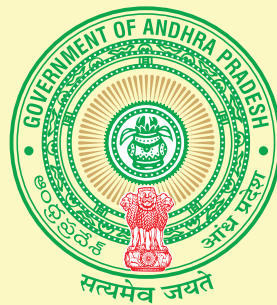




**Report of the
Comptroller and Auditor General of India
on
Economic Sector
for the year ended March 2017**



Government of Andhra Pradesh
Report No.4 of 2018

**Report of the
Comptroller and Auditor General of India
on
Economic Sector
for the year ended March 2017**

Government of Andhra Pradesh
Report No. 4 of 2018

Table of contents

Subject	Reference to	
	Paragraph	Page
Preface		v
Chapter - I Overview of Economic Sector		
Introduction	1.1	1
Authority for Audit	1.2	1
About this Report	1.3	2
Planning and Conduct of Audit	1.4	2
Response of Government Departments	1.5	3 - 4
Expenditure by Departments in Economic Sector Grants	1.6	4 - 5
Significant Audit Findings	1.7	5 - 12
Chapter - II Performance Audit		
<i>Water Resources Department</i> Polavaram Irrigation Project	2.1	13 - 43
<i>Information Technology, Electronics and Communications Department</i> Development of Information Technology and Communication Infrastructure by the Information, Technology, Electronics and Communications Department	2.2	44 - 58
Chapter - III Compliance Audit		
<i>Environment, Forests, Science and Technology Department</i> Implementation of Biological Diversity Act, 2002 by Andhra Pradesh State Biodiversity Board	3.1	59 - 65
<i>Industries and Commerce Department</i> Implementation of Andhra Pradesh Single Desk Policy 2015 in Industries & Commerce Department	3.2	66 - 71
<i>Water Resources Department</i> Implementation of Irrigation schemes under Accelerated Irrigation Benefits Programme	3.3	72 - 81
Extra expenditure on works	3.4	81 - 83

Avoidable expenditure of ₹ 14.33 crore due to late payment of High Tension Current Consumption charges	3.5	83 - 85
Incomplete execution of flood protection work	3.6	85 - 87
<i>Appendices</i>		89 - 95
<i>Glossary</i>		97 - 99

Appendices

Appendix No.	Subject	Page
1.1	Department-wise details of Outstanding Inspection Reports and Paragraphs as on 30 September 2017	89
1.2	Year wise breakup of outstanding Inspection Reports and Paragraphs for which first replies have not been received	90
1.3	Year-wise details of outstanding Inspection Reports and Paragraphs pending for more than 10 years	90
2.1	Progress of canal works under the Polavaram Irrigation Project as on July 2017	91
2.2	Details of IT Units to which lands were allotted under ICT Policies 2005-10 and 2010-15	92 - 93
3.1	Statement showing the Grievances Pending as of July 2017	94
3.2	Statement showing the expenditure details of test checked major/medium projects	95
3.3	Statement showing the expenditure details of test checked minor irrigation (MI) projects	95

Preface

This Report pertaining to the State of Andhra Pradesh for the year ended March 2017 has been prepared for submission to Governor of Andhra Pradesh under Article 151 of the Constitution of India for being laid before Legislature of the State.

This Report contains significant results of Performance Audit and Compliance Audit on Water Resources Department; Information Technology, Electronics and Communications Department; Environment, Forests, Science and Technology Department; and Industries and Commerce Department of Government of Andhra Pradesh.

The instances mentioned in this Report are those which came to notice in the course of test audit for the period 2016-17 as well as those which came to notice in earlier years, but were not reported earlier. Instances relating to the period subsequent to 2016-17 have also been included wherever necessary.

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

Chapter - I

Overview of Economic Sector

Chapter-I

Overview of Economic Sector

1.1 Introduction

Andhra Pradesh State has a population of 4.95 crore with a geographical area of 1.63 lakh square kilometres. Government of Andhra Pradesh consists of 30 Departments at the Secretariat level headed by Special Chief Secretaries/ Principal Secretaries/ Secretaries. Officers are assisted by Commissioners, Directors and sub-ordinate Officers. Of these 30 Departments, nine come under the jurisdiction of Economic Sector.

1.2 Authority for Audit

Comptroller and Auditor General of India (CAG) derives authority for audit from Articles 149 and 151 of the Constitution of India and the CAG's (Duties, Powers and Conditions of Service) Act, 1971 (DPC Act). CAG audits Economic Sector departments of the Government as per the following:

- **Audit of expenditure** as per Section 13¹ of the DPC Act;
- **Financial audit** of four autonomous bodies (ABs)² under Economic Sector, as per Sections 19(2)³, 19(3)⁴ and 20(1)⁵ of the DPC Act; and
- **Audit of other ABs**, which are substantially funded by the Government, as per Section 14⁶ of the DPC Act.

Auditing Standards and Regulations on Audit and Accounts - 2007 of the CAG, lay down the principles and methodologies for audits.

¹ Departments delivering economic services, which include (i) General Economic Services; (ii) Agriculture and allied services; (iii) Industry and Minerals; (iv) Water and Power Development; and (v) Transport and Communications.

² AP Electricity Regulatory Commission (APEREC) under Section 19(2), AP Khadi and Village Industries Board (APKVIB) under Section 19(3), Environment Protection Training and Research Institute (EPTRI) under Section 20(1) and AP Compensatory Afforestation Fund Management and Planning Authority (AP State CAMPA) under Section 20(1) of DPC Act.

³ Audit of the accounts of Corporations (not being Companies) established by or under law made by the Parliament in accordance with the provisions of the respective legislations.

⁴ Audit of accounts of Corporations (not being companies) established by or under law made by the State Legislature in accordance with the provisions of respective legislations.

⁵ Audit of accounts of any body or authority on the request of the Governor, on such terms and conditions as may be agreed upon between the CAG and the Government.

⁶ Audit of all receipts and expenditure of (i) any body or authority substantially financed by grants or loans from the Consolidated Fund and (ii) any body or authority where the grants or loans to such body or authority from the Consolidated Fund in a financial year is not less than ₹ one crore.

1.3 About this Report

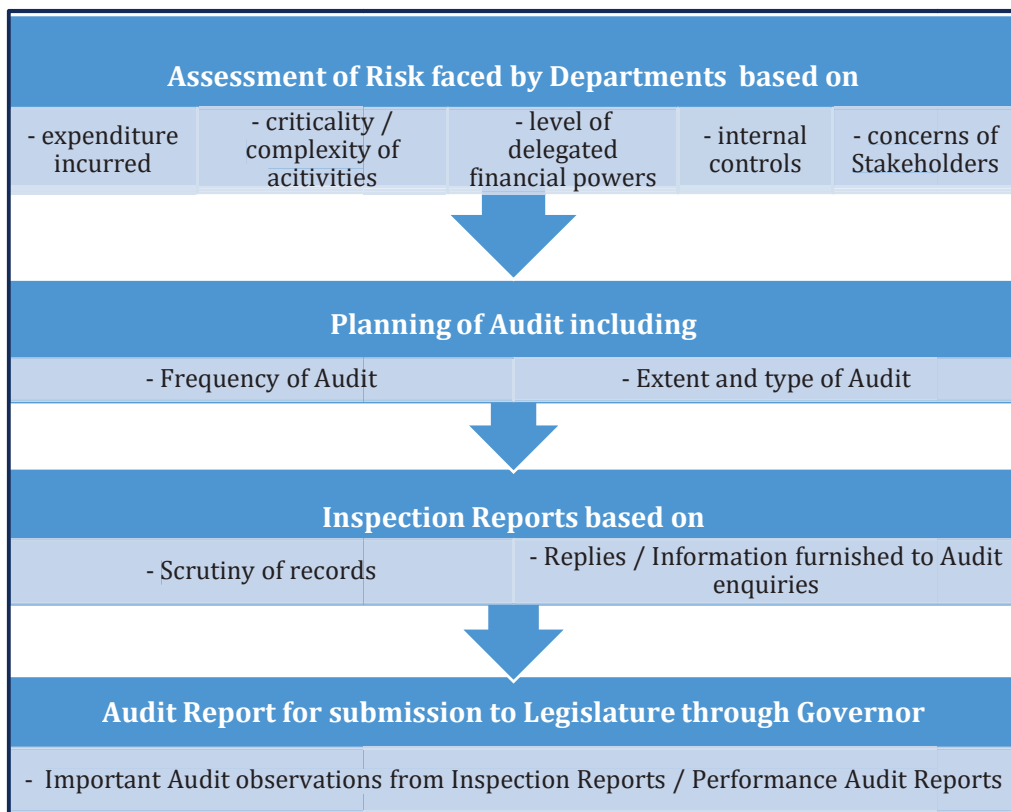
Primary purpose of Audit Reports is to bring important results of audit to the notice of the State Legislature. Audit findings enable the executive to take corrective action in cases of lapses / deficiencies. They also help to frame directives for better governance.

This Report on Economic Sector relates to matters arising from Performance Audit⁷ and Compliance Audit⁸ of selected programmes and activities of Departments coming under Economic Sector.

1.4 Planning and conduct of audit

The following flow chart depicts planning and conduct of audit:

Chart 1.1: Planning and conduct of audit



Audit conducted inspection of various Departments / Organizations under the Economic Sector in 2016-17 and issued 144 Inspection Reports with 916 paragraphs.

⁷ Performance Audit examines whether the objectives of the programme / activity / Department are achieved economically, efficiently and effectively.

⁸ Compliance Audit covers examination of transactions relating to expenditure of audited entities to ascertain whether the provisions of the Constitution of India, applicable laws, rules, regulations and various orders and instructions issued by competent authorities are being complied with.

1.5 Response of Government Departments

1.5.1 Response to past Inspection Reports

The following process is adopted in respect of Inspection Reports:

- Principal Accountant General (PAG) issues Inspection Reports (IRs) to the heads of offices inspected with a copy to the next higher authority.
- Heads of offices and next higher authorities are required to rectify the defects and omissions mentioned in IRs and report compliance to PAG.
- Half yearly reports of pending IRs are sent to Secretaries of Departments concerned to monitor outstanding audit observations.

As of 30 September 2017, there were 2,393 IRs consisting of 8,428 paragraphs, issued up to March 2017, which were not settled (Department wise break up is given in *Appendix 1.1*). Of these, Audit did not receive even first replies in respect of 2419 paragraphs in 430 IRs (year-wise break up is given in *Appendix 1.2*).

Out of nine Departments under Economic Sector, Water Resources Department and Agriculture, Cooperation and Rain Shadow Area Development Department had highest number of unsettled audit observations as of 30 September 2017. Water Resources Department had 1,137 IRs with 3,608 paragraphs and Agriculture, Cooperation and Rain Shadow Area Development Department had 499 IRs with 1,899 paragraphs. Of these, 346 IRs with 661 paragraphs on Water Resources Department and 185 IRs with 328 paragraphs on Agriculture, Cooperation and Rain Shadow Area Development Department were outstanding for more than ten years (year-wise details are in *Appendix 1.3*).

Audit recommends that the Government may strengthen procedures to ensure:

- a) prompt action by officers to send replies to IRs / paragraphs as per the prescribed time schedule;
- b) recovery of loss/outstanding advances/over payments in a time bound manner.

1.5.2 Response to present Performance Audit and Compliance Audit reports

Audit forwarded, two performance audit and six compliance audit paragraphs to the Special Chief Secretaries/ Principal Secretaries/ Secretaries of the Departments during June 2017 to November 2017. The Government provided responses to all the proposed paragraphs which have been suitably incorporated in the report.

1.5.3 Response to recommendations of the Public Accounts Committee

The Finance and Planning Department had issued (May 1995) instructions to all Administrative Departments to submit Action Taken Notes (ATNs) on the recommendations of the Public Accounts Committee (PAC) relating to the paragraphs contained in Audit Reports within six months.

All the Departments have furnished ATNs as of 30 November 2017, except Water Resources and Animal Husbandry, Dairy Development & Fisheries Department in respect of seven⁹ recommendations.

1.6 Expenditure by Departments in Economic Sector Grants

Expenditure incurred by Economic Sector Departments during the last five years is given in below:

Table 1.1: Table showing expenditure incurred by Economic Sector Departments

(₹ in crore)

S. No.	Name of the Department	2012-13	2013-14	2014-15*	2015-16	2016-17
1	Agriculture ¹⁰ and Cooperation					
2	Rain Shadow Area Development	3633.36	2874.65	9258.24	3868.44	6687.98
3	Animal Husbandry and Fisheries	830.61	839.18	715.35	933.49	1235.73
4	Energy, Infrastructure & Investment	6249.03	7553.28	14476.96	3852.32	11838.45
5	Environment, Forests, Science and Technology	391.25	399.56	290.60	307.23	305.30
6	Industries and Commerce	760.53	705.66	2464.64	398.95	711.34
7	Information Technology, Electronics and Communications	199.37	155.10	127.02	402.56	330.34
8	Water Resources ¹¹	19704.27	18760.67	9378.12	9596.41	10637.24
9	Public Enterprises	1.40	1.44	1.22	0.87	1.53
10	Roads & Buildings	4188.66	4948.75	5969.18	4076.03	3469.82
Total		35958.48	36238.29	42681.33	23436.30	35217.73

(Source: Appropriation Accounts of Government of Andhra Pradesh for the relevant years)

* These figures represent the expenditure figures of the erstwhile composite AP State from 01 April 2014 to 01 June 2014 and of residuary AP State from 02 June 2014 to 31 March 2015.

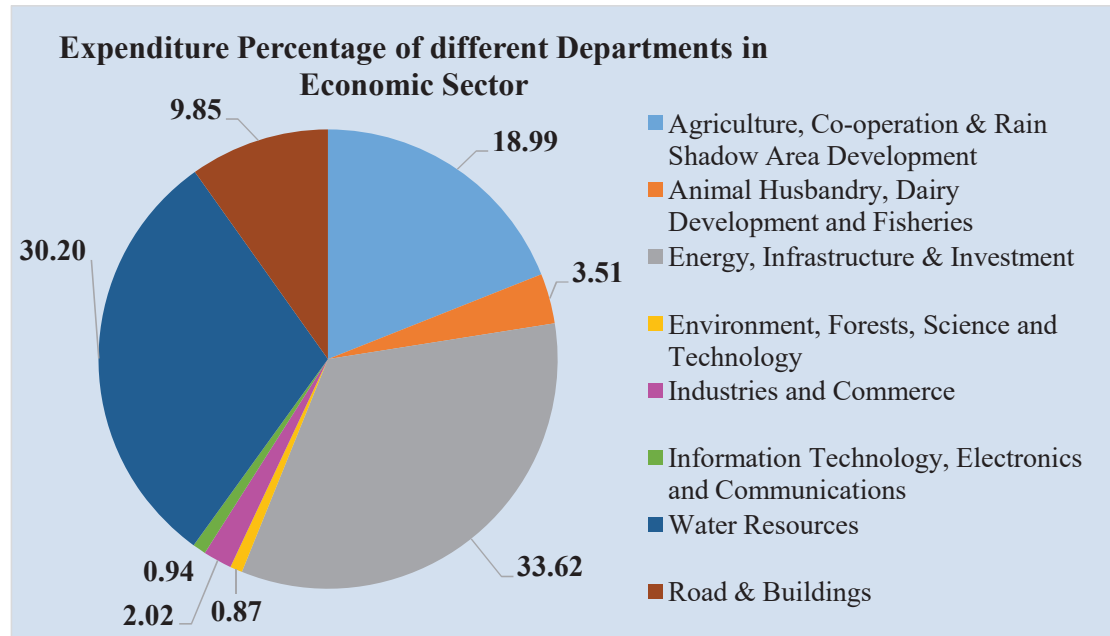
⁹ Water Resources Department – 5 ATNs and Animal Husbandry, Dairy Development and Fisheries – 2 ATNs.

¹⁰ The expenditure of Agriculture, Rain Shadow Area Development is covered under Grant No. XXVII – Agriculture and the expenditure of Co-operation Department is covered under Grant No. XXX.

¹¹ Formerly the Irrigation & Command Area Development Department.

The sectoral distribution of expenditure in Economic Services Sector in 2016-17 is shown in Chart 1.2. Outlay on two Departments viz., Energy, Infrastructure & Investment and Water Resources Departments comprised 64 per cent of total expenditure on Economic Services.

Chart 1.2 - Expenditure share of different Economic Sector Departments



1.7 Significant Audit Findings

Performance Audits

Polavaram Irrigation Project

The Polavaram Irrigation Project is Multi-purpose Project constructed on the river Godavari to provide water supply for i) irrigation benefits ii) Generation of Hydro Electric Power, iii) domestic and industrial uses in four districts. Audit was conducted (May to August 2017) to assess whether i) the GoAP planned the Project in accordance with the guidelines of Central Water Commission; ii) the GoAP executed the Project in an economic, efficient and effective manner; and iii) adequate monitoring mechanism existed and was effective during implementation.

The major audit findings are summarized below:

- *The Department submitted the Detailed Project Report (DPR) to Central Water Commission (CWC) in 2005. It took four years in rectifying the deficiencies and could obtain CWC's approval only in the year 2009. The Head works were awarded before approval of the DPR by CWC. Subsequent changes in design parameters as suggested by CWC led to pre-closure of the works and consequent cost and time overrun.*

[Paragraphs 2.1.7 and 2.1.10 (i)]

- *The Department could not acquire and provide required land to the contractors within agreement period in any of the 15 canal package works. The Department was yet to acquire 36,009 acres of land in the submergence areas and a further 26,830 acres of land required for Rehabilitation & Resettlement of the Project Affected Families.*

[Paragraph 2.1.9.1 (i)]

- *The Department could rehabilitate only 4,069 (4 per cent) out of the 1,05,601 Project Displaced Families (PDFs) in the last 12 years. It was yet to finalize Rehabilitation & Resettlement (R&R) plans in respect of 192 (52 per cent) villages out of 371 villages.*

[Paragraph 2.1.9.2 (ii)]

- *There was no progress in construction of protective embankments to prevent submergence in Odisha and Chhattisgarh States.*

[Paragraph 2.1.9.2 (v)]

- *Non-submission of details of expenditure incurred on Land Acquisition (LA) and R&R by the Department led to non-disbursement of ₹1,407.64 crore by Government of India (GoI).*

[Paragraph 2.1.8 (i)]

- *Progress of works, taken up during the years 2004-2006, was only 31 per cent in headworks, 55 per cent in connectivities, 65 per cent in left main canal and 91 per cent in right main canal, as of July 2017. Slow progress was mainly due to changes in designs and delays in land acquisition, finalization of alignments/designs/drawings and in shifting of public utilities.*

[Paragraphs 2.1.10 and 2.1.11]

- *Several concessions amounting to ₹1853.08 crore were allowed to the contractor of Head Works in relaxation of the agreement conditions for timely completion of the work. Yet, the progress was not in tandem with the scheduled completion time.*

[Paragraph 2.1.11.2]

- *Despite slow progress and delays attributable to the contractors, Department failed to levy liquidated damages on contractors.*

[Paragraph 2.1.11.3 (ii)]

- *The State and Project Level Monitoring Committees (to review and monitor progress of R&R implementation) had not held the required number of meetings as stipulated in the State's Resettlement & Rehabilitation Policy.*

[Paragraph 2.1.12.1 (i)]

- *The monitoring in respect of compliance of Forest/Environmental clearance conditions was weak and the stipulated conditions were yet to be adhered to.*

[Paragraph 2.1.12.2]

Conclusion

Progress of execution of Polavaram project which had commenced in the year 2004 had been slow mainly due to improper planning, delays in finalization of designs, land acquisition and R&R, and also due to the Department's inability to enforce the contract conditions. As a result, the possibility of completion of the project and achievement of intended objectives by the target date of 2019 appears improbable.

Development of Information Technology and Communication Infrastructure by the Information, Technology, Electronics and Communications Department

The Information Technology, Electronics & Communications Department plays a crucial role in policy formulation in IT sector, conceptualizing and initiating various IT enabled services through proactive measures and providing a strong communication backbone in the State. Audit was conducted (February to August 2017) to assess whether i) the formulation of selected initiatives was comprehensive and in accordance with objectives and policies of the Government; ii) Whether the selected initiatives/ projects and facilities were implemented as planned and those under implementation were progressing as scheduled; iii) Whether the completed initiatives/ projects and facilities were serving the intended objectives and whether there was a plan in place to accommodate future needs; and iv) Whether the Department had developed adequate infrastructure, on its own or through other organizations, to cater to the needs of the other Departments.

The major audit findings are summarized below:

- *Out of the 25 IT units that were allotted lands by the Department, during 2006 to 2012, two allotments were cancelled and only 14 units had completed construction and commenced operations. In eight cases, the projects were at different stages of construction and one unit did not commence construction as of July 2017, despite time over run of 22 months to 101 months.*

[Paragraph 2.2.7.3 (i)]

- *These units created a total of only 4,326 jobs (as of July 2017) as against the total employment generation target of 10,809 jobs as per the MoUs concluded with the 23 units.*

[Paragraph 2.2.7.3 (ii)]

- *Lack of proper monitoring mechanism was noticed. The Department did not have a system of obtaining periodical status/progress reports from APIIC or the IT units on implementation of the IT projects by the units.*

[Paragraph 2.2.7.4]

- *The intention of Government to develop common facilities in the IT-SEZ, Madhurawada, Visakhapatnam remained unrealized even after 10 years, due to allotment of unsuitable land to the Developer initially and delay in allotment of alternative piece of land.*

[Paragraph 2.2.8]

- *Against the total space of 79,530 Sft. available in the three Incubation Centres at Visakhapatnam, Tirupati and Kakinada, space of 23,774 Sft. (8,774 Sft. in Tirupati and entire 15,000 Sft. in Kakinada) remained unutilized as of May 2017.*

[Paragraph 2.2.9.1]

Conclusion

The Department's monitoring on implementation of IT projects and performance of Incubators was poor. As a result, there were abnormal delays in implementation of IT projects by IT Units. The Department had not been able to put to use the space created in Incubation Centres. Thus, there was no assurance that the objective of promoting IT industry/start-up companies and creation of employment was achieved as intended.

Detailed Compliance Audits

Implementation of Biological Diversity Act, 2002 by Andhra Pradesh State Biodiversity Board

India is rich in biological diversity and associated traditional knowledge. The Government of India enacted (February 2003) Biological Diversity Act, 2002 (Act) for conservation of biological diversity, regulation of access to/ sustainable use of biological resources, etc. Functional bodies at three different levels are responsible for implementation of the Act. They are - (1) the National Biodiversity Authority (NBA) at Central level; (2) the State Biodiversity Board at State level; and (3) Biodiversity Management Committees at Local Bodies level. Audit was conducted (June - July 2017) to assess the effectiveness of the role played by the Board and

the Biodiversity Management Committees in carrying out the functions prescribed in the Biological Diversity Act and Rules.

The major audit findings are summarized below:

- *The Biodiversity Management Committees (BMCs) have a vital role in implementation of the Act. However, only 2908 (i.e. 21 per cent) out of a total of 13725 local bodies in the State had formed BMCs as of June 2017. Even in areas where Red Sanders are grown, BMCs were not formed by all local bodies. Representatives from Panchayat Raj and Municipal Administration departments were not being nominated as ex-officio members of the Board to speed up formation of BMCs.*

[Paragraph 3.1.3]

- *The BMCs were to prepare People's Biodiversity Registers (PBRs) to document the information of local biological resources and related traditional knowledge. However, a total of only 75 PBRs had been prepared so far. In the absence of PBRs in all the local bodies, the Board could not build any database of biological resources available in the State.*

[Paragraph 3.1.4]

- *Two areas of Biodiversity importance identified in 2008 and 2012 have not been notified as Biodiversity Heritage Sites (BHS) till date.*

[Paragraph 3.1.5]

- *State Bio-diversity Conservation strategy and Action Plan to facilitate the implementation of the Biological Diversity Act and Rules has not been prepared by the Board so far.*

[Paragraph 3.1.6]

- *The Government had not sanctioned any regular posts and the Board was wholly depending on outsourced personnel (most of them were Data Entry Operators, office subordinates and drivers) for its day to day functioning.*

[Paragraph 3.1.7]

- *Adequate funds were not provided by Government, causing hindrance for the constitution of BMCs/preparation of PBRs, etc. which are vital for the implementation of the Act.*

[Paragraph 3.1.8]

Conclusion

Even after a decade since formation of AP State Biodiversity Board, the State had not attained the level of preparedness necessary for Implementation of the Biological Diversity Act.

Implementation of Andhra Pradesh Single Desk Policy 2015 in Industries & Commerce Department

The Andhra Pradesh Single Desk Policy 2015 was made to provide all clearances required for starting and operating an industry within 21 working days at single point through Information Technology (IT) enabled platform with an aim to improve the ease of doing of business in the state. In furtherance of the Policy, the Industries and Commerce Department launched (April 2015) a web based Single Desk Portal (SDP).

