through labour head man of the village though they were not registered contractors within the Forest Department.

3.5.3.4 Non adherence to time schedule in plantation activities

Plantation Manual stipulates specific time schedules for different components of plantation works like survey and demarcation, site clearance, alignment,

stacking, pitting, manuring, weeding out, soil working, etc. Audit observed following deficiencies in eight⁹² out of 13 test checked FDs:

- In 27 plantation areas under six FDs⁹³, survey, demarcation, pitting works were done with delay ranging from 17 days to five months.
- In 14 plantation areas under four FDs⁹⁴, weeding and soil working were done with delay ranging from one to two months.
- As per provisions contained in Forest Plantation Manual, casualty replacement was to be carried out during 1st and 2nd year of plantation after verification of survival by Range Officers and norm prescribed by PCCF for replacement was 10 *per cent*. Scrutiny of records revealed that replacement of casualty of 10 *per cent* was shown in all plantations and no report on verification of survival of plants was on record. This indicated that replacement was made without any survey.
- As per norm prescribed by PCCF, watch and ward was to be provided from October to March in 1st year and for whole year during 2nd and subsequent years. In 17 plantation areas it was noticed that under six FDs⁹⁵, watch and ward personnel were not deployed round the year. The period of non deployment was two to six months.

Government stated (October 2014) that delay in plantation activities was due to delay in approval of schemes and release of funds. But request for providing funds in time was not made by DFOs to PCCF.

3.5.3.5 Purchase of inputs for plantation activities

As per Para 43 of Plantation Manual, seeds required for plantation programmes were to be collected by FDs from forest. Silvicultural Divisions (SDs) were also required to supply quality seeds and stumps as per Rule 198 of OFD Code.

Scrutiny of records revealed that in selected 13 FDs stumps and seeds required for plantation programmes available in forest areas were neither collected nor obtained from SDs to ensure quality. Instead, seedlings were raised in nursery by procuring stumps and seeds without testing quality from private parties and expenditure of ₹2.07 crore was incurred during 2011-14. Further departmentally raised seedlings in nine FDs⁹⁶ were not utilised although available in permanent Nursery for one to two years. Four FDs⁹⁷ did not furnish required information on production and utilisation of seedlings raised in their permanent Nursery.

Government stated (October 2014) that quality planting materials (QPM) were raised in the SDs and as per plantation target communicated, DFOs were utilising QPMs as per their target. Further, departmental seedlings were raised in the permanent/central nursery to be used for buffer stock zone of plantation

⁹² Athagarh, Berhampur, Cuttack, Dhenkanal, Ghumsar (N), Jharsuguda, Sambalpur and Sonepur.

⁹³ Athagarh, Dhenkanal, Ghumsar (N), Jharsuguda, Sambalpur and Sonepur.

⁹⁴ Berhampur, Ghumsar (N), Jharsuguda and Sambalpur.

⁹⁵ Berhampur, Cuttack, Dhenkanal, Jharsuguda, Sambalpur and Sonepur.

⁹⁶ Athagarh, Berhampur, Baliguda, Dhenkanal, Ghumsar (N), Phulbani, Rayagada, Sambalpur and Sonepur.

⁹⁷ Cuttack, Koraput, Jharsuguda and Puri (WL).

activities if funds were released late in particular scheme. Reply is silent on other issues.

3.5.4 Financial Management

The Department received funds from GoI and GoO under various schemes, grants under 13th FC and CAMPA of State schemes as detailed below.

Table No. 3.6 Receipt and expenditure of funds under various schemes

		55	(₹ in crore)
Year	Name of the scheme	Funds received	Expenditure
2011-12	Plantation under 13th FC	36.17	36.11
	Urban plantation	6.82	6.82
	Economic Plantation	6.05	6.05
	Bald hill plantation	5.43	5.43
	CAMPA APO 2011-12	18.56	10.64
2012-13	Plantation under 13th FC	72.34	71.17
	Urban plantation	16.58	16.58
	Economic plantation	9.60	9.60
	Bald hill plantation	6.00	6.00
2013-14	Plantation under 13th FC	81.46	81.42
	Urban plantation	36.29	36.29
	Economic plantation	11.75	11.75
	Bald hill plantation	11.10	11.10
Total		318.15	308.96

Source: Information furnished by PCCF

As can be seen from above table, though department utilised funds allotted under various schemes (except in CAMPA), it failed to achieve physical target as commented upon in Para 3.5.3.1. Further, \gtrless 48.86 lakh had been spent on other purposes as mentioned in para 3.5.4.1.

3.5.4.1 Diversion of Funds

Scheme guidelines stipulated that expenditure shall be incurred for the purpose for which sanction was accorded. In eight⁹⁸ out of 13 test checked FDs, funds earmarked for plantation programmes were spent for non plantation items such as stationary, telephone charges, fuel for vehicles and construction of water tank/walls/roads in nursery. Such unauthorised expenditure amounted to ₹ 48.86 lakh as detailed in *Appendix-3.5.2*.

Government stated (October 2014) that as per the approved cost norm of different plantation modules there is a contingency head to meet the unforeseen expenditure like stationery, communication charges including POL and nursery related activities. But there was no such provision for contingency in block plantation cost norms and the expenditure incurred towards

⁹⁸ Athagarh, Berhampur, Cuttack, Dhenkanal, Ghumsur (N), Jharsuguda, Sambalpur and Sonepur.

construction of water tank/walls/roads was not related to plantation programmes.

3.5.4.2 Excess expenditure on payment of wages

In terms of Gazette Notification dated 6 October 2012 of Labour and Employees State Insurance Department, wage rate for Agriculture sector was fixed at ₹ 126 for non ploughing and ₹ 150 for ploughing. Agriculture Sector includes Agriculture, Animal Husbandry, Fishery and Forestry. However, in selected FDs wages were paid at the rate of ₹ 150 from November 2012. Since plantation activities are of non ploughing nature, payment made at ploughing rate was not justified and this resulted in excess expenditure of ₹ 3.98 crore towards payment of wages undertaken in respect of Economic plantation, plantation under 13th FC grant, Avenue plantation and Urban plantation up to March 2014 as detailed in *Appendix-3.5.3*.

After this was pointed out in audit, Government stated (October 2014) that wage rate of \gtrless 150 prescribed for bamboo forest establishment and for ploughing category in agricultural sector was taken and wage rate was finalised by a committee. Fact remains that deviation from the notification made by Labour & ESI Department should have been brought to their notice for ratification which was not done.

3.5.5 Other observations

Instances of lack of internal control and irregularities in free distribution of seedlings in test checked divisions are discussed below:

• As per rule 197 of Forest Plantation Manual, a permanent register incorporating plantation works carried out in a division/range shall be maintained in prescribed form. A map in prescribed scale showing precise boundaries shall also be affixed against each entry on register and a reference to scheme or plan shall also be given. However, it was noticed that plantation registers were not maintained in four Divisions⁹⁹ and Ranges under them. Further, in seven divisions¹⁰⁰, registers with maps showing boundaries were not maintained.

Government stated (October 2014) that in view of the audit observation directions are issued to DFOs to take appropriate action to maintain prescribed records of plantation carried out and record observations during their field inspection.

• As per Action Plan under 13th Finance Commission grant, tree cover outside designated forest area was to be increased to reduce pressure on forest. Scheme provides for raising saplings for farm forestry, agroforestry, avenue plantation, canal bank plantation, planting inside

⁹⁹ Jharsuguda, Puri, Sambalpur and Sonepur.

¹⁰⁰ Berhampur, Dhenkanal, Ghumsur (N), Phulbani, Rayagada, Koraput and Baliguda.

institutional premises, etc. for free distribution. During 2011-14, more than two crore saplings were distributed free of cost to general public and institutions. No wide publicity for such free distribution was arranged in divisions. Audit noticed that after issue of saplings to individuals and institutions, no monitoring was done to ensure actual plantation.

Government stated (October 2014) that while distributing seedlings to general public, institutions and NGOs a register was being maintained at the nursery showing name of beneficiary, address, identity proof and location of planting site. But the reply is silent on follow up action to ensure actual plantation.

• Under Sambalpur Division, economic plantation over 20 hectares was done in Beheramal RF during 2012-13. Due to lack of supervision and monitoring, plants were uprooted and taken away by local people (July 2013).

Government stated (October 2014) that the DFO had been instructed to undertake a detailed investigation for the reason of failure/damage to plantation and submit report for taking appropriate action.

3.5.6 Monitoring and evaluation

As per Rule 207 of Plantation Manual, each plantation shall be visited by Range Officers (ROs) once in October/January/June who shall submit report on 5th of November/February/July every year on condition of plantation such as maximum height, average height, total number of surviving plants, survival percentage, cause of mortality, etc. However, it was noticed in all 13 test checked FDs that above reports were not being submitted and higher authorities had also not insisted on the same. Further, in response to audit query regarding survival percentage, nine DFOs¹⁰¹ stated that survival percentage of plants was 60 to 100 but without any documentary evidence. In absence of effective monitoring, no evaluation of plantation could be done by the department.

Government stated (October 2014) that as per the guidelines, monitoring and evaluation of plantations was being conducted at Division, Circle as well as at head office level.

3.5.7 Conclusion

There were instances of plantation activities being carried out by Divisions as per targets fixed by PCCF without fully checking site conditions. In some cases, plantation activities were carried out on contract basis and not departmentally as required. In plantation activities, time schedules were not adhered to. Stumps and seeds were procured from private parties without testing quality instead of collecting departmentally or obtaining from Silvicultural Divisions. Periodical supervisions by ROs, DFOs and higher authorities were not conducted to ensure successful plantation.

¹⁰¹ Athagarh, Baliguda, Berhampur, Cuttack, Dhenkanal, Ghumsur (N), Puri, Sambalpur and Sonepur.

3.6 Short realisation of Net Present Value

Short realisation of Net Present Value of ₹ 1.22 crore for diversion of forest land for non forestry activities

Under the provisions of Forest (Conservation) Act, 1980, forest land may be diverted for non forest activities with the approval of GoI on payment of Net Present Value (NPV) of forest land. As per guideline issued by GoI in October 2006, NPV is required to be recovered from the user agencies in all cases approved by it after 30 October 2002 irrespective of date of clearance (i.e. stage – I clearance granted for projects before or after 30.10.2002). As ordered by the Hon'ble Supreme Court of India in November 2002, Government of Odisha adopted the rates of NPV ranging from ₹ 5.80 lakh to ₹ 9.20 lakh per hectare depending on density of forest. This was revised ranging from ₹ 6.26 lakh to ₹ 10.43 lakh with effect from 28 March 2008.

Test check of records of two Divisional Forest Offices¹⁰² (DFOs) (March to December 2013) revealed that 72.0572 hectare of forest land was diverted to two user agencies for non-forestry activities without realising NPV at applicable rate. As against NPV realisable for $\overline{\mathbf{x}}$ six crore from user agencies, a sum of $\overline{\mathbf{x}}$ 4.78 crore was realised resulting in short realisation of $\overline{\mathbf{x}}$ 1.22 crore (detailed in *Appendix-3.6.1*). Neither did the user agencies deposit the differential dues of NPV nor did the DFOs issue demand notices against them for recovery of balance NPV.

Government stated (October 2014) that differential amount of \gtrless 20.36 lakh was realised (November 2013) from IOCL by DFO, Rairakhol and in case of DFO, Khurdha demand had been raised (July 2014). In another case, DFO, Rairakhol had also raised demand (July 2014) for realisation of differential amount of \gtrless 99.99 lakh.

3.7 Non disposal of timber

Non disposal of timber and poles seized in undetected forest offence cases

The Government of Odisha issued instruction in August 2005 to Forest and Environment Department for disposal of timber and poles seized in undetected (UD) forest offence cases either by public auction or by prompt delivery to the Odisha Forest Development Corporation (OFDC) Limited within two months from the date of seizure in order to avoid loss of revenue due to deterioration in quality and value on account of prolonged storage. The rates of royalty on timber regular and irregular lots for the year 2012-13 and 2013-14 were fixed by Government in Forest and Environment Department in joint meeting of Principal Conservator of Forests, Odisha and Managing Director, OFDC Ltd held during October 2012 and November 2013 respectively.

Check of records of 24 forest divisions during 2012-13 and 2013-14 revealed that timber and forest produce valued at ₹ 39.25 lakhs which were seized under 9,857 UD forest offence cases during 2011-12 and 2012-13 as detailed

¹⁰² DFOs, Khordha and Rairakhol.

in *Appendix-3.7.1* lay undisposed (March 2014) and resulted in blockage of revenue of ₹ 39.25 lakh.

Government stated (October 2014) that action would be taken to dispose timber seized in UD cases.

INDUSTRIES DEPARTMENT

3.8 Implementation of Single Window Mechanism and Financial Incentives under Industrial Policy Resolution 2007

3.8.1 Introduction

In order to extend faster and one point project clearance with single point dissemination of project related information to prospective entrepreneurs Single Window Mechanism was introduced under Industrial Policy Resolution (IPR) 2001. For giving effect to these provisions of IPR 2001, the Orissa Industries Facilitation Act (OIFA) was enacted in 2004. The corresponding Rules namely the Orissa Industries Facilitation Rules (OIFR) were notified in 2005. IPR 2007 effective from 2 March 2007 March includes operationalisation of Single Window mechanism to facilitate setting up of industries and extension of financial incentives to industrial units. In pursuance of OIFA, Industries Department appointed (March 2005) IPICOL as the State Level Nodal Agency (SLNA) and District Industries Centre (DIC) as the District Level Nodal Agency (DLNA). It also constituted following three authorities:

(i) District Level Single Window Clearance Authority (DLSWCA) comprising of District Collector as Chairman and 11 other members to examine and consider proposals where the amount of investment is less than ₹ 50 crore.

(ii) State Level Single Window Clearance Authority (SLSWCA) comprising of Chief Secretary, Odisha as Chairman and 16 other members to examine and consider proposals where the amount of investment is more than or equal to ₹ 50 crore but less than ₹ 1,000 crore.

(iii) High Level Clearance Authority (HLCA) comprising of Chief Minister, Odisha and 12 other members to examine and consider proposals where the amount of investment is more than or equal to \gtrless 1,000 crore.

Besides, OIFA also provided for constitution of Special Single Window Clearance Committees (SSWCC) for promotion and development of industries in IT, Information Technology Enabled Services (ITES) and Tourism Sector. The OIFR provides timeframe ranging from seven to 120 days for issue of as many as 22 categories of approvals/ clearances/ registration.

Audit of implementation of Single Window Mechanism and Financial Incentives under IPR 2007 was conducted between May and June 2014 covering period 2007-14. Audit test checked records at Industries Department, Micro, Small and Medium Enterprises (MSME) Department, one out of two Directorates¹⁰³ of MSME Department and the Industrial Promotion and Investment Corporation of Odisha Limited (IPICOL). Besides, eight¹⁰⁴ out of 31 DICs/ Regional Industries Centres (RICs) under the control of Director of Industries, Odisha (DI) were also selected on the basis of both most and least industrialised districts considering the number of units gone into production and amount of investment. Further, since IPR 2007 provides that financial benefit extended under earlier IPR would continue during the tenure of IPR 2007, such cases were also reviewed. Audit was conducted to assess whether IPICOL/DICs had arranged required clearances for projects approved by competent authorities timely and assisted entrepreneurs to set up industries, eligibility of industrial units for extending financial incentives was determined as per IPRs, incentives were disbursed in time, and adequate monitoring and internal control mechanism was in place and effective.

Audit findings

3.8.2 Implementation of Single Window Mechanism

3.8.2.1 Implementation of Single Window Mechanism at State/High Level

Functioning of HLCA

As per Para 7.1 of IPR 2007, HLCA, shall meet at least once in a quarter to review implementation of the IPR 2007 viz., issues pertaining to industrial development such as promotion of foreign direct investment, environment management, land policy, peripheral development, ancillary and downstream development, promotion of frontier industries etc. Besides giving overall direction to industrial development efforts made by Team Orissa¹⁰⁵, the HLCA may give specific direction(s) wherever required.

Audit observed:

No meeting of HLCA was held after September 2012 upto March 2014. Eleven proposals for setting up industries with investment of ₹ 59,491.64 crore were delayed by one to 18 months. Issues such as industrial development promotion of foreign direct investment, environment management, land policy, peripheral development, ancillary and downstream development, promotion of frontier industries did not find mention in the minutes.

Government stated (October 2014) that date of convening of HLCA is based on various factors, convenience of committee, sufficiency of proposals etc.

• As per Para 7.2 of IPR 2007, though DI proposed to (August 2007) Industries Department for constitution of sub-committee/expert bodies of HLCA on issues relating to Foreign Direct Investment (FDI),

¹⁰³ Directorate of Industries and Directorate of Export Promotion and Marketing.

¹⁰⁴ Cuttack, Deogarh, Dhenkanal, Ganjam, Jajpur (At Kalinganagar), Jharsuguda, Khordha and Sundargarh.

¹⁰⁵ Team Orissa means the broad institutional framework of the Government that is engaged in industrial facilitation and investment promotion in all key areas of economic growth.

environment management, land policy, periphery development, ancillary and downstream development, promotion of frontier industries the proposal was not appraised to HLCA. Thus, benefit of valuable advice of resource persons on industrial development in respective fields could not be availed.

• As per Para 12.4 of IPR 2007, SLSWCA/HLCA was to review implementation of provisions relating to (i) amalgamation of different records, registers and returns required to be maintained under various Labour Laws; and (ii) introduction and implementation of a system of joint inspection by various regulatory agencies which would reduce the transaction cost for establishment and post entry operations of the industries. But no such review was conducted.

3.8.2.2 Functioning of SLNA and clearance of project proposals by SLSWCA

As per OIFA, functions of SLNA included issue and receipt of Combined Application Form (CAFs) from entrepreneurs and arranging required clearance from Department or Authorities concerned within specified time limit; State's image building to attract investments and guiding, assisting entrepreneurs to set up industries in State. During 2007-14, IPICOL as SLNA received 378 proposals for setting up of industries in various sectors. The year-wise position of receipt of CAFs and their status of processing/appraisal/ approval by SLSWCA/HLCA is given in *Appendix-3.8.1*. Audit observed the following;

There has been a steady decline in number of CAFs from 2010-11 onwards. As against 87 CAFs received in 2010-11, SLNA received 48 in 2011-12, 20 in 2012-13 and 26 in 2013-14. Further upto 2013-14, 52 proposals involving investment of ₹ 2,66,545 crore were deferred by SLSWCA without assigning any recorded reasons and 62 proposals involving investment of ₹ 54,541 crore were not yet put up to SLSWCA for want of further information from entrepreneurs even after one to eight years.

Government stated that SLSWCA had not mentioned the reason for deferment and it was due to matters related to policy issues, paucity of time for deliberation of proposal etc.

