REPORT OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA ON GENERAL AND SOCIAL SECTOR FOR THE YEAR ENDED MARCH 2018

GOVERNMENT OF GUJARAT REPORT NO. 1 OF 2020

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PREFACE

This Report for the year ended 31 March 2018 has been prepared for submission to the Governor of the State of Gujarat under Article 151 of the Constitution of India. This Report contains three Chapters.

This Report relates to audit of the Social and General Sectors of the Government departments conducted under the provisions of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971 and Regulations on Audit and Accounts, 2007 issued thereunder by the Comptroller and Auditor General of India. This Report is required to be placed before the State Legislature under Article 151 (2) of the Constitution of India.

The instances mentioned in this Report are those, which came to notice in the course of test audit during the period 2017-18 as well as those, which came to notice in earlier years, but could not be reported in the previous Audit Report; instances relating to the period subsequent to 2017-18 have also been included, wherever necessary.

The audit has been conducted in conformity with the Auditing Standards (March 2002) issued by Comptroller and Auditor General of India.

CHAPTER-I

INTRODUCTION

CHAPTER-I

INTRODUCTION

1.1 About this Report

This Report of the Comptroller and Auditor General of India (C&AG) relates to matters arising from Performance Audit of selected programmes and activities and Compliance Audit of various Departments of State Government.

Compliance Audit refers to examination of the transactions relating to expenditure of the 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. On the other hand, Performance Audit, besides conducting a Compliance Audit, also examines whether the objectives of the programme/activity/department are achieved economically and efficiently.

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

This chapter, in addition to explaining the planning and extent of Audit, provides a synopsis of the significant deficiencies in performance of selected programme, significant audit observations made during the Compliance Audit and follow-up on previous Audit Reports. Chapter-II of this report contains findings arising out of Performance Audit of selected programme/ activity/departments. Chapter-III contains observations on the Compliance Audit in Government Departments.

1.2 Audited entity profile

The Principal Accountant General (General and Social Sector Audit), Gujarat conducts Audit of the expenditure under the General and Social Services incurred by 17 Departments¹ in the State at the Secretariat level, 226 autonomous bodies and 14,482 local bodies². The Departments are headed by Additional Chief Secretaries/Principal Secretaries/Secretaries, who are assisted by Directors/ Commissioners/Chief Engineers and subordinate officers under them.

The summary of fiscal transactions during the years 2016-17 and 2017-18 is given in Table 1 -

¹ Includes Water Supply Department of Narmada, Water Resources, Water Supply and Kalpsar Department

² District Panchayats - 33, Taluka Panchayats - 249, Gram Panchayats - 14,030, Nagarpalikas - 162 and Municipal Corporations - 08

Table 1: Summary of fiscal transactions

(₹ in crore)

							in crore)
Receipts			Disbursements				
	2016-17	2017-18		2016-17		2017-18	
	2010-17	2017-10		2010-17	Non- Plan	Plan	Total
1	2	3	4	5	6	7	8
Section-A: R	evenue						
Revenue receipts	1,09,841.81	1,23,291.27	Revenue expenditure	1,03,894.83	1,03,043.68	15,015.98	1,18,059.66
Tax revenue	64,442.71	71,549.41	General services	35,804.35	40,932.63	468.93	41,401.56
Non-tax revenue	13,345.66	15,073.97	Social services	44,926.02	38,934.11	10,104.89	49,039.00
Share of Union taxes	18,835.39	20,782.29	Economic services	22,748.51	22,702.88	4,442.16	27,145.04
Grants from Government of India	13,218.05	15,885.60	Grants- in-aid and Contributions	415.95	474.06	0.00	474.06
Section-B: C	apital						
Misc. Capital receipts	240.05	0.00	Capital Outlay	22,355.39	20,305.34	6,007.85	26,313.19
Recoveries of Loans and Advances	165.77	346.22	Loans and Advances disbursed	477.56	631.07	-	631.07
Public Debt receipts*	27,668.31	26,952.74	Repayment of Public Debt*	9,073.17	-	-	13,700.23
Contingency Fund	3.75	0.00	Contingency Fund	0.00	-	-	0.00
Public Account receipts ³	2,570.71	1,394.21	Net Public Account	0.00	-	-	0.00
Opening Cash Balance	18,559.48	23,248.93	Closing Cash Balance	23,248.93	-	-	16,529.22
Total	1,59,049.88	1,75,233.37	Total	1,59,049.88			1,75,233.37
(So	urce: Finance	Accounts of	the State Gover	mment for the	vears 2016-1'	7 and 2017-1	18)