The major audit findings are summarized below:

- *The SDP did not have input validations regarding the dates of receipt of applications. In 802 (4 per cent) out of 19,837 approvals given through SDP, the date of receipt of application was one to 347 days prior to the date of submission of application by the applicant.*

[Paragraph 3.2.3.2]

- *The SDP did not have adequate provision to enable the entrepreneurs to enter details of already existing approvals in the Common Application Form. This was leading to incorrect list of approvals yet to be taken by entrepreneurs.*

[Paragraph 3.2.4]

- *The Commissioner of Industries was not ensuring that the grievances of entrepreneurs were resolved within the stipulated period of 30 days. There were 28 grievances that were pending for 108 to 606 days.*

[Paragraph 3.2.5]

- *The line Departments were not given privileges to change the status of clearances in cases where an application was rejected/additional information called for initially and approval was given later. Audit found two instances where the SDP data was showing that approvals were pending whereas the approvals were already given.*

[Paragraph 3.2.6]

- *The Portal did not have a provision to display the unit wise list of approvals applied for, issued and pending.*

[Paragraph 3.2.7]

- *SDP did not have provision to utilize the online information already available/maintained by the Government Departments to minimize input by applicants.*

[Paragraph 3.2.8]

Conclusion

The Single Desk Portal had gaps in the software which were causing hindrances in achievement of the objective of providing single window clearances to industrial units through a user friendly online environment.

Implementation of irrigation schemes under Accelerated Irrigation Benefits Programme

Government of India launched the Accelerated Irrigation Benefits Programme (AIBP) in the year 1996-97 with an objective to accelerate implementation of projects which were beyond resource capability of the States or were in advanced stage of completion. Government of India assisted the ongoing Major/Medium projects which are in advanced stage of completion based on the fulfillment of specified criteria. Audit was conducted (May 2017 – August 2017) to assess whether the projects were effectively implemented in a timely manner and objective of creation and utilization of Irrigation Potential had been achieved.

The major audit findings are summarized below:

- *In case of Tadipudi Lift Irrigation Scheme and Tarakarama Thirtha Sagaram project, the State Government could not spend the Central assistance within the stipulated period. As a result, GoI did not release further funds for these projects and the State had forgone Central assistance of ₹ 79.04 crore.*

[Paragraph 3.3.3]

- *Under Gundlakamma Reservoir Project, there was a shortfall of 11,112 acres (13.88 per cent out of the target of 80,060 acres) in creation of ayacut even after 13 years since commencement of work due to incomplete land acquisition and Rehabilitation & Resettlement (R&R).*

[Paragraph 3.3.4.1 (i)]

- *Incorrect computation of rates payable for distributary network in Gundlakamma Reservoir Project resulted in extra commitment of ₹ 1.49 crore.*

[Paragraph 3.3.4.1 (i)]

- *In Tadipudi Lift Irrigation Scheme, electro-mechanical equipment procured in 2007 at a cost of ₹ 1.90 crore had not been put to use so far due to non-completion of distributary network.*

[Paragraph 3.3.4.1 (ii)]

- *In Tarakarama Thirtha Sagaram Project, though the Department awarded the work in May 2006, the work remained incomplete even after lapse of 11 years due to delayed land acquisition and forest clearance. This resulted in*

cost overrun to a tune of ₹251.20 crore and time overrun of nine years, besides non creation of ayacut.

[Paragraph 3.3.4.2 (ii)]

- *Two minor irrigation tanks - viz. Maddileru river (Kurnool District) and Bhavanasi (Prakasam District) were not completed even after 10 years from Administrative approval due to delayed land acquisition. The delay resulted in non-serving of intended ayacut and rendering the expenditure of ₹34.13 crore unfruitful.*

[Paragraph 3.3.4.3]

Conclusion

Progress of the projects under Accelerated Irrigation Benefits Programme suffered due to delays in land acquisition, forest clearance, etc. As a result, the objective of taking up these projects under AIBP had not been achieved fully.

Compliance Audits

- *In the work of 'Modernisation of Prakasam Barrage and Head works, etc.' in Krishna District (Package-1), the Department incorrectly worked out the amount to be deducted from agreement value for the portion of work deleted from the scope of contract. This resulted in extra financial burden of ₹22.60 crore on the public exchequer.*

[Paragraph 3.4]

- *In Handri Neeva Sujala Sravanthi project, the delays in payment of electricity bills of pumps and motors for the period 2012-13 to 2016-17 resulted in avoidable expenditure of ₹14.33 crore. A further liability of ₹17.90 crore towards late payment charges was incurred, which was yet to be paid.*

[Paragraph 3.5]

- *Due to failure of the Department to finalize the designs for more than seven years, the work of 'Restoration of the existing Rajukalva flood bank from Km 1.000 to Km 6.300 and formation of new flood bank from Km 6.300 to Km 9.500' was not completed. As a result, the intended objective of providing protection to the Lankevanidibba village from floods was not achieved.*

[Paragraph 3.6]

Chapter - II

Performance Audit

Chapter-II

Performance Audit

Water Resources Department

2.1 Polavaram Irrigation Project

Executive Summary

Polavaram Irrigation Project was contemplated to provide inter alia irrigation, supply of drinking water, generation of Hydro Electric Power and diversion of Godavari water to Krishna River. Audit noted several deficiencies in planning and execution of the project. The Department submitted the Detailed Project Report (DPR) to Central Water Commission (CWC) in 2005. However, it took four years to rectify deficiencies pointed out by CWC and obtain approval of CWC. Progress of works, taken up during the years 2004-2006, was slow mainly due to changes in design and delays in land acquisition, finalization of alignments/ designs/ drawings and in shifting of public utilities.

The Department was yet to acquire 36,009 acres of land in the submergence areas and a further 26,830 acres of land required for allotment to the Project Affected Families. The Department was yet to rehabilitate 96 per cent of the Project Displaced Families (PDFs). Government was yet to sort out the submergence issues with the neighbouring States of Chhattisgarh and Odisha. The work of constructing protective embankments to prevent submergence in those States had not yet commenced.

The total cost of the project increased from ₹10,151.04 crore in 2005 to ₹55,133 crore in 2017. Even after three years since declaration of the Project as National Project, no Memorandum of Understanding (MoU) was concluded between GoAP and GoI. There was short reimbursement of project expenditure of ₹3249 crore to GoAP by GoI. Out of this, ₹1407.64 crore was not released due to non-submission of details of expenditure incurred on LA and R&R. The GoAP granted several relaxations to the contractor of Head works. However, the progress of work was not as stipulated. Despite slow progress and delays attributable to the contractors, Department failed to levy liquidated damages on contractors.

The Department was yet to arrange Third Party Quality Control and Quality Audit of the project works. Monitoring in respect of progress of R&R implementation and compliance of Environmental/ Forest Clearance conditions was weak.

2.1.1 Introduction

The Polavaram Project is located in Andhra Pradesh on the river Godavari, near Ramayyapeta village of Polavaram Mandal in West Godavari district. It is a Multi-purpose Project which contemplated the following benefits:

- Providing irrigation benefits to 2.91 lakh hectares (7.20 lakh acres) in four districts (of East Godavari, Visakhapatnam, West Godavari and Krishna Districts) in AP State;
- Generation of 960 Mega Watts of Hydro Electric Power;
- Diversion of 80 Thousand Million Cubic feet (TMC) of water through the right canal to Krishna river to augment the supplies of Krishna Basin for irrigation purpose;
- Industrial water supply for the Visakhapatnam Township and Vishakhapatnam Steel Plant through the left canal; and
- Domestic water supply to villages and towns en-route, besides indirect benefits such as development of Pisciculture, etc.

The Government of Andhra Pradesh (GoAP) initiated the project in 2004 with an estimated cost of ₹10,151.04 crore. The GoAP revised the project cost to ₹16,010.45 crore with 2010-11 price level in 2011. The Andhra Pradesh State Re-organization Act, 2014 declared the Project as a National Project in March 2014. The Polavaram Project consisted of the following works components:

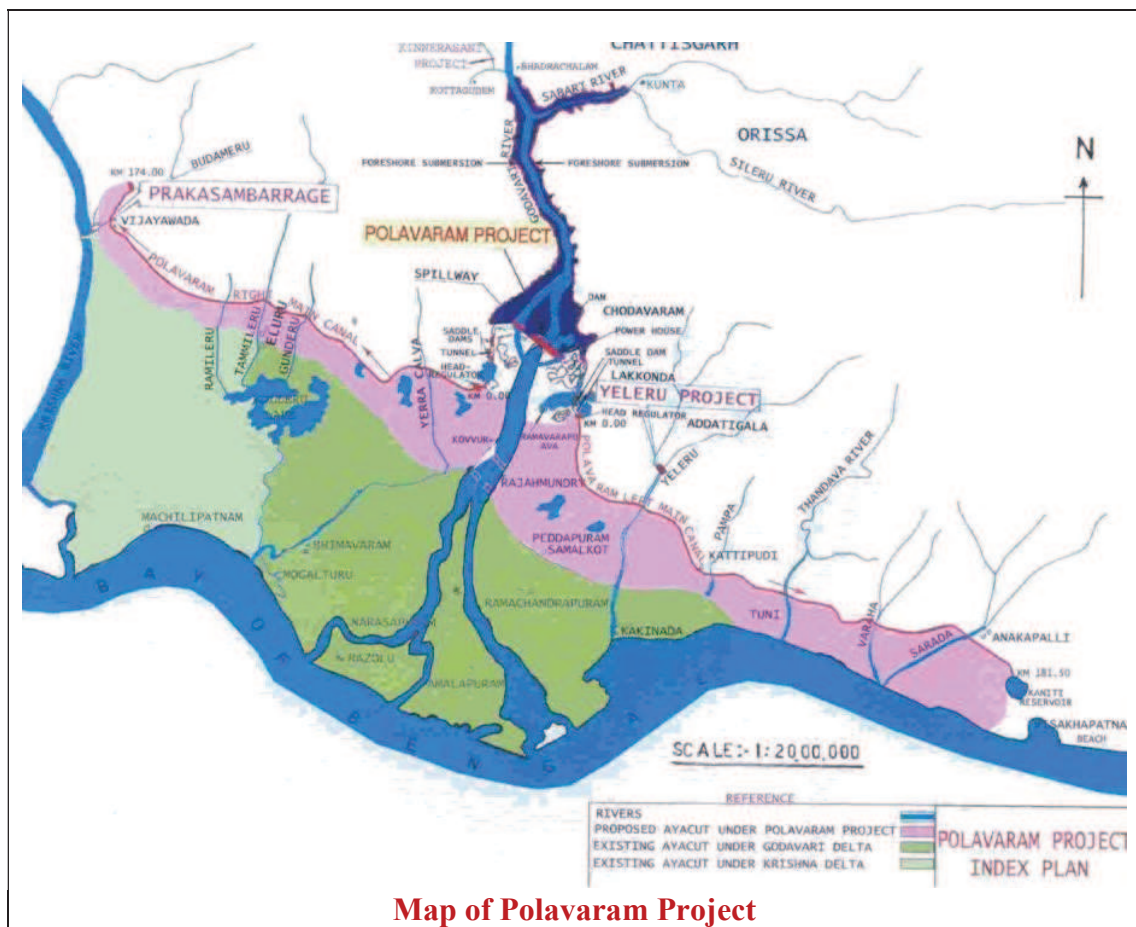
- Head Works consisting of Spill Way, Earth-cum-Rock fill (ECRF) Dam, Power House, Connectivities to Right and Left Main Canals;
- Right Main Canal (RMC) of a total length of 174 KM passing through West Godavari and Krishna districts; and
- Left Main Canal (LMC) of a total length of 181.5 Km passing through East Godavari and Visakhapatnam districts.

Construction of the project was ongoing and the total expenditure incurred on the project was ₹12,147 crore, as of July 2017. The details of expenditure are shown in Table 2.1:

Table 2.1 - Details of component wise expenditure incurred on Polavaram project

Component of project	Expenditure incurred (₹ in crore)
Works	6176
Land Acquisition (LA)	4161
Rehabilitation and Resettlement (R&R)	599
Others ¹	1211
Total	12147

(Source: Records of the Water Resources Department)



Map of Polavaram Project

(Source: Water Resources Department)

2.1.2 Organizational setup

After declaration of National Project, the Ministry of Water Resources (MoWR), Government of India (GoI) had created (May 2014) the Polavaram Project Authority (PPA). The PPA has to oversee the project construction and release funds due from GoI. As per the present arrangement between the GoI and the GoAP, the Water Resources Department (WRD) of GoAP, headed by

¹ This includes the expenditure on Project establishment, payments made to Forest Department and other miscellaneous items.

the Secretary (Projects), is responsible for execution of the project on behalf of PPA/ MoWR. The Engineer-in-Chief (E-in-C), Polavaram Irrigation Project assisted by four Superintending Engineers (SEs) at Circle level, 23 Executive Engineers (EEs) at Divisional level oversee the project execution.

2.1.3 Scope and Methodology of Audit

Audit had earlier reviewed the implementation of Polavaram project in the year 2011 and the results of audit had appeared in the Report of the Comptroller and Auditor General of India (C&AG) on 'Jalayagnam' (Report No.2 of 2012). Further, the Report of C&AG on Economic Sector for the year ended March 2014 (Report No.2 of 2015) covered the issues relating to implementation of Resettlement and Rehabilitation (R&R).

This Performance Audit covers the implementation² of Polavaram Project during the period from April 2012 to March 2017. This Report also includes the updated position of the issues covered in the earlier Audit Reports wherever such issues have contemporary relevance. It also covers the events that occurred during the prior period but not covered in the earlier Audit Reports.

Audit teams visited (during May to August 2017) the offices of the Secretary, WRD, Engineer-in-Chief, three SEs, 18 EEs, seven Land Acquisition Offices and five R&R offices, involved in implementation of the project. Audit methodology included examination of records, issue of audit enquiries/questionnaires and seeking replies in the audited offices, and field visits to the project sites. Audit conducted an entry conference in May 2017 with the Secretary, WRD and other engineering staff to discuss the audit objectives, scope and methodology. The exit conference was held in December 2017 with the Secretary, WRD and Departmental Officials.

2.1.4 Audit objectives

This Performance Audit seeks to examine whether:

- The GoAP planned the Project in accordance with the guidelines of Central Water Commission;
- The GoAP executed the Project in an economic, efficient and effective manner; and
- Adequate monitoring mechanism existed and was effective during implementation.

² As regards Land Acquisition/R&R, the audit examination was limited to only the progress of these components. Payments made to land losers/project affected persons were not examined in audit.

2.1.5 Sources of Audit criteria

Audit used the following sources of audit criteria as benchmarks for this Performance Audit:

- Guidelines and circulars/instructions issued by the Ministry of Water Resources (MoWR)/Central Water Commission (CWC) on irrigation projects;
- Detailed Project Report of the Polavaram project;
- Conditions stipulated by the Ministry of Environment and Forests and the Ministry of Tribal Affairs in the clearances given for Polavaram project;
- Andhra Pradesh Public Work Department Code and Andhra Pradesh Detailed Standard Specifications;
- Land Acquisition Act – 1894, GoAP Rehabilitation and Resettlement (R&R) Policy 2005, Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act – 2013 (RFCT LARR Act 2013); and
- Terms and Conditions of the works contracts entered into by the Department with the contracting agencies.

2.1.6 Acknowledgement

Audit acknowledges the cooperation extended by the Department during the course of Audit.

Audit findings

2.1.7 Detailed Project Report (DPR)

The CWC had issued (1980 and 2010) ‘Guidelines for preparation of Detailed Project Reports for Irrigation and Multi-purpose projects’. The Department was required to prepare the DPR in accordance with the CWC guidelines. The Water Resources Department of GoAP submitted DPR on Polavaram Irrigation Project to the Central Water Commission (CWC) in the year 2005. Hydrological studies, design issues and planning aspects are important elements in the DPRs of irrigation projects.

(i) The CWC had pointed out several deficiencies relating to hydrological studies, design issues and planning aspects in the Department’s DPR submitted in 2005. The Department took four years to rectify the deficiencies and obtain the approval. CWC approved the DPR in the year 2009. The delay

in approval of DPR and design parameters of the project had an adverse impact on the execution of the project, especially the dam works, as discussed in Paragraph 2.1.10.

Government in its reply (December 2017) stated that delay of four years is mainly because of delay in getting forest clearance and various other clearances.

The fact remains that the Department failed to obtain statutory clearances, i.e., Forest clearance and Environment clearance before submission of the DPR to the CWC for approval. Delay in rectification of the deficiencies including the design parameters of the project contributed to delays in completion of the project construction and achievement of intended benefits.

(ii) The DPR approved by CWC in 2009 was not complete in all respects. Audit observed the following deficiencies in the DPR:

a) The CWC guidelines stipulated that modern techniques like remote sensing, satellite imagery, etc. shall be used for collection of data during survey. The aerial surveys were to be conducted wherever necessary, for better appreciation of the project area. The Department had not used any of these methods. It relied upon only topographical sheets of Survey of India and field surveys conducted by the Department.

Government accepted that the Department did not use modern techniques and aerial survey.

b) The Department proposed to bring the already existing command areas under various medium and minor irrigation projects, under the command area of this project. However, the details of command area under existing projects were also not mentioned in DPR.

c) The DPR did not mention the complete details of land required for each project work; head works, right main canal, left main canal and connectivities. It also did not contain the details of land to be acquired for Rehabilitation and Resettlement (R&R) for the Project Affected Families (PAFs).

The Government reply is silent on details of command area under medium and minor irrigation projects.

2.1.8 Project Cost

The Department in its DPR 2005 estimated the project cost as ₹10,151.04 crore. CWC approved the DPR in the year 2009. The Department submitted a revised DPR in 2010 for ₹16,010.45 crore. The Department had incurred an expenditure of ₹5,549 crore during the period 2004-05 to 2013-14. The

expenditure incurred on activities prior to approval of DPR was ₹1,889.77 crore (works: ₹1,085.41 crore and lands: ₹804.36 crore).

The Polavaram Project Authority (PPA) has to oversee the project construction and release of funds. The GoI had agreed to bear the expenditure incurred beyond April 2014 on the irrigation component of Polavaram Project. As per existing arrangement, the GoAP would execute the works with the funds from the State budget. On receipt of the claims, GoI would reimburse the expenditure incurred on irrigation component to GoAP through PPA.

(i) GoAP during the period April 2014 to July 2017 incurred an expenditure of ₹6,598.70 crore on irrigation component of the project. GoI through the PPA reimbursed to GoAP ₹3,349.70 crore, as shown below:

Table 2.2 - Expenditure by GoAP and reimbursement by GoI

(₹ in crore)

Year	Expenditure incurred by GoAP	Amount reimbursed by GoI
2014-15	439.48	245.00
2015-16	1868.30	590.00
2016-17	1700.21	2514.70
2017-18 (up to July 2017)	2590.71	0.00
Total	6598.70	3349.70

(Source: Records of the Department)

There was a short reimbursement of ₹3,249 crore. The Department had not submitted the details of expenditure of ₹1,407.64 crore on land acquisition and R&R to the PPA. **This amount was not reimbursed by the PPA due to non-submission of details by the Department.** Audit observed that the Department does not have a system to promptly capture, classify, consolidate and report the expenditure on land acquisition and R&R. The reasons for short reimbursement of the remaining amount of ₹1,841.36 crore were not on record.

As per National Projects Guidelines, a Memorandum of Understanding (MoU) needs to be concluded between GoAP and GoI regarding procedure for release of funds. Audit observed that the parties concerned did not sign any MoU even after more than three years from the date of declaration of the National Project. The parties also did not lay down the procedures to be followed for submission of claims to the PPA and the methodology of checking the claims and reimbursement. The parties had not yet fully streamlined the reimbursement process. The reasons for non-entering into MoU were not evident from the records made available to Audit.

Government replied that the details of expenditure on land acquisition and R&R up to November 2017 had been submitted to PPA for reimbursement. It

further stated that the draft MoU had been submitted to GoI. The reply did not state the specific reasons for non-conclusion of MoU till December 2017.

(ii) The PPA in its meeting in March 2015 and also in the subsequent letters³ asked the Department to submit the revised cost estimates at current price levels. The Department had submitted (July 2017) cost revision proposals in respect of the head works of the project (including R&R, land acquisition and power house component) for ₹47,112 crore with the price level of 2013-14. It had not submitted the revised cost estimate of Right and Left main canals to PPA. However, the Department had internally worked out the revised cost and approved the cost of estimate of ₹ 8,021 crore⁴ for these canals. Further, the project had a total irrigation potential of 7.20 lakh acres, the Department had not prepared the estimates for 3.28 lakh acres of distributary network in the revised estimates. **If the revised cost of all the above project components are taken into account, the total project cost would be ₹55,133 crore apart from the cost of distributary network which was not yet worked out by the Department.**

Table 2.3 – Details of increase in project cost

(₹ in crore)

Component of the Project	Cost as per DPR 2005	Cost as per DPR 2010	Cost as per latest estimates
Head works	3,931.53	6,600.56	11,638.20
Left Main Canal	856.55	1,472.05	3,024.66
Right Main Canal	1,273.82	2,135.09	3,167.86
Power	2,192.71	2,865.49	4,171.74
Works Total	8,254.61	13,073.19	22,002.46
Land acquisition and R&R	1,896.43	2,937.26	33,130.13
Total	10,151.04	16,010.45	55,132.59

(Source: Project DPRs and records of the Department)

The cost of works (head works, connectivities, left main canal and right main canal works) had increased from ₹8,255 crore to ₹22,002 crore mainly due to revision of rates, changes in designs, price escalation, etc. as discussed in Paragraphs 2.1.9.2 (iv) and 2.1.10 (i). In the DPR 2005 and DPR 2010, the estimated cost of land acquisition and resettlement and rehabilitation of project displaced persons constituted only 18 *per cent* of the total project cost. In the latest (July 2017) estimates, their cost constituted 60 *per cent* of the proposed project cost. It increased from less than ₹3 thousand crore to more than ₹33 thousand crore. The cost increased mainly due to increase in the cost of land as well as introduction of Right to Fair Compensation and Transparency in

³ The PPA letters dated 01.02.2016, 16.02.2016, 06.09.2016 and 25.04.2017.

⁴ RMC revised estimate: ₹ 4375.776 crore + LMC revised estimate: ₹ 3645.15 crore.

Land Acquisition, Rehabilitation and Resettlement (RFCT LARR) Act – 2013. The project is scheduled for completion by June 2019.

Government replied that the approval of revised cost and reimbursement was pending with Government of India.

2.1.9 Land Acquisition and R&R

2.1.9.1 Land Acquisition (LA)

(i) Progress of land acquisition: The Department was to acquire the lands for the project works, for submergence⁵ area and for R&R measures⁶. The Department retained the responsibility of identification of land that would come under submergence. Department to a large extent relied on its Engineering Procurement and Construction (EPC) contractors for identification of lands required for the works. The Commissioner/ Project Administrators (R&R) had the responsibility of identification of lands for providing R&R to PAFs. The details of land acquired as per the earlier Land Acquisition Act 1894 and RFCT LARR Act 2013 and the balance land to be acquired are as follows:

Table 2.4 – Land acquisition details

Component	Total land required for the project (in acres)	Land acquired as per LA Act 1894		Land acquired as per RFCT LARR Act 2013		Balance land to be acquired	Estimated cost (₹ in crore)
		land acquired (in acres)	Expen-diture (₹ in crore)	land acquired (in acres)	Expen-diture (₹ in crore)		
Submergence	103585.21	54448.69	356.67	13127.50	1588.49	36009.02	4095.07
Land to PAFs R&R Centres	37163.93	9229.95	118.80	1103.65	788.61	26830.33	2728.76
Works	24682.33	22515.81	631.09	2166.52	719.27	0	0
Total	165431.47	86194.45	1106.56	16397.67	3096.37	62839.35	6823.83

(Source: Information furnished by the Special Collector (LA), PIP, Rajahmahendravaram)

Audit observed that the Department, in its DPR, did not provide complete details of extent of land required for each project work; head works, right main canal, left main canal and connectivities. Department awarded the project works without identifying/ acquiring the required land. Department, instead entered into EPC contracts, conditions of which stipulated that agencies have to conduct detailed survey and investigations. The EPC Agencies would

⁵ The areas that are going to be inundated due to impounding of water into the project.

⁶ This includes allotment of land to the Project Affected Families (PAFs) and for setting up R&R centres for them.

submit proposed alignments/locations to the Department for approval. Agencies, after receiving such approvals, would identify the land and submit the land plan schedules to the Department. After receipt of Land Plan schedules from contractors, the Department would conduct survey of the identified land jointly with the LA authorities and contracting agencies. The Department, thereafter, would place indents with the LA authorities for initiating the LA process. Department would hand over the acquired land to the agencies for the execution of the works. Audit observed that this system led to acquisition of land in piece-meal manner. It is seen from the records that Department had sent 2 to 19 indents to LA authorities in respect of connectivities and canal packages.