As per Schedule-VI of Odisha Industries Facilitation Rules, 2005, time limit for assurance of IDCO land is 30 days and allotment of Government land is 65 days. Further, as per OIFA, 2004, SLNA is responsible for arranging required clearance from Department or Authorities concerned within specified time limit. Out of 172 proposals involving potential investment of ₹ 5,73,525 crore approved by SLSWCA/ HLCA only 38 projects (22 per cent) with an investment of ₹ 92,645 crore had gone into production till 2013-14. Further, 16 projects were under construction and in 55 cases process of land acquisition was in progress even after expiry of 18 to 68 months of their approval. In case of 63 proposals there was no progress in setting up of industrial units. But after clearance of proposals, SLNA has not

followed up the implementation of projects through setting up of task force (TF) consisting of senior level representatives from key Departments and Authorities to review periodically status of implementation of projects and to sort out problems, if any.

• On receipt of CAFs, SLNA send copies of CAFs to respective clearance granting authorities such as Directorate of Factory and Boilers, State Pollution Control Board, IDCO etc., for their views regarding clearance for setting up of industries. After obtaining approval of SLSWCA/HLCA, SLNA communicates the conditions of approval to entrepreneurs. Audit scrutiny revealed that SLNA did not arrange the required clearances as envisaged in IPR 2007 from respective departments, instead directed entrepreneurs to approach various clearance granting authorities directly for issue of clearances and thereby defeating the objective of single window mechanism.

Government (October 2014) stated that SLSWCA/HLCA accord in principle approval only which means detailed proposal in the appropriate format need to be filed before department/agencies concerned for detailed examination and formal approval at their end. But SLNA had not facilitated time bound arrangement of clearance from clearance granting authorities for setting up of industries as envisaged in IPR 2007.

• Para 6.1 of IPR 2007 provides that IPICOL, as SLNA shall establish a Comprehensive Industrial Data Bank on medium and large scale industries with the help of a professional agency. No such data bank, however, was established.

Government stated that IPICOL was in the process of establishing such Data Bank by appointing a professional agency.

• Para 6.4 of IPR 2007 envisaged IPICOL to develop and implement a web enabled Project Monitoring and Information System (PMIS) to facilitate time bound clearance to investment proposals, facility for e-filing of CAF and e-payment of processing fees and virtual single window interface between investors and different clearance authorities. This was not implemented till the date of audit. Non-implementation of PMIS thus defeated the objective of online interface of investors with nodal agencies for time bound clearance of investment proposals.

Government (October 2014) stated that for online filing of CAF, IPICOL had already started the work.

3.8.2.3 Implementation of Single Window Mechanism at District Level

Functioning of District Level Nodal Agency

In order to implement Single Window mechanism as envisaged in IPR 2007, GoO sanctioned ₹ 12.25 crore towards 'Implementation of Single Window System under DI' (₹ 8.09 crore), 'Restructuring of DICs' (₹ 1.83 crore) and 'Formation of RICs' (₹ 2.33 crore) during 2007-14. In this connection Audit observed the following:

• GoO sanctioned ₹2.33 crore during 2008-14 for creation of five RICs¹⁰⁶ by upgrading DICs and directed DI to place fund with IDCO, a GoO undertaking for creation of necessary infrastructure. Though GoO notified (March 2011) upgradation of five DICs to RICs, IDCO could not commence work till date of audit due to non finalisation of modalities and scope of work by Government. Thus, very objective of creation of infrastructure for RICs remained unfulfilled and this led to avoidable blockage of ₹2.33 crore. The role to be played by RICs including specific activities to be carried out after upgradation had also not been approved by GoO till date (June 2014).

On being pointed out, DI (August 2014) stated that the matter was being taken up with IDCO to execute the work with available funds.

• During 2009-14, ₹ 1.55 crore out of ₹ 1.83 crore was placed with IDCO under the scheme "Restructuring of DICs" for face lifting, renovation of conference hall, internal furnishing, etc. for 12 DICs and DI. Out of this, administrative approval for ₹ 0.10 crore (six *per cent* only) was only accorded and for remaining work, no estimate was prepared by IDCO till date.

On being pointed out, in reply DI stated (August 2014) that IDCO indicated its unwillingness to take up work at certain locations which were being reallocated to Odisha Small Industries Corporation (OSIC).

During 2007-14, under the scheme for "Implementation of Single Window under DI", ₹ 5.48 crore was given to IDCO for construction/ renovation of buildings and creation of facilitation cell in 29 DICs. Out of this, ₹ 3.84 crore related to construction of office building for 11 DICs. Against this, only two DIC buildings were completed. In respect of other nine DICs involving funds of ₹ 3.04 crore, there was no significant progress of work. Similarly, out of balance 18 DICs, though creation of business facilitation cell was completed in 11 DICs, the same was not completed in seven DICs/RICs.

In reply (August 2014), DI while accepting the fact stated that though progress was reviewed regularly, work of buildings and facilitation cells were not complete.

Non completion/commencement of work was mainly due to non finalisation of modalities and scope of work, delay in acquisition of land and non submission of estimate by IDCO. As a result, necessary infrastructure for formation of RIC, restructuring of DIC and implementation of Single Window could not be created even after seven years of implementation of IPR.

3.8.2.4 Clearance of Project Proposals at District Level

DICs act as Nodal Agencies at District Level to undertake industrial promotion activities and to facilitate investments. As per Section 5(4) of OIFA, DLSWCA shall examine proposals brought before it for setting up Industrial Units and other projects and communicate its decision to Entrepreneurs within prescribed time limit.

¹⁰⁶ Dhenkanal, Sambalpur, Kalinganagar (Jajpur), Rayagada and Rourkela.

The year-wise position of receipt of CAFs during 2007-14 by eight selected DICs/RICs and their status are given in *Appendix-3.8.2*. In eight selected DICs/RICs, Audit observed the following:

- There has been a steady decline in number of CAFs from 2010-11 onwards. As against 214 CAFs received in 2009-10, DLNAs received 196 in 2010-11, 189 in 2011-12, 89 in 2012-13 and 84 in 2013-14. Further 65 proposals involving investment of ₹ 159.34 crore received during 2009-10 to 2013-14 were pending for approval without assigning any recorded reasons. Out of 1,087 CAFs received during the period covered under audit, only 802 proposals were approved. Of the approved proposals, registration of commercial production (Enterprises Memorandum-II (EM-II) certificate) was issued to 90 industrial units only in selected DICs/RICs.
- Further, DLNAs received proposals seeking 1,440 clearances of various types in eight selected DICs/RICs as of March 2014 for setting up of industries out of which 492 were cleared, 609 were rejected and 339 were pending. Out of these pending cases, major portion is related to allotment of land i.e., IDCO land (234 cases) and Government land (68 cases).
- Though GoO time and again issued instructions to hold monthly meeting of DLSWCA, six to 22 meetings were held in eight selected DICs/RICs against 84 stipulated for each district during 2007-14. Non holding of meeting at regular interval weakened the effectiveness of Single Window Mechanism.
- DLSWCA, Jajpur¹⁰⁷ approved 10 cases of land allotment in March 2007 and 85 cases in May 2007 and recommended them to IDCO for allotment in Kalinganagar Growth Centre, against which IDCO issued provisional allotment letters in 76 cases. However, after a delay of four years Land Allotment Committee (LAC) of IDCO decided (April 2011) to return these cases (July 2011) to Collector, Jajpur for re-examination with reference to their value addition, forward and backward linkages with major industries situated at Kalinganagar. Records relating to these cases remained pending at Collectorate, Jajpur without any action for over 23 months and were finally handed over to RIC, Kalinganagar only in March 2013. Allotment of land in these cases was not yet finalised. The entire exercise over a period of more than six years for allotment of land in 76 cases thus yielded no results and was against the spirit of OIFA for faster clearance of projects.

In reply (August 2014), DI stated that amendment of OIFA, 2004 was under process.

¹⁰⁷ Located at Jagatpur.

3.8.2.5 Functioning of Special Single Window Clearance Committee (SSWCC)

Odisha Industrial Facilitation Act, 2004 provided for constitution of SSWCC by Government for any specified purpose, area or sector. Two Committees namely State Level SSWCC for promotion and development of industries in the IT/ITES and related sectors and State Level SSWCC in the Department of Tourism for promotion and development of Tourism were constituted (February 2008) by GoO. Subsequently, SSWCC for Tourism was rescinded (June 2012) and fresh notification was issued (November 2012). As per this notification, all tourism related project proposals above ₹ five crore shall be processed by SLNA and placed before SLSWCA through Task Force on Tourism. GoO during November 2013 reconstituted SSWCC on tourism. Though SSWCC for tourism sector was constituted late in November 2013, no meetings were convened till March 2014. As a result 14 project proposals involving project cost of ₹ 584.35 crore were pending for approval since June 2011.

Government in reply stated that SSWCC would be convened after receipt of recommendation of the Task Force.

3.8.2.6 Deemed Approval

Emphasising timely issue of clearances under Single Window mechanism, OIFA provided for issue of deemed clearances to entrepreneurs in case of failure of Departments or Authorities concerned to issue the required clearances within specified time limit.

Scrutiny of project proposal files at SLNA revealed that there were no recorded reasons for delay in issue of clearances. Further, scrutiny of 45 and five proposals at two clearance authority level i.e., State Pollution Control Board and Director of Factory and Boilers revealed that as against the specified time limit of 120 and 30 days, clearance were issued with period ranging from 160 and 1,425 days and 68 to 934 days respectively. Though there was delay in issue of clearances, SLNA had not issued Deemed Clearance to any of the project as provided in OIFA.

Government stated that clearances in respective departments require specific information and processing fees and also subject to availability of required quantity of land and water, entrepreneurs were advised to apply to respective departments to obtain the same. Therefore, allowing deemed approval as per provision to entrepreneurs by IPCOL was not feasible.

3.8.2.7 Collection and utilisation of processing fees

As per OIFR, 2005 every applicant, seeking clearance for establishment of an industry, shall apply in CAF along with the requisite fees varying from $\overline{\xi}$ 1,000 to $\overline{\xi}$ one lakh for processing of application. Processing fee being Government revenue, unless otherwise specifically permitted, should have been duly deposited into Government Account as required under Rule 6(1) of

Odisha Treasury Code (OTC) Vol. I. Audit observed following irregularities in collection and utilisation of processing fees:

• Processing fees of ₹ 12 lakh, collected with CAFs in eight selected DIC/RICs during 2007-14 were kept in Drawing and Disbursement Officer's (DDO) Current account. This resulted in irregular retention of government money outside Government account.

In reply (August 2014) DI stated that proposal for depositing processing fees to the State exchequer is under consideration of MSME/Industries Department.

• Similarly, IPICOL received ₹ 3.20 crore as processing fees of 378 CAFs during 2007-14 which was taken to its accounts as income without specific sanction from GoO in violation of provision of OTC and OIFR.

Government stated that there is no instruction issued to IPICOL to park the funds received as processing fees in any specified account. But processing fee collected with CAFs from entrepreneurs being Government revenue should have been duly deposited into Government Account.

3.8.3 Financial Incentives

IPR 2007 provides for extension of incentives, concessions etc. to new industries as per detailed guidelines/statutory notifications issued by Administrative Departments. Budgeted incentives (VAT reimbursement, interest subsidy etc.) are generally processed, sanctioned and disbursed at DIC/RICs and DI level. For incentives like concession of land premium on conversion, Stamp Duty, Electricity Duty which are not routed through budget, DI and DICs/RICs/IPICOL as the case may be determine the eligibility and issue eligibility certificates to industrial units. On the basis of the eligibility certificate industrial units avail benefits from authorities concerned. Audit observed following irregularities:

3.8.3.1 Exemption from payment of premium for conversion of agricultural land for industrial use

IPR 2007 provides that new industrial units and existing industrial units taking up expansion/modernisation/diversification will be granted exemption from payment of premium at 50 to 100 *per cent* on conversion of agricultural land for industrial use on production of eligibility certificate from DI for Large and Medium Enterprises and from GM, DIC for Micro and Small Enterprises. The GoO issued (May 2007) notification to give effect to this provision of IPR. New industrial unit as defined under IPR 2007 is one where fixed capital investment has commenced on or after the effective date and which goes into commercial production within two years for micro, small and medium enterprises and three years for the rest, from the date of starting first fixed capital investment. Audit observed that DI during 2007-14 issued eligibility certificates to 27¹⁰⁸ industrial units for conversion of 959.880 acres of land under large and medium sector. Similarly, in respect of eight selected DICs/RICs, eligibility certificates were issued to 106 industrial units for 201.535 acres of land under micro and small sector. As per IPR, commercial production of these units should have commenced within two years for micro, small and medium enterprises and three years for others from date of first fixed capital investment. Considering the date of commencement of fixed capital investment of these units, 108 units (out of 133 units) against which exemption had been granted for 830.645 acre of land should have achieved commercial production to be eligible for incentive. However, status of commercial production of these units had not been ascertained to ensure that they were eligible for incentive.

In reply (August 2014) DI stated that all RICs/DICs were advised to initiate action against the industrial units which had not started commercial production within the stipulated period.

3.8.3.2 Exemption of Stamp Duty for Micro, Small and Medium sector

IPR-2007 provides that in respect of transfer of land/shed by Government, IDCO etc., to new and existing Industrial Units taking up expansion/ modernisation/ diversification they are eligible for exemption of stamp duty ranging from 25 to 100 *per cent*.

GoO issued (May 2007) notification to give effect to this provision of the IPR according to which General Manager (GM), DIC and Managing Director (MD), IPICOL are authorities for recommending exemption of stamp duty in respect of Micro/Small/Medium/Priority/Thrust Sectors and large sector units respectively. During 2007-14, GMs recommended transfer of 72.287 acres of land in respect of 27 industrial units declaring units eligible for exemption from payment of stamp duty. As per the procedure stipulated in the circular issued (May 2009) by the DI for exemption of stamp duty, it shall become repayable with interest in case the unit is not set up within two years for Micro and small industries and three years for others.

Audit observed that actual date of commercial production had however not been ascertained so as to make recovery from defaulting units.

In reply (August 2014) DI stated that review and monitoring of units under implementation was being taken up for recovery from those units.

3.8.3.3 Exemption of Stamp Duty for large sector industrial units

On applications from large industrial units and prior to execution of lease deed for transfer of land, IDCO refers cases to IPICOL for authentication on the body of the conveyance deed for allowing concession on stamp duty. Though IPICOL recommends stamp duty exemption, no records are maintained at IPICOL regarding the list of industrial units who were recommended their

^{108 2007-08 - 5} cases, 2008-09 - 5 cases , 2009-10 - 4 cases, 2010-11 - 4 cases, 2011-12 - 6 cases, 2012-13 - 2 cases and 2013-14 - one case.

date of first fixed capital investment and date of commercial production etc. In absence of this, audit test checked three cases of Stamp Duty exemption recommended by IPICOL and observed the following:

- IPICOL recommended (March 2009 to April 2011) two large sector industrial units for exemption of Stamp Duty on transfer of 1,191.27 acres of land valued at ₹ 61.86 crore. The units, however, could not start commercial production within stipulated period of three years from date of first fixed capital investment. As such the industrial units were not eligible for exemption of ₹ 77 lakh towards SD.
- IPICOL recommended (September 2011) one large industrial unit for availing stamp duty exemption for 125.34 acres of land valuing ₹ 5.37 crore. The unit was ineligible for stamp duty exemption under IPR 2007 amounting to ₹ seven lakh as the commercial production was started (September 2006) before effective date (2 March 2007).

Government stated that action was being initiated against the projects who had failed to commence production within three years from date of first fixed capital investment.

3.8.3.4 Reimbursement of Value Added Tax

IPR 2007 (Clause 18.4) provides for reimbursement of 50 to 75 *per cent* net VAT paid by eligible units for a period of 5 to 10 years from date of starting commercial production limited to 100 to 200 *per cent* of fixed capital investment. GoO also issued (March 2010/May 2010) related operational guidelines for reimbursement of VAT.

Scrutiny of records revealed that GM, RIC, Rourkela sanctioned (February 2012 to July 2013) ₹ 38.55 lakh for 50 *per cent* reimbursement of VAT in favour of Plastic Company, Rourkela for 2010-13. Accordingly, disbursement of ₹ 35.50 lakh was made (April 2012 to July 2013).

Audit observed that first fixed Capital Investment was made by industrial unit on 10 December 2007. The unit, however, commenced its commercial production on 20 October 2010. Being a small sector unit and because it failed to commence commercial production within two years from date of its first fixed capital investment, it cannot be considered a new unit to be eligible for reimbursement of VAT under IPR 2007. Inappropriate determination of eligibility thus led to reimbursement of VAT of ₹ 35.50 lakh with additional sanctioned liability of ₹ 3.05 lakh.

In reply (August 2014) DI stated that \mathbf{E} 14.00 lakh had been recovered and recovery of rest amount was in progress.

3.8.3.5 Extension of undue benefit under Special Industrial Promotional Assistance

Clause 4.2A of IPR 2001 provides for special package of incentives to new mega industrial projects which include Special Industrial Promotional Assistance (SIPA) of 50 *per cent* of Sales Tax/VAT paid in the preceding year on sale of finished products.

DI recommended (30 March 2006) a unit at Paradip to be eligible to get SIPA and sanctioned (February 2008 and February 2013) ₹ 10.21 crore for reimbursement of VAT for years 2004-11, out of which it disbursed ₹ 9.70 crore. Audit observed the following:

- As per the guidelines, reimbursement of VAT is on sale of finished product manufactured by the Unit. Although the unit at Paradip was involved both in manufacturing and trading activities, VAT reimbursement was made on sale value including trading products without bifurcating sale value of manufactured products.
- Under the Orissa VAT Act, 2004, the unit as a registered dealer is entitled to input tax credit against output tax payable. Reimbursement of VAT, thus should have been limited to 50 *per cent* of net tax liability. DI had, however, sanctioned ₹ 4.72 crore for the year 2008-11 without considering input tax credit of ₹ 1.35 crore. Reimbursement of 50 *per cent* of full amount of output tax (VAT payable) thus led to excess reimbursement of ₹ 0.67 crore on account of input tax credit (50 *per cent* of ₹ 1.35 crore) for years 2008-11.

In reply (August 2014), DI stated that the beneficiary unit had been advised to arrange VAT audit of the industrial unit for every year for certifying VAT paid on sale of finished product exclusively manufactured by the units during past period of claims. They further stated that extension of incentive was stopped till settlement of matter.

3.8.3.6 *Exemption of Electricity Duty to Captive Power Plants*

Para 20.2 of IPR 2007 provides that new industrial units setting up captive power plants (CPP) shall be exempted from payment of Electricity Duty (ED) for a period of five years for self-consumption only from date of its commissioning. GoO in Department of Energy on 8 August 2008 issued Operational Guidelines for this.