ource: Finance Accounts of the State Government for the years 2016-17 and 2017-18 * Excluding net transactions under ways and means advances and overdrafts.

1.3 Authority for Audit

The authority for Audit by the C&AG is derived from Articles 149 and 151 of the Constitution of India and the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971.

1.4 Planning and conduct of Audit

Audit process starts with the assessment of risks faced by various Departments of Government based on expenditure incurred, criticality/complexity of activities, level of delegated financial powers, assessment of overall internal controls and concerns of stakeholders. Previous audit findings are also considered in this exercise. Based on this risk assessment, the frequency and extent of Audit are decided.

³ Net Public Account represents total public account receipts less disbursement. During 2017-18, public account receipts were ₹ 89,132.67 crore and disbursement were ₹ 87,738.46 crore, leaving a Net Public Account balance of ₹ 1,394.21 crore.

After completion of Audit of each unit, Inspection Reports containing audit findings are issued to the heads of the Departments. The Departments are requested to furnish replies to the Audit findings within one month of receipt of the Inspection Reports. Whenever replies are received, Audit findings are either settled or further action for compliance is advised. The important Audit observations arising out of these Inspection Reports are processed for inclusion in the Audit Reports, which are submitted to the Governor of the State under Article 151 of the Constitution of India, to be caused to be laid on the table of the State Legislature.

During 2017-18, in the General and Social Sector Audit Wing, 17,839 man-days were utilised to carry out Audits of total 251 units. The Audit plan covered those units/entities which were vulnerable to significant risk as per our assessment.

1.5 Significant Audit observations

In the last few years, Audit has reported on several significant deficiencies in implementation of various programmes/activities through Performance Audits, as well as on the quality of internal controls in selected Departments which impact the success of programmes and functioning of the Departments. Similarly, the deficiencies noticed during Compliance Audit of the Government Departments/organisations were also reported upon. The present report contains one Performance Audit and five Compliance Audit paragraphs. The highlights are given in the following paragraphs.

1.5.1 Performance Audit

1.5.1.1 Implementation of Rural Drinking Water Supply Programme in Gujarat

Water is a State subject and the State Government is responsible to ensure access to a minimum quantity of potable water. Government of India (GoI) supplements the efforts of the State Governments with technical and financial assistance for provision of safe drinking water to the habitations in the rural areas of the country. The Water Supply Department (WSD) is responsible for the proper implementation of Rural Water Supply Programme (RWSP) through Gujarat Water Supply and Sewerage Board (GWSSB) and Water and Sanitation Management Organisation (WASMO).

A Performance Audit of Rural Drinking Water Supply Programme in Gujarat was conducted between March 2018 and August 2018 covering the period 2013-18. The main audit findings are summarized below:

- As of August 2018, out of 17,843 villages in the State, 8,947 villages had been covered under Narmada Canal based projects/programmes and 3,893 villages under other source based water supply projects.
- Government of Gujarat's (GoG's) claim that all 35,996 habitations in the State were fully covered with water supply was not correct.
- Out of 2,352 villages covered under 91 Rural Water Supply Schemes (RWSSs) in eight test-checked Districts, only 1,587 villages were getting water through RWSSs. Of the remaining 765 villages, 258 villages had no

access of water due to insufficient water at source, non-creation of internal distribution networks, damaged pipes, *etc*.