As per the EPC agreements, the alignments of canals were to be finalized within six months, which was the first priority in the Project. However, there were abnormal delays in finalizing alignments of canals. The Department had to give extension of time (EOT) for completion of balance work portions on multiple occasions. The department had given EOTs due to delay in obtaining forest clearances, delay in LA and R&R and court cases. This system resulted in delay in execution of works and contributed to increase in costs.

Department awarded Right Main Canal works in seven packages in October 2004 with stipulation to complete by October 2006. It awarded Left Main Canal works in eight packages during March 2005 to March 2006 with stipulation to complete in 24 months. Audit observed that Department could not ensure acquisition of the required land within the original agreement periods in any of these 15 packages. Out of the total land of 22,891 acres acquired for the canal works, the Department acquired only 13,614 acres within the original agreement period of two years. It acquired the remaining 9,277 acres after completion of the agreement period. The delay in acquisition of land ranged between 6-120 months.

Government replied that almost 99 *per cent* of the land had been acquired for works. In respect of submergence area, the LA and rehabilitation of PAFs were being taken up in line with the progress of works. It also stated that the land for R&R would be identified and acquired by the R&R authorities duly locating the R&R centres as per the consent of villagers. However, the fact remains that the Department/contractors failed to identify and acquire land within the original agreement period. This led to delay in completion of the Project works.

(ii) Utilization of lands acquired for R&R centres: The Department, during 2005-06 had acquired 596.38 acres in East Godavari district for distribution to PAFs⁷ against their lost lands. Audit observed that the Department utilized

⁷ 56 villages in three mandals i.e., Addateegala; Devipatnam and Gangavaram

only 104.31 acres of land so far and left 492.07 acres of land unutilized. This was because the Department could not convince the PAFs who did not agree for construction of R&R centre in that area. Thus, the expenditure of ₹1.72 crore incurred on acquisition of this land had not fulfilled the desired objective of R&R.

Government replied that the R&R action plan was being implemented in a phased manner and all the lands acquired would be utilized to full extent. However, the Department had not utilized the land of 492.07 acres even after 12 years of acquisition.

(iii) Lapsing of LA notifications: Under Section 11 and 11A of the LA Act 1894, the Collector shall make an award within a period of two years from the date of publication of the declaration. It also stipulated that if no award is made within that period, the entire procedure for the acquisition of land shall lapse.

Land Acquisition Officer (LAO) issued Draft Notifications (DN) (July 2012-October 2013) for acquisition of land under submergence area of project. The total extent of land was 67.73 acres including structures⁸ thereon constructed on Government lands in eleven villages⁹ in Devipatnam Mandal, East Godavari District. The LAO issued Draft Declarations¹⁰ (DD) during January 2013 to January 2014. Audit observed that Department/LAO could not obtain the valuations for the structures to be acquired, from the departments¹¹. As a result, the LAO could not pass the LA awards resulting in lapsing of DD. Consequently, the Revenue Department had to issue fresh Preliminary Notifications (PN) during June - July 2016. Audit observed that the expenditure of ₹2.66 crore incurred on process of the DN and DD during 2012-14 had become wasteful besides continued delay in acquisition of the proposed land.

Government accepted this and replied that the District Collector has called for explanation from the LAO and the R&B authorities on the delays in submission of valuation reports.

⁸ AC sheet house with cement bricks, thatched house with mud walls and thatched house with brick walls, etc.

⁹ Chalakaveedhi H/o Manturu; Dandang; Ganugulagondi; Madipalli; Mettaveedhi; Mulametta; Mulapadu H/o Toyyeru; Pudipalli; Toyyeru Agraharam; Toyyeru and Yenugulagudem

¹⁰ If any particular land is needed for a public purpose, a Draft Declaration (DD) is issued about the intended acquisition after hearing objections of interested persons and conducting necessary enquiries.

¹¹ Roads & Buildings Department, Forest Department and Horticulture Department

2.1.9.2 Implementation of Rehabilitation and Resettlement (R&R)

(i) Identification of project affected villages and families: The proper assessment of the project affected villages and families were important for planning the R&R activities under the project. As per the DPR, 276 villages were coming under submergence in Andhra Pradesh. The Department had notified (July 2005) 412 villages as affected villages. The Department later (February 2006) realized that 136 out of the 412 notified villages were not coming under submergence but were falling in the alignment of canals. The Government issued orders for providing R&R benefits to 565 tribal families in three villages during 2012 to 2016 as they were falling in the alignment of canals. GoAP in January 2017 accorded permission to the Commissioner (R&R), WRD for notification of 92 additional villages. As per the latest figures (May 2017) the total number of villages coming under submergence was 371.

Department in its DPR 2005 mentioned that 44574 families would be affected under the project. Audit observed that as per the latest figures (November 2017) available in the records of the R&R Commissioner, 105601 families would be affected by the project.

Thus, the assessment of project affected villages and families by the Department at the time of preparation of DPR was inaccurate. Further, the Department took nearly 11 years for identification of the affected villages and families because of improper planning.

The Government replied that 276 villages were initially notified for R&R and that this number had increased to 371 due to identification of additional villages after conducting detailed Full Reservoir Level (FRL) survey. The reply confirms the audit observation that the number of villages was not accurately identified at the time of DPR. The reply is silent on the abnormal delays in identification of all the villages coming under submergence.

(ii) Progress of R&R activities: Polavaram reservoir, once completed is designed to store 194 TMC¹² of water. The FRL of the dam is + 45.72 M. Ministry of Tribal Affairs (MoTA) accorded R&R clearance. It stipulated that the GoAP should ensure that the R&R plan was to be completed within a specified time schedule before submergence in any area starts taking place. The Department planned to implement R&R starting from the villages located in the working area of the dam initially and then going to the villages in the higher contours in a phased manner. **Audit observed that as of March 2017, the Department was yet to rehabilitate 96 per cent of the Project Displaced Families (PDFs).**

¹² TMC – Thousand Million Cubic feet

Table 2.5 – Number of PDFs rehabilitated and yet to be rehabilitated as of March 2017

Contour level ¹³	Storage capacity at this contour level	Total PDFs to be rehabilitated		PDFs rehabilitated so far		Balance PDFs	
		No. of villages	No. of PDFs	No. of villages	No. of PDFs	No. of villages	No. of PDFs
+35.00 M	30 TMC	27	9204	15	4069	12	5135
+41.15 M	120 TMC	64	11552	-	Nil	64	11552
+45.72 M	194 TMC	280	84845	-	Nil	280	84845
Total		371	105601	15	4069	356	101532

(Source: Records of the Commissioner (R&R), Vijayawada)

Department as of March 2017 rehabilitated only 4,069 PDFs out of the total 1,05,601 PDFs identified for rehabilitation. Audit pointed out that even if the Department completes the dam works by March 2018 as targeted, it would not be able to store even 30 TMC of water in the reservoir. The Department had implemented R&R in respect of only 15 out of 371 villages. The Department obtained approval for R&R plans in respect of 164 villages from the Chief Commissioner of Land Administration only in August and October 2017. Department is yet to finalize R&R plans in respect of the remaining 192 villages.

The Department had not furnished the relevant records/information relating to implementation of R&R to Audit. As a result, Audit could not analyze the reasons for the abnormal delays in R&R implementation.

Government replied that R&R action plans were prepared to be implemented in four phases simultaneously with the progress of works. It stated that at present PDFs in 14 habitations under working area had been rehabilitated to new R&R colonies under Phase-I and the R&R activities under Phases II to IV were in progress. The reply is contrary to the fact that the progress of R&R activities was not in line with the progress of works. The Department could relocate only 15 out of 371 villages in the last 12 years. It was yet to implement R&R in 356 villages though the revised target date for completion of the project was June 2019.

(iii) Utilisation of R&R centres: Department could not succeed in relocating PDFs to two R&R centres it constructed in 2013-2014 at Nagalapalli and P.Gonduru villages in East Godavari district (July 2017) as it had not paid the benefits¹⁴ as per RFCT LARR Act 2013. The expenditure of ₹15.34 crore

¹³ Contour levels represent the levels/points of equal elevation (height) above a given level, such as Mean Sea Level (MSL).

¹⁴ R&R monetary benefits, additional gratuitous relief and civic amenities.

incurred on development of these R&R centres remained unfruitful besides non-rehabilitation of the PDFs of these two villages.

Government replied that it had sanctioned additional gratuitous relief to these villagers in February 2016. Payments were already made in majority of eligible cases and the remaining dues, if any, would be paid by December 2017. It also stated that after series of meetings, the PDFs had been persuaded for relocation to new colony which would be done by December 2017.

The fact remains that the intended purpose of constructed R&R centres could not be achieved till date.

(iv) Impact of delay in relocation of villages: The Department awarded (March 2013) the work of construction of Spillway, Earth Cum Rock Fill (ECRF) Dam and excavation of foundations of power house, approach channel, etc. to a contractor at a total agreement value of ₹4,054 crore. The contractor had showed poor progress of work stating that the Department did not complete land acquisition/R&R activities in the eight villages¹⁵ out of 14 in the dam area. The contractor sought (June/August 2015 and March 2016) revision to agreement rates with current schedule of rates. The Government accepted the request. The Department concluded (October 2016) a revised agreement (with 2015-16 rates) with the agency for ₹5,385.91 crore, which was ₹1,331.91 crore (i.e. 32.85 per cent) higher than the original agreement value (2011-12 rates). Thus, the delay in shifting of villages in dam area led to increase in cost of work by ₹1,331.91 crore.

Government replied that the villages in working area were paid R&R benefits as per the R&R Policy 2005. But later they demanded benefits as per the new RFCT LARR Act 2013 and were reluctant to relocate to R&R centres. Government stated that in view of the importance of the project, it had approved for payment of additional gratuitous relief of ₹115.5 crore. This action led to improvement of progress of work and avoided further cost increase. The reply is contrary to the fact that the failure to relocate the villages in a timely manner not only hampered the progress of the work, but also led to increase in cost by ₹1,331.91 crore.

(v) Inter State issues relating to R&R: The Godavari Water Disputes Tribunal (GWDT) Award-1980 with regard to submergence of bordering villages, gave two options to the Odisha and Chhattisgarh (the then Madhya Pradesh) States – (a) to receive compensation from Project authorities for the submergence areas; or (b) the Odisha and Chhattisgarh States may opt for construction of embankments in their areas by Andhra Pradesh Government to

¹⁵ Ramayyapeta, Mamidigondi, Devaragondi, Pydipaka, Thotagondi, Chegondapalli and Singanapalli villages in Polavaram Mandal of West Godavari District and Angaluru village of East Godavari District

prevent submergence. Ministry of Tribal Affairs (MoTA) had given R&R clearance (April 2007) for the project on the report given by the CWC that the GoAP had given assurance that it would bear the cost of embankments. The GoAP would take every care in the design and construction of protective bunds to ensure that the project would not affect any of the villages. The conditions stipulated by the MoTA inter alia included that the GoAP and the CWC should ensure that no submergence/ displacement of people takes place in the territories of Odisha and Chhattisgarh States. Audit observed that GoAP had not obtained any response from the Governments of Odisha and Chhattisgarh till December 2017 on conducting public hearings for construction of protective embankments.

As per the construction programme given in the DPR (2005), the Department was to commence the construction of protective embankments in 2011-12 and to complete by 2014-15. The Department till date (July 2017) had not even started the construction of protective embankments to prevent submergence of 4 border villages of Chhattisgarh and 8 border villages in Odisha States. Audit observed that the progress of construction of the embankments bordering Chhattisgarh and Odisha is not in tandem with the scheduled construction programme.

The Government replied that public hearings for construction of protective embankment are to be conducted by the concerned States and it was reminding these States frequently. It further replied that a Joint Committee of MoWR of GoI, WRD of GoAP, Chhattisgarh and Odisha had been formed. The Committee intends to resolve the inter-state issues. The Committee held its first meeting in June 2016 at New Delhi. In respect of Chhattisgarh state, it replied that necessary amount had been deposited for finalizing the submergence area in that State and the joint survey was in progress. The reply confirms audit contention.

2.1.10 Delay in finalization of Designs

Department awarded 23 works relating to head works and canal works under Polavaram project during 2004-06. In the agreements, the Department stipulated 36 months for completion of head works and 24 months for completion of canal works. As per these contract agreements, all the head works and the canal works were to be completed by July 2010 and March 2008, respectively. However, out of the 23 package works entrusted under the project, only one could be completed up to July 2017. The rest of 22 are yet to be completed despite time over run of 9 to 10 years. Audit observed that the deficiencies in finalization of designs and drawings contributed to the delays in completion of the project works, as discussed below:

(i) Spillway and ECRF dam: The CWC, as per the GWDT Award - 1980, had to decide the design parameters of Polavaram dam and its operation schedule. The Department, in the DPR 2005, proposed the spillway of Polavaram dam with a designed discharge capacity of 36 lakh cusecs (cubic feet per second). Department without waiting for the finalization of designs by CWC, awarded the works during March 2005 to August 2006. The Department, under EPC turnkey contract system, awarded the works of spillway and ECRF dam to two different contractors in two package works for ₹633.6 crore and ₹884 crore, respectively. The CWC, during scrutiny of DPR, directed the Department to work out the Probable Maximum Flood (PMF) as per IS Code 11223-1985. After further studies, the CWC/ Department worked out the PMF at 50 lakh cusecs and accordingly, increased (September 2006) the discharge capacity of spillway. Since the EPC contracts already awarded were fixed price contracts, the contracting agencies refused to take the additional cost arising due to increase in scope of work. **GoAP took nearly three years to take a decision in the matter and closed the contracts in August 2009. Progress of work at the time of closure of contracts in respect of Spillway and Earth Cum Rock Fill (ECRF) dam was 17.29 per cent and 1.68 per cent respectively.**

The Department in August 2009 invited tenders for a composite package for the balance work of Spill way and ECRF. It postponed the tenders due to non-finalization of estimates in respect of the Power house component. It invited bids again in June 2011, but cancelled again due to litigations and allegations regarding the eligibility of the lowest bidder. Department invited bids once again in April 2012 and awarded the work in March 2013 at a contract value of ₹4,054 crore. There was a cost escalation of ₹2,331.27 crore due to time overrun of three years as well as due to change in designs.

The agreement with the new contractor of Spill way and ECRF dam involved completion of the detailed survey, investigation and preparation of designs/ drawings. It also stipulated that the contractor had to complete these works in six months (i.e. by September 2013) and execution in 60 months (i.e. by March 2018). **Audit observed (June 2017) that even after four years, the Department had not finalized designs/drawings fully in respect of the dam works.** Audit called for the details of the designs¹⁶ but was provided partial information which shows that it finalized the designs of radial gates in January/May 2017 and was yet to finalize designs of four blocks of the spillway. The remaining designs and drawings were either under departmental scrutiny or the contractors had not submitted to the Department. The delay in finalization of designs and drawings could lead to further delay in completion of work.

¹⁶ The details regarding the number of designs required for the works, the number of designs approved, under examination and yet to be submitted by the contractor.

The Government replied that the original DPR was prepared considering maximum flood discharge of 36 lakh cusecs as was agreed to in the Interstate Agreements and submitted to CWC for approval. Meanwhile the Government took a decision to go ahead with the work and tenders were finalized. During scrutiny of the DPR, the CWC insisted that the dam safety should be checked for PMF of 50 lakh cusecs and finalized the design. The reply confirms the audit observation that entrustment of dam works without finalization of designs by CWC contributed to delay in their completion.

As regards delays in finalization of designs after re-award of works, Government replied that in the EPC contract system, the EPC agency was responsible for submission of detailed designs/drawings. It stated that approval of designs involved conduct of detailed surveys, investigations, studies, model studies, etc. and review by Dam Design Review Panel (DDRP). Government further stated that the design approving authorities sought various additional data which was to be attended by the EPC agency. Hence time lines were to be revised from time to time for the approval of designs. The reply is not in line with the fact that in the agreement concluded with the EPC agency, the Department stipulated that the designs were to be finalized by September 2013. But, the same were not finalized even as of July 2017.

(ii) Canal works:

(a) Department initially estimated discharge capacity of Right Main Canal (RMC) as 330.20 cumecs¹⁷. The GoAP had in July 2004 accorded administrative approval for RMC with a discharge of 396.43 cumecs. Department in October 2004 increased the discharge capacity to 497.299 cumecs. Department initially estimated the discharge capacity of LMC as 212.10 cumecs. The GoAP accorded (September 2004) administrative approval with a discharge of 396.43 cumecs. The Department subsequently increased the discharge capacity of Left Main Canal (LMC) to 497.277 cumecs. However, there was no increase in the irrigation potential of 7.20 lakh acres targeted under the project even after increasing the capacities of LMC and RMC.

Government replied that the capacity was increased mainly to take care of rush supplies due to erratic rainfall, drinking water aspect and upland areas irrigation. However, audit observed that the increased capacities were not part of the project proposals contemplated in the DPR.

(b) The Department in the DPR submitted to CWC in 2005, stated that it had finalized the alignments for the right and the left main canals. It also stated that it had carried out detailed final survey for the entire canal length and the

¹⁷ Cubic meters per second.

structures enroute and had prepared detailed designs and estimates. Audit observed that despite this, EPC contracts entered into by the Department allowed the EPC agencies to conduct detailed survey and investigations and propose alternative alignments/designs. This led to changes in canal alignments during the execution of works. Audit observed that total variation in length of right main canal and left main canals was 9.672 Km and 5.20 Km respectively. Audit observed that in the DPR, the Department proposed 478 structures¹⁸ on the canals. However, the number of structures to be built increased to 703 during execution.

Regarding variations in lengths of canals, Government replied that it was due to approval of revised alignments keeping in view safety of canals. The reply is not acceptable as the Department was to take into account these issues in the planning stage itself.

(c) As per the agreement conditions, the contractors of canal works were required to complete the preparation of designs and drawings within six months i.e., by April 2005 for RMC and September 2006 for LMC. Audit observed that there were abnormal delays in finalization of the alignments/designs in respect of the canal sections and the structures en-route the canals. The delays ranged between 3 months to 10 years in finalization of canal alignments. As regards finalization of designs of structures, as per the partial information furnished by the Department, there were delays ranging between 10 months to 12 years in approval of designs in respect of 139 out of 251 structures of RMC. In respect of LMC, there were delays ranging from 2 to 12 years in finalization of 123 out of 452 designs. **Even as of July 2017, out of a total of 703 designs of both the canals 233 designs were yet to be finalized.** Out of which, the contractors were yet to submit 102 designs as tabulated in Table 2.6:

Table 2.6 - Progress of the designs approval of the canal structures

Canal	Total no. of designs of structures	Designs submitted by the contractors	Designs approved by the Department	Designs under scrutiny with the Department	Designs yet to be submitted by the contractors
RMC	251	240	238	2	11*
LMC	452	361	232	129	91
Total	703	601	470	131	102

* These include nine designs returned to the contractors by the department and the contractors were yet to resubmit them.

(Source: Records of the Department)

¹⁸ These are Cross Masonry and Cross Drainage (CM&CD) works which inter alia include cross regulators, offtake sluices, aqueducts, under tunnels, super passages and bridges.

The Department awarded the works of connectivities to Right and Left Main Canals in six packages¹⁹ to contractors in March 2005 under EPC contract system. As per the agreement conditions, the contractors were required to complete the preparation of designs/drawings within two/three months (i.e. by May/June 2005) for Right Side and Left Side Connectivities, respectively. Audit observed that even after 12 years of commencement of works, the Department could not ensure the approval of the designs. **Audit observed that in connectivities works, the delays in approval of designs ranged from 4 to 138 months. Out of total 45 designs, 12 designs were yet to be approved as on July 2017.** The overall progress in respect of connectivities work was *55 per cent*.

Regarding delays in finalization of designs and drawings of canals, Government replied that detailed field data was required for their finalization and the contracting agencies had submitted the designs/drawings in piece meal manner. It further added that the EPC contractors had also to attend to the remarks of the design approving authorities. The reply is not tenable as the canal agreements stipulated that designs/drawings were to be finalized in six months.

With regard to delay in approval of designs (connectivities work), the Government replied that delays were due to involvement of Forest clearances for tunnel works. The reply is contrary to the fact that the MoEF had accorded Forest clearance for the project in the year 2010 itself. But, the Department failed to finalize designs even after seven years since then.

(d) As per the agreement conditions of connectivities, RMC and LMC packages, the EPC contractors were to obtain timely clearances. The contractors had to obtain the clearances from the concerned authorities where the canal is crossing Highways/other Roads, Railway lines, Oil/gas/water pipe lines, etc. Audit observed that the contractors had not obtained timely clearance from the Departments/agencies concerned. They could not complete the shifting of utilities despite time over run of nine years. As of July 2017, clearance for two Highway crossings, two Railway crossings, two oil/gas crossings and three crossings of electrical lines were pending from the concerned departments.

Government replied that the works estimates had provided for construction of four lane bridges, but the Highways authorities later insisted for construction of wider bridges. Hence, it had issued orders to delete the National Highway (NH) crossings from the agreements and proposed to award the works to other agencies by calling tenders which led to delays in their completion. The reply

¹⁹ Three packages of Right Side Connectivities (package Nos. 62, 63 and 64) and three packages of Left Side Connectivities (package Nos. 65, 66 and 67).

does not justify the abnormal delay of nine years. Further, the reply was silent on the delays in shifting of other public utilities.

Audit observed that in all the above cases the Department could not resolve the design issues during the contract period. Audit observed that the EPC contractors attributed the delays to the Department and insisted for payments with latest rates citing delays in land acquisition, increases in quantities. It was further noticed that though the department awarded the contracts on firm/fixed price, the contractor represented multiple times for revision of agreement rates. Some of the contractors either slowed down the works or suspended the works all together.

Audit pointed out that the award of works without finalizing designs led to delay in execution and contributed to increase in the cost of Spillway and ECRF dam. Similarly, award of works without finalizing alignments and detailed designs of the canals and connectivities led to delay in execution and contributed to increase in the cost of works.

2.1.11 Execution of works

Department in its DPR 2005 proposed to complete head works in 12 years and the canal system in 15 years and realize the intended irrigation potential by 15th year. It awarded all the works during 2004-2006 in 23 packages²⁰.

2.1.11.1 Head Works and its connectivities

The head works consists of the works relating to construction of Dam (Earth cum Rock Fill (ECRF) Dam and Spillway) and its connectivities (i.e., the linkages between the dam and canals).

The Department (March 2005 and August 2006) awarded the works relating to the Spillway and ECRF dam to two contractors. Due to changes in designs, etc., the Department had pre-closed (August 2009) the agreements with the contractors on mutual consent. As per the terms of pre-closure, a high power committee had to be constituted by the GoAP to settle the accounts of the contracts within 120 days from the date of closure of contract. The two contractors had then submitted claims for ₹335.62 crore and ₹246.61 crore in September 2009. The State Level Standing Committee appointed by the State Government in January 2011 agreed to pay ₹6.96 crore and ₹12.43 crore as full and final settlement of accounts and claims of the contractors. Audit observed that even after seven years, the department has not settled the accounts of the contractors.

²⁰ Initially the total works awarded were 23 in number. Due to pre-closure of two contracts and awarding of them as a single contract, the total number of contracts now stands at 22.

The Department replied that the contractors had approached the Honorable High Court AP which directed (April 2015) that the department has to constitute a High Power Committee under the chairmanship of retired Supreme Court Judge to settle the accounts and claims of the contractors. Audit observed that the Government is yet to take a decision on the department's request for permission to file Inter court Appeal in the High Court against the judgment of the High court.

Government replied that the settlement issues were not yet finalized.

2.1.11.2 Violation in Agreement clauses

Department invited the bids for the Spillway and ECRF Dam work (as a composite package including foundations of power house) and awarded the work to M/s Transstroy - JSC EC UES (Joint Venture) in March 2013 for a contract value ₹4,054 crore. As per the agreement, the contractor was to complete the works by March 2018.

(i) Revision of rates during agreement period: Audit observed that the contract for head works was concluded with the contractor after inviting competitive tenders. As per the tender/agreement conditions, the contract was for a firm price and was not subject to any claims on any ground whatsoever of the contractor. The agreement also stipulated that no claim for compensation on account of delays/hindrances to work from any cause whatsoever would be admissible. In the instant case, the agreement period was up to March 2018. Audit, however, observed that the Department increased (October 2016) the agreement value by ₹1,331.91 crore on the ground of delays in land acquisition/R&R (as stated in Paragraph 2.1.9.2 (iv)). The increase in contract value during the currency of the original agreement period was violative of contract conditions and against the spirit of competitive bidding since similar benefit was not offered to the other prospective bidders.

(ii) Collection of performance security: As per the agreement conditions of a contract, the contractor had to provide the Bank Guarantee/Demand Drafts of five *per cent* of the agreement value to the Department towards performance security. Audit observed that though the Department had revised the agreement value from ₹4,054 crore to ₹5,385.91 crore, it did not obtain additional performance security of ₹66.59 crore (on the increased agreement value of ₹1,331.91 crore) from the contractor. Thus, Government interest was not adequately safeguarded against any default by the contractor.