During 2007-14 three applications were received for exemption of ED on CPPs under IPR-2007 and all these applications were under process at DI, Odisha. During the same period, DI on the basis of proposal submitted by nine DICs had recommended ED exemption to 24 industrial units under IPR-2001. On test check of 10 out of these 24 cases, Audit observed following irregularities in determination of eligibility for exemption of ED:

• DI recommended nine units of CPP of 135 MW each of an Aluminium Plant¹⁰⁹ in four phases during 2009-13 for exemption of ED for five years from the respective date of commissioning of each unit to the extent of captive use. The eligibility for exemption of ED for all nine units was determined under IPR 2001 on the basis of date of first fixed capital investment furnished by unit.

Audit observed that the unit signed (April 2007) Memorandum of Understanding (MoU) with GoO for establishment of CPP of 675 MW with investment in IDCO land on 15 February 2007. Further, expansion proposal for enhancement of capacity of Aluminium plant

¹⁰⁹ Vedanta Aluminium Limited (VAL).

including that of CPP from 675 MW to 1,350 MW was submitted to the SLNA (IPICOL) on 27 November 2008. Thus, there was no proposal of unit to establish expanded capacity of CPP during IPR 2001 and the unit planned expanded capacity only during effective period of IPR-2007. Hence, expanded capacity was ineligible for incentive amounting to ₹ 314.40 crore on 15,720.03 million unit (MU) of electricity under IPR 2001 as well as under IPR 2007.

DI in reply (August 2014) stated that the unit made investment in IDCO land on 15 February 2007 i.e., under IPR 2001 and hence, exemption from ED was recommended as per provisions of IPR 2001. But there was no proposal for expansion of CPP capacity to 1,350 MW during IPR 2001 as MoU was signed with GoO in April 2007 and CAF for project was submitted to SLNA (IPICOL) on 27 November 2008 after IPR 2007 came into effect.

• DI recommended exemption from payment of ED to a Steel Plant¹¹⁰, Sambalpur against six units of CPP for a total capacity of 376 MW in four phases between 14 June 2006 and 25 October 2011 for a period of five years from respective date of commissioning of each unit to the extent of captive use.

Audit observed that though, it was to set up CPPs of 270 MW in two phases of 135 MW each as per MoU (May 2002) with GoO, it established CPPs of 246 MW (5 units of 40 MW + 60 MW + 2X8 MW + 130 MW) till September 2009. However, no approval was sought from SLSWCA/HLCA regarding proposal for expanded capacity of 130 MW (376 MW-246 MW). Further, for expansion of CPP capacity, it obtained (29 March 2007) environmental clearance from Ministry of Environment & Forest (MoEF) which was the pre-condition for such industry. Thus, recommendation for 130 MW additional unit by DI for exemption of ED for which NOC from MoEF was obtained beyond effective date of IPR 2001 was not in order.

Hence, expanded capacity was ineligible for incentive amounting to ₹ 38.56 crore on 1,927.74 MU of electricity consumed under IPR 2001 as well as under IPR 2007.

DI in reply (August 2014) stated that 1st fixed capital investment for the entire project started on 09 April 2003 i.e., during IPR 2001 and did not debar the unit to come up in phases. But MoU signed with GoO was for 270 MW. Further, for expanded capacity of CPP, no proposal was submitted to SLNA and environmental clearances (EC) from MoEF as stipulated in earlier EC for any further expansion of the project was also obtained during the effective period of IPR 2007, thus the unit was ineligible under IPR 2001.

• DI recommended exemption from payment of ED to a Power Plant¹¹¹, Jharsuguda for five years from respective date of commissioning of two units of CPP (12 MW + 25 MW) in two phases under IPR 2001.

¹¹⁰ Bhushan Power and Steel Limited (BPSL).

¹¹¹ Action Ispat and Power (P) Limited (AIPPL).

Audit observed that eligibility of 25 MW CPP was determined considering date of first capital investment as of 27 February 2007 i.e. dates of making advance payment to suppliers of Plant and Machinery. Further, CPP unit was an additional/expanded capacity under Industrial Entrepreneur Memorandum (IEM) (20 October 2007) and consent to establish was obtained from State Pollution Control Board (SPCB), Odisha on 03 December 2008. Hence, commencement of fixed capital investment for this CPP cannot be said to have been made during effective period of IPR 2001 to make this unit (25 MW) eligible for exemption of ED of ₹ 12.06 crore.

DI in reply (August 2014) stated that 1st fixed capital investment in land was made on August 2004 thus eligible for ED exemption under IPR 2001. But as the unit got IEM for expanded capacity during October 2007 and consent to establish was obtained from SPCB, Odisha during December 2008, the unit was ineligible for ED exemption under IPR 2001.

3.8.4 Monitoring and Internal Control

The following deficiencies in Monitoring and Internal Control system were noticed in audit.

3.8.4.1 Monitoring

OIFA, 2004 provided that IPICOL shall set up Task Force (TF) consisting of senior level representatives from key Departments and Authorities to review periodically status of implementation of projects and to sort out problems, if any. The Act also provided for constitution of TF by DLNA.

Based on this Act, IPICOL constituted (August 2005) a TF under Chairmanship of CMD, IDCO. However, details of meetings held by TF were not on record. Further, GoO constituted (November 2009) TF at IDCO under Chairmanship of Secretary to Government, ID with nine other members including CMD, IDCO as Member Convener. Audit observed the following:

• During the period September 2009 to August 2010, 14 TF Meetings were convened. No meetings, however, were conducted thereafter to review the status of projects, possibly contributing to 134 projects approved by SLSWCA/HLCA pending for implementation as on March 2014.

TF at district level as envisaged in OIFA was not set up.

3.8.4.2 Monthly Progress Report

As decided (24 September 2011) in Conference of GMs, RICs/DICs, RICs/DICs had to furnish monthly report on implementation of Single window in revised format. As on March 2014, six RICs/DICs had not furnished MPR September 2011 onwards and 13 DICs/RICs had not furnished Monthly Progress Report (MPR) for three to 22 months. But there was no pursuance from DI.

3.8.5 Non submission of UCs under Single Window

Audit observed that DI released funds of ₹88.16 lakh towards internet connectivity under the scheme Implementation of Single Window to OCAC (₹43.37 lakh) and different RICs/DICs (₹44.79 lakh) during 2007-14, out of which, UCs for only ₹18 lakh were submitted by RICs/DICs.

3.8.6 Conclusion

IPR a policy framework for industrial promotion and investment facilitation including operationalisation of Single Window mechanism was introduced in the State with effect from 2 March 2007 to facilitate setting up of industries and extension of financial incentives to industrial units. Audit revealed that the numbers of CAFs declined over years. Further, finalisation of CAFs received during the period 2007-14 was delayed due to non holding of SLSWCA/HLCA/DLSWCA and lack of monitoring on the part of IPICOL. Audit further, noticed deficiencies in implementation of various incentive schemes provided in the IPR such as exemption from stamp duty, reimbursement of value added tax, exemption of electricity duty, etc. which were extended to ineligible units. Monitoring and internal control required improvement.

WORKS DEPARTMENT

3.9 *Extra cost due to inflated rate in estimate*

Unwarranted deviation in estimate led to extra cost of ₹1.48 crore resulting in undue benefit to contractor

As per para 3.4.10 of OPWD Code the estimates should be prepared using the sanction schedule of rates and in most economical manner. Work of "Improvement to Sankarkhole - Khajuripada from RD 0/0 to 21/150 Km" was awarded (August 2013) to a contractor on percentage (1.2 *per cent* less) tender basis for \gtrless 25.80 crore to be completed by August 2015. The work was in progress as of March 2014.

Scrutiny of estimate for above work prepared by Executive Engineer (EE), Roads & Building (R&B) Division, Phulbani and sanctioned (November 2012) by Chief Engineer (CE), World Bank project for ₹26.12 crore under NABARD assistance RIDF-XVIII revealed (December 2013) that an item "roadway excavation" at the rate of ₹86.70 per cum for 2,12,291 cum was included with provision of ₹1.84 crore. Analysis of rates revealed that the rate was for "earth work in excavation in hard soil by labourers".

In another work "Improvement to Manamunda-Kantamal-Ghantapada-Sindhiguda road (SH-41) from 2/700 to 5/650 Km" prepared by the above Division and sanctioned in July 2011, it was noticed that the item rate provided for excavation of earth work of 3,596 cum by mechanical means. The difference in rate per cum from ₹ 16.36 to ₹ 86.70 in November 2012 was due to change in mode of execution of work from mechanical means to manual means. But it was noticed during joint physical inspection of the work by audit team with Assistant Engineer, South (R&B) Section, Phulbani that excavation work was being done by the contractor with mechanical means.

Thus, the deviation in estimate of excavation work from mechanical to manual means had the effect of inflating the item rate involving extra cost of \gtrless 1.49 crore. As the work was awarded to the contractor on the basis of percentage rate with 1.2 *per cent* less than the estimated cost, the extra cost and undue benefit to the contractor was \gtrless 1.48 crore (1.2 *per cent* less of \gtrless 1.49 crore), out of which \gtrless 22.10 lakh had already been paid to the contractor for execution of 31,416 cum of earth work (March 2014).

Accepting the audit observation, Government stated (October 2014) that EE was instructed to process deviation proposal for execution of earth work by using hydraulic excavator.

3.10 Non recovery of Government dues from the defaulting contractor

Despite default in execution of the works, penalty and LD of \gtrless 1.52 crore were not recovered from the contractor

As per clauses 2 (a) and 2 (b) (i) of the condition of the standard F_2 contract, time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and in case of delay the contractor shall pay as compensation upto 10 *per cent* of the estimated cost of the work. In case of failure to complete the work, the contract shall be rescinded and 20 *per cent* of the value of left over work will be realised from the contractor as penalty.

Test check of records of Executive Engineer¹¹² (EE), revealed that the work "Improvement to Gop - Balighai Road from 00 to 18/00 Km in the District of Puri under RIDF-V" was awarded (June 2010) to a contractor at a cost of ₹ 6.22 crore for completion by June 2011. The contractor failed to execute the works as per the work programme despite issue of several notices by EE and executed works valuing ₹ 1.48 crore only within scheduled date of completion. Despite this, compensation in shape of Liquidated Damages (LD) to ₹ 0.67 crore as stipulated in clause 2 (a) of the contract were not levied by EEs to ensure timely completion of works.

After receiving payment of ₹ 1.24 crore, contractor abandoned (October 2011) work leaving balance of works valued at ₹ 5.26 crore. Government terminated (August 2012) contract with instructions to recover penalty of 20 *per cent* of the value of works not completed by contractor. As such a sum of ₹ 0.67 crore being 10 *per cent* of the estimated cost as LD and penalty of ₹ 1.05 crore being 20 *per cent* of the value of left over works ₹ 1.72 crore was recoverable from the contractor as per the terms and conditions of agreements. Only a sum of ₹ 19.80 lakh was forfeited (November 2012) from contractor and balance LD and penalty of ₹ 1.52 crore remained unrecovered (February 2014).

EE paid (December 2011) \gtrless 24 lakh to the contractor before finalisation of the contract which could have been adjusted towards LD and penalty.

¹¹² Roads and Buildings (R&B) Division, Puri.

While accepting facts Government stated (October 2014) that due to non availability of funds in the account of contractor, CE moved to Government for recovery of balance dues. Further, it was stated that EE was advised to issue fresh demand note against contractor for recovery of penalty and LD charges.

3.11 Extra cost due to non finalisation of tender within extended validity period

Non finalisation of a tender within the extended validity period resulted in extra cost of \gtrless 1.11 crore on retender

As per Note (iv) below para 3.5.18 of OPWD Code Volume I, the tenders should be finalised within three months from the last date prescribed for receipt of tenders. If delay in deciding the tender is inevitable, the consent of the tenderer to keep the offer open for a further period should be obtained.

Check of records of Executive Engineer (EE), Khordha R&B division revealed (November 2013) that tender for the work "Improvement to Khandapada -Fategarh road from 20.700 km to 39.000 km in the district of Nayagarh under NABARD assistance (RIDF-XVII)" was invited (March 2011) by Chief Engineer (CE), World Bank Project. The last date for receipt of tender was 28 April 2011. In response to tender call notice, eight bids were received and validity of tender was upto 27 July 2011. The CE recommended (2 June 2011) the first lowest bid of ₹ 8.83 crore being 15 per cent less than the estimated cost of ₹ 10.39 crore. However, Government did not finalise the tender within its validity period and the lowest bidder was asked to extend the validity. In response, the lowest bidder extended the validity period twice (from 28 July 2011 to 28 September 2011 and 29 September 2011 to 28 November 2011). Instead of finalising the tender within the extended validity period, Chief Engineer requested for further extension which was not agreed to by the contractor. Next two lowest bidders also refused to extend the validity of their offers. The reasons for non finalisation of tender within the extended validity period were also not on record. Finally, Government approved (February 2012) cancellation of the above tender and instructed invitation of fresh tender. On retender (March 2012), the work was awarded (August 2012) to a single bidder at a cost of ₹ 9.94 crore for completion by February 2014 and work was in progress.

Thus, non finalisation of tender even during the extended validity period not only resulted in extra cost of ₹ 1.11 crore but also delayed improvement of road.

Government stated (July 2014) that the work was completed in all respect after retendering but is silent on aspect of delay in finalisation of 1st tender.

3.12 Extra cost due to non execution of agreement within validity period

Non execution of agreement within the validity period resulted in extra cost of \gtrless 4.73 crore on retender

As per Note (iv) below para 3.5.18 of OPWD Code Volume I, the tenders should be finalised within three months from the last date prescribed for receipt of the tenders. If delay in deciding the tender is inevitable, the consent of the tenderer to keep the offer open for a further period absolutely required should be obtained.

Chief Engineer (CE), World Bank Project, Odisha invited tender (5 April 2013) for the work "widening of Titilagarh - Phapsi PWD road in the district of Bolangir under NABARD assistance RIDF-XVIII". Last date for receipt of tender was 6 May 2013 and validity was upto 4 August 2013. Scrutiny of the records of EE revealed that though the technical bid was opened on 14 May 2013, the evaluation of tender was done by the committee under the Chairmanship of Engineer-in-Chief on 13 June 2013 i.e after one month. When the price bids of the three qualified bidders were opened on 18 June 2013, it was found that the lowest quote was for ₹19.23 crore being 15.7 per cent less than the estimated cost of ₹ 22.81 crore. On 2 July 2013, Tender Committee under the Chairmanship of Engineer-in-chief cum Secretary to Government considered the above facts and recommended lowest tender for approval of Government which was received by the CE on 01 August 2013 i.e after four weeks. The lowest bidder was communicated by registered post on 06 August 2013 to sign the agreement. Although the lowest bidder had given (25 June 2013) his willingness to extend the validity period upto 3 September 2013, he expressed (07 September 2013) his inability to do the work at quoted rate due to non receipt of the work order (till 7 September 2013) and also abnormal increase in rates of goods and labour.

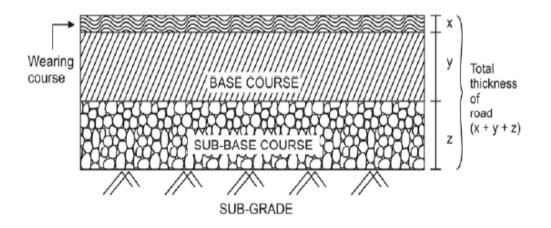
The second lowest bidder also declined to extend the validity of tender further as the Government had published revised SoR which was approximately five to six *per cent* higher. The work was awarded (February 2014) on retender to a contractor at a cost of ₹ 23.96 crore to complete the work by February 2016. Thus, delay at each stage of tender finalisation led to non execution of agreement within the extended validity period and extra cost of ₹ 4.73 crore for execution work through retender.

Government stated (October 2014) in reply that all action had been taken as per codal provision. Though the tender has been finalised within bid validity period and letter of award communicated within extended validity period, the successful bidder has intentionally avoided entering into contract. But the fact remains that the process could have been expeditiously completed instead of delaying till last stages.

3.13 Avoidable extra expenditure

Non adherence to Indian Road Congress guidelines resulted in avoidable extra expenditure of ₹ 7.54 crore on capping layer of sand

According to Indian Road Congress (IRC) norms, pavement layer of a road consists of three layers viz. sub-base course, base course and surfacing/ wearing course laid in successive layers over subgrade surface, as shown in the diagram below.



Depending on the strength of subgrade soil in terms of California Bearing Ratio (CBR) and on the basis of projected number of commercial vehicles Million Standard Axles (MSA), thickness of pavement of road is to be designed to ensure load bearing capacity of the road. According to IRC guidelines (4.2.1.5), preferably the subgrade soil should have a CBR of two *per cent*. Where the CBR value of the subgrade soil is less than two *per cent*, the design should be based on subgrade CBR value of two *per cent* and a capping layer of 150 mm thickness of material with minimum CBR of 10 *per cent* shall be provided in addition to the sub-base.

Check of records in six Roads and Bridges (R&B) Divisions¹¹³ revealed that Chief Engineer (CE), World Bank Projects had sanctioned (between July 2010 and October 2013) estimates for ₹ 196.86 crore for 11 road works. It was observed from the records that though CBR values of subgrade soil were more than the requisite two *per cent* (i.e. three to 10 *per cent*) indicating adequate load bearing capacity, divisions provided capping layer of sand with thickness ranging from 150 mm to 500 mm as detailed in *Appendix-3.13.1* and *3.13.2*. Further, thickness of GSB actually provided in these works were not uniform as per the IRC specification as in 10 works it was less and in one work it was more than the required IRC code.

Thus, unwarranted provision of capping layer of sand and reducing the thickness of GSB resulted in avoidable extra expenditure of \gtrless 7.54 crore as detailed in *Appendix-3.13.2*.

¹¹³ R & B Divisions, Rourkela, Angul, Dhenkanal, No.II Berhampur, Bhadrak and Puri.

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Government stated (October 2014) that total quantity of sand included quantity provided in crust portion as well as in shoulder portion while quantity under crust further consists of thickness required for drainage and thickness required in place of GSB close graded grading III material. While drainage layer of 150 mm thick is required for performance of pavement, the extra quantity below crust is a substitute of GSB grading III and there is saving in cost. But the guidelines of IRC-37 provide for provision of capping layer of sand preferably where the CBR value of the subgrade soil is less than two *per cent* which was not the case here. The drainage layer is required only under the shoulders of the road at the subgrade level and not for the entire road as per para 5.5 of IRC guidelines.

FINANCE DEPARTMENT

3.14 Response to Audit

Timely response to audit findings is one of the essential attributes of good governance as it provides assurance that the Government takes its stewardship role seriously.

Principal Accountant General (E&RSA) Odisha conducts periodical inspection of Government departments and their field offices to test check the transactions and verify the maintenance of important accounting and other records as per prescribed rules and procedures. These inspections are followed by Inspection Reports (IRs) sent to the Heads of offices and the next higher authorities. Defects and omissions are expected to be attended promptly and compliance reported to the Principal Accountant General. A half-yearly Report of pending IRs is sent to the Secretary of each department to facilitate monitoring of the audit observations and their compliance by the departments.