- There were under-reporting of non-functional WSSs. Even many of the non-functional schemes were not in the knowledge of the Department.
- State Level Laboratory (SLL) at Gujarat Jalseva Training Institute (GJTI) conducted only routine tests instead of conducting specific tests and could not act as a referral laboratory due to non-availability of high end equipment/instruments. Due to less number of Taluka Level Laboratories (TLLs), there was vast shortfall in the number of water sources to be tested as per norms. Mobile Laboratory Vans were not being utilised optimally. Field Test Kits meant for water quality testing were not utilized by Gram Panchayats (GPs) and Multi Purpose Health Workers (MPHWs) in test-checked habitations.
- GoG's claim of no Quality Affected habitations in the State was not correct. About 10 *per cent* habitations in the State had no fit source of potable water.
- In the test-checked Districts, bacteriological testing was not being done for all sources of water except for water supplied from RWSS, which is supplied after treatment in Water Treatment Plants (WTPs).
- Irregular booking of expenditure under Research and Development (R&D) schemes by GWSSB and the test-checked Districts respectively, non-surrender/non-refund of unspent funds by WASMO, and non-payment of water charges by Gram Panchayats were noticed in Audit.
- Periodical monitoring of completed schemes was not being done.

(Paragraph 2.1.1 to 2.1.15)

1.5.2 Compliance Audit of Transactions

1.5.2.1 Implementation of National Programme of Nutritional Support to Primary Education

Audit observed incorrect reporting by the Commissioner (MDM) to the GoI in respect of coverage of schools and students under the scheme. The number of schools reported as covered in Annual Work Plan and Budget (AWP&B) was more than the actual number of schools in the State as per the records of Sarva Shiksha Abhiyan (SSA). Similarly, there was variation in coverage of students reported by Commissioner with respect to the figures reported by test-checked Districts.

The Commissioner has been under-reporting the closing stock of food grains to GoI during 2015-18, however, there was huge closing stock of food grains at the godowns of Gujarat State Civil Supplies Corporation (GSCSC). The objective to have a uniform menu throughout the State to enhance the nutritional intake of students by dividing single meal into breakfast and lunch was not achieved. Checks to ensure use of quality food articles for supply of cooked food to children were not being applied effectively.

(Paragraph 3.1.1 to 3.1.10)

1.5.2.2 Implementation of Underground Drainage System (UDS) under Rurban Scheme

Implementation of 18 out of 19 UDS projects taken up under Rurban Scheme was far from satisfactory even after spending ₹ 194.70 crore⁴ and lapse of six years (from 2012 to 2018), due to flaws in planning. Projects were taken up without city sanitation plans; project reports were prepared without site surveys; adequate supply of water was not ensured before commencement of projects; house connections with completed UDS was poor; sites selected for pumping stations and treatment plants were prone to water-logging during monsoon season; and responsibility of operation and maintenance of completed projects was thrust upon Gram Panchayats without assessing their institutional and financial capacity. The District Panchayats did not ensure availability of jetting-*cum*-cleaning machinery.

(Paragraph 3.2.1 to 3.2.6)

1.5.2.3 Implementation of Indira Gandhi National Old Age Pension Scheme

Audit concludes that GoG had not covered all the Below Poverty Line (BPL) beneficiaries both rural and urban BPL populations under the scheme. As against the estimated BPL beneficiaries of 5.81 lakh approved as a ceiling by GoI based on poverty ratio of 2004-05, GoG could cover 5.60 lakh BPL beneficiaries under the scheme as of March 2018.

In the test-checked Talukas, Audit observed that the Mamlatdars have provided pension to ineligible persons with BPL scoring higher than fixed scoring criterion and eligible beneficiaries had been rejected in an arbitrary fashion in contravention to the provisions of the scheme guidelines and instructions issued by the Director, Social Defence.