(iii) Procurement of Steel: As per the agreement conditions, the contractor had to make his own arrangements for procurement of tested steel required for the work. Audit observed that the Department paid (June 2017) an amount of

₹25.37 crore directly to suppliers for supply of steel for the work based on the request received from the contractor. Such payments were against the agreement conditions and was undue benefit to the contractor.

(iv) Payment of Customs Duty by the Department: The agreement conditions stipulated that the contractor shall make his own arrangements to equip himself with all machinery/tools and plants for speedy and proper execution of the work and the Department does not undertake responsibility towards their supply. The agreement did not have any clause for payment of Customs Duty by the Department on the machinery/equipment imported by contractor. The Government, contrary to the agreement conditions had permitted (May 2017) for release of ₹7.50 crore towards payment of Customs Duty. The Customs Duty pertained to concreting equipment imported by the contractor and was recoverable from the subsequent Running Account (RA) bills. The Department had paid (June 2017) Customs Duty of ₹5.22 crore. Payment of Customs Duty on behalf of the contractor was violative of the contract conditions and undue benefit to contractor.

(v) Payment towards land cost of dump area: As per the agreement conditions, the responsibility for arranging the land for borrow area and dumping areas rests with the contractor. The Department would not make any separate payment for procurement or otherwise. The contractor's quoted price was inclusive of land cost and the contractor shall hand over the land to the Department after completion of work. **Audit observed that the Department acquired land to the extent of 203.74 acres at a cost of ₹32.66 crore for dumping the excavated earth contrary to agreement conditions.**

(vi) Deferment of recovery of mobilization advance: As per the agreement conditions, the contractor was eligible for an interest bearing mobilization advance (MA) of 10 *per cent* of agreement value. Accordingly, the Department had paid (April 2013 to May 2017) a total MA of ₹404.86 crore to the contractor. As per the agreement conditions, the recovery of MA along with interest shall commence when the total value of work reaches 10 *per cent* of agreement value. Considering this agreement clause, the recovery was to commence from the Running Account (RA) Bill No.21 onwards. The Government, based on the requests of the contractor issued directions (June 2016) for postponement of commencement of recovery of MA and interest initially up to 25th RA bill. Government again postponed it in October 2016 and March 2017 extending the relaxations up to 32nd RA bill. Recently, in May 2017, the contractor again requested the Department for further deferment of recovery of MA and interest for another three months. Audit observed that so far, 34 RA bills were paid (June 2017) to the contractor for the work done amounting to ₹1,404.59 crore which works out to 26 *per cent* of the contract value. **As of June 2017, the Department was to recover a**

total principal amount of ₹187.05 crore and the accrued interest on MA of ₹109.28 crore. Audit pointed out that the deferment of recovery of MA was contrary to agreement conditions and conferred undue benefit to contractor.

(vii) Payment of interest free mobilization advance to the sub-contractor: The contractor, during the execution of the work, in December 2015, had sub-let a part of work related to construction of diaphragm wall costing ₹422.20 crore to another agency. In the agreement concluded with the main contractor, there was no provision of payment of mobilization advance to sub-contractors. The main contractor, in January 2017, expressed his inability to make advance payments to the sub-contractor due to severe financial crisis. The Government in February 2017 permitted the Department to make payment of ₹95 crore directly to the sub-contractor towards mobilization and machinery advance by granting exemption to contract conditions. The Department paid the amount in March 2017. **Audit observed that payment of MA to the sub-contractor directly that too interest free was an undue benefit to contractor/sub-contractor.**

As per the original agreement with the main contractor, the MA paid was recoverable with interest at Government borrowing rate (11 *per cent* per annum applied in this case). Audit observed that the MA to the sub-contractor was interest free and thus it was an undue benefit to the contractor. The interest foregone as of June 2017 worked out to ₹2.87 crore (considering the interest rate of 11 *per cent*).

With regard to the progress of construction, audit observed that only 31 *per cent* work was completed by July 2017 against 76 *per cent* work to be completed as per the milestone programme of the Department.

The Government replied that the above relaxations were given to expedite the Project. The reply further stated that the Government relaxed the relevant clauses of the agreement based on the request of the agency to overcome cash flow problems in the interest of smooth progress of the work and that there was no undue benefit to the contractor.

The fact remains that there was slow progress of work (31 *per cent*) despite relaxation to the agreement conditions given by the Government of Andhra Pradesh. Government needs to withdraw the concessions extended to the contractor, effect necessary recoveries and ensure that the work is executed strictly as per the agreement conditions.

2.1.11.3 Left and Right Main Canals

The Department awarded LMC works (*Appendix 2.1 (i)*) during March 2005 - March 2006 to be completed in 24 months (i.e. by March 2007 – March 2008).

The Department could not complete any of the eight packages in all respects. The overall progress of LMC was only 65 per cent till July 2017.

The Department awarded RMC works (*Appendix 2.1 (ii)*) in October 2004 with stipulation to complete by October 2006. The Department had yet to complete six packages. The overall progress of RMC was 91 per cent as of July 2017.

(i) Payments for pipeline crossings and shifting of electrical lines: As per the contract conditions of the RMC and LMC Packages, if the canal system is crossing HPCL or GAIL²¹ pipelines or any other pipelines, the contractor shall provide suitable crossing in consultation with the concerned authorities. The contractor was to provide these crossings either by himself or get them executed by the concerned authorities duly depositing the requisite amount. The contract price was deemed to include the cost of such crossings. The contractors were also required to bear the cost of shifting of electrical lines and damages occurred to public utilities.

Audit observed that the Department had paid an amount of ₹38.12 crore as detailed in Table - 2.7 below, on behalf of the contractors towards shifting of utilities on the canals:

Table 2.7 – Details of payments made by the Department for shifting of utilities

Pkg. no.	Agency to which the amount was paid	Purpose	Month of payment	Amount paid by department (₹ in crore)
RMC-2	GAIL	Pipeline crossing	May 2015	6.9
	HPCL	Pipeline crossing	May 2015	7.21
	APSPDCL	Electrical line shifting	May 2015	0.16
RMC-4	GAIL	Pipe line crossing	July 2015	5.48
RMC-5	GAIL	Pipeline crossing	June 2015	7.67
RMC-6	APSPDCL	Electrical line shifting	July/August 2015	0.93
	RWS Department	Restoration of damaged pipeline	August 2015/ March 2016	0.46
RMC-7	RWS Department	Restoration of damaged pipeline	October 2015	0.12
	APSPDCL	Shifting of electrical line	August 2016	0.07
LMC-1	GAIL	Shifting of LPG pipeline	June 2017	5.52
	HPCL	HPCL pipe line crossing at Km 18.537	November 2015	3.6
Total				38.12

GAIL - M/s Gas Authority of India Ltd.; **HPCL** - M/s Hindustan Petroleum Corporation Ltd.; **APSPDCL** - Southern Power Distribution Company of AP Ltd.; **RWS** - Rural Water Supply

(Source: Records of the Department)

²¹ **HPCL** - M/s Hindustan Petroleum Corporation Ltd.; **GAIL** - M/s Gas Authority of India Ltd.

The amount of ₹38.12 crore was the liability of the contractors. However, the Department paid the amount on behalf of contractors. The Department had not recovered the amount from the contractor as on November 2017. The reasons for non-recovery were not on record.

Government replied that the amount on shifting of above utilities would be recovered from the respective EPC contracting agencies.

(ii) Levy of liquidated damages: The EPC agreements concluded with the contractors provided for levy of liquidated damages for the delays attributable to the contractors. Liquidated damages were leviable at the rate of one-twentieth of one *per cent* of the respective milestone financial programme value per calendar day or part of the delay for the period of delays subject to a maximum of 10 *per cent* of the contract value. Audit observed that the contractors had not completed the works within the contract period in any of the packages. **In three packages of RMC (package nos. 2, 5 & 6 of RMC) the contractors stopped the works for a period of three to six years despite availability of work front.** The Department failed to levy liquidated damages on the three contractors.

Government replied that it had considered all issues related to hampering of work and EOT had been granted from time to time.

However, granting of EOT without levying any penalty for the delay on the part of the contractors tantamount to relaxation of agreement conditions.

2.1.11.4 Distributory network

Distributory network is an essential component in any irrigation project to deliver irrigation water to the fields of farmers. The Polavaram project contemplates creation of irrigation potential of 7.20 lakh acres. Out of this, 3.92 lakh acres was being covered under Pushkara and Tadipudi lift irrigation schemes taken up to derive early benefits from Polavaram project. Audit observed that the Department was yet to take up the works of distributory network for the remaining 3.28 lakh acres.

Government replied that the entire canal network of these above lift irrigation schemes would become distributory network of the Polavaram Project. For the remaining ayacut, the GoAP and PPA were considering establishing of Micro Irrigation System (piped network) in place of open channel system due to increase in land cost. Audit however observed that micro irrigation was not part of the project proposals contemplated in the DPR. Further, as per the target dates, the works of Polavaram dam and canals were scheduled for completion by June 2019. To derive optimal benefits from the project, it was essential to develop distributory network by the time the project works are completed.

2.1.11.5 Quality Control

Assurance on the quality of works is a critical element in execution of a large scale project like Polavaram project. The EPC agreements concluded with the contractors contained provisions relating to Quality Control (QC) by the EPC contractors. The responsibility of quality assurance was with the QC wing of WRD.

(i) Third party quality control mechanism: After declaration of Polavaram project as a National Project, the PPA had advised (July 2016) the Department to have Quality Control Mechanisms through a third party. The PPA proposed to establish a third party quality control setup for Head works, Left main canal and Right main canal of Polavaram Project. The quality control mechanism inter alia provides for – i) utilization of existing labs at Head works, LMC and RMC, ii) training of candidates engaged in quality assurance by the Central Soil and Material Research Station (CSMRS), New Delhi in Quality control test procedure, recording, compiling and reporting of results, iii) entrustment of overall supervision and examination of the test results to CSMRS etc. **However, the Department had not engaged any third party agency for quality assurance, as of July 2017.**

Government replied that MoU between PPA and CSRMS is under process.

(ii) Quality Audit: As per conditions of agreement concluded (2013) with the EPC agency in respect of the spillway and ECRF dam, the Engineer-in-Charge/ Project Management Consultant (PMC) would conduct Quality Audit departmentally or by other organization. **However, the Department had not arranged for any such quality audit.** The reasons were not on record. The Polavaram Project Authority (PPA), constituted by GoI to oversee the implementation of the project, had engaged (July 2017) the CSMRS, New Delhi for conducting quality audit in respect of dam works. The overall progress of the Project was 50 *per cent* by the time of appointment of CSMRS (July 2017).

The Government replied that action was being taken for concluding MoU with CSMRS authorities for quality audit.

2.1.12 Monitoring mechanism

2.1.12.1 Monitoring of R&R activities

(i) State and Project Level Monitoring: As per the State's R&R Policy, the State Level Monitoring Committee should meet once in three months to review and monitor progress of R&R implementation in various projects in the State. Similarly, the R&R policy require that the Project Level Monitoring Committee meet at least once in two months. **However, Audit observed that**

only six meetings were conducted by the State Level Committee as against stipulated 24 meetings during the period 2012-2017.

Government replied that after introduction of the RFCT LARR Act 2013, it had constituted a State Level Monitoring Committee in February 2015 and the Committee had met twice in July 2017. Regarding Project Level Monitoring, the Government has not furnished any reply.

(ii) Setting up of LA and R&R Authorities: As per Section 51 of the RFCT LARR Act 2013, the Department had to constitute 'Land Acquisition, Rehabilitation and Resettlement Authorities' for speedy disposal of disputes relating to LA, compensation and R&R. The GoAP appointed (April 2016) 'Land Acquisition, Rehabilitation and Resettlement Authorities' in three regions of the State at Visakhapatnam, Vijayawada and Tirupathi. No evidence, i.e., records regarding the functioning of these authorities were made available to audit by R&R Commissionerate to show that these Authorities started functioning.

Government did not furnish specific replies to the audit observations. It did not furnish records to provide assurance that these authorities started functioning.

(iii) Ombudsman for R&R: As per R&R Policy, the Government shall appoint an Ombudsman for time-bound disposal of grievances of stake holders, arising out of the R&R Policy implementation. The R&R Commissioner did not furnish any record of such appointment.

Government replied that efforts were made for appointment of Ombudsman, but did not appoint any officer till January 2014. It further stated that after the RFCT LARR Act 2013, appointment of Ombudsman was not considered as three LA, R&R Authorities had been established to discharge functions of Judicial Court in nature as that of Ombudsman.

The fact remains that Government did not appoint ombudsman till 2014. Further, the Government/R&R Commissioner did not furnish any record to show that the LA, R&R Authorities were functioning.

(iv) Social Audit: As per the Section 44 and 45 of the RFCT LARR Act 2013, the Department was to arrange to conduct social audit in respect of R&R centres established for the benefit of PDFs. This was intended to ascertain the post-accommodation grievances of the PDFs, so that the respective departments address them. The R&R Commissioner had not furnished the details of any social audits conducted in respect of 20 R&R centres where the Department had relocated the PDFs. During the site visit with the

departmental staff, Audit found that there were several sanitation issues in many R&R centres which needed to be resolved.

Government replied that the District Collectors were requested to conduct post implementation Social Audit in consultation with the Gram Sabha in rural areas and municipality in urban areas.

2.1.12.2 Monitoring of compliance with Environmental/Forest clearance conditions

(i) The GoAP had formed (September 2009) a Committee for independently monitoring the implementation of Forest clearance conditions given by GoI. Audit observed that Committee held only two meetings (in May 2013 and July 2017) in the last seven years.

Government had not given any specific reply in this regard.

(ii) While according Environmental Clearance (October 2005) and Forest Clearance (In-principle approval in December 2008 and final approval in July 2010) for Polavaram project, the MoEF had stipulated certain conditions to the Department. Audit observed that there has been little progress in implementing these conditions.

- As per the conditions of Forest Clearance (December 2008), the Project area shall be demarcated on ground at the Project cost using four feet high concrete pillars inscribed with serial numbers. Audit observed that though the final approval of forest clearance was granted by GoI in July 2010, the demarcation was not completed even as of July 2017. **Out of 3,229 pillars to be erected for demarcation of the CA area, only 1,490 RCC pillars were erected (May 2017) leaving a balance of 1,739 (54 per cent) pillars yet to be erected.**

Government replied that the user agency has assured to complete the work by the end of April 2018.

- As per the Environmental Clearance (EC) conditions, the Department was to implement Catchment Area Treatment Plan (CAT) in 34,500 hectares of area. The CAT involved Biological/Vegetative Treatment (afforestation/re-vegetation, social forestry and vegetative barriers) and Engineering Treatment (construction of gully plugs, rockfill dams, percolation tanks, check dams and contour trenches). For implementing CAT, the WRD had deposited (August 2009) an amount of ₹21.05 crore with the State Forest Department. **Audit observed that there was no progress in implementation of Vegetative Treatment as of March 2017. In respect**

of Engineering Treatment, the progress was only 6.44 per cent as of July 2017.

Government replied that CAT was delayed due to transfer of records from Bhadrachalam to Kakinada forest Division. It also stated that the Forest Department was requested to take urgent action and ensure that the CAT plan is implemented as per time schedule.

2.1.13 Conclusion

Polavaram irrigation project, taken up with the objectives of providing irrigation benefits to 7.20 lakh acres, diversion of 80 thousand million cubic feet (TMC) water to Krishna river, supply of industrial water to Visakhapatnam town and supply of drinking water to villages and towns en-route, was scheduled to be completed by June 2019.

Audit findings indicate that completion of the project by June 2019 is at huge risk because of the following reasons:

Department's ability to enforce the contract conditions to complete the works on time was weak. Progress of execution of Spill Way and ECRF dam works, as of July 2017, was only 31 per cent. Department extended a number of concessions to the contractors in violation of contract conditions. Department's enforcement of contract conditions was also weak in respect of works related to connectivities, Left Main Canal and Right Main Canal. As of July 2017, the progress of works was 55 per cent, 65 per cent, and 91 per cent, respectively. Department extended a number of concessions to contractors for shifting of utilities on the canals. Department is yet to take up the works of balance distributary network under the project.

Department's inability to complete the design parameters of the Spillway and ECRF dam works in all respects before the award of contracts contributed to time overrun and cost overrun. Alignments for canals and the designs stated to be final and complete in the DPR proved to be incorrect. The contract conditions allowed the EPC agencies to survey and propose alternative alignments/designs.

Department's inability to identify the extent of land that had to be acquired had an adverse effect on the project time schedule and on the expenditure. GoAP, as of July 2017, was yet to acquire 36,009 acres that would be submerged.

Department did not clearly identify the number of project affected villages and families and did not adequately plan the required R&R measures and progress of works in respect of R&R. GoAP, as of July 2017, was yet to acquire 26,830 acres of land for this purpose. GoAP was yet to resolve the issue of

submergence of bordering villages with the Governments of Odisha and Chhattisgarh.

Polavaram is a National Project. GoAP would execute the works with the funds from the State budget. GoI, on receipt of claims, would reimburse the expenditure incurred on irrigation component to GoAP through Polavaram Project Authority (PPA). Audit observed that as of July 2017, GoAP has not submitted the details of expenditure of ₹1,407.64 crore on land acquisition and R&R. Audit observed that the Department does not have a system to promptly capture, classify, consolidate and report the details of expenditure on the project. This problem is more pronounced in respect of the expenditure on land acquisition, payment of compensation and rehabilitation works.

Audit observed that the parties (GoI and GoAP) had not signed any Memorandum of Understanding specifying the role to be played by each party. The parties had not laid down the procedures to be followed for submission of claims to the PPA and the methodology of checking the claims and reimbursement. The parties had not yet fully streamlined the reimbursement process.

2.1.14 Recommendations

Audit recommends that:

- *The Department should improve its ability to enforce the contract conditions in the execution of project works to avoid any further time overrun and cost overrun.*
- *The Department should make concerted efforts to complete the process of land acquisition in submergence areas and R&R activities synchronizing with completion of the project works so as to make use of the project immediately on its completion.*
- *GoAP may take steps to resolve the submergence issues with the Governments of Odisha and Chhattisgarh and take steps for timely construction of protective embankments to prevent submergence in those States.*
- *The Department should take immediate steps to identify the village wise command area to be developed under the project and take up the works of distributary network.*
- *The Department should immediately institute a system to promptly capture, classify and consolidate the details of expenditure on the project, particularly for land acquisition and R&R activities.*

- *Government should expedite conclusion of Memorandum of Understanding with the Ministry of Water Resources/ Polavaram Project Authority, so as to streamline the process of getting the Central assistance in a timely manner. It should provide for procedures and timeframes to be followed for submission of claims to the PPA, the methodology of checking the claims, and for reimbursement.*

Information Technology, Electronics and Communications Department

2.2 Development of Information Technology and Communication Infrastructure by the Information, Technology, Electronics and Communications Department

Executive Summary

The Government's Information Technology (IT) Policy aimed at taking various measures to facilitate the establishment of IT units in the State so as to achieve rapid growth of IT exports, domestic turnover, IT Investments and creating employment opportunities and providing a strong communication backbone in the State. Audit observed that the Department did not prepare any long term strategic plan or annual action plans to achieve the goals stipulated by Government in the IT/Electronics Policies.

The State's IT policies envisaged allotment of Government land to the IT units to encourage IT industry in the State. The process of recommending units by the Consultative Committee on IT Industry (CCITI) for land allotments was deficient. There was no uniformity in the employment generation targets stipulated in the MoUs concluded with the units that were allotted lands.

Out of the 25 IT units that were allotted lands by the Department during 2006 to 2012, two allotments were cancelled, only 14 units had commenced operations, eight projects were still under construction despite time over run of 22 months to 101 months and one unit did not commence construction as of July 2017. As against the total employment target of 10809 as per MoUs, the units created only 4326 jobs. Monitoring by the Department on implementation of IT projects was poor.

Out of the total space of 79,530 Sft. created in the three Incubation Centres at Visakhapatnam, Tirupati and Kakinada, the Department could enter into MoUs with Incubators for only 22,256 Sft. Out of the remaining space, the Department was utilizing 33,500 Sft. for other purposes and the balance 23,774 Sft. was unutilized. The Department was not monitoring the performance of the Incubators and it did not even have the details of start-up units that came up in the Incubation Centres. There was no assurance that the intended objective of promoting start-up companies had been achieved.

2.2.1 Introduction

The Information Technology, Electronics & Communication Department plays a crucial role in policy formulation in Information Technology (IT) sector, managing various e-governance initiatives, promoting investments in IT sector, facilitating growth of IT enabled services (ITES) and providing a strong communication backbone in the State.

The Government aimed at taking various measures to facilitate the establishment of IT and ITES units in the state so as to contribute to the economic development through rapid growth of IT exports, domestic turnover, IT Investments and creating employment opportunities.

Before bifurcation (June 2014) of the erstwhile combined Andhra Pradesh State, two policies viz., Information and Communication Technology (ICT) Policy - 2010-15 and Electronic Hardware (EH) Policy – 2012-17 were in operation. Consequent to the State bifurcation, the Government in the present AP State pronounced (August/ September 2014) a new set of IT Policies²² for the period 2014-20. These new Policies superseded the earlier policies.

2.2.2 Organizational setup

The Information Technology, Electronics and Communications (ITE&C) Department headed by a Principal Secretary, is responsible for promoting development of ITE&C Infrastructure in the State. The Department is supported by M/s Andhra Pradesh Technology Services (APTS) Limited (a Public Sector Undertaking, functioning under the Department). APTS acts as a nodal agency for procurement of IT related equipment and services on behalf of the Department. Another PSU, i.e., the AP Industrial Infrastructure Corporation Limited (APIIC) is the nodal agency for allotment of land to IT units on recommendation of the Department.

2.2.3 Scope and Methodology of Audit

Audit conducted a Performance Audit (PA) on “Development of Information Technology and Communication Infrastructure by ITE&C Department” from February to August 2017. Audit examined implementation of the following ITE&C infrastructure development initiatives during the five year period from 2012-13 to 2016-17:

- 1) **Allotment of Government lands** for setting up of IT units;
- 2) **Development of Incubation Centres** aimed at incubating and nurturing Start-up IT units.

²² (1) APIT Policy 2014-20; (2) AP Electronics Policy 2014-20; and (3) AP Innovation and Start up Policy 2014-20

- 3) **AP State Wide Area Network (APSWAN)** which connects the State Capital (State Headquarters – SHQ) to all District Headquarters (DHQs) and all DHQs with Mandal Headquarters.

The performance audit involved examination of records in the Secretariat, APIIC, APTS and AP Electronics and Information Technology Agency (APEITA)²³, Visakhapatnam. An Entry Conference with the Principal Secretary of ITE&C Department was held in June 2017 to discuss the audit objectives, scope and methodology. Audit conducted Exit Conference with the Principal Secretary in December 2017. Audit conclusions were drawn after taking into account the replies given by the Government/ Department.

2.2.4 Audit Objectives

The objective of this Performance Audit was to assess:

- (i) Whether the formulation of selected initiatives was comprehensive and in accordance with objectives and policies of the Government;
- (ii) Whether the selected initiatives/ projects and facilities were implemented as planned and those under implementation are progressing as scheduled;
- (iii) Whether the completed initiatives/ projects and facilities are serving the intended objectives and whether there is a plan in place to accommodate future needs ; and
- (iv) Whether the Department has developed adequate infrastructure, on its own or through other organizations, to cater to the needs of the other Departments.

2.2.5 Audit Criteria

Audit used the following sources of audit criteria for conducting this Performance Audit :

- (i) ICT Policy 2005-10; ICT policy 2010-15; the new AP IT Policy 2014-20; EH policy 2012-17; the new AP Electronics Policy 2014-20 and AP Innovation and Start up Policy 2014-20 of Government of AP;
- (ii) Orders/Guidelines issued by GoAP on provision/allotment of land;
- (iii) Terms and conditions of MoUs/Agreements of projects concerned entered between the Department and other agencies; and
- (iv) Feasibility Reports and Detailed Project Reports of project initiatives.

The audit findings are discussed in the subsequent paragraphs.

²³ A society registered under AP Societies Registration Act, 2001.

Audit findings

2.2.6 Absence of Strategic Plans and Annual Action Plans

The stated objectives of the new IT Policy 2014-20 and Electronics Policy 2014-20, among other things, were to achieve the following in the next five years:

- (i) to attract investments of US \$ 2 billion in IT and US \$ 5 billion in electronics manufacturing;
- (ii) to achieve a five *per cent* share in the national software exports; and
- (iii) to create an additional direct employment of 0.5 million.

To achieve the goals stipulated by Government in the IT Policies, it was essential that the Department prepares and implements long term and short term action plans to have a focused approach on the various initiatives. Audit, however, observed that the Department had not prepared any long term strategic plan or annual action plans. In the absence of such strategic/annual action plans, there was no assurance that the Department would be able to achieve the goals of the IT Policy within the stipulated period of five years.