A review of IRs issued upto March 2014 pertaining to 17 departments showed that 18,940 paragraphs relating to 5,471 IRs were outstanding at the end of June 2014. Of these, 1,848 IRs containing 5,222 paragraphs are outstanding for more than 10 years (*Appendix-3.14.1*). Even first reply from the Heads of Offices which was to be furnished within one month was not received in respect of 1,115 IRs issued upto March 2014. Year-wise position of the outstanding IRs and paragraphs are detailed in *Appendix-3.14.2*.

Serious irregularities commented upon in these IRs had not been settled as of June 2014 (*Appendix-3.14.3*). Number of paragraphs and amount involved in these irregularities is categorised below.

			(<i>t in crore</i>)
Sl.	Broad objective heads	Number of	Amount
No.		paragraphs	
1	Non compliance with rules and regulations	22	551.22
2	Audit against propriety/expenditure without	15	407.50
	justification		
3	Persistent/pervasive irregularities	18	438.30
4	Failure of oversight/governance	06	237.29
	Total	61	1634.31
Course	a. As non necords of the DAC (EPDSA)		•

Table No. 3.7 Category of paragraphs

Source : As per records of the PAG (E&RSA)

3.14.1 Follow up action on earlier Audit Reports

Serious irregularities noticed in audit are included in the Reports of the Comptroller and Auditor General that are presented to State Legislature. According to the Finance Department instructions (December 1993), Administrative Departments are required to furnish explanatory notes on transaction paragraphs, reviews/performance audits, etc. included in the Audit Reports within three months of their presentation to the State Legislature.

It was noticed that in respect of Audit Reports from the year 1997-98 to 2011-12 as indicated below (Table), seven¹¹⁴ out of 17 departments, which were commented upon, did not submit explanatory notes on paragraphs and reviews as of March 2014.

Year of Audit Report	Total number of paragraphs	Individual paragraphs/reviews		Number of paragraphs/reviews for which explanatory notes were not submitted (March 2014)		
		Individual paragraphs	Reviews/ Performance Audits	Individual paragraphs	Reviews/ Performance Audits	
1	2	3	4	5	6	
1997-98	32	28	04	05	03	
1998-99	34	32	02	01	00	
1999-00	26	23	03	00	01	
2000-01	32	29	03	01	01	
2001-02	17	16	01	00	01	
2002-03	23	21	02	00	02	
2003-04	23	23	00	03	00	
2004-05	18	18	00	01	00	
2005-06	20	17	03	00	00	
2006-07	28	27	01	02	00	
2007-08	19	16	03	02	02	
2008-09	15	12	03	04	02	
2009-10	15	15	00	00	00	
2010-11	10	08	02	01	02	
2011-12	14	12	02	08	02	
Total	326	297	29	28	16	

Table No.3.8 No. of paragraphs for which explanatory notes not received

Source : As per records of the PAG (E&RSA)

28 individual transaction audit paragraphs and 16 reviews on which compliance has not been submitted to the Odisha Legislative Assembly can be categorised under (i) non compliance with rules and regulations (ii) audit against propriety/ expenditure without justification, (iii) persistent/pervasive irregularities and failure of oversight and governance. Departments largely

¹¹⁴ Works, Water Resources, Agriculture, Energy, Fisheries and Animal Resources, Industries and Forest and Environment Departments.

responsible for non submission of explanatory notes were Water Resources, Works and Agriculture.

3.14.2 Response of Departments to recommendations of the Public Accounts Committee

Public Accounts Committee Reports/Recommendations are the principal medium by which Legislature enforces financial accountability of the executive to the Legislature and it is appropriate that they elicit timely response from the Government Departments in the form of Action Taken Notes (ATNs). The Orissa Legislative Assembly (OLA) Secretariat issued (May 1966) instructions to all Departments of the State Government to submit ATNs on suggestions, observations and recommendations made by Public Accounts Committee (PAC) for their consideration within six months after presentation of PAC Reports to the Legislature. The above instructions were reiterated by Government in Finance Department in December 1993 and by OLA Secretariat in January 1998. Time limit for submission of ATNs had since been reduced from six to four months by OLA (April 2005).

Out of 573 recommendations relating to Audit Reports made by the PAC from the first Report of 10th Assembly (1990-95) to 40th Report of 13th Assembly (2004-09), final action on 89 recommendations were awaited (March 2014).

Bhubaneswar The (Sunil S. Dadhe) Principal Accountant General (E&RSA) Odisha

Countersigned

New Delhi The (Shashi Kant Sharma) Comptroller and Auditor General of India



Appendix - 2.1.1

(Refer paragraph 2.1.7.9 at page 24)

Payment of additional cost due to delay in land acquisition

Sl. No.	Name of the Village	Date of passing award	Area (in Acre)	Preliminary estimate (in ₹)	Revised estimate (in ₹)	Extra cost (in ₹)
	Kanupur Irrigation Project			•		
1	Basudevpur (Earth Dam)	11.01.2007	70.77	20916757	22094714	1177957
2	Kandara (Earth Dam Base)	09.03.2007	107.95	65510848	70122983	4612135
3	Kandara (Reservoir)	08.01.2007	109.00	30701473	32214355	1512882
4	Basudevpur (Reservoir)	11.01.2007	83.43	29916091	31600917	1684826
5	Gobindapur (Reservoir)	02.04.2008	683.86	270663759	293473997	22810238
6	Murusuan (Reservoir)	27.10.2007	182.49	91791036	101775171	9984135
7	Remenshapur (Ka) (Reservoir)	12.12.2007	325.16	145210186	162578578	17368392
8	Remenshapur (Kha) (Reservoir)	12.11.2008	152.32	70530208	84428138	13897930
9 10	Chamakpur (Reservoir) Dhobakuchuda (Reservoir)	25.05.2008	698.95 616.17	316021325 273591531	342719145 296192734	26697820 22601203
10	Hariharpur (Reservoir)	09.07.2008 19.11.2008	40.76	19252705	296192734 20743829	1491124
11	Balabhadrapur (Reservoir)	17.01.2009	19.81	8909238	9724672	815434
12	Lahanda (Reservoir)	04.03.2010	19.81	14033812	16405338	2371526
14	Rugudi (Reservoir)	01.03.2009	289.72	164124018	176523543	12399525
15	Daduan (Reservoir)	01.07.2009	562.80	294872133	326438635	31566502
16	Sankarpur (Reservoir)	16.04.2009	287.83	134087519	145415203	11327684
17	Birakala (Reservoir)	15.09.2009	321.46	137910034	155386098	17476064
18	Bileipada (Reservoir)	05.03.2010	44.80	48761851	56315689	7553838
19	Kandara (Spill Channel)	04.01.2010	47.45	14572582	16452876	1880294
20	Basudevpur (Colony)	27.01.2010	26.00	7688684	8094663	405979
21	Basudevpur (Maincanal)	11.08.2009	16.21	7228906	7500359	271453
22	Mirigisingha (Main Canal)	06.08.2009	15.71	7683760	8245831	562071
23	Kodagadia (Main Canal)	11.08.2009	33.02	7539770	8017413	477643
24	Jaymangalpur (Main Canal)	07.01.2010	16.53	3982307	4374705	392398
25	Banka (Main Canal)	11.08.2009	8.92	1408604	1497815	89211
26	Chimila (Main Canal)	06.08.2009	0.98	230975	245298	14323
27	Sunaposi (Main Canal)	03.10.2009	53.98	12378408	12988254	609846
28 29	Giridharipur (Main Canal) Hunjaposi (Main Canal)	18.03.2010	24.93 1.63	6073232 385594	6581341 414092	508109 28498
30	Taduabahal (Main Canal)	15.01.2010 28.05.2012	30.74	9781183	17367198	7586015
30	Angulia (Main Canal)	10.11.2010	29.36	5013780	5119625	105845
32	Nuagaon	23.02.2011	19.72	3147297	3235912	88615
33	Jamujodi (Main Canal)	23.03.2011	4.28	598914	628415	29501
34	Jamudapal (Main Canal)	20.04.2011	21.91	3204900	3440258	235358
35	Kanjipani (Main Canal)	02.08.2011	16.52	2168761	2234856	66095
36	Goda (Main canal)	05.11.2011	43.555	7563967	7963269	399302
37	Gopinathpur (Main Canal)	10.08.2011	20.00	4561880	4575606	13726
38	Nischintapur (Main Canal)	11.08.2011	17.88	7101234	7586122	484888
39	Jhumpura (Main Canal)	10.08.2011	4.09	4595604	4644143	48539
40	Durgapur (Main Canal)	03.11.2011	1.09	400457	405344	4887
41	Gopinathpur (Minor & Sub-Minor)	21.03.2012	1.03	241443	254613	13170
42	Tolakbahal (Minor & Sub- Minor)	06.03.2012	6.01	195809	2050930	1855121
43	Satahalia (Minor & Sub-Minor)	25.01.2012	7.13	2449787	2549573	99786
44	Sunaposi (Minor & Sub-Minor)	12.07.2012	9.55	2489693	2687184	197491
45	Sankarpur (Reservoir)	25.01.2012	0.47	269659	282079	12420
46	Ghuntuposi (Main Canal)	10.05.2012	5.02	3872516	3989762	117246
47	Bhaluka (Main Canal)	14.05.2012	27.45	51713175	53304533	1591358
48	Rajia (Minor & Sub- Minor)	20.03.2012	3.28	354177	364897	10720
49	Sanahundula (Main Canal) Nayabandha (Minor & Sub-Minor)	18.06.2012	42.51	7327151 895598	7715412 919224	388261 23626
50 51	Arsala (Main Canal)	27.01.2012 13.03.2012	6.26 29.65	895598 74285606	76519295	23626
51	Mahadevpur (Main Canal)	13.03.2012		1971828	2016077	44249
52	Laxmiposi (Main Canal)	25.01.2012	12.21 27.10	8965684	9202272	236588
54	Basudevpur	18.12.2012	4.94	5945519	6238584	230388

Sl. No.	Name of the Village	Date of passing award	Area (in Acre)	Preliminary estimate (in ₹)	Revised estimate (in ₹)	Extra cost (in ₹)
55	Khendra (Main Canal)	03.05.2013	27.02	9859782	10692824	833042
56	Jansanpur (Main Canal)	27.06.2012	29.33	8251231	8352289	101058
57	Pratapposi (Minor & Sub-Minor)	05.01.2013	2.84	5127862	5416741	288879
58	Tulasipur (Main Canal)	30.01.2013	8.55	2231563	2370450	138887
59	Kandarapasi (Main Canal)	07.05.2013	60.06	39589009	41968538	2379529
60	Birakala (Reservoir)	16.07.2013	260.99	231589660	244419726	12830066
61	Jayamangalpur (Minor & Sub-Minor)	05.02.2013	4.16	5981738	6103467	121729
62	Mirigsingha (Minor & Sub-Minor)	03.01.2013	1.04	215490	218219	2729
63	Gopapur (Minor & Sub-Minor)	05.02.2013	5.99	7549846	7703484	153638
	Sub Total		5650.525	2725489149	2971107307	245618158
Low	er Sukutel Irrigation Project					
64	Garjan	31.03.2012	331	113780937	129577950	15797013
65	Chudapali	26.10.2010	45.32	11528140	13475711	1947571
66	Khagasabahal	23.05.2012	438.06	74448607	84690576	10241969
	Sub Total		814.38	199757684	227744237	27986553
	Grand Total		6464.805	2925246833	3198851544	273604711

Appendix - 2.1.2

(Refer paragraph 2.1.8.1 at page 28)

Statement showing the details of extra cost due to non adherence to SoR

Sl. No.	Name of the projects	Discrepancies in the estimates	Impact of discrepancies
1	KIP/ SIP/ LIIP / Telengiri/ Rukura/ Ret project	PWD fixed the hire charges of Dozer for spreading 300 cum of earth at ₹ 2141.79 per hour. However, while preparing the estimates for compaction of earth dam and canal embankments the department had taken the hire charges of ₹ 2141.79 per hour for spreading 100 cum instead of 300 cum.	Estimates of 25 works under seven projects were inflated by ₹ 44.41 crore out of which ₹ 29.77 crore had already been paid to contractors.
2	LSIP	Analysis of rate for compaction of earth work provided for use of sheep foot roller. However, Odisha Construction Corporation adopted rate of vibratory roller for compaction of earth in LSIP earth dam. The rate was accepted by the DoWR without negotiation.	Since inclusion of vibratory roller was costlier, the estimate was inflated by \gtrless 20 per cum. Acceptance of this offer resulted in extra expenditure of \gtrless 4.63 crore.
3	LIIP	There is no specific provision in the agreement for compaction of canal embankment. Accordingly, this provision was not adopted in execution of entire right main canal and 20 km of left main canal of LIIP and natural settlement was allowed. On the contrary, tail end of canal and branch canals were compacted.	The unwarranted provision of compaction in 12 works of right and left canal along with distributaries resulted in extra cost of $₹$ 8.31 crore.
4	SIP/KIP/ Rukura Irrigation Project	In Analysis of Rates of PWD there is no provision for rehandling charges for materials for cement concrete or other items of works. However, this has been included in the analysis of rates of these works.	The provision of rehandling charges, not only inflated the estimate of five works by ₹ 13.17 crore but also resulted in undue benefit of ₹ 13.51 crore to contractors including tender premium.
5	SIP and KIP	PWD Analysis of item rates for cement concrete works do not provide for cost of sundries, form works, controlled concrete and quality control test charges. The estimates of the project works included separate provision for the above items.	Cost of six works were not only inflated by ₹ 7.10 crore but also resulted in undue benefit of ₹ 8.22 crore to contractors.
6	SIP	Analysis of rate for cement concretes lining work provided for four <i>per cent</i> of cost of concrete and this should be added to the cost of CC works towards cost of centering and shuttering (form work). However, separate item at the rate of \gtrless 67.80 per square meter of centering and shuttering was made in the estimates.	Due to provision of separate item rate towards form work the estimates of four works were not only inflated by $\gtrless 0.81$ crore but also undue benefit of $\gtrless 0.9$ crore was provided to the contractors including tender premium.
7	SIP, Ret and Rukura Irrigation Project	Provision of cement in quintalName of the workAR provisionActual provisionExcessCCM152.803.210.41CCM 203.474.110.64CCM254.035.711.68	Excess provision of 2.30 lakh quintal of cement in CC works inflated the estimates by \gtrless 9.31 crore. This resulted in undue benefit of \gtrless 10.33 crore to contractors.
8	KIP- Spillway construction	Analysis of Rates provided cement at the rate of 3.47 quintal and 4.03 quintal for execution of one cum of CCM ₂₀ and CCM ₂₅ respectively. Against the above, the EE provided cement at the rate of 4.11 quintal and 5.71	This not only resulted in less recovery of ₹ 3.27 crore but also led to extension of undue financial benefit to the

Sl. No.	Name of the projects	Discrepancies in the estimates	Impact of discrepancies
		quintal for execution of the above two items respectively. The cost was also increased by ₹ 360 and ₹ 861 per cum of CCM ₂₀ and CCM ₂₅ respectively by adding nine <i>per cent</i> towards sundries, 10 <i>per cent</i> towards overhead charges and tender premium there on. However, EE recovered only the cost as provided in the estimate at lesser rate.	contractor.
9	SIP and KIP	Analysis of Rates of PWD provided for 10 <i>per cent</i> overhead charges on items rates but there is no separate provision for sundries, tools and plants. Scrutiny of records revealed that CE & BMs, made provision of two <i>per cent</i> sundries, tool and plants over and above 10 <i>per cent</i> overhead charges.	This not only inflated the estimate by ₹ 3.21 crore but also resulted in undue benefit of ₹ 3.37 crore to contractors.
10	SIP	Analysis of Rates of PWD provided for excavation and transportation of earth at a distance of one km through mechanical means at the rate of ₹ 45.80 per cum. There was no provision in Analysis of Rates towards manual excavation and mechanical transportation. The EE, Subernarekha Irrigation Division No.I, however, adopted manual excavation and mechanical transportation of earth at the rate of ₹ 82.28 per cum.	Adoption of manual excavation and mechanical transportation inflated the rate by ₹ 36.48 per cum. This not only led to extra cost of ₹ 4.60 crore towards excavation and transportation of 12.60 lakh cum of earth but also led to undue benefit of ₹ 5.70 crore to contractor including tender premium.
11	CE & BM, RVN Basin	SoR provided for 10 <i>per cent</i> overhead charges only whereas the CE sanctioned two estimates with overhead charges of 10 <i>per cent</i> on labour components and 15 <i>per cent</i> profit over and above the overhead charges in computation of items rate.	This not only inflated the estimate by $₹$ 6.89 crore but also resulted in undue benefit of $₹$ 6.59 crore to contractors.
12	CE & BM, BSB Basin	Analysis of Rates of cement concrete lining works provided for polythene film at ₹ 1.50 per square meter. However, in the estimates, provision was made for hessian cloth at higher rate ranging from ₹ 8.00 to ₹ 26.50 per square metre.	This resulted in extra cost of ₹ 2.14 crore.
13	CE & BM, BSB Basin	There is no provision for primer painting in Analysis of Rates of PWD. However, the CE & BM of SIP and AB Project provided for such painting for cement concrete lining work to the extent of 27.93 lakh square metre.	Due to provision of primer painting, department incurred avoidable extra expenditure of ₹ 14.59 crore.
14	Haladia/ Jambhira earth dam	As per SoR, for obtaining 100 cum of compacted earth, 120 cum of loose earth were required. However, in the estimates of four works EEs made provisions of 124 cum as against the requirement of 120 cum.	Excess provision of earth not only inflated the estimate but also led to undue benefit of ₹ 2.01 crore.
15	SIP/ KIP/ Ret/ AB Project (canal)	Offered rate of cement included transportation cost and hence there was no need to make provision for transportation cost. However, the EEs made separate provision towards transportation cost ranging between ₹ 11.50 and ₹ 39.40 per quintal.	Separate provision of transportation cost not only inflated the estimate by $₹ 6.08$ crore for 27.58 lakh quintal of cements but also led to undue benefit of $₹ 6.83$ crore to contractors.
16	Jambhira/ Kanupur earth dam	Agreement condition of three works stipulated that two <i>per cent</i> of compacted earth was to be deducted from total quantity towards settlement allowances. However, no such recovery was made from contractors.	This led to undue benefit of ₹ 1.21 crore.