Instances of non-disbursement of pension in cases of return of money orders were noticed in test-checked Talukas. In Dahod, Jamnagar and Palanpur Talukas, Audit observed that pension of 107 beneficiaries (₹ 10.18 lakh) was being credited wrongly to the bank accounts of others due to incorrect linkage of Aadhaar and incorrect entry of bank account number by the Mamlatdars. The test-checked Mamlatdars had not conducted annual personal verification of existing beneficiaries.

(Paragraph 3.3.1 to 3.3.6)

1.5.2.4 Functioning of Residential Schools under Gujarat State Tribal Education Society

Audit observed that horizontal spread of residential schooling for Scheduled Tribes (STs) was not uniform and self-evident in the absence of transparent criteria for setting up of Eklavya Model Residential Schools (EMRSs) as 18 out of 43 tribal Talukas had no EMRSs while three Talukas had more than one EMRS. The Society and the Girls Literacy Residential Schools (GLRSs) failed to utilise the recurring grant as per the budget estimates and as prescribed in the guidelines resulting in loss of central assistance of ₹ 5.36 crore. The Society had extended extra financial benefit to two NGO-run EMRSs (₹ 2.07 crore) managed on Public Private Partnership (PPP) mode by releasing excess recurring grants.

^{4 ₹ 166.83} crore spent on 15 complete projects + ₹ 27.87 crore spent on 03 incomplete projects

Due to non-starting/part commencement of higher secondary section, the students of eight EMRSs and 19 GLRSs were deprived of higher secondary education. Out of 36 EMRSs and 43 GLRSs, the choice of all the three streams was available in only four EMRSs. The teachers were appointed on monthly fixed remuneration on contract basis which was lower than the minimum wages of the State for skilled labourers. As a result, many of them left the job in between leading to vacancies and affecting regular conduct of classes.

The Society could not start the construction work of seven EMRSs and eight GLRSs though GoI had provided funds to the tune of ₹ 110 crore. Due to nonavailability of buildings, these schools were being run in the buildings of other schools. As a result, the classrooms and hostels were found overcrowded in Integrated Tribal Development Project (ITDP) Banaskantha. Shortage of bed and mattress was noticed in two EMRSs and six GLRSs test-checked. In EMRS, Jagana, against 479 students, only 294 sets of bed, mattress and linen were available; in EMRS, Kadana, against 338 students, only 155 beds were available and the overall shortage of beds in eight out of 12 test-checked schools was 27 *per cent*. During visit of three test-checked GLRSs of ITDP, Chhotaudepur, students were found collecting water from the water tankers for storing them in the buckets for their use as the building had no facility of direct water connections.

Monitoring and evaluation of the schools by the Society was found deficient as it had not established any mechanism to assess curricular and extra-curricular progress of the students, data of EMRS students, who got admission in higher educational institutions and details of drop-outs in the Talukas.

(Paragraph 3.4.1 to 3.4.8)

1.5.2.5 Unfruitful expenditure on procurement of Refuse Compactor Vehicles

Gujarat Urban Development Company Limited procured 25 Refuse Compactor Vehicles of uniform capacity and payload for the Nagarpalikas (NPs) at a total cost of \gtrless 9.94 crore for efficient handling of municipal solid waste. Of the 25 vehicles, 15 could not negotiate the narrow roads/streets in the NP areas for garbage collection due to their large size, while three could not be made functional due to non-availability of matching garbage containers and non-fulfilment of warranty repairs by the contractor, leading to unfruitful expenditure of \gtrless 7.16 crore.