The Government did not furnish any reply on this issue.

Further, there were deficiencies in implementation of the initiatives taken up under these Policies as discussed in the subsequent paragraphs.

2.2.7 Allotment of land to IT units

The earlier and new IT policies envisaged allotment of Government land to the IT/EH industry to encourage IT industry in the State. Allotment of land was subject to fulfillment of eligibility criteria and payment of land and development costs by IT units.

The Government constituted a Consultative Committee on IT Industry (CCITI) under the Chairmanship of Secretary/Principal Secretary of ITE&C Department. The CCITI consisted of representatives of IT industry and other stake holders including APIIC as its members. The role of the Committee was to examine the applications received and recommend for allotment of land to eligible IT units. Based on the recommendations of CCITI, the APIIC, being nodal agency would allot lands to the units. The ITE&C Department would enter into Memorandum of Understanding (MoU) with the IT unit and forwards its copy to the APIIC.

The Department/APIIC allotted lands to 25 units under ICT Policy 2005-10 (23 units) and ICT Policy 2010-15 (2 units) and to 17 units under IT Policy 2014-20.

2.2.7.1 Process of recommendation by CCITI for allotment of land under IT Policy 2014-20

After announcement of the new IT Policy 2014-20, the Department received 83 applications from IT units for allotment of lands. Out of these, the CCITI recommended 44 units, against which APIIC could allot lands to 17 units only. 24 units did not file applications with APIIC for land allotment and one unit had withdrawn application. In case of two units, allotments were cancelled due to non-payment of land cost by them. Audit observed the following deficiencies in the land allotment process:

Existing employment criteria: As per the IT Policy 2014-20, an IT unit should have existing employee strength of minimum 100 to qualify for allotment of land.

- Audit observed that in five²⁴ cases, the IT Units which were recommended by CCITI did not have existing employee strength of 100. APIIC allotted land to one such unit²⁵ which was not entitled as per criteria.
- In case of another unit²⁶, the CCITI in its meeting (June 2015) had rejected the application based on the ground that it was not into IT/ITES activities. However, in the next meeting (November 2015), the CCITI recommended for land allotment to same unit without any recorded justification. The Profit and Loss (P&L) Account for the years 2012-13 and 2013-14 furnished by the unit showed zero revenue from operations in both the years. Audit observed that the unit had claimed to have 102 existing employees on its rolls. However, its P&L Accounts showed that the total expenses (and an equal amount of loss) during the years 2012-13 and 2013-14 were ₹2.95 lakh and ₹6.44 lakh, respectively. APIIC was yet to allot land to the unit as of March 2017.

Government replied (November 2017) that in case of two units, CCTI recommended land even though their existing employees were less than 100, to promote Tirupati as an investment destination. The reply is not convincing. If Government intended to promote IT investments in Tirupati, it should have relaxed the existing employment criteria in the Policy itself. This would have given equal opportunity to all such smaller units. Audit observed that the CCITI had rejected applications of some units proposed in Tirupati on the

²⁴ (1) M/s Naina Power Pvt. Ltd., (2) People Link Corporate Solutions Pvt. Ltd., (3) M/s Davis Software Solutions Pvt. Ltd., (4) M/s Garuda Engineering Solutions, (5) M/s Corsen Donk Consultants Pvt. Ltd.

²⁵ M/s Naina Power Pvt. Ltd.

²⁶ M/s Mudunuru Holdings Pvt. Ltd.

ground that they were not fulfilling 100 employee criteria. Government did not furnish convincing replies in respect of the remaining units.

2.2.7.2 Stipulation of employment generation norms while allotting lands

The objective of allotting lands to IT units was to encourage investments in IT sector and to generate employment. But, the ICT Policy 2005-10 had not stipulated the minimum employment to be created by the IT units to which lands were allotted. The Policy stipulated that the units would be eligible to claim concession on the land cost at the rate of ₹ 20,000 per job created or the cost of the land (excluding development charges) whichever was less subject to a ceiling of 0.30 acre of land for every 100 jobs created.

However, in the MoUs concluded with the units, the ITE&C Department incorporated a clause regarding the minimum employment to be generated by the IT units. Audit observed that there was no uniformity in the employment generation norms stipulated by the Department in the MoUs. **Out of the 21 land allotment cases under ICT Policy 2005-10, in 15 cases, the employment generation target stipulated in the MoUs ranged from 100 to 250 per acre. In six MoUs, the Department stipulated employment target of 500 per acre.** The reasons for adopting different norms for different units were not on record.

Government replied (November 2017) that the clause of 100 jobs per 0.30 acre of land stipulated in ICT Policy 2005-10 relate only to concessions on land cost and that there was no minimum employment norm in the Policy. The reply is contrary to the fact that in the MoUs, the Department had incorporated minimum employment norm without linking to the concessions. Further, the reply is silent about lack of uniformity in the employment generation norm stipulated in different MoUs. In the absence of uniform procedure, the Department failed to ensure that the extent of lands allotted to the units was proportionate to the employment generation committed by them.

2.2.7.3 Delay in implementation of projects and shortfall in employment generation by IT/ITES units which were allotted lands

(i) Delay in implementation of projects by IT units that were allotted land under ICT Policies 2005-10 and 2010-15:

On the recommendations of the Department, the APIIC allotted land to 25 IT Units under ICT Policies 2005-10 (23 units) and 2010-15 (2 units). APIIC cancelled²⁷ the land allotments to two units, due to non-implementation of the projects. In case of the remaining 23 units, APIIC handed over the sites to these units between 2006 and 2012. As per the MoUs concluded with the

²⁷ Both these units filed Writ Petitions in the Court and the cases are sub-judice.

units, the due dates for completion of these projects fell between 2009 and 2015 (details are shown in *Appendix - 2.2*). Audit observed that:

- Out of the 23 units, only 14 units had completed the projects. However, the dates of completion of these projects were not furnished by the Department. In eight cases, the projects were still under construction as of July 2017, despite time over run of 22 to 101 months.
- One unit²⁸ kept the plot vacant due to an electrical pole existing in the middle of the plot which was shifted only in February 2017, i.e., more than four years after handing over the land to the unit. The unit was yet to start construction (July 2017) and had not submitted the time lines for project implementation.

The reasons for delays in the above projects were not recorded in the files of the Department/APIIC. Abnormal delays ranging from 22 months to 101 months in implementation of the projects resulted in non-achievement of objectives of promotion of IT industry and creation of employment.

Government replied (November 2017) that the projects were delayed due to infrastructural problems like hilly terrain of the land in the IT parks, recession during 2008-13, unrest due to Andhra agitation and natural calamity like Hud Hud cyclone. The reply is not convincing as the above mentioned causes were not exclusive to only these units and the other 14 were able to complete the projects in the same IT parks during this period.

(ii) Shortfall in employment generation by IT units that were allotted land under ICT Policies 2005-10 and 2010-15:

In respect of generation of employment by the IT units that were allotted land, Audit observed that:

- As against the total employment generation target of 10,809 jobs as per the MoUs concluded with the 23 units, these units created a total of only 4,326 jobs (40 *per cent*) as of July 2017, as per the information furnished by the APIIC.
- Nine units (Sl. No. 14 to 21 & 23 in *Appendix - 2.2*) could not create the employment of 5,450 as stipulated in the MoUs due to non-completion of the projects despite time over run of 22 months to 101 months.
- Even in the case of the 14 units which had commenced operations, only six units were stated to have met the target of employment as per the information furnished by the APIIC. In respect of eight units (Sl. No 1,

²⁸ M/s Spectrum Innovative Technologies, Visakhapatnam

3, 4, 6, 7, 10, 13 & 22 in *Appendix - 2.2*) there was a shortfall of 1,821 (50.94 *per cent*) in employment generation (Target: 3,575; Achievement: 1,754).

- The APIIC stated that six units had created targeted employment fully and eight units partially. However, Audit observed that the APIIC was merely relying on the list of employees furnished by the units and was not ensuring the authenticity of the employment details so furnished by the units. APIIC did not insist on furnishing of supporting details like Provident Fund (PF)/ Employees State Insurance (ESI) Registration Numbers of the employees by the units. Only five out of the 14 units had furnished the PF Registration Numbers of employees along with the employee lists.
- Further, the units furnished the list of employees only once at the time of project completion and the APIIC was not obtaining this information periodically in the subsequent years.
- In respect of three units, the APIIC did not obtain even the list of employees from them.
- The terms and conditions of the MoUs concluded with the units stipulated recovery of existing market rate of the land proportionate to the employment not generated along with interest of 16 *per cent* per annum from the defaulting units. However, APIIC did not impose/recover any such penalties.
- The ITE&C Department also was not monitoring the progress of creation of targeted employment by the units against the targets stipulated in the MoUs.

Thus, due to delays in implementation of projects by the units and lack of monitoring by the Department/APIIC on the progress of project implementation/ employment generation by the units, the targeted number of jobs were not created.

Government replied (November 2017) that the desired employment goal was not achieved by the units due to issues like recession, united Andhra agitations and Hud Hud cyclone, besides infrastructural issues/ground conditions. The reply is not tenable as the reasons put forth were not specific to some units and the other units were stated to have created the targeted employment. The reply did not address the audit observations on non-authentication of the employment details and lack of monitoring by the Department.

(iii) Land allotments made under IT Policy 2014-20:

Under IT Policy 2014-20, on the recommendations of the Department, APIIC handed over lands to 15 units between March 2015 and March 2017. As per the MoUs concluded with the IT units, the due date for completion of projects by these units would fall between March 2018 and March 2020. As per the MoUs, the units were required to commence construction within 6 months/12 months from the date of handing over of site.

Audit observed that out of the 15 units, the due date for commencement of construction was over in case of 11 units. Of these, nine units were yet to start construction work (July 2017) and the delay in commencement of construction in these cases ranged from 4 months to 14 months. Reasons for the delay in commencement of construction in these projects were not on record.

Government replied (November 2017) that the Department and the APIIC were conducting multiple meetings with the IT units for seeking explanations from them and were granting extensions in genuine cases. Reply is not acceptable as the Department and the APIIC were not recording the reasons for delays in their files. Even in the minutes of the internal review meetings, there was no discussion about the reasons for delays in commencement of construction or grant of extensions in respect of these 9 units. Inaction in these cases is fraught with the risk of lands being retained by the units for long periods without implementing the projects.

2.2.7.4 Lack of proper monitoring mechanism

To ensure that the units complete their projects and commence operations in allotted time, it was essential that the Department closely monitored the progress of these projects. Audit observed that there was no mechanism in place in the Department/APIIC to monitor the progress of implementation of the IT projects by the units to which lands were allotted.

- It was the ITE&C Department which recommended for land allotments and entered into MoUs with the units. However, it had not developed any system to watch periodical status/ progress reports from APIIC/IT units on implementation of the IT projects and employment generation by the units.
- The APIIC also did not stipulate/obtain any periodical progress reports from its Zonal offices or the IT units.
- APIIC allots lands to IT units on the recommendations of the CCITI. But the CCITI had not played any role in monitoring the implementation of the IT projects by the IT units after allotment of lands. There was no implementation/ monitoring committee formed at any level.

Government replied (November 2017) that APIIC and the Department were jointly monitoring the implementation of the projects in the joint review meetings held between them. The reply is not acceptable since neither the ITE&C Department nor the APIIC conducted any review meetings on the progress of the IT projects until March 2017. It was only in April 2017 that the APIIC started conducting review meetings with the IT units (meetings were held in April, July and August 2017). The reply was silent on the inadequate review prior to April 2017. The reply was also silent on the non-stipulation/non-obtaining of periodical progress reports from the IT Units/Zonal offices of APIIC.

The abnormal delay in implementation of projects by IT units coupled with inadequate monitoring by the Department led to non-achievement of the objectives of promotion of IT industry and creation of employment.

2.2.8 Development of Common Facilities and Incubation Spaces in IT-SEZ, Madhurawada, Visakhapatnam

The GoAP decided (March 2007) to develop 'Common facilities/Incubation centres' in IT-SEZ, Madhurawada, Visakhapatnam with a view to promote Visakhapatnam as a Tier-II IT Hub. APIIC, after inviting bids, allotted (January 2008) 7.24 acres of land²⁹ in Madhurawada on lease basis (33 years) to a private Developer for development of IT Tower, Incubation Spaces and Support Services. Later, the APIIC withdrew (May 2012) 2.47 acres of land on the ground that this part of land was not suitable. Accordingly, the APIIC executed (April 2013) a lease deed for the remaining 4.77 acres located in the SEZ area and handed over the land to the Developer in April 2013.

As per lease deed, the Developer shall develop an IT Tower with office space of 30,000 Sft. for IT/ITES Companies and Incubation Space of 25,000 Sft. The Developer would also develop support services including serviced apartments, bank, health club and restaurants. The agreement stipulated that the Developer should commence construction within three months³⁰ and complete construction substantially within 24 months. However, the Developer did not take up any development activity on the allotted land so far.

Audit observed that the APIIC took four years to withdraw the unsuitable land of 2.47 acres and to issue (May 2012) the revised Letter of Award (LoA). Withdrawal of part of land on the ground of its non-suitability indicates improper survey at the time of initial allotment. Even after modifying the LoA,

²⁹ This land was located in Hill No.2 (2.50 acres in SEZ area and 2.47 acres in non-SEZ area) and Hill No.3 (2.27 acres in SEZ area) in Madhurawada.

³⁰ from the date of execution of lease deed or taking possession of land or obtaining of all statutory approvals for construction, whichever is later.

the APIIC executed (April 2013) the lease deed with Developer after a gap of 11 months. Reasons for these delays were not on record.

The Developer had not commenced construction till August 2017. Finally, in the review meeting held by APIIC in August 2017, it was decided to cancel the land allotment to the Company.

Thus, the intention of Government to develop IT/ Incubation space and common facilities in the IT-SEZ remained unrealized even after nine years.

Government in its reply (November 2017) accepted that part of land allotted initially was not suitable. It further stated that IT industry did not show much interest in the region due to adverse conditions like recession, socio political situation, etc. and the Developer did not create infrastructure as per the agreement. The reply is silent on the reasons for delay in revising the land allotment and failure to sort out differences with the Developer by APIIC.

2.2.9 Development of Incubation Centres

The Innovation and Start-up (IS) Policy 2014-20 aimed at creating an ecosystem that produces an entrepreneur in every family. The Policy targeted (i) Establishment of 100 Incubators/Accelerators; (ii) Incubation of 5,000 Companies and Start-ups; (iii) Development of one million Sft. of incubation space; and (iv) Creation of at least one home grown billion dollar technology start-up, by June 2019. As per the Policy, the Incubators were to be provided with fully furnished and ready to use Plug and Play IT infrastructure along with other facilities as infrastructure support from the State Government.

Accordingly, the Department planned (2014-15) to develop Incubation Centres at Visakhapatnam, Tirupathi, Kakinada and Anantapuramu. APIIC constructed and handed over to the Department (October 2015 to November 2016) the buildings for Incubation Centres at Visakhapatnam, Tirupathi and Kakinada. The construction work of Incubation Centre at Anantapuramu was in progress (March 2017).

2.2.9.1 Selection of Incubators and utilization of the Incubation space

For selection of pilot Incubators, GoAP constituted a Committee under the Chairmanship of Advisor (IT), GoAP with three other members including the Secretary, ITE&C Department³¹. The Department issued (September 2014) notification inviting reputed Incubators for managing/operating the incubation spaces available. After selection, the GoAP entered into MoUs (2015-16) with two Incubators for setting up Incubation Centres at Visakhapatnam and with one Incubator for setting up Incubation Centre at Tirupati.

³¹ The other two members are Joint Director (Promotions) IT of ITE&C Department and Secretary, IT Software Enterprises Association, AP.

Audit observed that as against the total space of 79,530 Sft. available in the three Incubation Centres, the Department could identify Incubators and enter into MoUs for only 22,256 Sft. (i.e., 28 per cent), as of May 2017. Out of the remaining space of 57,274 Sft., the Department was utilizing 33,500 Sft. (in Visakhapatnam) for other purposes by allotting it to IT units/APEITA. The balance 23,774 Sft. (8,774 Sft. in Tirupati and entire 15,000 Sft. in Kakinada) remained unutilized as of May 2017. The efforts of the Department to identify Incubators for the remaining incubation space in these Centres were not forthcoming from the records furnished to Audit.

Government replied (November 2017) that agreement for another 20000 Sft. in Visakhapatnam and MoU with another agency was under consideration and that the space would be fully utilized by end of this financial year. In respect of the Incubation Centre at Kakinada, Government replied that it was negotiating with incubators and was in the process of bringing into utilization 2,000 Sft. It further replied that the Incubation Tower at Tirupati had been temporarily allotted to the International Institute of Digital Technologies.

Non-utilization of the incubation space fully for intended purposes resulted in partial achievement of the objective of encouraging innovation and Start up units. **Department needs to take steps to invite fresh bids to attract incubators by giving wide publicity so as to fully utilise the space available in the Incubation Centres.**

2.2.9.2 Monitoring on the performance of Incubation Centres

The responsibilities of Incubators, as per the MoUs, included managing the Incubator facility and producing the mutually agreed number of Incubated Start-up units, as shown below:

Table 2.8 - Start ups deliverable by Incubators

Sl. No.	Name of the Incubator facility & Location	Office space provided (Sft.)	Date of MoU	Term and Duration	No. of Incubated Start-ups to be delivered (Year-wise)
1	NASSCOM, Technology Research and Incubation Park, Visakhapatnam	5,500	15.03.2016	5 Years	2016-17: 25*
2	M/s GOVIN, Incubation Towers, Visakhapatnam	6,000	21.02.2015	5 Years	2015-16: 5; 2016-17: 15; 2017-18: 20; 2018-19: 20
3	M/s Venusgeo Solutions Pvt. Ltd. (7in Q), Incubation Towers, Tirupati	2,450	24.09.2015	3 Years	2015-16: 50; 2016-17: 100; 2017-18: 200

* Number for subsequent years to be determined after review

(Source: Information furnished by ITE&C Department and APEITA)

Audit observed that the Department was not monitoring the performance of the Incubators with whom MoUs were concluded. **The Department did not even have the details of number of start-up units that came up in the Incubation Centres.** It did not prescribe/obtain any periodical reports from the Incubators to evaluate their performance and deliverables. There was also no evidence that the Department had conducted any review meetings with the Incubators.

Government replied (November 2017) that periodical review meetings were conducted with Incubators, one non-performing incubator was sent out and one low performing Incubator was advised to improve performance. The reply was not supported by any documentation on the performance of Incubators against the stipulated targets of incubated start ups.

Thus, there was no assurance as to what extent the Department had achieved the intended objective of promoting start-up companies through the Incubation Centres.

2.2.9.3 Allotment of space on rent free basis to some units

As per IS Policy 2014-20 and MoUs entered with Incubators, no rent was chargeable for incubation purpose. The IS Policy did not provide space for other purposes on rent free basis.

Audit observed that the Department had allotted 13,000 Sft. of space in the Incubation Centre, Visakhapatnam to four private firms for non-incubation purposes. In case of one firm (space allotted: 5,000 Sft.), the Department was collecting a total rent of ₹ 75,000 per month. However, in case of other three firms, it allotted rent-free working space of 8,000 Sft.

Thus, there was no uniformity in the rent collection from the firms which were not incubators. Non-collection of rent from the three units led to loss of revenue of ₹ 1.20 lakh per month (for 8000 Sft. at the rate of ₹ 15 per Sft. (₹ 75,000 / 5000 Sft.) to the Department. Since the Department did not furnish the details of the periods for which the three firms were rented the incubation spaces on rent-free basis, the total loss for the period could not be calculated. Government reply was silent on not charging of rent from some units. The allotment of space to firms free of rent for non-incubation purposes was arbitrary and without any basis.

2.2.10 Andhra Pradesh State Wide Area Network (APSWAN)

APSWAN was proposed to connect the State Headquarters (SHQ) with all District and Mandal Headquarters (DHQs/MHQs) with minimum 2 Mbps leased line. The objective was to create a secure Government network for the

purpose of delivering G2G and G2C³² services through Common Service Centres (CSCs). The GoAP had developed APSWAN through Public Private Partnership (PPP) model.

Non-handing over of APSWAN assets by the Operator: The BOOT Operator was to hand over the APSWAN assets in working condition to the APTS at the end of contract period, in accordance with conditions of contract. The contract with the BOOT operator for APSWAN expired in November 2015 and APTS concluded (November 2015) a fresh Facility Management & Annual Maintenance Contract (FM&AMC) with a new agency. However, The BOOT Operator was yet to hand over (July 2017) some of the assets³³ to the FM&AMC agency even after more than 20 months since expiry of their contract. The APTS failed to ensure complete handing over of assets by the BOOT Operator.

Government replied (November 2017) that final formal asset handing over would be done after rectification of some of the faulty assets.

2.2.11 Conclusion

The Department had been implementing several initiatives for development of IT infrastructure in the State. Audit scrutiny revealed that monitoring by the Department on implementation of IT projects was poor. There were abnormal delays in implementation of IT projects by IT Units that were allotted land. Even the IT Units that completed the projects did not fully create the targeted employment. This resulted in short-achievement of objectives of development of IT industry and creation of IT jobs. The Incubation Centres set up at Visakhapatnam, Tirupati and Kakinada were only partly serving the incubation purpose. In the absence of documentation on the performance of Incubators, there was no assurance that the intended objective of promoting start-up companies had been achieved.

2.2.12 Recommendations

Audit recommends that:

- *The Department should prepare and implement a long term action plan/strategy so as to achieve the IT investments, software exports and employment goals aimed by the IT policy 2014-20.*
- *Feasibility studies should be conducted while identifying lands regarding their suitability for allotment to IT units in order to avoid non progress of projects at a later stage.*

³² G2G: Government to Government; G2C: Government to Consumer

³³ DHQ Switch - 1; MHQ Switches - 19; MHQ Routers - 19; 5 KVA/8 KVA Generator sets - 662; Isolation Transformers - 74; etc.

- *The Department should put in place monitoring mechanism including stipulation of periodical progress reports from the implementing agencies and IT units that were allotted land and incubation spaces.*
- *Department need to take steps to identify Incubators and utilize vacant space at incubation centres. Department may need to consider constitution of an expert panel for assessment of the performance of Incubators.*

Chapter - III

Compliance Audit

Chapter-III

Compliance Audit

Environment, Forests, Science and Technology Department

3.1 Implementation of Biological Diversity Act, 2002 by Andhra Pradesh State Biodiversity Board

3.1.1 Introduction

The Government of India enacted (February 2003) Biological Diversity Act, 2002 (Act) for conservation of biological diversity¹, regulation of access to/sustainable use of biological resources, etc. Functional bodies at three different levels are responsible for implementation of the Act. They are - (1) the National Biodiversity Authority (NBA) at Central level; (2) the State Biodiversity Board at State level; and (3) Biodiversity Management Committees at Local Bodies level.

As provided in the Act, the GoI established NBA in October 2003. At the State level, the GoAP constituted the AP State Biodiversity Board (Board) in May 2006. The Board functions under the administrative control of the Environment, Forests, Science and Technology (EFS&T) Department. The Board consists of a Chairperson, five ex-officio members from the concerned departments² and five nominated members from experts in matters relating to conservation of biodiversity. The State Government appoints the Chairperson³ and the members of the Board. After the bifurcation of AP State, the Board was bifurcated in March 2015. As per the Act, the main functions of the State Board are to:

- Advise the State Government on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of the benefits arising out of the utilization of biological resources; and
- regulate by granting of approvals or otherwise requests for commercial utilization or bio survey and bio utilization of any biological resource by Indians.

GoAP also formulated the AP Biological Diversity Rules, 2009 for implementation of the Act in the State.

¹ The Act defines “Biological Diversity” as variability among living organisms from all sources and the ecological complexes of which they are part of.

² GoAP had been nominating the Principal Secretaries of the EFS&T, Animal Husbandry & Fisheries and Agriculture & Co-operation Departments; and the Director of Integrated Coastal Marine Area Management Project (of GoI) as ex-officio members of the Board.

³ The Chairperson of the Board shall be an eminent person having adequate knowledge and experience in conservation/sustainable use of biological diversity.

3.1.2 Scope and objectives of Audit

Audit assessed the effectiveness of the role played by the Board and the Biodiversity Management Committees in carrying out the functions prescribed in the Biological Diversity Act and Rules. Audit examined (June - July 2017) records in the Secretariat and the Board covering the period from the date of bifurcation of the Board (March 2015) to end of March 2017.