Appendices

Sl. No.	Name of the projects	Discrepancies in the estimates	Impact of discrepancies
17	Jambhira/ Haldia/ Kanupur earth dam	As per technical specification of Agreement adequate extra width on either side of the dam shall be provided to have the required compaction of earth dam as per drawing. However, EEs made separate provision for excavation of such extra width in the items.	Provision of additional payment for removal of earth from either side of dam not only led to extra cost of $₹ 3.87$ crore but also resulted in undue benefit to contractors.
18	LSIP/LIIP/ KIP/Rukura Irrigation Project	Agreement condition stipulated recovery of cost of useful blasted stone retrieved at 70 <i>per cent</i> from excavated hard rock and then retrieved quantity was to be issued to the contractor and cost thereof was to be recovered. The EEs recovered cost of blasted stone at the rate of $₹75/ ₹230.20$ per cum against the recoverable amount of $₹306/₹372.36$ per cum.	The EEs however, recovered at lesser rates leading to undue benefit of ₹8.81 crore to contractors.

Appendix -2.2.1

(Refer paragraph 2.2.7 at page 43)

Summary of use based classification system

Sl. No.	Designated best use	Class of water	Criteria
	Drinking water source		1. Total Coliforms Organism MPN/100 ml shall be 50 or less
1	without conventional	А	2. pH between 6.5 and 8.5
1	treatment but after	Л	3. Dissolved Oxygen 6mg/l or more
	disinfection		4. Biochemical Oxygen Demand 5 days 20°C 2mg/l or less
			1. Total Coliforms Organism MPN/100 ml shall be 500 or less
2	Outdoor bathing	В	2. pH between 6.5 and 8.5
2	(Organised)	D	3. Dissolved Oxygen 5mg/l or more
			4. Biochemical Oxygen Demand 5 days 20°C 3mg/l or less
	Drinking water source		1. Total Coliforms Organism MPN/100 ml shall be 500 or less
3	after conventional	С	2. pH between 6 to 9
5	treatment and disinfection		3. Dissolved Oxygen 4mg/l or more
	treatment and disinfection		4. Biochemical Oxygen Demand 5 days 20°C 3mg/l or less
	Propagation of wild life		1. pH between 6.5 to 8.5
4	and fisheries	D	2. Dissolved Oxygen 4mg/l or more
	and fisheries		3. Free Ammonia (as N) 1.2 mg/l or less
	Irrigation Industrial		1. pH between 6.0 to 8.5
5	Irrigation, Industrial Cooling, Controlled waste	Е	2. Electrical Conductivity at 25° micro mhos/cm Max 26.
5	disposal	E	3. Sodium absorption Ratio Max 26
	uisposai		4. Boron Max 2mg/l

Appendix -2.2.2

(Refer paragraph 2.2.7.1 at page 43)

Surface Water Monitoring Stations under SPCB, Odisha

Sl. No.	Source of monitoring	Total stati	no. of ions	NWMP san	NWMP sampling locations		pling locations
		NWMP	SWMP				-
(A)	Major River						
1	Mahanadi	27	5	Ib	Sundargarh	Mahanadi	Sambalpur FD/s at
2					Jharsuguda		Sankarmath Cuttack FD/s
2					Brajarajnagar		Power
					U/s		Channel U/s
4					Brajarajnagar D/s	Kathajodi	Cuttack U/s
5				Bheden	Before		Cuttack FD/s
					Jharsuguda		at Matgajpur
6					Hirakud		
					Reservoir		
7					Power Channel		
					D/s		
8				Mahanadi	Sambalpur U/s		
9					Sambalpur D/s		
10					Sambalpur		
					FD/s at Huma		
11					Sonepur U/s		
12					Sonepur D/s		
13					Tikarpara		
14 15					Narsinghpur Munduli		
15					Cutttack U/s		
10					Cutttack D/s		
18					Paradip U/s		
19					Paradip D/s		
20				Tel	Manmunda		
21				Kathjodi	Cuttack D/s		
22				Serua	Sankhatrasa		
23				Kuakhai	Bhubaneswar		
					FU/s		
24					Bhubaneswar		
					U/s		
25				Daya	Bhubaneswar D/s		
26					Bhubaneswar FD/s		
27				Birupa	Choudwar D/s		
27	Brahmani	20	5	Sankh	Sankh U/s	Brahmani	Rourkela FD/s
20	Diminun	20	5	Summe	Sunkii 0/5		at Attaghat
29				Koel	Koel U/s		Dhenkanal U/s
30				Brahmani	Panposh U/s	Nadira	Nadira D/s at
21					Dong ash D/:	Vicin 1. Ile	Dasnali Kisinda Ibar
31 32					Panposh D/s Rourkela D/s	Kisinda Jhor Kharashrota	Kisinda Jhor Binjharpur
32					Rourkela D/s	Kharashrota	Binjharpur
- 33					at Biritola		

Sl.	Source of		no. of				
No.	monitoring	stations		NWMP sam	pling locations	SWMP samp	oling locations
		NWMP	SWMP				
34	Brahmani			Brahmani	Bonaigarh		
35					Rengali		
36					Samal		
37					Talcher FU/s		
38					Talcher U/s		
39					Talcher D/s		
40					Talcher FD/s		
41					Dhenkanal D/s		
42					Bhuban		
43					Dharmasala		
44					Kabatabandha		
45					Pattamundai		
46				Kharashrota	Khanditara		
47					Aul		
48	Baitarani	6	-	Kusei	Deogaon		
49				Baitarani	Joda		
50					Anandpur		
51					Jajpur		
52					Chandballi		
53				Dhamara	Dhamara		
54	Rusikulya	2	-	Rusikulya	Madhopur		
55					Potagarh		
56	Nagavali	3	-	Nagavali	Penta U/s		
57					Jay Kay Pur		
					D/s		
58					Rayagada D/s		
59	Subarnarekha	1	-	Subarnarekha	Rajghat		
60	Budhabalanga	2	1	Budhabalanga	Baripada D/s	Budhabalanga	Balasore U/s
61					Balasore D/s		
62	Kolab	1	-	Kerandi	Sunabeda		
63	Vansadhara	2	-	Vansadhara	Muniguda		
64					Gunupur		
	Sub-Total	64	11				
(B)	Canal	3	3	Taladanda	Jobra	Taladanda	Ranihat
					Nuabazar		Chhatra Bazar
					Atharbanki		Biribati
(C)	Ponds	6	-	Bhubaneswar	Bindusagar		
				Puri	Narendra		
					Markand		
L					Indradyumn		
L					Swetaganga		
		-			Parbati Sagar		
(D)	Lakes	2	-		Chilika		
	~	-			Ansupa		
(E)	Sea	3	-		Puri		
					Gopalpur		
					Paradip		
	Sub-Total	14	3				
	Total	78	14				

Appendix - 2.2.3

(Refer paragraph 2.2.7.9 at page 46)

Statement of water samples collected and checked in SPCB laboratory which showed BOD, DO and TC at high levels

Name of the river	Locations	Dissolved Oxygen	Biochemical Oxygen demand	Total Coliform
	U/s of Khannagar waste water discharge point to river Kathajodi	7	1.45	13,000
Kathajodi	Wastewater of Cuttack city before discharging to river Kathajodi at Khannagar	1.7	72.7	16,00,000
	D/s of Kathajodi at Khannagar	3.4	4.85	16,00,000
	U/s of Kuakhai river of Bhubaneswar city before confluence of Budu Nallah	7.8	0.8	1,400
Kuakhai	Water of Budu Nallah at Mancheswar	0.9	3.9	2,20,000
	D/s of confluence point of Budu Nallah with river Kuakhai	7.3	1.3	5,400
	Gangua Nallah water near Samantarapur	0.8	11.9	16,00,000
Daya	Daya river at D/s of Bhubaneswar city near Kanti bridge	1.3	3.4	1,60,000
·	Gangua Nallah before mixing with river Daya	2.1	4.8	1,60,000
Standard	Class-B (Organised Outdoor Bathing)	5 mg/ltr or more	3 mg/ltr or less	500 MPN*/100 ml or less

* MPN-Most Probable Number

Appendix -3.1.1

(Refer paragraph 3.1.2.1 at page 62)

Statement showing sanctioned strength and men in position of teaching staff

Sl. No.	Name of the cadre	Approved posts	In position	Shortfall	Percentage of shortfall
1	Professor-cum-Head of the Departments/ Senior Scientists	62	40	22	35
2	Associate professors/ Scientist	197	124	73	37
3	Assistant Professors/ Assistant Scientists	369	248	121	33
4	KVKs	196	149	47	24
5	Self Financing scheme (Professor/ Associate Professor)	17	15	2	12
	Total	841	576	265	32

(Source: As per data furnished by OUAT)

Appendix - 3.1.2

(Refer paragraph 3.1.2.3 at page 62)

Statement showing intake capacity and actual occupancy of students in different hostels

Year	College of Horticulture, Chipilima (Girls)			College of Agriculture, Chipilima (Girls)			College of Fisheries, Rangeilunda (Girls)			College of Agriculture, Bhawanipatana (Boys)		
	Intake	Actual	Excess percentage	Intake	Actual	Excess percentage	Intake	Actual	Excess percentage	Intake	Actual	Excess percentage
2009-10	-	-	-	99	115	16.16	50	48	-4.00	32	32	-
2010-11	48	48	-	99	136	37.37	50	62	24.00	57	57	-
2011-12	48	68	41.67	99	100	1.01	50	79	58.00	87	87	-
2012-13	48	66	37.50	99	115	16.16	50	88	76.00	87	102	17.24
2013-14	48	66	37.50	120	135	12.50	50	103	106.00	87	96	10.34

(Source:- Information furnished by the Dean, Student Welfare and Principal of concerned Colleges)

Statement showing loss of ₹ 0.35 crore to OUAT due to sale of seeds as non seeds										
Sl. No.	Name of the farms	Crop	Quantity produced (In quintal)	Quantity sold as non seeds (In quintal)	Rate of seeds per quintal	Rate of seeds sold as non seeds	Loss per quintal	Total loss		
1	2	3	4	5	6	7	8	9		
1	RRTS, CZ, Bhubaneswar	Paddy KH-12	100.00	34.20	3900	1250	2650	90630		
2	BSP (NSP-Crop), Bhubaneswar	Paddy 2013-14 KH-12	332.00	51.33	3900	1250	2650	136025		
3	SRF, Gambharipalli, Bargarh	Paddy R-11-12	1960.00	740.40	2510	1250	1260	932904		
5	SKI', Gamonaripani, Bargani	KH-12	2048.00	20.60	2510	1250	1260	25956		
4	KVK, Jagatsinghpur	Sarala KH-12-13	245.00	21.00	2510	1250	1260	26460		
4	K V K, Jagatsinghpur	Paddy 2011-12	54.60	54.60	2510	1250	1260	68796		
5	KVK, Bargarh (2011-12 Rabi)	Paddy R-11-12	374.40	374.40	2510	1250	1260	471744		
6	BSP (NSP Crop), Bhubaneswar	Paddy (2010-11)	323.09	12.78	3900	1080	2820	36040		
7	KVK, Josipur	Paddy KH11	117.00	51.00	2380	1150	1230	62730		
8	RRTS, Chipilima	Swarna 2011	200.90	104.00	2380	900	1480	153920		
9	RRTS, Ranital Bhadrak	Swarna 2011	330.09	191.10	1980	1080	900	171990		
10	SRF, Gambharipalli, Bargarh	Paddy MTU 1001 CS 2010-11	442.80	370.80	1830	900	930	344844		
11	RRTS, Kandhamal	Paddy lalat 2010	24.70	6.00	1830	250	1580	9480		
12	RRTS, Bhawanipatna	Paddy 2010	300.00	106.00	1980	1080	900	95400		
13	RRTS, Jeypore	paddy KH 10	136.30	24.90	1980	1080	900	22410		
14	RRTS, Bhawanipatna	Paddy 2008-09 (sell 2009-10)	585.75	585.75	1800	950	850	497888		
14	KK15, Bhawampatha	Paddy 2011-12	300.00	106.00	1830	1000	830	87980		
15	KWK Dhanhanal	Paddy 2012-13	87.00	87.00	2380	1250	1130	98310		
15	KVK, Dhenkanal	Paddy 2013-14	75.40	75.40	2380	1310	1070	80678		
16	KVK, Angul	Paddy 2010-11	50.40	15.00	1830	1000	830	12450		
17	DDTTS Kandhamal	Paddy KH 11	48.55	3.25	1830	1000	830	2698		
1/	RRTTS, Kandhamal	Paddy 2010-11	18.60	6.00	1830	1000	830	4980		
18	RRTTS, Joshipur	Paddy 11-12	51.00	51.00	2510	1250	1260	64260		
19	KVK, Nuapada	Paddy 11-12 KH	16.50	16.50	2510	1250	1260	20790		
	Total		8222.08	3109.01				3519361		

Appendix -3.1.3 (Refer paragraph 3.1.4.2 at page 66) Statement showing loss of ₹ 0.35 crore to OUAT due to sale of seeds as non seeds

Appendix - 3.2.1

(Refer paragraph 3.2 at page 72)

Status of Minor Irrigation Projects under RIDF - XIII & XIV

Sl. No.	Name of the MIP	Administrative approval cost (₹in lakh)	Date of sanction	RIDF trenches	Expenditure incurred (₹in lakh)	Designed potential (In hectare)	Potential created (In hectare)	Status of head works	Status of distribution systems	Date of LA proposal issued	LA position
1	2	3	4	5	6	7	8	9	10	11	12
1	Matuljore	241.21	01.09.2008	RIDF-XIII	196.16	313	100	Completed during August 2009	In progress	22.11.2012	At 4 (i) stage
2	Lamer	145.00	21.10.2009	RIDF-XIV	87.50	142	0	Completed during June 2010	Not taken up	13.08.2013	At 4 (i) stage
3	Siriliguda	118.95	19.01.2009	RIDF-XIV	85.95	107	0	Completed during October 2009	500 m canal out of 1,900 m completed	14.10.2011	At 4 (i) stage
4	Bhatajhore	149.52	02.03.2009	RIDF-XIV	71.52	60	0	Completed during June 2010	Work of LMC in progress and tender for RMC is to be initiated	09.12.2011	At 4 (i) stage
5	Kutingpadar	190.72	23.10.2010	RIDF-XIV	108.72	130	0	Completed during January 2011	Not taken up	17.11.2012	At 4 (i) stage
	Total	845.40			549.85	752.00	100.00				

(Refer paragraph 3.3 at page 72)

Statement showing details of extra cost involved in the estimates due to provision of manual excavation of earth instead of mechanical excavation

		_						-								(In ₹)
SI. No.	Name of the work	Estimated cost (₹in lakh)	Date of sanction of estimate	Agree- ment Value (₹ in lakh)	Agreement No. / Date of commencement & completion	Quantity of earth work in estimate (in cum)	Rate of earth work in estimate	Rate provided for earth excavat- ion by manual means	Rate admiss -ible for mecha nical means	Excess rate provided in estimate	Amount of extra cost	Tender premi- um (per cent)	Extra cost including tender premium	Value of work executed (₹ in lakh)	Quantity executed (in cum)	Undue benefit to contractor including tender premium
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Rehabilitation of Taladanda canal system from RD 41.935 km to 49.00 km under Package No. C- NCB-T4 (B)	715.42	12/03/2011	977.54	02 NCB/12-13 10-12-2012 09-03-2014	182373.40	144.25	43.77	15.38	28.39	5177580.83	36.63	7074128.68	442.17	133882.57	5193205.42
2	Rehabilitation of Taladanda canal system from RD 49.00 km to 79.02 km under Package No. C- NCB-T4 (C)	527.85	09/04/2010	565.34	03 NCB/12-13 01-02-2013 31-01-2014	264226.25	140.69	43.77	15.38	28.39	7501383.24	7.10	8033981.45	189.39	105161.81	3197517.39
3	Improvement to OAE 95 B on Surua Left embankment from RD 00 to 16.00 km RIDF XVII	866.44	05/19/2012	1037.99	646F2/12-13 14-02-13 13-08-14	129033.00	115.23	33.48	15.38	18.10	2335497.30	19.80	2797925.77	381.53	123348.79	2674670.49
	Total	2109.71		2580.87		575632.65					15014461.36		17906035.90	1013.09	362393.17	11065393.30

(Refer paragraph 3.4.2.1 at page 74)

Statement showing number of trades proposed for upgradation/introduction

Sl. No.	Name of ITI	Upgradation of trades proposed as per IDP	No. of new trades proposed to be introduced as per IDP	No. of existing trades upgraded as per IDP	No. of new trades introduced as per IDP	Shortfall in upgradation of existing trades as per IDP	Shortfall in introduction of new trades as per IDP
1	Berhampur	6	1 (CoE Sector)	6	1	-	-
2	Balasore	6	1 (CoE Sector)	-	1	6	-
3	Hirakud	6	1 (CoE Sector)	6	1	-	-
4	Talcher	6	1 (CoE Sector)	5	1	1	-
5	Bhawanipatna	6	1 (CoE Sector)	1	1	5	-
6	Phulbani	3	2	2	1	1	1
7	Bolangir	2	5	2	-	-	5
8	Ambaguda	3	2	0	0	3	2
9	Bhubaneswar	2	3	0	3	2	-
	Total	40	17	22	9	18	8

(Refer paragraph 3.4.2.2 at page 74)

Statement showing project outlay, allocation and utilisation of funds under CoE

Sl.	Name of ITI	Total prov	i <mark>ect outlay a</mark>		Total Central	Total	(₹ in lakh) Percentage
Si. No.	Name oj 111	1 otat proj	eci oullay a	s per IDF	and State share	fund	of of
110.		CS	SS	Total	released	utilised	utilisation
Α	Civil Work						
1	ITI, Cuttack	30	10	40	40	30	75.00
2	ITI, Rourkela	30	10	40	40	30	75.00
3	ITI, Bolangir	37.5	12.5	50	50	50	100.00
4	GITI, Ambaguda	37.5	12.5	50	50	50	100.00
5	ITI, Phulbani	37.5	12.5	50	50	50	100.00
6	ITI (W), Bhubaneswar	65.62	21.875	87.50	87.50	87.50	100.00
7	ITI, Bhawanipatna	65.625	21.875	87.50	87.50	87.50	100.00
8	ITI, Hirakud	65.625	21.875	87.50	87.495	87.50	100.01
9	ITI, Berhampur	65.625	21.875	87.50	87.415	87.50	100.10
10	ITI, Balasore	65.625	21.875	87.50	87.495	87.50	100.01
11	ITI, Talcher	65.625	21.875	87.50	87.415	87.50	100.10
	Sub Total	566.25	188.75	755	754.82	735	97.37
В	Equipment						
1	ITI, Cuttack	56.25	18.75	75	75	75	100.00
2	ITI, Rourkela	56.25	18.75	75	75	54.76	73.01
3	ITI, Bolangir	162.75	54.25	217	217	181.51	83.65
4	GITI, Ambaguda	162.75	54.25	217	217	151.91	70.00
5	ITI, Phulbani	162.75	54.25	217	217	185.89	85.66
6	ITI (W), Bhubaneswar	229.125	76.375	305.5	305.5	118.96	38.94
7	ITI, Bhawanipatna	225	75	300	300	215.82	71.94
8	ITI, Hirakud	225	75	300	300.52	231.14	76.91
9	ITI, Berhampur	225	75	300	305	200.86	65.86
10	ITI, Balasore	225	75	300	300.52	159.98	53.23
11	ITI, Talcher	225	75	300	300.52	220.98	73.53
	Sub Total	1954.88	651.625	2606.5	2613.06	1796.81	68.76
С	Other charges						
1	ITI, Cuttack	33.75	11.25	45	45	45	100.00
2	ITI, Rourkela	33.75	11.25	45	45	45	100.00
3	ITI, Bolangir	58.5	19.5	78	38.88	18.16	46.71
4	GITI, Ambaguda	58.5	19.5	78	38.88	16.92	43.52
5	ITI, Phulbani	58.5	19.5	78	38.88	8.66	22.27
6	ITI (W), Bhubaneswar	76.5	25.5	102	65.01	47	72.30
7	ITI, Bhawanipatna	80.625	26.875	107.5	78.005	77.5	99.35
8	ITI, Hirakud	80.625	26.875	107.5	78.014	75.54	96.83
9	ITI, Berhampur	84.375	28.125	112.5	77.504	77.504	100.00
10	ITI, Balasore	80.625	26.875	107.5	78.014	76.46	98.01
11	ITI, Talcher	80.625	26.875	107.5	78.014	76.32	97.83
	Sub Total	726.375	242.125	968.5	661.201	564.064	85.31
	Grand Total	3247.5	1082.5	4330	4029.081	3095.87	76.84

(Refer paragraph 3.4.3.1 at page 77)

Statement showing shortfall in upgradation and introduction of trades

Sl. No.	Location of ITI	Upgradation of trades proposed	No. of new trades proposed to be	No. of existing trades	No. of new trades introduced	Shortfall in upgradation of existing	Shortfall in introduction of new
1	011	2	introduced	upgraded	2	trades	trades
1	Chhatrapur	3	4	3	3	-	1
2	Cuttack	3	5	1	1	2	4
3	Puri	8	5	2	-	6	5
4	Umerkote	2	4	-	-	2	4
5	Barbil	7	3	7	-	-	3
6	Baripada	4	3	2	-	2	3
7	Takatpur	4	3	3	-	1	3
8	Anandpur	4	4	-	-	4	4
9	Bargarh	2	4	2	-	-	4
10	Boudh	3	2	-	-	3	2
11	Dhenkanal	2	4	1	1	1	3
12	Khariar Road	4	1	-	-	4	1
13	Bolangir	-	4	-	-	-	4
14	Malkangiri	4	10	1	5	3	5
	Total	50	56	22	10	28	46

(Refer paragraph 3.4.3.2 at page 77)

Statement showing release of funds and utilisation thereof for projects without World Bank assistance

									(₹ in lakh)
Sl. No.	Year	Location of ITI	Fund released by DGE&T	Date of release to IMC society	Funds available in fixed deposits	Date of investment in fixed deposits	Funds utilised as on March	Percentage of utilisation	Balance remaining fund
							2014		
1	2007-08	Puri	250	29.2.08	150	11.11.08 & 1.12.08	45.71	18.28	204.29
2	2007-08	Cuttack	250	29.2.08	125	2.7.08	93.96	37.58	156.04
3	2007-08	Umerkote	250	29.2.08	125	16.1.09	134.78	53.91	115.22
4	2007-08	Chhatrapur	250	29.2.08	125	30.9.09	110.33	44.13	139.67
5	2008-09	Barbil	250	16.3.09	125	19/20.8.09	104.52	41.81	145.48
6	2008-09	Baripada	250	26.3.09	125	1.5.09	60.88	24.35	189.12
7	2008-09	Takatpur	250	26.3.09	125	10.12.09 & 12.11.09	104.79	41.92	145.21
8	2009-10	Bargarh	250	10.3.10	125	-	77.98	31.19	172.02
9	2009-10	Dhenkanal	250	23.9.09	125	10/11.12.09	144.07	57.63	105.93
10	2009-10	Malkangiri	250	23.12.09	250	4/6.3.10	16.49	6.60	233.51
11	2009-10	Boudh	250	1.10.10	125	1.10.10	60.6	24.24	189.40
12	2009-10	Anandpur	250	23.3.10	125	28.4.10 & 4/6.5.10	48.27	19.31	201.73
13	2010-11	Khariar Road	250	15.2.11	125	-	32.5	13.00	217.50
14	2011-12	Bolangir	250	10.6.11	125	14.3.12	70.77	28.31	179.23
	Total		3500		1900		1105.65	31.59	2394.35

(Refer paragraph 3.4.3.2 at page 77)

Loss of interest due to delay in investment of funds in fixed deposits by ITIs

(In ₹) Sl. Name of ITIs Delay Differential Date of Date of Amount Interest Loss of No. release of investment invested (in rate on interest revenue funds to of funds in no. of which rate exceeding IMC fixed days) initially deposits invested four per in fixed cent saving deposits rate 420822 ITI, Puri 29-02-2008 11-11-08 1000000 256 10.00 6.00 1 245753 5000000 10.50 6.50 29-02-2008 01-12-08 276 415998 ITI (W), Cuttack 24990000 124 8.90 4.90 2 29-02-2008 02-07-08 574914 ITI, Chhatrapur 12500000 8.25 4.25 3 30-03-09 395 29-02-2008 81164 ITI, Dhenkanal 12500000 7.00 3.00 4 23-09-2009 11-12-09 79 56764 PCITI, Baripada 12500000 8.25 4.25 5 23-03-2009 01-05-09 39 314041 ITI, Takatpur 12500000 7.50 3.50 6 23-03-2009 10-12-09 262 220548 ITI, Barbil 7.50 3.50 7 12500000 17-02-2009 20-08-09 184 137500 ITI, Malkangiri 25000000 6.75 2.75 8 23-12-2009 06-03-10 73 499829 GITI, Bolangir 12500000 9.25 5.25 9 10-06-2011 14-03-12 278 4.50 496233 10 ITI, Umerkote 29-02-2008 16-01-09 12500000 322 8.50 245719 ITI, Boudh 12500000 7.50 3.50 10-03-2010 01-10-10 205 11 10-03-2011 8.50 4.50 872260 ITI, Khariar Road 26-09-12 12500000 566 12 ITI, Bargarh 12500000 7.75 3.75 213185 13 10-03-2010 23-08-10 166 4794731 Total 189990000

(Refer paragraph 3.4.5 at page 79)

Statement showing number of trades not abolished

Name of ITI	Abolition of trades proposed as per IDP	Since when no admission taken	No. of units proposed for abolition	Actual no. of units of trades abolished	Value of materials of abolished trades (in ₹)	No. of units of trades not abolished
MITI,	Stenography	2008-09	1 unit	1 unit	40000	Abolished
Cuttack	Bakery & Confectionary	2008-09	1 unit	1 unit	65000	Abolished
	Preservation of fruits & vegetable	2006-07& 2010-11	1 unit	Nil	116395	Not abolished
ITI.	Bakery & Confectionary	2010-11	1 unit	Nil	193909	Not abolished
Anandpur	Secretarial Practice	2010-11	1 unit	Nil	142654	Not abolished
Ananupui	Dress Making	2011-12	1 unit	Nil	158027	Not abolished
	Cutting & Sewing	2007-08 & 2013-14	2 units	Nil	45535	Not abolished
	Stenography	2013-14	1 unit	Nil	41515	Not abolished
	Stenography	-	1 unit	Nil	-	Not abolished
	Cutting & Sewing	-	1 unit	Nil	-	Not abolished
ITI, Takatpur	DM (civil)	-	2 units	Nil	-	Not abolished
	Sheet Metal Worker	-	1 unit	Nil	-	Not abolished
ITI Duri	Stenography	2009-10	1 unit	1 unit	49000	Abolished
ITI, Puri	DM (Civil)	2009-10	NA	Nil	60000	Not abolished
ITI, Bargarh	PF & Vegetables	2009-10	1 unit	1 unit	-	Abolished
ITI, Rourkela	Machine Grinder	2005	2 units	2 units	500000	Abolished
	Pattern Maker	2000	1 unit	1 unit	350000	Abolished
Planned but n	ot abolished			8 units	758035	

(Refer paragraph 3.4.7 at page 80)

Statement showing number of vacancies in ITIs

Sl.	Name of ITI	Year	Required strength	Sanc	tioned strength	l	A	ctual strength		Vacancy	Percentage
No.			as per NCVT norm	Regular	Contractual	Total	Regular	Contractual	Total	position	of vacancy
1	ITI, Hirakud	2013-14	75	14	23	37	8	3	11	26	70.27
2	ITI, Phulbani	2013-14	37	8	17	25	6	5	11	14	56
3	ITI, Balasore	2013-14	56	12	25	37	6	8	14	23	62.16
4	ITI, Berhampur	2013-14	95	25	17	42	16	4	20	22	52.38
5	ITI, Talcher	2013-14	47	9	26	35	5	4	9	26	74.29
6	ITI, Bhubaneswar	2013-14	27	6	12	18	5	-	5	13	72.22
7	ITI, Rourkela	2013-14	85	22	27	49	4	-	4	45	91.84
8	ITI, Ambaguda	2013-14	40	7	20	27	7	6	13	14	51.85
9	ITI, Cuttack	2013-14	147	40	28	68	24	10	34	34	50
10	ITI, Bolangir	2013-14	39	10	15	25	9	2	11	14	56
11	ITI, Bhawanipatna	2013-14	44	7	17	24	4	6	10	14	58.33
12	ITI, Takatpur	2013-14	51	11	23	34	7	5	12	22	64.71
13	MITI, Cuttack	2013-14	27	6	9	15	5	-	5	10	66.67
14	PCITI, Baripada	2013-14	14	5	9	14	1	-	1	13	92.86
15	ITI, Dhenkanal	2013-14	19	2	8	10	2	-	2	8	80
16	ITI, Chhatrapur	2013-14	23	0	11	11	0	0	0	11	100
17	ITI, Barbil	2013-14	43	9	17	26	5	4	9	17	65.38
18	ITI, Puri	2013-14	40	11	16	27	7	3	10	17	62.96
19	ITI, Umerkote	2013-14	15	5	9	14	4	-	4	10	71.43
20	ITI, Anandpur	2013-14	26	5	11	16	4	-	4	12	75
21	ITI, Bargarh	2013-14	19	2	9	11	2	1	3	8	72.73
22	ITI, Boudh	2013-14	21	-	11	11	-	2	2	9	81.82
23	GITI, Bolangir	2013-14	20	-	13	13	-	1	1	12	92.31
24	ITI, Khariar Road	2013-14	24	-	17	17	-	5	5	12	70.59
25	ITI, Malkangiri	2013-14	27	-	18	18	-	6	6	12	66.67
	Total		750	216	264	503	126	52	165	418	

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Appendix - 3.4.8

(Refer paragraph 3.4.11.1 at page 83)

Statement showing percentage of utilisation of funds released for construction of 22 Government Polytechnics

(₹ in crore) UC Name of the Sanction details Percentage **Reasons for unspent** Funds Expen-**Unspent** institution released balance (furnished by ITIs) Sanction order No. Sanction Amount diture submitted of balance date in lakhs by GoI utilisation The unspent balance relate to Government F.No 22-10/2008-TSIV 31.12.2008 200.00 10.12 8.87 8.87 87.68 1.25 equipment component. The Polytechnic, F.No 22-10/2008-TSIV 30.03.2009 12.00 process of the purchase of Gajapati F.No 22-48/2009-TSIV 29.09.2009 500.00 equipment started at a F.No 22-48/2009-TSIV 14.03.2012 200.00 belated stage when the F.No 22-28/2009-TSIV 24.01.2013 100.00 building was nearing Total 1012.00 completion. F.No 22-10/2008-TSIV 200.00 The unspent balance relate to Government 31.12.2008 10 8.72 8.72 87.19 1.28 Polytechnic, F.No 22-48/2009-TSIV 29.09.2009 500.00 equipment component. The Balasore process of the purchase of F.No 22-48/2009-TSIV 18.02.2013 300.00 equipment started at a Total 1000.00 belated stage when the building was nearing completion. 200.00 The unspent balance relate to F.No 22-10/2008-TSIV 31.12.2008 10 8.58 8.58 85.79 1.42 Government equipment component. The Polytechnic, F.No 22-48/2009-TSIV 29.09.2009 500.00 process of the purchase of Bolangir F.No 22-28/2009-TSIV 14.03.2012 200.00 equipment started at a F.No 22-28/2009-TSIV 24.01.2013 100.00 belated stage when the 1000.00 Total building was nearing completion. Government F.No 22-10/2008-TSIV 31.12.2008 200.00 7 5.81 5.81 83.05 1.19 The unspent balance relates to Civil work due to slow Polytechnic, Jajpur F.No 22-48/2009-TSIV 29.09.2009 500.00 progress of work by the Total 700.00 contractor. 200.00 Due to late possession of the Government F.No 22-42/2009-TSIV 23.07.2009 7 1.94 1.94 27.67 5.06 land and late Tendering Polytechnic, F.No 22-28/2009-TSIV 13.12.2010 500.00 Bhawanipatna Total 700.00 process.

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Sl.	Name of the	Sanction	details		Funds	Expen-	UC	Percentage	Unspent	Reasons for unspent
No.	institution	Sanction order No.	Sanction	Amount	released	diture	submitted	of utilisation	balance	balance (furnished by ITIs)
6	9	EN. 22.42/2000 ESU/	date	in lakhs	by GoI	2.61	0.61		4.20	
6	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	7	2.61	2.61	37.22	4.39	Due to late Tendering
	Polytechnic,	F.No 22-28/2009-TSIV	13.12.2010	500.00						process.
	Nuapada	Total		700.00				04.50	1.00	
7	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	9	7.61	7.61	84.53	1.39	The unspent balance relates
	Polytechnic,	F.No 22-28/2009-TSIV	13.12.2010	500.00						to equipment component.
	Kendrapara	F.No 22-28/2009-TSIV	14.03.2012	200.00						The process of the purchase
		Total		900.00						of equipment started at a
										belated stage when the
										building was nearing completion.
8	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	7	0.00	0.00	0.00	7.00	Construction of Govt.
0	Polytechnic,	F.No 22-28/2009-TSIV	13.12.2010	500.00	/	0.00	0.00	0.00	7.00	Polytechnic is delayed due to
	Bhadrak	Total	13.12.2010	700.00						poor response to tender call
	Diladiak	Total		700.00						at various points of time and
										encroachment of some
										portion of the land allotted in
										favour of Polytechnic and
										maize cultivation by local
										people. The land cannot be
										handed over to the Executing
										Agency in time. However,
										due to intervention of
										District Administration, the
										work has been started in the
										month of February 2014.
9	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	7	4.52	4.52	64.53	2.48	Due to late possession of
	Polytechnic, Puri	F.No 22-28/2009-TSIV	13.12.2010	500.00						land which was identified at
		Total		700.00						another place instead of
										earlier place.
10	Government	F.No 22-10/2008-TSIV	31.12.2008	200.00	7.12	4.07	4.07	57.19	3.05	The building was re-tendered
	Polytechnic, Boudh	F.No 22-10/2008-TSIV	30.03.2009	12.00						due to change in foundation
		F.No 22-48/2009-TSIV	29.09.2009	500.00						leading to delay.
		Total		712.00						
11	Government	F.No 22-10/2008-TSIV	31.12.2008	200.00	10.12	8.46	8.46	83.57	1.66	The unspent balance relates
	Polytechnic,				10.12	0.70	0.70	05.57	1.00	to equipment component.

Sl.	Name of the	Sanction	details		Funds	Expen-	UC	Percentage	Unspent	Reasons for unspent
No.	institution	Sanction order No.	Sanction date	Amount in lakhs	released by GoI	diture	submitted	of utilisation	balance	balance (furnished by ITIs)
	Sambalpur									The process of the purchase
		F.No 22-10/2008-TSIV	30.03.2009	12.00						of equipment started at a
		F.No 22-48/2009-TSIV	29.09.2009	500.00						belated stage when the
		F.No 22-48/2009-TSIV	14.03.2012	200.00						building was nearing
		F.No 22-28/2009-TSIV	24.01.2013	100.00						completion.
		Total		1012.00						
12	Government	F.No 22-10/2008-TSIV	31.12.2008	200.00	9.11	1.28	1.28	14.05	7.83	1. Revision of scheduled
	Polytechnic,	F.No 22-10/2008-TSIV	30.03.2009	11.00						rates. 2. Increase in labour
	Malkangiri	F.No 22-48/2009-TSIV	29.09.2009	500.00						rates.3. Increase in market
		F.No 22-48/2009-TSIV	14.03.2012	200.00						rate of Steel & Cement
		Total		911.00						within this period.
13	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	7			0.00	7.00	Due to two writ petitions
	Polytechnic,	F.No 22-28/2009-TSIV	13.12.2010	500.00						filed vide W.P.C. No. 7708/2011 and 7709/2011 in
	Deogarh	Total		700.00						the Hon'ble High Court, by the locals claiming possession over the land handed over during December 2009 at Tileibani measuring A.C. 10.00, the work could not be started. After constant persuasion of Govt. in ETE&T Department, District Administration has allotted land measuring 8.00 acre. Land was handed over to Principal, ITI, Hirakud on 24.3.2014.
14	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	9	7.30	7.30	81.13	1.70	The unspent balance relates
	Polytechnic,	F.No 22-28/2009-TSIV	13.12.2010	500.00						to equipment component.
	Nabarangpur	F.No 22-28/2009-TSIV	14.03.2012	200.00						The process of the purchases
		Total		900.00						of equipment started at a belated stage when the

Sl.	Name of the	Sanction	details		Funds	Expen-	UC	Percentage	Unspent	Reasons for unspent
No.	institution	Sanction order No.	Sanction date	Amount in lakhs	released by GoI	diture	submitted	of utilisation	balance	balance (furnished by ITIs)
										building was nearing completion.
15	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	10	8.00	8.00	80.00	2.00	The unspent balance relates
	Polytechnic, Nayagarh	F.No 22-28/2009-TSIV	13.12.2010	500.00						to equipment component. The process of the purchases
		F.No 22-28/2009-TSIV	31.12.2013	300.00						of equipment started at a
		Total		1000.00						belated stage when the building was nearing completion.
16	Government	F.No 22-10/2008-TSIV	31.12.2008	200.00	10	8.65	8.65	86.46	1.35	The unspent balance relates
	Polytechnic,	F.No 22-48/2009-TSIV	29.09.2009	500.00						to equipment component.
	Sonepur	F.No 22-28/2009-TSIV	14.03.2012	200.00						The process of the purchases
		F.No 22-28/2009-TSIV	24.01.2013	100.00						of equipment started at a
		Total		1000.00						belated stage when the building was nearing completion.
17	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	7	0.14	0.14	2.07	6.85	Due to delay in possession of
	Polytechnic,	F.No 22-28/2009-TSIV	13.12.2010	500.00						land.
	Jagatsinghpur	Total		700.00						
18	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	7	2.53	2.53	36.08	4.47	The contractor assigned with
	Polytechnic, Angul	F.No 22-28/2009-TSIV	13.12.2010	500.00						construction of Academic
		Total		700.00						and Administrative buildings left the work. Finally the R&B Authority went for retendering.
19	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	7			0.00	7.00	One of the local person has
	Polytechnic,	F.No 22-28/2009-TSIV	13.12.2010	500.00						filed the W.P.C. No.30480
	Samakhunta	Total		700.00						of 2011 in the matter of challenging of Government decision regarding setting up of new Polytechnic at Samakhunta Block, Dist- Mayurbhanj. After the case was dismissed in the Hon'ble High Court vide Order No.5