Audit findings

3.1.3 Constitution of Biodiversity Management Committees

The Act stipulated that every local body shall constitute a Biodiversity Management Committee (BMC)⁴ within its area for promoting conservation, sustainable use and documentation of biological resources. As per the Act and the State Biological Diversity Rules, the BMCs have to be consulted for granting access to or imposing restrictions on access to biological resources occurring within their jurisdiction. Thus, the BMCs have a vital role in implementation of the Act. However, Audit observed that only 2908 (21 per cent) out of a total of 13725 local bodies in the State had formed BMCs as of June 2017, as detailed below :

Table 3.1 – Details of BMCs formed at local bodies' level as of June 2017

Type of Local Body	No. of Local bodies in the State	No. of BMCs formed	No of BMCs not formed	Percentage of BMCs formed
Zilla Parishads	13	1	12	7.7
Municipal Corporations	14	1	13	7
Municipalities	110	5	105	4.5
Mandal Parishads	664	30	634	4.5
Gram Panchayats	12924	2871	10053	22.2
Total	13725	2908	10817	21.19

(Source: Information furnished by Board)

Audit observed that :

- While formulating the AP State Biological Diversity Rules, the Government had not stipulated any time frame for constitution of BMCs by local bodies in the State.
- Other than engaging private personnel (appointed as District Biodiversity Coordinators - DBCs in each district to pursue with local

⁴ As per the State Biological Diversity Rules, each local body was to nominate seven community members and six special invitees from the State Government Departments as members of the BMC. The Chairperson of the local body should be the ex-officio Chairperson of the BMC.

bodies) and addressing letters to the District Collectors once in a year, the Board had not made any effective pursuance with the local bodies for formation of BMCs.

- The Board did not pursue the issue of formation of BMCs by local bodies with the Panchayat Raj (PR) and the Municipal Administration (MA) departments.
- In the last 12 years since formation of the Board, the GoAP did not nominate any representatives from the PR and the MA departments as ex-officio members of the Board.
- The Board had not rendered any advice to the State Government on the steps to be taken to speed up the formation of BMCs by local bodies in the State.

Government replied (November 2017) that activities of the Board remained slow in initial years due to various reasons and gained pace after the State bifurcation due to appointment of DBCs. **However, Government should stipulate a timeframe for formation of BMCs and ensure active involvement of the PR and the MA departments, which would yield better results.** As regards nomination of ex-officio members from the PR and the MA departments, Government replied that this would be considered at the time of reconstitution of the Board.

- Red Sanders are scarce and high value biological resource⁵ grown in five districts (viz., Chittoor, YSR Kadapa, Kurnool, Prakasam and SPS Nellore) in the State. As per the information furnished by the Board, Red Sanders are grown in areas under 348 villages in 47 mandals of four districts (except Prakasam district⁶). However, out of these 348 villages/47 mandals, only 162 Gram Panchayats and three mandals had formed BMCs. At district level, only one Zilla Parishad of YSR Kadapa district had formed BMC. Thus, the local bodies had not formed BMCs fully even in the bio-rich areas where Red Sanders were being grown.

Government replied that BMCs were formed in 1476 local bodies in these five districts which included most of the Red Sanders growing areas and the process of formation of BMCs in the rest of areas was under process. The reply is not specific to the audit observation that BMCs were not formed in all the 348 villages/47 mandals/five districts identified by the Board as Red Sanders growing areas.

⁵ Red Sanders were included in the negative list of exports notified (April 1998) by the GoI. The Foreign Trade Policy of GoI which is an instrument under the Customs Act, 1962 totally prohibits export of Red Sanders in any raw form. Red sanders are also classified as a 'Reserved Tree' under the AP Preservation of Private Forest Rules, 1978.

⁶ The Board stated that in Prakasam district, red sanders were available only in forest core area where no villages were located.

Thus, due to slow pace of constitution of BMCs at local bodies' level, the State did not have the organizational set up necessary for implementing even the basic provisions of the Act.

3.1.4 Building database of biological resources

As per the AP Biodiversity Rules, the Board had to build a database and create information and documentation systems for bio-resources and associated traditional knowledge through biodiversity registers and electronic databases. Audit observed that:

The BMCs were responsible for preparation of People's Biodiversity Registers (PBRs) in consultation with local people. The PBRs were to contain comprehensive information of local biological resources, their medicinal or any other use, or any other traditional knowledge associated with them. However, 10817 (i.e., 79 *per cent*) out of the 13725 local bodies in the State had not constituted BMCs, as of June 2017. Even in respect of the 2908 BMCs formed, the Board had not effectively pursued with the BMCs for preparation of PBRs. So far, a total of only 75 PBRs had been prepared in the State and 55 PBRs were under preparation. In the absence of PBRs in all the local bodies, the Board had not built any comprehensive database of biological resources despite lapse of 11 years since its formation.

The AP Biological Diversity Rules stipulated that a Technical Support Group (TSG)⁷ shall be established at district level by the district administration to lend support to BMCs. However, as of June 2017, no TSG was constituted in any of the districts in the State.

Government replied that the budget allocation from different sources for preparation of PBRs had been very meagre and that the Board was taking initiatives to prepare PBRs based on availability of budget. **Government should ensure that TSGs are formed in each district and adequate training is to be given to BMCs to guide them in preparation of PBRs.**

3.1.5 Identification/notification of Biodiversity Heritage Sites

The Act⁸ empowered the State Government to notify the areas of biodiversity importance as Biodiversity Heritage Sites (BHS) in consultation with the local bodies. The Act provided that the State Government had to frame rules for management and conservation of BHS.

Audit observed that the Board had submitted Guidelines for Identification, Notification and Management of BHS to the State Government in July 2016.

⁷ TSG shall comprise of experts in the field of biodiversity drawn from Government agencies, Non-Government Organizations, academic field, community and individuals.

⁸ Section 37 of the Act

As of June 2017, the Government was yet to approve the guidelines and to frame the rules for management/conservation of BHS in the State. Audit could not ascertain the reasons there for, as the Department did not furnish relevant records.

Audit further observed that the Board had sent proposals to State Government for notifying two sites⁹ as BHS in September 2008 and January 2012, respectively. However, even after a lapse of nine years/five years respectively, the State Government has not notified these places as BHS so far (June 2017). After submitting the initial proposals, the Board had not pursued with the Government on this issue.

In August 2011, the President of Veerapuram BMC reported to Board that the village is famous for painted storks (Siberian birds) which move in the month of January and stay up to July every year for breeding. It was stated that the trees had become old and were drying up and requested to grow trees for safeguarding the birds. The Board had forwarded (September 2011) the representation to the Principal Chief Conservator of Forests (PCCF). However, the Board had not pursued with the PCCF on this issue. The details of action taken thereon were not available in the Board's records. The PCCF had also not furnished any information in this regard, though specifically called for by Audit.

Government replied that the proposals for notification of the guidelines and notification of proposed BHS were under consideration. The reply was silent on the action taken for plantation near Veerapuram lake to safeguard Siberian birds.

Non-framing of rules for identification, management and conservation of BHS could be a hurdle in identification and notification of BHS. On the other hand, conservation plans were not made even for the two places identified due to non-notification as BHS by the Government.

The Government needs to expedite framing of guidelines/rules for identification, management and conservation of Biodiversity Heritage Sites.

3.1.6 State Bio-diversity Conservation Strategy and Action Plans

The Board had not prepared any long term Bio-diversity Conservation Strategy or Action Plan so far as required under the AP Biological Diversity Rules. It had also not prepared any annual action plans until 2015-16. It was only in November 2016 that the Board had approved Vision Plans for the years 2016-17 to 2018-19. However, it could not implement the vision plans

⁹ (1) Veerapuram lake in Chilamathur Mandal of Anantapuramu District and (2) Timmamma Marrimanu situated at Gootibayalu Village in Kadiri Taluk of Anantapuramu District.

effectively, due to non-release of adequate funds by Government, as discussed in Paragraph 3.1.8.

The Government needs to expedite preparation of Bio-diversity Conservation Strategy and Annual Action Plans and also allocate adequate funds to the Board as per these Plans for effective implementation of the Act in the State.

Government replied that the Board was taking action for preparation of a Biodiversity Conservation Strategy and Action plan for the present AP State.

3.1.7 Lack of regular staff

The Board had submitted proposals to the Government for sanction of posts (10 scientific and 29 administrative posts) in September 2010, April 2012 and again in June 2016. The board had been expressing concerns that it was facing difficulties in implementation of the Act due to non-sanction of posts. However, the Government has not sanctioned any posts so far. The Board had no regular staff as of June 2017. It was totally dependent on outsourced staff (most of them were Data Entry Operators, office subordinates and drivers) for its day to day functions. Non-sanction of posts by Government and absence of regular staff was adversely affecting the Board's functioning. **Government should consider sanction of adequate staff to the Board on regular basis to enable it to effectively discharge its functions mandated under the Act.**

Government replied that the proposal for sanction of posts to the Board was under active consideration.

3.1.8 Provision of funds by Government to the Board

As per the AP Biological Diversity Rules¹⁰, the State Government shall pay to the Board such sum of money, as it may think fit, for being utilized for the purpose of the Act. Audit observed that Government had not been providing adequate funds to the Board as shown below:

Table 3.2 – Details of budget proposed by the Board and releases by Government during 2015-16 and 2016-17

(₹ in crore)

Financial Year	Budget proposed		Budget provided and released		Expenditure	
	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-plan
2015-16	3.72	1.98	0.50	0.10	0.05	0.55
2016-17	2.15	1.62	1.00	1.00	1.00	1.00

(Source: Records of the Board)

¹⁰ Rule 19(3) of the AP Biological Diversity Rules, 2009

- In the year 2015-16, due to release of meagre funds by Government, the Board had utilized the Plan funds also for payment of salaries, wages, etc. It utilized ₹ five lakh for conducting awareness programmes and had no funds for Plan activities like release of startup fund to BMCs and preparation of PBRs in that year.
- The Plan budget requirement for 2016-17 worked out by the Board as per the Vision Plan was ₹10.54 crore. However, the budget proposals already submitted to Government were for only ₹2.15 crore against which the Government released only ₹one crore during the year. Hence, the Vision Plan had lost its relevance as the Board could not implement the Plan as envisaged.
- For the year 2017-18, the Board proposed to constitute 4000 BMCs during the year. Accordingly, it submitted budget proposals for ₹36.56 crore to Government. This amount included ₹4 crore for constitution of 4000 BMCs and ₹10 crore for preparation of 5000 PBRs. However, Government allocated a meagre amount of ₹2 crore, which is barely sufficient to meet the expenditure on salaries, contractual services, etc. (₹1.97 crore) estimated by the Board.

The Government replied that after bifurcation of the State, the allocation of funds was reduced on all schemes due to financial constraints. It further replied that the Department was trying to impress upon the Finance Department to allocate more funds. Government also replied that the Board was being requested to explore other sources of funding.

Thus, inadequate provision of funds by Government was adversely affecting the implementation of the Act in the State by the Board.

3.1.9 Conclusion

Government of AP had constituted the AP State Biodiversity Board (Board) in June 2006 to advise and assist the State Government in implementing the Biological Diversity Act, 2002 (Act) in the State. Even after a decade since its formation, the Board had not attained the level of preparedness necessary for undertaking conservation of biological diversity in the State. The State did not have any Bio-diversity Conservation Strategy and Action Plan. Biodiversity Management Committees (BMCs), which have a vital role to play in implementation of the Act, were not formed in 79 *per cent* of the local bodies in the State. The Board did not even build a database of biological resources available in the State. The Board did not have regular staff as the Government did not sanction any posts. Government was not providing adequate funds to the Board which was adversely affecting the Board's functioning.

Industries and Commerce Department

3.2 Implementation of Andhra Pradesh Single Desk Policy 2015 in Industries & Commerce Department

3.2.1 Introduction

Government of Andhra Pradesh (GoAP) formulated (April 2015) ‘Andhra Pradesh Single Desk Policy 2015’ to provide all approvals required for starting and operating an industry, within 21 working days at single point through Information Technology (IT) enabled platform. In furtherance of the Policy, the Industries and Commerce Department launched (April 2015) a web based Single Desk Portal (SDP).

An entrepreneur, both existing and new, registers with the Portal to obtain approvals online. On submission of requisite information and uploading online or sending the enclosures through courier, the competent authorities in line departments¹¹ scrutinize and accord the approval online.

Single Desk Bureau (SDB)¹² headed by the District Collector at district level and Empowered Committee of Secretaries chaired by Chief Secretary at State level function to monitor and review the implementation of the Policy.

3.2.2 Audit scope and methodology

As of 18 May 2017, a total number of 11,297 entrepreneurs had registered with the SDP since its launch (April 2015). As per the data furnished by the Commissioner of Industries, the portal received applications from 6,685 entrepreneurs for a total of 19,837 approvals. Out of these applications, the line departments gave 17,787 approvals, rejected/sent back 1,283 applications and 767 applications were under scrutiny as on 26 April 2017.

Audit examined (February – May 2017) the implementation and functioning of SDP since its inception (April 2015) to March 2017. It was aimed to assess whether the SDP was designed in a user-friendly manner and had been implemented effectively. Audit examined records at the Secretariat, Directorate of Industries and District Industries Centers (DICs) of six Districts¹³, selected through random sampling method. Out of 11,297

¹¹ List of line Departments: 1) Energy, 2) Municipal Administration & Urban Development, 3) PR & Rural Development, 4) Irrigation & CAD, 5) Directorate of Factories, 6) Commercial Taxes, 7) APPCB, 8) Revenue & LA, 9) Registration & Stamps 10) Health, Medical & Family welfare, 11) Home (Fire Services), 12) Civil Supplies 13) Prohibition & Central Excise.

¹² SDB constituted by GoAP, is a State level clearance mechanism consisting of HODs of various Line Departments as members and the Commissioner of Industries as the Chairman. The SDB was to ensure that the clearances are issued within stipulated timelines.

¹³ Anantapuramu, Chittoor, Guntur, Krishna, Prakasam and Visakhapatnam

industries registered in SDP, Audit selected a sample of 176 Industries¹⁴ (100 per cent of Mega Industries, two per cent each from Large; and Micro, Small and Medium Enterprise (MSME) industries through random sampling technique for audit analysis. In addition, Audit also analysed the data dump of SDP furnished by the Department.

Audit findings

3.2.3 Deficiencies in the System Processing

The line departments give approvals under respective Acts/Rules/ Regulations at two stages viz., pre-establishment and pre-operation. For existing industries, approvals are given for expansion activities. SDP facilitates online applications for all such cases.

Audit identified certain deficiencies in the systems processing in the Single Desk Portal as under:

3.2.3.1 Validations for Pre-establishment and Pre-operation approvals

The line departments give pre-establishment approvals to setup an industry and pre-operation approvals to commence the operations.

The AP Pollution Control Board (APPCB) issues Consent for Establishment (CFE) at pre-establishment stage and Consent for Operation (CFO) at pre-operation stage under the Water (Prevention & Control of Pollution) Act 1976 and the Air (Prevention & Control of Pollution) Act 1982. CFOs are issued if the conditions stipulated in the CFE by the industrial unit are complied with. Thus, date of CFO cannot be prior to the date of CFE.

Audit observed that:

- APPCB rejected CFE in case of one unit¹⁵ in Guntur district in June 2016 but, approved CFO in October 2016. Approval of CFO before the CFE suggests lack of validation in the system to make approval of CFE as a pre-requisite for approval of CFO.
- Similarly, the Department of Factories issues Factory Plan Approval at pre-establishment stage and Factory Registration/License at pre-operation stage. However, it was observed that in two (out of 183) cases, the date of approval of Factory Registration/License preceded the date of approval of Factory Plan, as shown in Table 3.3:

¹⁴ Mega units -27; Large units - 12; and MSME units - 137

¹⁵ M/s Surya Corporation, Guntur

Table 3.3 - Details of discrepancies

Sl. No.	Name of the unit	Factory Plan Approval Date	Factory Registration /License approval date
1	S V D P Industries, Visakhapatnam District	30/6/2016	28/6/2016
2	Sprint Exports Private Limited, West Godavari District	10/11/2016	24/5/2016

(Source: SDP data)

Thus, there were no validations in the SDP to ensure availability of all pre-establishment approvals with the entrepreneurs when they apply for pre-operation approvals.

Government replied (September 2017) that validations were being put in place in the Portal to ensure that pre-operation approvals are given after pre-establishment stage approvals.

3.2.3.2 Validation for dates of submission and receipt of applications

The data dump of the online approvals given contains “date sent” which is the date on which the registered entrepreneurs submitted information in Common Application Form (CAF) in the Portal and “date of receipt” which is the date on which the competent authority accessed the CAF through their login in the Portal.

Audit analysis of SDP data pertaining to 802 (4 per cent) out of the total 19,837 approvals given through SDP revealed that the date of receipt of application by the Department concerned was one to 347 days prior to the date of sending of application by the applicant.

Thus, there were no validations in the system to check that the dates were as per chronological events and accept only valid inputs.

Government replied that discrepancy in application sent date was being fixed.

3.2.4 Inadequate provision to enter details of existing approvals

The applicants (both existing and new entrepreneurs) have to fill in a Common Application Form (CAF) to obtain approvals for expansion of the existing units or approvals for fresh units respectively. Existing entrepreneurs who are already running an industrial unit with approvals and going for expansion of their units do not require all the approvals listed in the SDP.

However, in the CAF only one text box for ‘reference number’¹⁶ of approvals and one ‘date field’ for ‘date of approval’ were provided, instead of separate

¹⁶ Item No. 7 of CAF

‘text boxes’ and ‘date fields’ for entering details of different approvals already obtained by entrepreneurs. Besides, there was no provision to upload copies of the existing approvals.

Thus, there was no linking of information of existing approvals with the approvals required/ applied for in the SDP.

As a result, the SDP was showing the status of already existing approvals as ‘yet to apply’. During physical verification of 18 out of 176 industrial units in the test checked districts, it was observed that 23 approvals were already obtained by these units while the SDP data showed that they were yet to apply for the same. Thus, the SDP data was not portraying the correct picture of approvals required/obtained/yet to be applied by the entrepreneurs.

Government replied that provision would be made in the user registration process to identify whether a particular industry was new/ already existing/ expansion unit. It further replied that provision would be made to upload all the clearances/ approvals/certificates/licences issued prior to launch of SDP.

3.2.5 Delay in resolving grievances

The SDP had a provision for uploading of grievances, if any, by the registered entrepreneurs. Audit observed that since inception (April 2015) of SDP, the Commissionerate of Industries and six test checked Districts had received 50 grievances, out of which 28 cases were yet to be resolved. The details are shown in *Appendix 3.1*. These were pending for a period ranging from 108 to 606 days. The pending grievances related mainly to application process like permission for changing CAF details, seeking guidance to apply online, etc.

Audit observed that the SDP guidelines issued by Government initially in April 2015 did not stipulate any timelines for addressing grievances. However, in the revised guidelines issued in June 2016, Government stipulated a maximum period of 30 days within which the grievances were to be resolved. As per the guidelines, it was the responsibility of the Commissioner of Industries (COI) to dispose of the grievances. However, 27 out of the 28 grievances that were pending for more than 30 days were those that were registered after issue of revised guidelines. Pendency of grievances for long periods was due to lack of follow up/monitoring by the COI.

Government replied that instructions were issued to the concerned authorities to take action on pending grievances and progress would be reviewed through SDB meetings.

3.2.6 Privilege to change the Status of Clearance

The competent authorities of line departments record their remarks viz., approved /rejected/additional information called for as the case may be. The

line departments take further action on submission of the requisite information by the applicants. Such remarks reflect the status of the applications.

Audit selected 18 Units involving 174 approvals in six districts for physical verification of status of clearances as test check. Out of these, incorrect status of clearances was reflected in SDP in one unit for two approvals. Status of these approvals was shown in the portal as 'Final Approval Pending'/'Additional information called for', though the unit had already obtained these approvals. The above discrepancy was due to lack of privileges/rights to the approval authorities in line departments to update the final action taken subsequent to entering the initial remarks in the SDP.

As a result, the status/remarks indicated initially, remained unchanged though approvals were granted subsequently.

The Government replied that necessary provision would be made in the SDP to indicate current status by the line departments.

3.2.7 Non-provision for display of unit-wise approvals

The Single Desk Performance Report of SDP portrays the status of approvals (Factory plan approval, power feasibility certificate, CFE/CFO, etc.) sought by the entrepreneurs and issued by line departments.

The portal displayed that the line departments processed 19,837 approvals from April 2015 to May 2017 under the SDP.

However, the Portal does not have the provision to generate the unit-wise list of approvals applied for, approvals given and yet to be applied, so as to verify whether a unit had obtained all the required approvals to operate.

Thus, non-availability of unit-wise details in the SDP performance report in the Portal made the SDP deficient for third party verification.

The Government replied that over a period of time, comprehensive report of total approvals required/already existing/applied under SDP and approved in respect of each industry would be provided in the SDP for third party verification.

3.2.8 Minimizing the information input

Government of Andhra Pradesh computerised records of Revenue and Registration Departments for issue of land documents etc., online to the public. Similarly, the location details are available online and verifiable with "Bhuvan/Field Measurement Book"¹⁷.

¹⁷ Bhuvan: ISRO's Geo-portal providing visualisation services and Earth observation data. It is an open platform being used by user community including Andhra Pradesh for various purposes.

The entrepreneurs have to provide details of location of factory etc., proposed in the online application and submit/upload land documents, site plan, Topo Plan, Layout, etc. These plans and documents are verified by the competent authorities of Factories Department, AP Pollution Control Board, etc., to confirm the location details and accord approvals.

The SDP did not integrate the sites/resources available with other departments/agencies to verify the inputs given by the entrepreneurs. Instead the Portal stipulated to upload/courier the supporting documents.

Thus, non-integration of “Bhuvan/FMB”¹⁸ and revenue records with SDP resulted in unnecessary documentation by entrepreneurs.

The Government replied that steps were being taken to make the application completely online and integrate with IGRS/Meebhoomi¹⁹ of Revenue Department and digitalisation of FMB was also in progress. Further, Department assured that various data maintained by the State Government shall be used to reduce the inputting by the entrepreneurs.

3.2.9 Conclusion

The Single Desk Portal is useful to obtain approvals for the applications made by the entrepreneurs to setup, operate and continue industrial units in the State. However, the processing of applications for approvals and display of information requires strengthening of systems to improve the performance of the Portal and availability of information to the public. There are no validations to ensure second stage (pre-operation) approvals are given only after ensuring all first stage (pre-establishment) approvals were given. In the SDP data, there were cases where the dates of receipt were before the dates submission of applications. The Common Application Form (CAF) was not designed to collect the details of approvals already available with the entrepreneurs. The grievances of entrepreneurs were not being resolved even after the prescribed period of 30 days. The portal does not display the updated status of approvals and also unit wise details of applications received/approvals given. Information already available with other departments/agencies of the Government was not integrated with the portal to strengthen the online processing of applications.

¹⁸ FMB is the Field measurement Book which will have the field measurement sketches of all individual fields with Survey Numbers.

¹⁹ IGRS: Website of Registration and Stamps Department of AP which contains information relating to details of Sale/Mortgage of open lands/buildings etc.

Meebhoomi: Website of Revenue Department of AP contains information of village records and maps.

Water Resources Department

3.3 Implementation of irrigation schemes under Accelerated Irrigation Benefits Programme

3.3.1 Introduction

Government of India (GoI) launched the Accelerated Irrigation Benefits Programme (AIBP) in the year 1996-97 to provide Central Assistance to major/ medium irrigation projects in the country. The objective was to accelerate implementation of projects which were beyond resource capability of the States or were in advanced stage of completion. Minor Irrigation schemes were subsequently introduced from the year 2005-06. The intervention of the GoI through Central Assistance was from 25 *per cent* or more of the estimated project cost depending on the location of the project and date of its inclusion in the Programme.

Government of Andhra Pradesh (GoAP) implemented 26 projects since beginning under AIBP consisting of seven major, nine medium and ten minor irrigation projects. The Water Resources Department (WRD) is responsible for execution and maintenance of irrigation projects in the State. The Secretary, WRD at Secretariat level, Engineer-in-chief (E-in-C) (Irrigation) at State level, Chief Engineers, Commissioner of Command Area Development Authority, 50 Superintending Engineers and 266 Executive Engineers are in charge of execution of works.

3.3.2 Audit objectives, scope and methodology

Audit examined (May to August 2017) the implementation of irrigation schemes under AIBP covering the period from April 2008 to March 2017. It was to ascertain whether the projects were effectively implemented in a timely manner and objective of creation and utilization of Irrigation Potential (IP) had been achieved. Audit selected a sample of projects through random sampling method. Sample consisted of two²⁰ out of seven major irrigation projects, four²¹ out of nine medium irrigation projects and six²² out of ten minor irrigation projects. Audit test checked the records in the offices of the concerned Chief Engineers, Superintendent Engineers and Executive Engineers.