Sl.	Name of the	Sanction	details		Funds	Expen-	UC	Percentage	Unspent	Reasons for unspent
No.	institution	Sanction order No.	Sanction date	Amount in lakhs	released by GoI	diture	submitted	of utilisation	balance	balance (furnished by ITIs)
										dtd.20.8.2012, the Executive Engineer has been instructed to prepare estimate of all the buildings. All the preliminary works have been completed by January 2014 and the work was started recently.
20	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	7	4.15	4.15	59.31	2.85	The contractor assigned with
	Polytechnic,	F.No 22-28/2009-TSIV	13.12.2010	500.00						construction of Academic
	Bargarh	Total		700.00						and Administrative buildings left the work. Finally the R&B Authority went for retendering by making closer procedure of the work which causes in delay.
21	Government	F.No 22-42/2009-TSIV	23.07.2009	200.00	7	1.92	1.92	27.46	5.08	Delay in Tendering process
	Polytechnic, Koraput	F.No 22-28/2009-TSIV Total	13.12.2010	500.00 700.00						and very slow progress of the work
22	Government	F.No 22-42/2009-TSIV	29.09.2009	200.00	10	8.31	8.31	83.07	1.69	The unspent balance relates
	Polytechnic,	F.No 22-28/2009-TSIV	13.12.2010	500.00						to equipment component.
	Phulbani	F.No 22-28/2009-TSIV	14.03.2012	200.00						The process of the purchase
		F.No 22-28/2009-TSIV	24.01.2013	100.00						of equipment started at a
		Total		1000.00						belated stage when the building was nearing completion.
	Total				181.47	103.46	103.46		78.01	

(Refer paragraph 3.4.11.1 at page 83)

Statement showing sanction of funds to executing agencies prior to handing over of land

(₹ in lakh)

C1					N7 C	4 4 6		T C
Sl. No.	Name of the polytechnic	Estimated cost	Date of handing over	Date of release of fund to	Name of executing	Amount of fund	No. of days the fund lying idle with the	Loss of interest
140.		cosi	of land	executing agency	agency	released	agency	at four
			oj iana	executing agency	ugency	reieuseu	ugency	per cent
1	Government Polytechnic, Balasore	1802.24	01-03-11	04-10-10	IDCO	200	148	3.24
				07-02-11	IDCO	425	22	1.02
2	Government Polytechnic, Bargarh	1154.92	03-02-11	04-10-10	State PWD	200	122	2.67
3	Government Polytechnic, Bhadrak	1136.24	05-08-11	04-10-10	OSIC	200	305	6.68
				07-02-11	USIC	425	179	8.34
4	Government Polytechnic, Deogarh	830.66	24-03-13	04-10-10	State PWD	200	902	19.77
				07-02-11	State PWD	425	776	36.14
	Government Polytechnic,							
5	Jagatsinghpur	805.39	14-05-13	04-10-10	State PWD	200	953	20.89
				07-02-11		425	827	38.52
	Government Polytechnic,							
6	Bhawanipatna	906.09	21-04-12	04-10-10	OSIC	200	565	12.38
				07-02-11		425	439	20.45
7	Government Polytechnic, Koraput	1073.88	22-03-12	04-10-10	State PWD	200	535	11.73
				09-02-11	State F WD	425	407	18.96
	Government Polytechnic,							
8	Malkangiri	1019.78	24-11-10	04-10-10	State PWD	625	51	3.49
	Government Polytechnic,							
9	Samakhunta	1324.95	04-10-12	04-10-10	State PWD	200	731	16.02
				07-02-11		425	605	28.18
10	Government Polytechnic, Nuapada	881.58	12-10-10	04-10-10	OSIC	200	8	0.18
11	Government Polytechnic, Sonepur	1691.68	12-10-10	04-10-10	State PWD	200	8	0.18
	Total	12627.41				5600		248.84

(Source: Information furnished by Polytechnic Centres)

(Refer paragraph 3.5.3.3 at page 87) Statement showing execution of plantations through contractors

				(In ₹)
Sl.	Name of the Division	Name of the scheme	No. of vouchers on	Amount paid for
No.			contract	works executed
1	DEO Dharlanal	12th EC Crowt		on contract
1	DFO, Dhenkanal	13th FC Grant	89	2464644
		Economic Plantation	35	937660
		Bald Hill, Urban plantation etc.	18	519796
2	DFO, Cuttack	13th FC Grant	63	2589325
		Economic Plantation	35	1090541
-	220 0	Bald Hill, Urban plantation etc.	85	3740150
3	DFO, Sonepur	13th FC Grant	121	3635610
		Economic Plantation	115	2058374
		Bald Hill, Urban plantation etc.	25	696525
4	DFO, Sambalpur	13th FC Grant	83	2063254
		Economic Plantation	45	973122
		Bald Hill, Urban plantation etc.	15	513906
5	DFO, Jharsuguda	13th FC Grant	27	652285
		Economic Plantation	16	459850
		Bald Hill, Urban plantation etc.	66	3105394
6	DFO, Athagarh	13th FC Grant	32	845145
		Economic Plantation	13	248694
		Bald Hill, Urban plantation etc.	15	692494
7	DFO, Berhampur	13th FC Grant	4	188100
		Bald Hill, Campa	136	4020150
		Bald Hill, Urban plantation etc.	26	826158
8	DFO, Ghumsur (N)	13th FC Grant	5	149400
		Bald Hill, Urban plantation etc.	3	70000
9	DFO, Phulbani	13th FC Grant	24	326420
		CAMPA Block plantation	6	59000
		Bald Hill, Urban plantation etc.	13	110194
10	DFO, Balliguda	CAMPA Block plantation	62	1439640
		Bald Hill, Urban plantation etc.	6	107050
11	DFO, Rayagada	13th FC Grant	70	1082517
		CAMPA Block plantation	35	804373
		Bald Hill, Urban plantation etc.	25	601731
12	DFO, Koraput	13th FC Grant	48	1336585
	Î Î	CAMPA Block plantation	25	737700
		CAMPA Bald hill	108	3481250
		Bald Hill, Urban plantation etc.	9	184650
13	DFO, Puri (W)	13th FC Grant	17	185385
		Economic Plantation	5	84850
		Mangrove	10	328080
	Total		1535	43410002

(Refer paragraph 3.5.4.1 at page 89)

Statement showing diversion of plantation fund

Sl. No.	Name of the Division	Name of the scheme	Diversion of plantation fund (in ₹)
1	DFO, Dhenkanal	13th FC Grant	120091
		Economic Plantation	57050
2	DFO, Cuttack	Economic Plantation	38450
		Bald Hill, Urban plantation etc.	324408
3	DFO, Sonepur	Economic Plantation	81080
4	DFO, Sambalpur	13th FC Grant	262260
		Economic Plantation	15000
		Bald Hill, Urban plantation etc.	65210
5	DFO, Jharsuguda	13th FC Grant	195130
		Bald Hill, Urban plantation etc.	426934
6	DFO, Athagarh	13th FC Grant	1288609
		Economic Plantation	632681
7	DFO, Berhampur	13th FC Grant	390486
		Bald Hill, Campa	42361
		Bald Hill, Urban plantation etc.	138027
8	DFO, Ghumsur (N)	13th FC Grant	382363
		Bald hill CAMPA	425498
	Total		4885638

(Refer paragraph 3.5.4.2 at page 90)

Extra expenditure paid on wages during 2012-14

SL. No.	Name of the Division	Amount paid from November 2012 to March 2014 at the rate of ₹ 150	No. of mandays	Amount payable at the rate of ₹126	Extra expenditure (in ₹)
1	DFO, Cuttack	13951763	93012	11719512	2232251
2	DFO, Athagarh	23018625	153458	19335708	3682917
3	DFO, Dhenkanal	17131230	114208	14390208	2741022
4	DFO, Sonepur	16505133	110034	13864284	2640849
5	DFO, Sambalpur	16094475	107297	13519422	2575053
6	DFO, Jharsuguda	34515191	230101	28992726	5522465
7	DFO, Berhampur	35247238	234982	29607732	5639506
8	DFO, Ghumsur (N)	7674524	51163	6446538	1227986
9	DFO, Phulbani	8748903	58326	7349076	1399827
10	DFO, Balliguda	21295431	141970	17888220	3407211
11	DFO, Rayagada	23435867	156239	19686114	3749753
12	DFO, Koraput	20486877	136579	17208954	3277923
13	DFO, Puri (W)	10688648	71258	8978508	1710140
	Total	248793905	1658626	208986876	39807029

(Refer paragraph 3.6 at page 92)

Short realisation of ₹ 1.22 crore towards Net Present Value for forest land diverted for non forestry purposes

<i>Sl</i> .	IR No./	Division	Lessee	GoI approval	Eco	Canopy density	Area	Rate	Amount	Amoun	nt demanded a	and realised (₹)	Balance	Remarks
No.	Para	Division	Lessee	No./Date	class	(per cent)	(h a)	(₹)	due (₹)	Rate	Amount	Date of demand	due (₹)	Remarks
1	06/2013- 14/ 2	DFO, Khordha	Indian Oil Corporation	F-8-01/ 2013-FC/	Π	> 0.40	0.6482	939000	608660	730000	473186	01/05/2013	135474	Differential rate w.e.f 28.3.2008
	(PCCF, Odisha)	DFO, Rairakhol	Ltd.	22.2.2013	Π	0.40 to 0.50	14.969	939000	14055891	803000	12020107	03/05/2013	2035784	
2	09/2013- 14/ 2	DFO, Rairakhol	Odisha Power Transmission Corporation Ltd.	F-8-53 / 1999-FC / 13.11.2003	III	0.50 to 0.75	56.44	803000	45321320	626000	35331440	22/11/2010	9989880	
		Total					72.0572		59985871		47824733		12161138	

Appendix -3.7.1

(Refer paragraph 3.7 at page 93)

Division-wise abstract of non-disposal of timber seized in undetected forest offence cases

Sl. No.	IR No. / year of Audit (2012-13)	Para No.	Name of the Division	No. of cases	Volume of Logs (cft)	Rate (₹)	Money value (₹)	Volume in cft. (Size)	Rate (₹)	Money value (₹)	No. of Poles	Rate (₹)	Money value (₹)	Fire wood (stack)	Rate (₹)	Money value (₹)	Total Money value (₹)
1	4	4	DFO, Berhampur	28	74.71	212	15839	3.5	276	966	453	27	12231			0	29036
2	6	7	DFO, Rayagada	21	388.82	212	82430	53.13	276	14664	0	27				0	97094
3	7	9	DFO, Koraput	3	0		0	39.11	276	10794	0	27		3	385	1155	11949
4	9	3	DFO, Jeypore	22	287.95	212	61045	101.67	276	28061	10	27	270			0	89376
5	17	2	DFO, Sonepur	43	172.51	212	36573	343.346	276	94763	870	27	23490	1	385	385	155211
6	19	3	DFO, Bolangir	55	473.96	212	100480	0.62	276	171	7	27	189	7	385	2695	103535
7	20	3	DFO, Angul	9	92.47	212	19604	19.23	276	5307	33	27	891				25802
8	24	3	DFO, Rairkhole	36	701.77	212	148775	287.85	276	79447	282	27	7614				235836
9	33	2	DFO, Kalahandi (S)	39	5091.53	212	1079404	90.4	276	24950	52	27	1404				1105759
10	34	3	DFO, Nayagarh	19	309.99	212	65718	13.01	276	3591	86	27	2322				71631
Su	b -Total	10		275	7593.71		1609867	951.87		262715	1793		48411	11		4235	1925228
SI. No.	IR No./ year of Audit (2013-14)	Para No.	Name of the Division	No. of cases	Volume of logs (cft)	Rate (₹)	Money value (₹)	Volume in cft. (Size)	Rate (₹)	Money value (₹)	No. of poles	Rate (₹)	Money value (₹)	Fire wood (stack)	Rate (₹)	Money value (₹)	Total money value (₹
1	1	4	DFO, Athagarh	19	372.58	212	78986.96	68.72	276	18966.72	102	27/ 47	3334	0.9	385	346.5	101634
2	2	2	DFO, Dhenkanal	60	593.43	212	125807.16	65.56	276	18094.56	92	27	2484	1.35	385	519.75	146905
3	3	2	DFO, City Forest Division, Bhubaneswar	242	0	0	0	350.127	276	96635.052	15	27	405	35.6	385	13706	110746

Sl. No.	IR No./ year of Audit (2013-14)	Para No.	Name of the Division	No. of cases	Volume of logs (cft)	Rate (₹)	Money value (₹)	Volume in cft. (Size)	Rate (₹)	Money value (₹)	No. of poles	Rate (₹)	Money value (₹)	Fire wood (stack)	Rate (₹)	Money value (₹)	Total money value (₹)
4	5	4	DFO, Athamallick	455	214.84	212	45546	23.204	276	6404	0	0	0	0	0	0	51950
5	7	2	DFO, Karanjia	6593	12.77	212	2707	1714.35	276	473160.6	11	27	297	7.5	385	2888	479052
6	9	2	DFO, Rairakhol	13	58.396	212	12379.952	19.4441	276	5367	89	27	2403	0	0	0	20150
7	10	2	DFO, Rairangpur	876	39.32	212	8336	128.796	276	35547.696	74	27	1998	0	0	0	45882
8	11	3	DFO, Keonjhar	972	940.171	212	199316.25	238.163	276	65732.988	61	27	1647	1.2	385	462	267158
9	12	3	DFO, Baripada	37	50.41	212	10687	98.11	276	27078.36	3	27	81	0.2	385	77	37923
10	13	4	DFO, Deogarh	140	315.459	212	66877	262.47	276	72441.72	100	27	2700	0	0	0	142019
11	16	3	DFO, Sundargarh	9	216.28	212	45851	24.58	276	6784	0	0	0	0	0	0	52635
12	20	2	DFO, Gumsur (S)	28	213.12	212	45181	346.321	276	95584.596	0	0	0	0	0	0	140766.036
13	21	2	DFO, Rajnagar	3	202.49	212	42928	0	0	0	0	0	0	0	0	0	42928
14	22	3	DFO, Gumsur (N)	71	602.99	212	127833.88	180.36	276	49779.36	188	27	5076	0	0	0	182689
15	26	4	DFO, Boudh	20	114.066	212	24181.992	118.697	276	32760.372	9	27	243	0	0	0	57185
16	27	3	DFO, Kalahandi(S)	25	269.712	212	57179	33.93	276	9365	0	0	0	0	0	0	66544
17	32	2	DFO, Jeypore	19	150.8623	212	31983	78.0344	276	21537.494	0	0	0	0	0	0	53520
Su	b -Total	17		9582	4366.90		925782	3750.87		1035239.15	744		20668	46.75		17998.75	1999687.92
	Total	27		9857	11960.61		2535649	4702.73		1297954.17	2537		69079	57.75		22233.75	3924916.09

(Refer paragraph 3.8.2.2 at page 95)

Year-wise status of proposals received at SLNA for setting up of industries

Year	No. of Propo- sals	Proposed investment (₹ in		Appr	roved		I	Dropped			Pending				recomm	und endation ses
		crore)	Gone into production	Investment (₹ in crore)	Production yet to be done	Investment (₹ in crore)	No. of cases	Investment (₹ in crore)	Deferred by Task Force/ SLSWCA/ HLCA	Investment (₹ in crore)	Yet to be put before TF/ SLSWCA/ HLCA	Inves- tment (₹ in crore)	Trans- ferred	Invest- ment (₹ in crore)	land recomm- endation cases	Invest- ment (₹ in crore)
2007-08	54	181010	14	19528	22	114217	11	24641	4	20968	3	1656	-	-	-	-
2008-09	80	365207	9	68162	31	148770	23	91340	11	52824	6	4111	-	-	-	-
2009-10	63	301599	7	2596	23	100853	18	89622	11	95641	2	5090	2	7797	-	-
2010-11	87	257953	7	2133	38	108381	20	90800	12	42507	6	4833	1	380	3	8918
2011-12	48	35867	1	225	19	8280	6	9894	7	9112	12	8105	1	55	2	196
2012-13	20	13067	-	-	1	380	-	-	6	10492	8	1793	5	402	-	-
2013-14	26	63953	-	-	-	-	-	-	1	35000	25	28953	-	-	-	-
Total	378	1218656	38	92645	134	480880	78	306296	52	266545	62	54541	9	8634	5	9114

(Refer paragraph 3.8.2.4 at page 98)

Year-wise CAF received at DLNA of eight selected Districts for 2007-14 for setting up of industries

Year	No. of	Proposed	A	pproved	Drop	ped/Rejected	Pendi	ng/ Deferred		Total
	CAF	investment (in ₹)	No. of CAF	Investment (in ₹)	No. of CAF	Investment (in ₹)	No. of CAF	Investment (in ₹)	No. of Proposals	Proposed investment (in ₹)
2007-08	138	4157914518	137	4151131518	1	6783000	-	-	138	4157914518
2008-09	177	4534966128	164	2980836128	13	1554130000	-	-	177	4534966128
2009-10	214	5517643656	182	4958168167	28	493878139	4	65597350	214	5517643656
2010-11	196	7571956280	126	6310284507	57	1123543773	13	138128000	196	7571956280
2011-12	189	5133571144	106	3754461035	81	1288826109	2	90284000	189	5133571144
2012-13	89	17773689002	41	959200918	28	16079372075	20	735116009	89	17773689002
2013-14	84	2351819856	46	1776595210	12	10928000	26	564296646	84	2351819856
Total	1087	47041560584	802	24890677483	220	20557461096	65	1593422005	1087	47041560584

(Refer paragraph 3.13 at page 110)

Statement showing Road-wise CBR value, Traffic density and sanctioned estimated cost