²⁰ Gundlakamma Reservoir Project and Tadipudi Lift Irrigation Scheme

²¹ Tarakarama Thirtha Sagaram Project, Swarnamukhi Barrage Project, Veligallu Reservoir Project and Kanupur Canal Project

²² Conversion of Bhavanasi Tank into mini Reservoir, Formation of Reservoir across Isukagedda at Buchaiahpalem, Construction of new MI Tank across Maddileru vagu near Gani, Formation of new MI Tank across Chandravanka, Construction of Multi-purpose check-dam across Musi River near Ananthavaram and Construction of Pickup Anicut across Musi River near Muppavaram

Audit findings

Major and medium irrigation projects

The two major irrigation projects selected are still ongoing and out of four medium irrigation projects, two were completed, one is ongoing and another project is deferred.

3.3.3 Financial management

The GoI and the State Government have funded the AIBP projects as per the ratios (25:75, 30:70 and 90:10) agreed upon in the Memorandum of Understanding between both the Governments at the time of inclusion of the project under the scheme. The state government adjusted the funds released by the GoI to the State finances. The state government issues Letter of Credit (LoC) to the Pay and Accounts Officer, who, in turn, would book the expenditure on the project against the bills preferred by the executing agency.

The details of expenditure on the test checked AIBP Projects as of March 2017 is given in *Appendix-3.2*.

AIBP Guidelines prescribed that subsequent instalments should not be released to State Governments if audited statement of expenditure was not furnished within nine months of release of central assistance. Audit observed that in case of two projects viz., Tadipudi Lift Irrigation Scheme (TLIS) and Tarakarama Teertha Sagaram project (TRTS), the State Government could not spend the Central assistance within the stipulated period of nine months. This was because progress of works was slow due to delays in land acquisition. The Government could submit the statement of expenditure for TLIS in 2008 and TRTS in 2015 as shown below:

Table 3.4 - Details of grants not released

(₹ in crore)								
Sl. No.	Name of the Project	Project Cost	Revised cost	Central Grant eligible	Central Grant released	Year of release	Year of confirmation of expenditure	Amount not released
1.	Tarakarama Thirtha Sagaram Project (TRTS)	220.11	471.31	66.03	33.01	2005-06	2015	33.02
2.	Tadipudi Lift Irrigation Scheme (TLIS)	376.96	568.00	94.24	48.22	2006-07	2008	46.02
Total		597.07		160.27	81.23			79.04

(Source: Records of the Department)

As a result, Government of India did not release the second instalments for these two projects and the State Government had forgone the remaining Central assistance of ₹79.04 crore.

The Government accepted (December 2017) the above audit observation and stated that the AIBP authorities were being frequently requested for release of further Central assistance. The reply confirms that the State exchequer was burdened to a tune of ₹79.04 crore.

3.3.4 Project Execution and Management

The project-wise audit observations on execution of Major and Medium projects are discussed below:

3.3.4.1 Major Irrigation Projects

(i) Kandula Obula Reddy Gundlakamma Reservoir Project

State Government had taken up Kandula Obula Reddy Gundlakamma Reservoir Project on Gundlakamma River in Prakasam District. The Government envisaged utilization of 12.84 TMC of water to irrigate 80060 acres in Prakasam District and provide drinking water to a population of 2.56 lakh of Ongole town and 43 en-route villages in the command area.

Government accorded administrative approval (October 2003) for ₹165.22 crore. It later revised the project cost to ₹453.85 crore (December 2005), ₹592.18 crore (June 2009) and then to ₹753.83 crore (November 2016). The project works consisted of formation of earth bund, construction of spillway, fabrication and erection of gates, excavation of left and right canals, distributaries and minors.

- ***Delay in completion of the project and non-achieving the objectives:*** Audit observed that, though the department awarded (2004) the works with a date of completion (30 months), the contractor did not complete the project in all respects as of June 2017. The contractor completed the construction of earth bund, spillway, fabrication & erection of gates. The progress in excavation of left and right canals, distributaries and minors were 86 *per cent*. The progress in land acquisition was 99 *per cent*. The expenditure incurred up to 2016-17 was ₹535.01 crore. The Department was required to rehabilitate 6605 families from five full and seven partial submergence villages. Till June 2017, it had rehabilitated 3567 families from only the ‘full submergence villages’. It could not rehabilitate families from ‘partial submergence villages’ due to non-completion of construction of rehabilitation and resettlement (R&R) centres.

Due to non-completion of land acquisition and R&R, the Department could create an ayacut²³ of 68948 acres as against the target of 80060 acres. Due to non-completion of works, envisaged benefits of the projects were achieved partially even after 13 years since commencement of works.

Government accepted that creation of about 11500 acres of ayacut was held up due to incomplete land acquisition process.

- **Extra commitment of ₹1.49 crore due to incorrect adoption of differential rate for distributary network:** Government vide order²⁴ (June 2015) increased the rate payable for distributary network from ₹9000/acre to ₹10500/acre in the ongoing contracts with effect from April 2013. Accordingly, the Department concluded (June 2016) a supplemental agreement for ₹3.21 crore for balance ayacut of 32,333 acres to be created as on April 2013 in Gundlakamma project. Audit observed that the Government orders stipulated that the Department should pay the differential rate (₹1500/acre) without applying tender discount/premium²⁵. However, while computing the revised value of distributary network, the Department incorrectly applied tender discount of 5.13 per cent on old rate of ₹9000/acre and arrived at differential rate of ₹1962/acre (₹10500 - ₹8538), instead of ₹1500/acre that was payable. Audit pointed out that incorrect application of tender discount on old rate by the Department resulted in an extra commitment of ₹1.49 crore (₹1962- ₹1500 = ₹462 x 32,333 acres).

Government replied that the supplemental agreement would be modified after calculating the differential rate without applying tender discount.

- **Wasteful Expenditure on 20R Major on RMC:** According to the provisions laid down in Para 392 of APPWD Code, written statements from the ryots shall be obtained as part of initial investigation work before execution of the works. Audit noticed that as per the agreement conditions, under Right Main Canal of Gundlakamma Reservoir Project, 20R Major distributary canal was excavated (2012) along with structures at a cost of ₹12.97 lakh to create an ayacut of 292.46 acres. However, the farmers of the area re-filled the canal with excavated soil on the plea that the flow of water through this distributary would increase salinity in their lands.

²³ Command area

²⁴ G.O.Ms.No.63 dated 12.06.2015

²⁵ 'Tender discount' is the percentage of the price quoted by the bidder below the estimated cost of the work. 'Tender premium' is the percentage quoted in excess of the estimated cost.

The Government accepted (December 2017) the fact that the farmers refilled the excavated distributary. It further stated that the reason of increase in salinity put forth by farmer was far from truth and that the canal would be re-excavated in due course.

However, there was no evidence on record to show that either the Department or the EPC agency had taken concurrence of farmers before taking up and execution of the work. This rendered ₹ 12.97 lakh wasteful.

(ii) Tadipudi Lift Irrigation Scheme

The Tadipudi Lift Irrigation Scheme (TLIS) envisaged creation of irrigation potential of 2,06,600 acres in 14 Mandals of West Godavari district. The work inter alia included lifting 12.14 TMC of water from the river Godavari to main canal.

Government initiated the project in 2004 with an estimated project cost of ₹ 376.96 crore. Subsequently, the Government revised it to ₹ 467.70 crore (October 2010) and to ₹ 568 crore (December 2016). The scope of work included construction of two pump houses on Godavari right bank with four pumps/motors, laying of pressure mains, excavation of main canal for 80.991 kms and construction of four second stage pump houses on main canal.

- **Cost overrun of ₹ 191.04 crore due to delay in completion of main canal and distributaries:** The work of main canal and distributaries was awarded in October 2004 with target date of completion as October 2006. The work was not completed and the target date was extended up to March 2018. As of March 2017, the Department created ayacut of 1.54 lakh acres against the target of 2.07 lakh acres. The Department, even after lapse of 11 years, could not create irrigation facilities to an extent of 53000 acres due to delays in land acquisition and could achieve only partial benefits from the project. Non-completion of the work within the stipulated period resulted in cost overrun of ₹ 191.04 crore. The Department attributed non-creation of ayacut to non-handing over of land by Revenue Authorities.
- **Electro-mechanical equipment lying idle:** The agency procured (2006-07/2007-08) Electro mechanical equipment (such as pumps, motors, power transformers, power and control cables and sub-station) for sub lift No. IV on main canal of Tadipudi LIS at a cost of ₹ 1.90 crore. Audit noticed that the equipment, though installed, had not been put to use as the works of distributaries and field channels were not completed due to non-handing over of lands by the Revenue Department. Further, the possibility of the expiry of guarantee/warranty period besides deterioration of the equipment cannot be ruled out.

Government replied that the Revenue Department handed over the land (2017) and the construction work would be commenced.

3.3.4.2 Medium Irrigation Projects

(i) Kanapur Canal Project

Award of work without proper verification of genuineness of experience certificates of contractor: Government, awarded (October 2002) the work of lining from Km 0.00 to Km 7.20 of Kanapur Canal project with a cost of ₹9.78 crore under AIBP. The scheduled date of completion of work was March 2003. Vigilance and Enforcement Department pointed out that the department selected the contractor without proper verification of genuineness of experience certificates enclosed to tender documents. Accordingly, the department determined (April 2003) the work. The Department took up (June 2008) the work under Package-4 of Modernisation of Kanapur Canal System with State funds. The total expenditure from AIBP fund up to the date of termination of contract (April 2003) was ₹71 lakh. This amount included mobilization advance of ₹42 lakh paid to the contractor which was yet to be recovered. The remaining expenditure of ₹29 lakh was incurred on departmental charges on tender schedules, etc. Thus, the whole expenditure became wasteful and was a loss to the Government.

(ii) Tarakarama Thirtha Sagaram Project

Government accorded (2003) administrative sanction for ₹220.11 crore for construction of Tarakarama Thirtha Sagaram medium irrigation project over Champavathi river in Vizianagaram district. The Project envisaged creation of ayacut of 24710 acres in 49 villages in three Mandals utilizing 5.80 TMC of water. The Government subsequently revised (September 2015) the project cost to ₹471.31 crore.

Delay in completion of works and non-achieving the objectives: The Department awarded the work (May 2006) to a contractor for ₹181.50 crore. It was scheduled for completion by May 2008, which was rescheduled (December 2017) to December 2018. The scope of the work included construction of a barrage at Kotagandredu Village across Champavathi River, excavation of diversion canal and tunnel, formation of a reservoir, excavation of right and left main canals with distributary system, etc., including maintenance for two years. The expenditure incurred as of March 2017 was ₹144.28 crore.

The contractor achieved 31 *per cent* progress on earth dam; 80 *per cent* on barrage and did not commence Right and Left Main Canal works and distributary system. Audit observed that as of May 2017, out of 3296.75 acres of total land required, the Department acquired 3031.15 acres and was yet to

acquire 265.60 acres. Further, the Department was yet to obtain Forest Clearance for diversion of 21.91 acres of forest lands required for the tunnel and right main canal works. Delays in acquisition of lands and non-obtaining of forest clearance resulted in non-completion of work even after 11 years from the date of agreement. The delay resulted in cost overrun of ₹ 251.20 crore besides non creation of ayacut despite time overrun of nine years.

The Government confirmed that the works were not completed due to non-acquisition of land and delay in obtaining forest clearance.

(iii) Veligallu Reservoir Project

Government envisaged Veligallu Project across Papagni River near Veligallu village in Galiveedu mandal of Kadapa District to create ayacut of 24000 acres at a cost of ₹ 80.31 crore. Department awarded (March 2005) the work (Package-5 AIBP) for ₹ 72.90 crore to be completed by September 2006. The scope of work included fabrication, supply and fixing of radial gates; excavation of right and left main canals, distributary system with field channels including maintenance of the project for two years.

Issue of incorrect Completion Certificate: As per the agreement condition, the contractor shall carryout any maintenance or repairs to work during the maintenance period of two years or two Kharif crop seasons, whichever is more, from the date of issue of completion certificate. The work was completed in August 2007 and the Department issued (May 2010) Completion Certificate to the contractor. The Department, during the maintenance period, noticed (November 2010) several defects like, slippages of soil in main canal, field channels and structures not being executed fully, damages to revetment, etc. The Department had issued notices to the contractor several times (between 2010 and 2012) for rectification of these defects. However, the contractor had not rectified these defects. The Department did not make any efforts to renovate the field channels and structures for smooth flow of water to the fields. This resulted in non-flowing of water to the fields though water was released in to the canals. Audit observed that as per the latest estimates (2017-18 rates) prepared by Department, the cost of rectification of the defects was worked out at ₹ 16 crore.

The Department replied (December 2017) that Government has initiated action (September 2017) against the persons responsible for defective work. It also stated that estimate for excavation of field channels would be submitted to Government. Thus, due to poor monitoring Government is burdened to incur an avoidable expenditure of ₹ 16 crore, besides non-provision of irrigation facilities to the targeted ayacut.

3.3.4.3 Minor Irrigation Projects

Audit examined the records of the following six²⁶ Minor Irrigation tanks. The details are given in *Appendix 3.3*.

Department could not provide information regarding the amount it received from GoI under the AIBP for the above schemes. Audit observed that one scheme was deleted from the AIBP in 2011 due to the dissent from the farmers of the foreshore area²⁷. This was because their lands were already receiving sufficient water from Telugu Ganga Project canals.

Audit findings on the test checked projects are discussed below:

(i) Minor Irrigation tank across Maddileru river

Government accorded (February 2007) administrative sanction of ₹ 3.07 crore (later revised to ₹ 9.10 crore in March 2012) for construction of minor irrigation tank across Maddileru river²⁸. The main objective of the project was to create ayacut of 642 acres. The Department awarded (November 2009) work to a contractor for ₹ 2.78 crore with scheduled completion by November 2010. **As of March 2017, the Department incurred an expenditure of ₹ 8.25 crore (land acquisition: ₹ 5.09 crore and works: ₹ 3.16 crore) and the project was yet to be completed.**

Non-achievement of project objectives: For constructing the project, lands to an extent of 226 acres was needed. However, the Department awarded the works without acquiring lands. It also could not acquire and hand over the land to the contractor during the agreement period. This resulted in stoppage of work by the contractor. The Department could complete land acquisition only in May 2011. Due to delay, the cost of land acquisition also increased from ₹ 0.39 crore to ₹ 5.09 crore. After resuming the work, the contractor again stopped (August 2012) the work demanding revision of rates. The issue of allowing revised rates was under consideration with Government. As of now, the earth bund was completed and water was being stored in the tank. However, due to non-execution of head sluice and supply channel, the Department was not in a position to release water to the intended ayacut.

Thus, despite time over run of more than seven years and an expenditure of ₹ 8.25 crore (including LA), the intended benefit of providing irrigation facilities to 642 acres was not achieved. This rendered the expenditure on the

²⁶ (i) Maddileru Minor Irrigation Tank, (ii) Bhavanasi Minor Irrigation Tank, (iii) Ananthavaram Minor Irrigation Tank, (iv) Isukagedda Minor Irrigation Tank, (v) Muppavaram Irrigation Tank and (vi) Chandravanka Minor Irrigation Tank.

²⁷ Thodendlapalle, Mutyalapadu and Chakravartulapalle villages.

²⁸ Gani village (Gadivemula Mandal) in Kurnool District.

project unfruitful besides cost over run on land acquisition with further possibility of increased cost of works.

The Department replied that the work of head sluice and supply channel would be executed after obtaining approval from the Government.

(ii) Conversion of Bhavanasi tank into mini reservoir

Government accorded (November 2007) administrative approval for ₹ 27 crore for conversion of Bhavanasi Tank into Mini-Reservoir in Addanki Mandal of Prakasam District. The main objective of conversion was to create new ayacut of 2036 acres and to stabilize existing ayacut of 1797 acres. The Department divided the work into three packages and awarded (February 2009) to contractors. The target date of completion was November 2011. The scope of work included (i) construction of pickup anicut²⁹ across Gundlakamma river at Velamavaripalem (Package-II); (ii) excavation of feeder channel from pickup anicut to Bhavanasi Tank (Package-IV); and (iii) raising of full tank level (FTL) of Bhavanasi tank (Package-III).

Audit observed that the total land required for execution of the project works was 465.72 acres. The Department awarded the works without acquiring lands necessary for smooth execution of works. It had failed to complete the land acquisition within stipulated date of completion of the work. It had submitted requisition for land to LA authority only in August 2012. The Department acquired only 190.29 acres (40.85 *per cent*) as of December 2016. This had resulted in non-completion of works relating to raising of FTL of Bhavanasi Tank and excavation of feeder channel from pickup anicut to Bhavanasi Tank. This had resulted in time over run and non-completion of the project till date. The work of construction of pickup anicut was completed in March 2015.

The work of raising of FTL of Bhavanasi tank was awarded (March 2009) for ₹ 1.48 crore scheduled to be completed in six months. The work was completed up to 98 *per cent* (May 2012). Raising the body wall of surplus weir³⁰ was not completed due to non-acquisition of lands in the foreshore submergence area. Department closed (July 2012) the contract and did not take up the balance work as it could not complete land acquisition even now.

Thus, non-completion of land acquisition led to non-completion of the project works despite time over run of six years. This resulted in non-creation of targeted ayacut, besides rendering the expenditure of ₹ 25.88 crore incurred on the project unfruitful.

²⁹ A pickup anicut is a small dam constructed across river/stream to store water and divert it through a regulator into supply channel

³⁰ A surplus weir is a low barrier which is built across a river/stream/reservoir to store water up to a specific level and to facilitate overflow of the excess water.

Government replied that the LA authority had acquired only 190.29 acres in the last seven years and were now requesting the Department to submit revised land schedules as per the new LA Act, 2013. The reply was silent on the delays on part of the Department in sending the LA proposals initially.

3.3.5 Conclusion

The Accelerated Irrigation Benefits Programme (AIBP) is centrally sponsored scheme aimed at accelerating the execution of last mile irrigation projects to derive benefits early. Audit test checked the implementation of 12 AIBP projects (major, medium and minor) in the State. In two projects, failure of the State to utilize the Central assistance within the stipulated period resulted in non-release of further funds by GoI and the State had forgone Central assistance of ₹ 79.04 crore. Five test-checked projects had not been completed despite time overrun of six to eleven years due to delays in land acquisition, forest clearance, etc. Out of these, partial irrigation benefits were achieved in two projects. No benefits were achieved in three projects rendering the expenditure of ₹ 178.41 crore incurred so far on these projects unfruitful. The objective of taking up these projects under AIBP had not been achieved.

3.4 Extra expenditure on works

In the work of 'Modernisation of Prakasam Barrage and Head works, etc.' in Krishna District (Package-1), the Department incorrectly worked out the amount to be deducted from agreement value for the portion of work deleted from the scope of contract. This resulted in extra financial burden of ₹ 22.60 crore on the public exchequer.

As a part of modernisation of the Krishna Delta System, the Water Resources Department entrusted (July 2008) the work of 'Modernisation of Prakasam Barrage and Head works, etc.' in Krishna District (Package-1) to an agency. The contract was an Engineering, Procurement and Construction (EPC) turnkey contract for ₹ 204.67 crore (at a tender premium³¹ of 4.3837 per cent). As per agreement, the work was to be completed by October 2012. The extension of time (EOT) was granted up to October 2017. The work is in progress and the value of work done was ₹ 179.81 crore (i.e., 88 per cent) as of May 2017.

On scrutiny of records pertaining to the above work during local audit (January 2015) of the Krishna Central Division, Vijayawada, Audit observed:

³¹ The percentage quoted by contractor over and above the value of work estimated by the Department.

As per agreement, the scope of the work included earthwork excavation, Head Works, providing cement concrete (CC) lining to canals, construction/reconstruction of CM&CD³² works, construction of retaining walls and other miscellaneous items. During the course of execution, the Department decided (December 2011) to delete 'construction of retaining walls' and 'CC lining of canals' in Vijayawada city limits from the scope of the contract due to field constraints. It also proposed to take up some new items of work in place of the deleted items. The Department worked out the cost of deletions at ₹64.45 crore and the cost of additional items at ₹63.27 crore. Government approved (June 2014) these deletions and additions to the agreement. Accordingly, the Department issued (August 2014) a 'Correction Slip' to the agreement duly changing the scope of work under the agreement.

Audit observed that the Department incorrectly worked out the cost of deleted items. As per the estimate, the cost of the deleted items worked out to ₹86.41 crore (including premium of + 4.3837 per cent), whereas ₹63.81 crore was adjusted from the contract value. The excess amount of ₹22.60 crore (as detailed in table below) retained in the agreement value was spread among the payments of various items of work under the contract and was being released to the contractor through part payments. So far (as of May 2017), 88 per cent of the inflated agreement value had already been released to the contractor. Thus, the incorrect computation of the cost of deleted items resulted in extra financial burden of ₹22.60 crore on the Department.

Item of work	Cost as per estimate (₹)	Original length (Kms)	Cost per Km as per estimate (₹)	Deleted Length (Kms)	Pro rata cost of deleted length (₹)
CC lining	195462000	13.596	14376434	13.096	188273780
RCC retaining wall	648595000	25.657	25279456	25.297	639494398
Total cost as per estimate rates					827768178
Add tender premium @ 4.3837%					36286874
Total cost to be deleted from agreement					864055052
Cost actually deleted by Department					638080700
Extra expenditure to the Department					225974352

Audit had brought this issue to the notice of Government in August 2015 and again in June 2017. However, the Department did not take any action to recover/adjust the excess payment. The Chief Engineer, Krishna Delta System (CE) replied (August 2017) (endorsed by Government) that in the Payment Schedule under the agreement, the Department had reduced the percentage costs allocated for CC lining and retaining walls. The CE stated that the

³² Cross masonry and cross drainage

differential amount was being utilized for additional works under (i) repairs and replacement of sluice/scour gates of Prakasam Barrage and (ii) Residential and non-residential buildings.

However, Audit observed that repairs/replacement of sluice/scour gates and construction of residential/non-residential buildings were already part of the original agreement. There was no evidence in the departmental records that any additional works were taken up under these components. Further, as per the agreement conditions, the entrustment of additional items outside the scope of original contract and the price payable shall be referred to a committee constituted by Government for decision. However, the CE could not furnish the details of proposals/estimates in respect of such additional works, when called for (September 2017) by Audit.

The Department needs to recover the excess amount of ₹22.60 crore from the contractor. Government should get the matter investigated through the Vigilance Department and fix responsibility of the persons responsible.

3.5 Avoidable expenditure of ₹14.33 crore due to late payment of High Tension Current Consumption charges

In Handri Neeva Sujala Sravanthi project, the delays in payment of electricity bills of pumps and motors for the period 2012-13 to 2016-17 resulted in avoidable expenditure of ₹14.33 crore and a further liability of ₹17.90 crore towards late payment charges was incurred, which was yet to be paid.

Handri Neeva Sujala Sravanthi (HNSS) Project, a lift irrigation project, was intended to provide irrigation to 6.03 lakh acres in four districts³³ in Rayalaseema region. The Water Resources Department took up the Phase-1 works of 12 pumping stations under the project in the year 2004-05. Department after completion had commissioned eight out of 12 pumping stations in Kurnool and Anantapuramu districts. These pumps commenced operations in November 2012. For lifting of water, these pumps run on high tension (HT) power provided by the Central Power Distribution Company of Andhra Pradesh Limited (APCPDCL)³⁴. Every month, the APCPDCL issues HT current consumption (HTCC) bills for the electricity consumed by the pumps during the month. The Department was required to pay these bills before the due dates (i.e., within 15 days from the date of issue of bill). In

³³ Anantapuramu, Chittoor, Kadapa and Kurnool districts

³⁴ After bifurcation of the AP State, the APCPDCL is now renamed as Southern Power Distribution Company of AP Limited (APSPDCL).

case of delay in payment, late payment charges³⁵ would be levied in the subsequent bills. Upon submission of estimates for High Tension Current Consumption (HTCC) charges by the Chief Engineer, the Government accords Administrative Approval and authorizes payments to be made. Thereafter, the Executive Engineer, HNSS Division No.4, Kurnool³⁶ was required to make payments to APCPDCL.

Audit examined (September 2016) payments of HTCC charges in the office of the Executive Engineer, HNSS Division No.4, Kurnool. It was observed that the Department made the payments of HTCC bills for the years from 2012-13 to 2015-16 to the APCPDCL with delays ranging from one to nine months as detailed below :

Year of bills	Reasons for delay
2012-13	Operation of pumps commenced in November 2012. However, the CE submitted the estimates (₹62.8 crore) for HTCC charges to Government only in February 2013 (delay of more than two months). Government accorded administrative approval in March 2013. The Department paid the bills in the same month which included late payment charges of ₹0.47 crore.
2013-14	CE submitted the estimates (₹139.43 crore) to Government in May 2013. Substantial time was lost in Government seeking (July 2013) clarifications and furnishing replies (October 2013) thereto by the CE. Government finally accorded administrative approval in December 2013. The Department paid the bills for April - December 2013 in the month of January 2014. It paid the bills for January - March 2014 in the subsequent financial year (June 2014). The total late payment charges paid during the year was ₹0.82 crore.
2014-15	CE submitted the estimates (₹251.44 crore) to Government in April 2014. Government accorded administrative approval in May 2014. Department paid the bills in October/December 2014 and March 2015. The delay was due to returning of bills by the Pay and Accounts Officer, Kurnool and delays in release of funds/ authorization of payments by Finance Department. The total late payment charges paid during the year amounted to ₹8.25 crore.