(₹ in crore) Sl. Name of the work CBR Required Pavement Difference Sanctioned Agreement No. & Value of Name of Traffic Date of Agreement pavement thickness in thickness estimated sanction date of value the work No. the value density of the provided cost of the commencement of division (msa) thickness as executed work work / stipulated subper IRC-37 *(mm)* soil date of completion (mm)7 8 9 12 13 1 2 3 4 5 6 10 11 R&B Improvement to Koira, 4 75 790 950 160 13.53 12/11/2012 9P1(R) 2013-14 12.93 7.20 1 Division. Dengula, Tensa, Barsuan, 20-05-2013/ Kaleiposh Road from 19-11-2014 Rourkela 7/000 km to 15/00 km under RIDF-VIII 1075 535 19.61 02P 2012-13 17.32 9.52 Improvement to Kalunga -10 10 540 07/10/2011 Bonai Road MDR-26 03-05-2012/ from 55/00 km ro 71/00 02-05-2014 km under RIDF-XVII 2 R&B Improvement to 4 3 605 950 345 22.99 31/12/2012 11P1 2013-14 22.37 8.33 Thakurgarh-Nakchi Road 20-05-13/ Division, 19-05-15 Angul from 00/00 km to 17/00 km under RIDF-XVIII Improvement to Boinda-4 5 620 775 155 1403//2011 7 P1 2011-12 13.53 8.87 15.46 Athamallik Road from 02-08-11 0/00 km to 15/00 km under RIDF-XVI 3 750 R&B Improvement to 4 4 600 150 11.81 08/09/2010 1 P1(R) 2010-11 10.17 10.27 Division. Dhenkanal-Deogaon-15-04-11/ Dhenkanal Haripur road from 16/00 14-10-12 km to 35/0 km under RIDF-XVI 825 10.92 3P1(R) 2012-13 9.58 Improvement to 4 3 600 225 15/10/2011 10.53 Dhenkanal-Bhapur road 01-05-12/ 31-10-13 from 0/00 km to 14/700 km under RIDF

Sl. No.	Name of the division	Name of the work	CBR value of the sub- soil	Traffic density (msa)	Required pavement thickness as per IRC-37 (mm)	Pavement thickness provided (mm)	Difference in thickness	Sanctioned estimated cost of the work	Date of sanction	Agreement No. & date of commencement of work / stipulated date of completion	Agreement value	Value of the work executed
1	2	3	4	5	6	7	8	9	10	11	12	13
		Improvement to Old Cuttack-Sambalpur Road from 7/505 km to 39/500 km under RIDF	3	3	645	825	180	30.38	15/04/2011	347 P1 2011-12 25-11-11/ 24-11-13	25.76	20.99
4	R&B Division No.I, Berhampur	Improvement to Palaspur- Dengusta Road from 0/00 km to 11/720 km under RIDF-XVI	5	3	530	750	220	8.90	26/07/2010	26 P1 2010-11 19-11-10/ 18-05-12	7.95	7.78
5	R&B Division, Bhadrak	Improvement to Barapada- Agarpada Road from 00/00 km to 15/700 km under RIDF-XVI	3	6	700	825	125	18.30	25/04/2011	1P1 2012-13 02-04-2012/ 01-04-14	16.17	6.48
6	R&B Division, Puri	Improvement to Delang- Brahmagiri Road from 16/500 km to 36/00 km under RIDF-XVI	4	1	480	775	295	29.10	04/10/2013	40 P1 2013-14 17-01-14/ 16-01-16	29.07	1.24
		Improvement to Bhargavi- Harachandi Road from 00/00 km to 11/00 km under RIDF-XVII	4	3	580	600	20	15.86	23/02/2012	34 P1 2012-13 11-03-13/ 10-03-15	16.05	7.46
	Total							196.86			181.85	97.72

(Refer paragraph 3.13 at page 110)

Statement showing details of avoidable extra cost

(Thickness: mm and quantity: Cum)

(Inickness: mm and quantity: Cum) SI. Name of the Name of the work CBR Traffic Required GSB provided Lesser(-)/excess(+) GSB layer provided in the Unwarranted capping layer of sand provided Extra cost																
SI. No.	Name of the Division	Name of the work	CBR value of the sub-	Traffic density (msa)	Required GSB as per IRC code		provided			work						Extra cost involved (₹)
			grade		Thickness	Thick- ness	Quantity	Thick- ness	Quantity	Rate (₹)	Amount (₹)	Thick- ness	Quantity	Rate (₹)	Amount (₹)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	R&B Division, Rourkela	Improvement to Koira, Dengula, Tensa, Barsuan, Kaleiposh Road from 7/000 km to 15/00 km under RIDF-VIII	4	75	330	300	18772.45	-30	1877.25	1068.21	2005297.22	150	28337.34	553.39	15681600.58	13676303.36
		Improvement to Kalunga - Bonai Road MDR-26 from 55/00 km ro 71/00 km under RIDF-XVII	10	10	200	250	29645.80	50	5929.16	732.60	4343702.62	500	51123.11	209.30	10700066.92	15043769.54
2	R&B Division, Angul	Improvement to Thakurgarh-Nakchi Road from 00/00 km to 17/00 km under RIDF-XVIII	4	3	280	225	18394.10	-55	4496.34	916.70	4121794.88	400	26905.50	422.00	11354121.00	7232326.12
2		Improvement to Boinda-Athamallik Road from 0/00 km to 15/00 km under RIDF-XVI	4	5	285	200	12731.08	-85	5410.71	736.10	3982823.63	250	28069.49	379.70	10657985.35	6675161.72
3	R&B Division, Dhenkanal	Improvement to Dhenkanal- Deogaon-Haripur road from 16/00 km to 35/0 km under RIDF-XVI	4	4	285	200	10474.00	-85	4451.45	1143.00	5088007.35	250	19618.00	348.30	6832949.40	1744942.05

Appendices

SI. No.			CBR value of the sub-	Traffic density (msa)	Required GSB as per IRC code	GSB	provided	Lesser	r(-) /excess(+,	work	rovided in the	Unwa	rranted cappi	ng layer of s	and provided	Extra cost involved (₹)
			grade		Thickness	Thick- ness	Quantity	Thick- ness	Quantity	Rate (₹)	Amount (₹)	Thick- ness	Quantity	Rate (₹)	Amount (₹)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		Improvement to Dhenkanal-Bhapur road from 0/00 km to 14/700 km under RIDF	4	3	280	200	10943.00	-80	4377.20	1039.40	4549661.68	300	23607.30	297.50	7023171.75	2473510.07
		Improvement to Old Cuttack- Sambalpur Road from 7/505 km to 39/500 km under RIDF	3	3	335	200	21629.08	-135	14599.63	973.70	14215659.73	300	56971.74	418.70	23854067.54	9638407.81
4	R&B Division No. II, Berhampur	Improvement to Palaspur- Dengusta Road from 0/00 km to 11/720 km under RIDF-XVI	5	3	230	200	4280.00	-30	642.00	999.60	641743.20	225	13215.00	220.50	2913907.50	2272164.30
5	R&B Division, Bhadrak	Improvement to Barapada-Agarpada Road from 00/00 km to 15/700 km under RIDF-XVI	3	6	380	300	27997.44	-80	7465.98	1116.50	8335766.67	200	31949.00	481.63	15387596.87	7051830.20
6	R&B Division, Puri	Improvement to Delang - Brahmagiri Road from 16/500 km to 36/00 km under RIDF-XVI	4	1	255	250	11686.96	-5	233.74	1324.60	309612.00	300	15308.62	522.70	8001815.67	7692203.67
		Improvement to Bhargavi - Harachandi Road from 00/00 km to 11/00 km under RIDF-XVII	4	3	280	200	6249.00	-80	2499.60	1174.20	2935030.32	150	9678.85	502.80	4866525.78	1931495.46
		Total														75432114.30

(Refer paragraph 3.14 at page 111)

Statement showing Department-wise Inspection Reports / Paragraphs issued up to 31 March 2014 but not settled by 30 June 2014

Sl. No.	Name of the Department	Reports o settle (Upto Ju	ment	settlemen than	s awaiting nt for more 10 years	Reports to which even first reply has not been received
		Number of Reports	Number of Paragraphs	Number of Reports	Number of Paragraphs	Number of Reports
1	Agriculture	662	2131	134	404	8
2	Co-operation	91	298	20	50	3
3	Commercial Tax	865	2640	325	599	67
4	Commerce & Transport	698	4522	195	1386	583
5	Energy	158	366	34	64	10
6	ETET	143	588	39	128	20
7	Forest & Environment	535	1507	216	665	73
8	F&ARD	456	1551	167	351	84
9	Industry	9	84	5	36	1
10	MSME	123	604	35	135	17
11	Revenue & Disaster Management	75	178	26	32	40
12	Steel & Mines	39	74	2	2	7
13	State Excise	298	842	110	204	69
14	Textile, Handloom & Handicraft	74	259	13	26	44
15	Tourism	57	182	11	48	41
16	Works	322	710	128	217	19
17	Water Resources	866	2404	388	875	29
	Total	5471	18940	1848	5222	1115

(Refer paragraph 3.14 at page 111)

Statement showing the year-wise break up of outstanding Inspection Reports/ Paragraphs issued up to 31 March 2014 but not settled by June 2014

Year	Number of Inspection Reports	Number of Paragraphs
1982-83	1	2
1983-84	1	3
1984-85	2	2
1985-86	6	13
1986-87	5	6
1987-88	9	12
1988-89	7	16
1989-90	20	36
1990-91	19	30
1991-92	29	48
1992-93	55	106
1993-94	52	100
1994-95	53	96
1995-96	60	132
1996-97	76	192
1997-98	85	295
1998-99	94	404
1999-00	133	391
2000-01	154	535
2001-02	169	500
2002-03	193	643
2003-04	255	919
2004-05	260	773
2005-06	264	741
2006-07	306	938
2007-08	276	948
2008-09	883	2119
2009-10	446	1491
2010-11	483	1854
2011-12	302	1132
2012-13	425	2239
2013-14	348	2224
Total	5471	18940

(Refer paragraph 3.14 at page 111)

Statement showing serious irregularities noticed and reported in Inspection Reports

Sl. No.	Name of the objection	Number of paragraphs	Amount (₹in lakh)
A. N	Ion-Compliance with rules and regulations	•	
1	Infructuous / Unfruitful/ Avoidable expenditure/ Extra liability/ Excess expenditure	19	52615.57
2	Inadmissible/ irregular payment	3	2505.97
Sub '	Fotal (A)	22	55121.54
B. A	udit against propriety / expenditure without justification		
3	Excess payment of firms/ contractors	3	3144.84
4	Loss, misappropriation and shortage of stores	7	25679.51
5	Unauthorised expenditure	1	9.06
6	Undue financial aid to contractors/ firms	4	11916.29
Sub Total (B)		15	40749.70
C. P	ersistent and pervasive irregularities		
7	Idle store/ surplus/ unserviceable store/ blockage of Government money	16	19173.83
8	Demurrage/ penalty	1	8313.69
9	Short/ non realisation of Government dues	1	16342.59
Sub Total (C)		18	43830.11
D. F	ailure of oversight / governance		
10	Irregular purchase/ Non-accountal of stock/ Non- adjustment of cost of materials	1	141.89
11	Non recovery of dues from firms/ contractors and others	4	23446
12	Under utilisation of departmental machinery	1	141.14
Sub-	Fotal (D)	6	23729.03
Gran	d total (A+B+C+D)	61	163430.38

Glossary of Abbreviations

	A
AAP	Annual Action Plan
AAQ	Ambient Air Quality
ABP	Anandapur Barrage Project
AD	Agriculture Department
ADB	Asian Development Bank
AIBP	Accelerated Irrigation Benefit Programme
AIPPL	Action Ispat and Power (Private) Limited
AIRCP	All India Research Coordinated Programmes
AM	Advance Module
ANR	Assisted Natural Regeneration
AP	Action Plan
AQWQMS	Air Quality and Water Quality Monitoring Stations
AR	Artificial Regeneration
ASH	Animal Slaughter Houses
AWRS	Ash Water Collection and Recirculation System
	В
BBBT	Broad Based Basic Training
BCR	Benefit Cost Ratios
BOD	Biochemical Oxygen Demand
BOM	Board of Management
BPSL	Bhushan Power and Steel Limited
BSL	Bhushan Steel Limited
	C
CA	Central Assistance
CA	Consent Administration
CAAQMS	Continuous Ambient Air Quality Monitoring Stations
CAF	Combined Application Form
CAMPA	Compensatory Afforestation Fund Management and
CBA	Planning Authority Cost Benefit Analysis
CBR	California Bearing Ratio
CCA	Culturable Command Area
CCE	Chief Construction Engineer
CDA	Chilika Development Authority
CE	Chief Engineer
CE&BM	Chief Engineer and Basin Manager
CEADM	Central Electricity Authority
CEPI	Comprehensive Environmental Pollution Index
	Comprehensive Environmental Fonution muex

CETP	Common Effluent Treatment Plant
CGWB	Central Ground Water Board
CMC	Cuttack Municipal Corporation
COD	Chemical Oxygen Demand
CoE	Centre of Excellence
CPCB	Central Pollution Control Board
CPIC	Critically Polluted Industrial Cluster
CPP	Captive Power Plants
CREP	Corporate Responsibility for Environmental Protection
Cr+6	Hexavalent Chromium
CTE	Consent to Establish
СТО	Consent to Operate



DAF&P	Director of Agriculture & Food Production
DDA	Deputy Director of Agriculture
DDO	Drawing and Disbursement Officer
DF	Displaced Families
DFO	Divisional Forest Officer
DGE&T	Directorate General of Employment & Training
DI	Director of Industries
DIC	District Industries Centre
DLNA	District Level Nodal Agency
DLSWCA	District Level Single Window Clearance Authority
DM	Draftsman
DO	Dissolved Oxygen
DoFE	Department of Forest and Environment
DoWR	Department of Water Resources
DPF	Demarcated Protected Forest
DPP	Director Physical Plants
DPR	Detailed Project Report
D/s	Down Stream
DTCN	Detailed Tender Call Notice
DTE&T	Director of Technical Education & Training
	E
E&TE&T	Employment and Technical Education & Training Department
EC	Environmental Clearance
EC	Executive Committee
ED	Electricity Duty
EE	Executive Engineer
EIA	Environment Impact Assessment
EIC	Engineer-in-Chief

EPTRI	Environment Protection Training and Research Institute	
ESP	Electro Static Precipitators	
ESS	Environment Surveillance Squad	
ETP	Effluent Treatment Plant	
	F	
FA	Financial and Accounts	
FC	Faecal Coliform	
FC	Finance Commission	
FD	Finance Department	
FD	Fixed Deposits	
FD	Forest Division	
FDI	Foreign Direct Investment	
FLD	Front Line Demonstration	
FRBM	Fiscal Responsibility and Budget Management	
FTC	Fume Treatment Centre	
FTP	Fluoride Treatment Plant	
	G	
CD	Coursering Bade	
GB GEMS	Governing Body Clobal Equipmental Manitoring Soutern	
	Global Environmental Monitoring System	
GFR	General Financial Rules	
GoI	Government of India	
GoO	Government of Odisha Granular Sub Base	
GSB		
	Н	
H&UDD	Housing and Urban Development Department	
HLCA	High Level Clearance Authority	
HMP	Hot Mix Plant	
Ι		
ICAR	Indian Council of Agriculture Research	
ICED	International Centre for Environment Audit and Sustainable	
	Development	
IDP	Institute Development Plan	
IEM	Industrial Entrepreneur Memorandum	
IFFCO	Indian Farmers Fertilizer Cooperative Limited	
IIT	Indian Institute of Technology	
IMC	Institute Management Committees	
IPICOL	Industrial Promotion and Investment Corporation of Odisha Limited	
IPP	Independent Power Plant	
IPR	Industrial Policy Resolution	

IT Information Technology Enabled Services ITI Industrial Training Institute ITI Industrial Information Project ITI Industrial Information Project ITI Industrial Information Project ITI Industrial Information System ITI Information Project ITI Information Information System ITI Information Information System ITI Information Informatic	IRC	Indian Road Congress	
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NPIU National Project Implementation Unit			

NPV	Net Present Value
NRCD	National River Conservation Directorate
NRCP	National River Conservation Plan
NWMP	National Water Quality Monitoring Programme
NWP	National Water Policy
	0
O&G	Oil and Grease
OCC	Odisha Construction Corporation
OCMMS	Online Consent Management & Monitoring System
OEMF	Odisha Environment Management Fund
OEMS	Online Emission Monitoring Systems
OFDC	Odisha Forest Development Corporation
OFSDP	Odisha Forestry Sector Development Project
OFT	On Farm Testing
OIFA	Odisha Industries Facilitation Act
OIFR	Odisha Industries Facilitation Rules
OPGC	Odisha Power Generation Corporation Limited
OPWD Code	Odisha Public Works Department Code
OSIC	Odisha Small Industries Corporation Limited
OSSC	Odisha State Seed Corporation
OTC	Odisha Treasury Code
OUAT	Orissa University of Agriculture and Technology
OWDA	Odisha Wetland Development Authority
OWSSB	Odisha Water Supply and Sewerage Board
	F
PA	Programme Assistant
PC	Programme Coordinator
PCE	Pollution Control Equipment
PCP	Prevention and Control of Pollution
PCCF	Principal Chief Conservator of Forest
PD	Project Director
PF	Protected Forests
PF&V	Preservation of Food and Vegetables
рН	Power of Hydrogen
PHC	Petroleum Hydrocarbon
PHD	Public Health Department
PLC	Project Level Committee
PM	Particulate Matter
PMIS	Project Monitoring and Information System
PPP	Public Private Partnership
PTC	Private Testing Centres
PTE	Pollution Testing Equipment

PTE Pollution Testing Equipment

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SSCState Steering CommitteeSSWCCSpecial Single Window Clearance Committees		
SSWCC Special Single Window Clearance Committees	SS	Suspended Solids
	SSC	State Steering Committee
STP Sewerage Treatment Plant	SSWCC	Special Single Window Clearance Committees
	STP	Sewerage Treatment Plant

SCTE&VT	State Council of Technical Education and Vocational Training
SWMP	State Water Quality Monitoring Programme
SWP	State Water Policies
TC	Total Coliform
TD	Transport Department
TDCC	Tribal Development Co-operative Corporation of Orissa
	Limited
TF	Task Force
TPA	Tonnes Per Annum
TPP	Thermal Power Plant
TSS	Total Suspended Solids
TTPS	Talcher Thermal Power Station
	U
UC	Utilisation Certificates
UD	Undetected
UKP	Upper Kolab Project
ULB	Urban Local Bodies
U/s	Up Streams
	V
V&AH	Veterinary and Animal Husbandry
VAL	Vedanta Aluminium Limited
VCI	Veterinary Council of India
VE&SD	Vocational Education and Scheme Development
VTS	Vocational Training System
	w
WBA	World Bank Assistance
WHO	World Health Organisation
WQAA	Water Quality Assessment Authority
WQMS	Water Quality Monitoring Station

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