³⁵ As per the Tariff Orders issued by the AP Electricity Regulatory Commission, the Discoms shall charge the delayed payment surcharge per month at the rate of 1.5 *per cent* of the bill amount or ₹550 whichever is higher.

³⁶ The Executive Engineer, HNSS Division No.4, Kurnool was responsible for payment of HTCC bills in respect of all the eight pumps. In September 2016, this responsibility was transferred to the Executive Engineer, HNSS Division No.2, Kurnool.

2015-16	CE submitted the estimates (₹633.33 crore) to Government in May 2015. Government sought clarifications thereon and the CE furnished replies in July 2015. Government accorded administrative approval in November 2015 (delay of more than three months). The Department paid the bills (up to February 2016) in February/March 2016 with late payment charges of ₹4.79 crore.
---------	--

In all, the Department had paid a total amount of ₹14.33 crore towards late payment charges for the period 2012-16.

For the HTCC bills pertaining to the year 2016-17, Audit observed that the CE had submitted estimates to Government in May 2016. Government had not accorded the administrative approval till August 2017. HTCC bills amounting to ₹468.45 crore for the year 2016-17 were pending for payment. This amount also included late payment charges of ₹17.90 crore.

Thus, the delays in payment of HTCC bills in HNSS project resulted in avoidable expenditure of ₹14.33 crore towards late payment charges paid and ₹17.90 crore for 2016-17 are to be paid.

The Government needs to frame a suitable mechanism for payment of HTCC charges in a timely manner and to avoid late payment charges.

The CE, in reply (August 2017) (endorsed by Government) stated that the Government was actively considering giving permission to the CE to accord technical sanctions for the estimates for the subsequent years based on the administrative approval already accorded by the Government to avoid delays in payment of HTCC charges. The CE further replied that the estimates for HTCC charges would be submitted well in advance in future.

3.6 Incomplete execution of flood protection work

Due to failure of the Department to finalize the designs for more than seven years, the work of 'Restoration of the existing Rajukalva flood bank from Km 1.000 to Km 6.300 and formation of new flood bank from Km 6.300 to Km 9.500' was not completed. As a result, the intended objective of providing protection to the Lankevanidibba village from floods was not achieved.

GoAP accorded (January 2008) administrative approval for the work of 'Restoration and formation of Rajukalva flood bank from Km. 1.00 to Km 9.50 of Lankevanidibba village in Guntur District for ₹2.18 crore. The

Department had proposed restoration work from Km 1.000 to Km 6.300 and formation of new flood bank from Km 6.300 to Km 9.500. The objective of the work was to protect Lankevanidibba village in Guntur district from submersion due to floods in Krishna river. The Department accorded Technical Sanction for the work in February 2008. After tender process, the Department entrusted (May 2008) the work to a contractor for ₹ 1.89 crore. As per the contract, the work was to be completed within 12 months (i.e., by May 2009).

Audit examined (May 2016) the records pertaining to the above work in the Krishna Central Division, Vijayawada. Audit observed that the work was not completed even after a time over run of more than eight years. Audit also observed the following:

In the original design, the Department had proposed to form the flood banks with 2:1 slopes on both sides of the banks. However, after awarding of work, the Department noticed that it was not possible to form the banks with 2:1 slopes on the canal side from Km 1.000 to Km 6.500. This was due to the fact that the Krishna river was flowing close to toe of Rajukulva flood bank and also since there were prawn culture tanks in farmers' lands on both sides. In view of this, the Department proposed (December 2009) to alter the slopes as 1½:1 instead of 2:1 in this reach and also to extend flood bank from Km 9.500 to Km 10.040. Superintending Engineer, Irrigation Circle, Vijayawada (SE) submitted the above deviation proposals to the Chief Engineer³⁷ (CE) in March 2010. CE had sought some clarifications (March 2010). The SE had submitted the replies to the clarification in June 2010. Thereafter, there was no correspondence on the issue from June 2010 to October 2014 and the deviations were not approved. The reasons for non-approval of the deviation proposals by CE were not on record. After four years, the SE once again requested (October 2014) the CE to approve the deviation proposals. The CE again sought (December 2014) clarifications³⁸ thereon. However, no further correspondence on the issues was available in the records of the CE/SE.

The contractor after executing work valuing ₹ 0.61 crore (June 2009) stopped due to non-approval of the revised design proposals. The Department neither extended the agreement period of completion nor closed the contract (June 2017). Due to non-approval of the deviation proposals, the work had not been resumed since June 2009.

³⁷ CE, Flood Banks (now CE, Krishna Delta System)

³⁸ viz., the reasons for submission of deviation proposals after a long gap of five years; whether extension of time was granted to the contractor; copies of orders to extend the flood banks from Km 9.500 to Km 10.000; and details of protection works proposed with the additional quantities.

The post award deviations to the work indicate improper assessment of site conditions before award of work. Further, the Department failed to finalize the designs and complete the balance work even after a delay of eight years. As a result, the intended objective of providing protection to the Lankevanidibba village from floods was not achieved and the work done amounting ₹0.61 crore was unfruitful.

Government replied (August 2017) that the modifications to the drawings were finalized and the contractor had been requested to resume the work and required EOT for completion of work was being granted by the Department. However, Department replied (September 2017) the matter was under study.

Government needs to fix accountability on the officials responsible for non-completion of the work for eight years.



(L. TOCHHAWNG)
Principal Accountant General (Audit)
Andhra Pradesh

Hyderabad
The 28 March 2018

Countersigned



(RAJIV MEHRISHI)
Comptroller and Auditor General of India

New Delhi
The 02 April 2018

Appendices

Appendix 1.1

(Reference to paragraph 1.5.1, page 3)

Department-wise details of Outstanding Inspection Reports and Paragraphs as on 30 September 2017

Sl. No.	Department	Number of outstanding		Earliest year of the outstanding IRs	Number for which even first replies have not been received		Earliest year of the report for which first replies have not been received
		IRs	Para-graphs		IRs	Para-graphs	
1.	Agriculture & Cooperation	499	1899	1992-93	164	879	1995-96
2.	Animal Husbandry, Dairy Development and Fisheries	136	871	2001-02	97	532	2001-02
3.	Environment, Forests, Science and Technology	197	602	1990-91	18	183	2014-15
4.	Industries and Commerce	124	401	1992-93	35	182	1994-95
5.	Information Technology, Electronics and Communication	1	5	2014-15	1	5	2014-15
6.	Infrastructure and Investment	11	63	2003-04	4	28	2010-11
7.	Water Resources	1137	3608	1999-00	92	500	2005-16
8.	Works & Projects wing of Finance Department	17	89	2015-16	0	0	0
9.	Roads and Buildings	271	890	1999-2000	19	110	2013-14
Total		2393	8428		430	2419	

Appendix 1.2

(Reference to paragraph 1.5.1, page 3)

Year wise breakup of outstanding Inspection Reports and Paragraphs for which first replies have not been received

Year	Number of IRs/Paragraphs as of 30 September 2017		IRs/Paragraphs where no replies have been received	
	IRs	Paragraphs	IRs	Paragraphs
2012-13 and earlier years	1870	5251	156	713
2013-14	59	272	6	32
2014-15	146	848	59	384
2015-16	174	1141	87	635
2016-17	144	916	122	655
Total	2393	8428	430	2419

Appendix 1.3

(Reference to paragraph 1.5.1, page 3)

Year-wise details of outstanding Inspection Reports and Paragraphs pending for more than 10 years

Year	Water Resources Department		Agriculture and Cooperation Department	
	IRs	Paragraphs	IRs	Paragraphs
Up to 2006-07	346	661	185	328
2007-08	155	395	53	131
2008-09	152	393	32	125
2009-10	101	339	29	181
2010-11	128	472	75	389
2011-12	31	166	17	116
2012-13	2	3	0	0
2013-14	35	165	0	0
2014-15	54	309	33	189
2015-16	90	484	26	139
2016-17	43	221	49	301
Total	1137	3608	499	1899

Appendix-2.1

(Reference to paragraph 2.1.11.3, page 35)

Progress of canal works under the Polavaram Irrigation Project as on July 2017

(i) 8 packages under Left Main Canal:

Pack- -age No.	Chainages (from KM – to KM)		Name of the agency	Date of agreement	Stipulated period of completion	EOT sanctioned upto	Percentage of progress
1	0.000	25.600	M/s Progressive Construction Ltd., Hyderabad	20.03.05	19.03.07	31.01.18	64
2	25.600	51.600	M/s Patel Soma (JV), Hyderabad	17.03.05	16.03.07	30.06.16	94
3	51.600	69.145	M/s Maytas NCC (JV), Hyderabad	19.03.05	18.03.07	31.12.17	75
4	69.145	93.700	M/s Sabir Dam & water works, Hyderabad	23.03.05	22.03.07	31.03.18	50
5	93.700	111.000	M/s Sabir Dam & water works, Hyderabad	23.03.05	22.03.07	31.03.18	48
6	111.000	136.000	M/s Madhucon-Sino Hydro, Hyderabad	23.03.05	22.03.07	31.12.17	57
7	136.000	162.409	M/s KCL-JCC(JV), Ahmedabad	14.03.05	13.03.07	31.01.18	80
8	162.409	177.809	M/s IVRCL-SEW & Prasad (JV), Hyderabad	09.03.06	08.03.08	30.06.16	29

(ii) 7 packages under Right Main Canal:

Pack- -age No.	Chainages (from KM – to KM)		Name of the agency	Date of agreement	Stipulated period of completion	EOT sanctioned upto	Percentage of progress
1	0.000	14.800	M/s Patel Soma (JV), Hyderabad	21.10.04	20.10.06	30.06.16	99
2	14.800	38.199	M/s Progressive Constructions Ltd., Hyderabad	20.10.04	19.10.06	31.05.17	86
3	38.199	71.500	M/s Hindustan Construction Company Ltd., Mumbai	23.10.04	22.10.06	30.06.16	Completed
4	71.500	105.100	M/s Jai Prakash Gayatri (JV), Hyderabad	23.10.04	22.10.06	30.06.17	84
5	105.100	133.800	M/s IVRCL-SEW Prasad (JV), Hyderabad	23.10.04	22.10.06	30.06.17	72
6	133.800	156.500	M/s Progressive Constructions Ltd., Hyderabad	21.10 .04	20.10.06	31.03.17	89
7 ¹	156.500	174.700	M/s Larson & Turbo, Ltd., Chennai	25.10.04	24.10.06	30.09.16	88

(Source: Records of the Department)

¹ A part of the work i.e. from Km 162.625 to 175.335 was deleted and awarded to another contractor in July 2015. The work is in progress.

Appendix - 2.2

(Reference to paragraph 2.2.7.3 (i), page 49)

Details of IT Units to which lands were allotted under ICT Policies 2005-10 and 2010-15

Sl. No.	Name of the Unit	Place	Land allotted (in acres)	Date of MOU	Date of Handing over of Land	Due date for completion	Actual date of completion	Delay in implementation as of July 2017 (in months)	Employment target as per MOU (Nos.)	Actual employment provided (Nos.)	Shortfall In employment generation (Nos.)
ICT POLICY 2005-10											
IT Units that commenced operations											
1	Miracle Software Systems (I) Pvt. Ltd.	Hill No.1, IT SEZ Madurawada	5.00	13.06.2005	31.03.2006	30.06.2009	Completion date not furnished	Not applicable	800	559	241
2	Symbiosys Technologies	Hill No.2, IT SEZ, Madurawada	2.00	13.06.2005	23.02.2006	22.02.2009			300	726	---
3	Mahathi Software Pvt. Ltd.	Hill No.2, IT SEZ, Madurawada	2.00	13.06.2005	13.04.2006	12.04.2009			500	153	347
4	Nunet Technologies Pvt. Ltd.	Hill No.2, IT SEZ, Madurawada	3.00	13.06.2005	24.02.2006	23.02.2009			500	305	195
5	E Centric Solutions Pvt. Ltd.	Hill No.2, IT SEZ, Madhurawada	1.00	13.06.2005	17.10.2006	16.10.2009			200	512	---
6	Softsol India Ltd.	Hill No. 2, IT SEZ, Madhurawada	1.00	13.06.2005	23.02.2006	22.02.2009			100	23	77
7	Sankhya Technologies Pvt. Ltd.	Hill No. 2, IT SEZ, Madhurawada	2.00	13.06.2005	24.02.2006	23.02.2009			300	20	280
8	IBM India Pvt. Ltd.	Hill No.3, IT SEZ, Madhurawada	3.84	24.06.2005	24.05.2006	23.05.2009			384	404	---
9	IIC Technologies Pvt. Ltd.	Hill No.3, IT SEZ, Madhurawada	2.00	10.01.2006	20.07.2006	19.07.2009			200	223	---
10	World Infotech Pvt. Ltd.	Hill No.3, IT SEZ, Madhurawada	2.00	10.01.2006	22.08.2006	21.08.2009			200	170	30
11	Cyient Ltd.	Hill No.3, IT SEZ, Madhurawada	5.00	10.01.2006	06.07.2006	05.07.2009			500	507	---
12	ACN Infotech	Hill No. 2, IT SEZ, Madhurawada	2.00	10.01.2006	04.05.2006	03.05.2009			200	200	---
13	Clove Technologies Ltd.	Hill No. 2, IT SEZ, Madhurawada	1.35	08.10.2008	19.02.2008	18.02.2011			675	129	546

Sl. No.	Name of the Unit	Place	Land allotted (in acres)	Date of MOU	Date of Handing over of Land	Due date for completion	Actual date of completion	Delay in implementation as of July 2017 (in months)	Employment target as per MOU (Nos.)	Actual employment provided (Nos.)	Shortfall In employment generation (Nos.)
IT Units yet to commence operations											
14	Color Chips Entertainment and Media Ltd.	Hill No. 2, IT SEZ, Madhurawada	3.00	13.06.2005	23.02.2006	22.02.2009	Under Progress	101	500	0	Not applicable
15	Navayuga Infotech Pvt. Ltd.	Hill No. 2, IT SEZ, Madhurawada	3.00	13.06.2005	22.06.2006	21.06.2009		97	500	0	
16	Softpro Systems Ltd.	Hill No. 2, IT SEZ, Madhurawada	1.00	13.06.2005	23.02.2006	22.02.2009		101	200	0	
17	Phoenix IT Solutions Ltd.	Hill No.1, IT SEZ Madurawada	2.00	07.07.2008	02.11.2011	01.11.2014		33	1000	0	
18	C E S Private limited	Hill No. 2, IT SEZ, Madhurawada	1.00	07.07.2008	19.07.2008	18.07.2011		72	500	0	
19	Precistat IT Solutions Pvt. Ltd.	Hill No.3, IT SEZ, Madurawada	2.00	16.12.2008	06.02.2009	05.02.2012		66	1000	0	
20	Xenosoft Technologies (India) Pvt. Ltd.	Hill No.3, IT SEZ, Madurawada	2.00	16.12.2008	27.02.2009	26.02.2012		65	1000	0	
21	BHSP Nexus Software Consulting Pvt. Ltd.	Hill No.2, IT Non-SEZ, Madurawada	0.50	24.11.2009	24.04.2010	23.04.2013	51	250	0		
ICT Policy 2010-15											
IT Units that commenced operations											
22	Mouri Tech Pvt. Ltd.	Hill No.2, IT Non-SEZ, Madurawada	1.00	09.07.2012	22.08.2012	21.08.2015	Completion date not furnished	Not applicable	500	395	105
IT Units yet to commence operations											
23	Spectrum Innovative Technologies Pvt. Ltd.	Hill No.2, IT Non-SEZ, Madurawada	1.00	Not available	14.09.2012	13.09.2015	Under Progress	22	500	0	Not applicable
								Total	10809	4326	

(Source: Records of the Department and APIIC)

Appendix - 3.1

(Reference to paragraph 3.2.5, page 69)

Statement showing the Grievances Pending as of July 2017

SI No	Industry name	Category	District	Grievance raised date	Pending as on 27/7/2017		
1.	Sri Mouli Textiles Private Ltd.	Clearances Related	Guntur	31/1/2017	177		
2.	Satyavathi Bio Life Sciences Ltd.		Krishna	2/12/2016	237		
3.	Villmar Agro Polymers Pvt. Ltd.		East Godavari	29/11/2015	606		
4.	Gerdau Steel India Limited		Anantapuramu	22/11/2016	247		
5.	Srivatsa Bio-Tech India Pvt. Ltd.		Prakasam	27/10/2016	273		
6.	Assurgen Pharma Pvt. Ltd.		Visakhapatnam	1/10/2016	299		
7.	Elite Exports		Anantapuramu	1/2/2017	176		
8.	Bunny Foods		Anantapuramu	2/1/2017	206		
9.	Nirman Fertilizers Ltd.	Industrial Incentives	Anantapuramu	10/9/2016	320		
10.	Sri Mallikarjuna Industries	Clearances Related	Guntur	13/3/2017	136		
11.	Svm Eco Blocks		Guntur	26/7/2016	366		
12.	Lotus Abrasive Tech (India) Private Limited	Industrial Incentives	Prakasam	25/9/2016	305		
13.	Srivatsa Bio-Tech India Pvt. Ltd.	Clearances Related	Prakasam	12/8/2016	349		
14.	Varshith Aquavet		Krishna	20/3/2017	129		
15.	Varshith Aquavet	Land	Krishna	19/3/2017	130		
16.	Natura,Organic Farms	Clearances Related	Krishna	3/1/2017	205		
17.	Rushikeshhwar Eco Infra		Chittoor	7/3/2017	142		
18.	M/s Lorven Granities		Chittoor	4/11/2016	265		
19.	Sri Vijayadurga Flyash Bricks		Chittoor	19/7/2016	373		
20.	Sri Bankey Bihari Exports		Visakhapatnam		10/4/2017	108	
21.	Amaravati HDPE Pipes				13/2/2017	164	
22.	ACC Limited			Industrial Incentives		8/2/2017	169
23.	Ms. Nenu Sytam Industries					6/12/2016	233
24.	Corey Organics Pvt. Ltd.				11/11/2016	258	
25.	Amaravati HDPE Pipes	Clearances Related			7/11/2016	262	
26.	Amaravati HDPE Pipes				26/7/2016	366	
27.	Amaravati HDPE Pipes			11/7/2016	381		
28.	Kota Marine Park	Land		20/6/2016	402		

Source: COI/DICs(Selected Districts) Logins

Appendix - 3.2

(Reference to paragraph 3.3.3, page 73)

Statement showing the expenditure details of test checked major/medium projects

(₹ in crore)

Name of the project	Project cost (Revised)	Up to 31 March 2012		2012-13	2013-14	2014-15	2015-16	2016-17
		GoI	GoAP					
Gundlakamma Reservoir project (Major)	753.83	99.35	269.87	50.50	25.45	36.79	40.01	13.04
Tadipudi Lift Irrigation Scheme (Major)	568.00	48.22	306.09	17.21	5.35	7.86	3.08	13.04
Tarakarama Thirtha Sagaram Reservoir project (Medium)	471.31	33.01	12.80	3.60	25.03	42.00	21.54	6.20
Swarnamukhi Barrage project (Medium)	52.04	11.86	31.33	Project completed				
Veligallu Reservoir Project (Medium)	80.31	62.33	6.59	Project completed				
Kanupur Canal project (Medium)	137.70	0.71	76.21	0.86	3.62	6.77	6.81	1.08
TOTAL		255.48	702.89	72.17	59.45	93.42	71.44	33.36

(Source: Records of the Department and Finance Accounts of GoAP)

Appendix - 3.3

(Reference to paragraph 3.3.4.3, page 79)

Statement showing the expenditure details of test checked minor irrigation (MI) projects

Sl. No.	Name of the Tank	Year of inclusion	District	Project cost (₹ in crore)	Stipulated date of completion	Expenditure till March 2017 (₹ in crore)	Status
1	Maddileru MI Tank	2006-07	Kurnool	3.07	November 2010	8.25	Ongoing
2	Bhavanasi MI Tank	2006-07	Prakasam	27.00	November 2011	25.88	Ongoing
3	Ananthavaram MI Tank	2006-07	Prakasam	7.35	November 2011	1.97	Ongoing
4	Isukageddda MI Tank	2006-07	Visakha-patnam	2.80	September 2008	1.76	Completed
5	Muppavaram MI Tank	2006-07	Prakasam	1.38	February 2010	0.87	Completed in 2009
6	Chandravanka MI Tank	2006-07	Kurnool	2.75	Deleted from AIBP and not taken up		

(Source: Records of the Department)

Glossary

Glossary

AIBP	:	Accelerated Irrigation Benefits Programme
APCPDCL	:	Central Power Distribution Company of Andhra Pradesh Limited
APEITA	:	AP Electronics and Information Technology Agency
APIIC	:	AP Industrial Infrastructure Corporation Limited
APPCB	:	AP Pollution Control Board
APSWAN	:	AP State Wide Area Network
APTS	:	M/s Andhra Pradesh Technology Services
BHS	:	Biodiversity Heritage Sites
BMC	:	Biodiversity Management Committee
BOOT	:	Build Own Operate Transfer
CAG	:	Comptroller and Auditor General of India
CAF	:	Common Application Form
CAT	:	Catchment Area Treatment
CC	:	Cement Concrete
CCITI	:	Consultative Committee on IT Industry
CFE	:	Consent for Establishment
CFO	:	Consent for Operation
CM&CD	:	Cross masonry and cross drainage
COI	:	Commissioner of Industries
CWC	:	Central Water Commission
DBC's	:	District Biodiversity Coordinators
DD	:	Draft Declaration
DHQ's	:	District Headquarters
DIC's	:	District Industries Centers
DN	:	Draft Notification
DPR	:	Detailed Project Report
EFS&T	:	Environment, Forests, Science and Technology
ECRF	:	Earth Cum Rock Fill Dam
EEs	:	Executive Engineers
EH	:	Electronic Hardware
E-in-C	:	Engineer-in-Chief
EOT	:	Extension of Time
EPC	:	Engineering Procurement and Construction
FM&AMC	:	Facility Management & Annual Maintenance Contract

FRL	:	Full Reservoir Level
FTL	:	Full Tank Level
G2C	:	Government to Citizen
G2G	:	Government to Government
GoAP	:	Government of Andhra Pradesh
GoI	:	Government of India
GP	:	Gram Panchayat
GWDT	:	Godavari Water Dispute Tribunal
HNSS	:	Handri Neeva Sujala Sravanthi
HT	:	High Tension
HTCC	:	HT Current Consumption
ICT	:	Information and Communication Technology
IS	:	Innovation and Start-up
IT	:	Information Technology
ITE&C	:	Information Technology, Electronics and Communications
ITIRs	:	Information Technology Investment Regions
LA	:	Land Acquisition
LAO	:	Land Acquisition Officer
LMC	:	Left Main Canal
LoA	:	Letter of Award
LoC	:	Letter of Credit
MA	:	Mobilization Advance
MA (in Paragraph 3.1.3)	:	Municipal Administration
MHQ	:	Mandal Headquarters
MoTA	:	Ministry of Tribal Affairs
MoU	:	Memorandum of Understanding
MoWR	:	Ministry of Water Resources
MSME	:	Micro, Small and Medium Enterprise
NBA	:	National Biodiversity Authority
NeGP	:	National e-Governance Plan
NH	:	National Highway
NMS	:	Network Monitoring System
PA	:	Performance Audit
PAFs	:	Project Affected Families
PBRs	:	People's Biodiversity Registers

PCCF	:	Principal Chief Conservator of Forests
PDFs	:	Project Displaced Families
PIP	:	Polavaram Irrigation Project
PMF	:	Probable Maximum Flood
PN	:	Preliminary Notification
PPA	:	Polavaram Project Authority
PPP	:	Public Private Partnership
PR	:	Panchayat Raj
QC	:	Quality Control
R&R	:	Rehabilitation and Resettlement
RA	:	Running Account
RFCT LARR Act	:	Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act - 2013
RMC	:	Right Main Canal
SDB	:	Single Desk Bureau
SDP	:	Single Desk Portal
SEs	:	Superintending Engineers
SHQ	:	State Headquarters
TLIS	:	Tadipudi Lift Irrigation Scheme
TMC	:	Thousand Million Cubic feet
TPA	:	Third-Party Audit
TRTS	:	Tarakarama Thirtha Sagaram Project
WRD	:	Water Resources Department

©

COMPTROLLER AND AUDITOR GENERAL OF INDIA

www.cag.gov.in

www.agap.cag.gov.in

©

COMPTROLLER AND AUDITOR GENERAL OF INDIA

www.cag.gov.in

www.agap.cag.gov.in