(Paragraph 3.5)

1.6 Lack of responsiveness of Government to Audit

1.6.1 Inspection Reports outstanding

The Hand Book of Instructions for prompt Settlement of Audit Objections/ Inspection Report issued by the Finance Department in 1992 provides for prompt response by the Executive to the Inspection Reports (IRs) issued by the Accountant General to ensure rectificatory action in compliance with the prescribed rules and procedures and accountability for the deficiencies, omissions, *etc.*, noticed during the inspections. The Heads of Offices and next higher authorities are required to comply with the observations contained in the IRs, rectify the defects and omissions promptly and report their compliance to the Accountant General within four weeks of receipt of the IRs. Periodical reminders are issued to the Head of the Departments requesting them to furnish the replies expeditiously on the outstanding paragraphs in the IRs.

As of 31 December 2018, 6,286 IRs (28,018 paragraphs) were outstanding against 17 Departments under the General and Social sector. Year-wise details of IRs and paragraphs outstanding are given in **Appendix-I**.

1.6.2 Response of departments to the audit paragraphs

One draft Performance Audit Report and five draft Compliance Audit Paragraphs were forwarded to the Additional Chief Secretaries/Principal Secretaries/ Secretaries of the concerned administrative departments between July 2018 and November 2018 with a request to send their responses within six weeks. The departments replied to two Compliance Audit Reports till date (September 2019). Exit conferences were also held with the concerned Departments on the audit findings included in the draft report of the Performance and Compliance Audits. The replies of the department and the views expressed by them have duly been considered while finalising this report.

1.6.3 Follow-up of Audit Reports

Rule 7 of Public Accounts Committee (Rules of Procedure) 1990 provides for furnishing Detailed Explanation (DE) to the observations which featured in Audit Reports by all the Departments of Government, within 90 days of their being laid on the Table of the Legislative Assembly.

The administrative Departments did not comply with these instructions and 18 Departments⁵ as detailed in **Appendix-II** had not submitted 57 DEs for the period 2007-08 to 2016-17 as of 31 December 2018.

1.6.4 Paragraphs to be discussed by the Public Accounts Committee

Details of paragraphs pending for discussion by the Public Accounts Committee as of 31 December 2018 are shown in **Appendix–III.**

⁵ This includes audit of departments transferred to Principal Accountant General (Economic and Revenue Sector Audit), Gujarat, Ahmedabad after restructuring with effect from 1 April 2012

CHAPTER-II

PERFORMANCE AUDIT

CHAPTER - II

This chapter contains findings of Performance Audit on "Implementation of Rural Drinking Water Supply Programme in Gujarat".

PERFORMANCE AUDIT

NARMADA, WATER RESOURCES, WATER SUPPLY AND KALPASAR DEPARTMENT

2.1 Implementation of Rural Drinking Water Supply Programme in Gujarat

Executive Summary

Water is a State subject and the State Government is responsible to ensure access to a minimum quantity of potable water. Government of India (GoI) supplements the efforts of the State Governments with technical and financial assistance for provision of safe drinking water to the habitations in the rural areas of the country. The Water Supply Department (WSD) is responsible for the proper implementation of Rural Water Supply Programme (RWSP) through Gujarat Water Supply and Sewerage Board (GWSSB) and Water and Sanitation Management Organisation (WASMO).

A Performance Audit of Rural Drinking Water Supply Programme in Gujarat was conducted between March 2018 and August 2018 covering the period 2013-18. The main audit findings are summarized below:

- As of August 2018, out of 17,843 villages in the State, 8,947 villages had been covered under Narmada Canal based projects/programmes and 3,893 villages under other source based water supply projects.
- Government of Gujarat's (GoG) claim that all 35,996 habitations in the State were fully covered with water supply was not correct.
- Out of 2,352 villages covered under 91 Rural Water Supply Schemes (RWSSs) in eight test-checked Districts, only 1,587 villages were getting water through RWSSs. Of the remaining 765 villages, 258 villages had no access of water due to insufficient water at source, non-creation of internal distribution networks, damaged pipes, etc.
- There were under-reporting of non-functional WSSs. Even many of the non-functional schemes were not in the knowledge of the Department.
- State Level Laboratory (SLL) at Gujarat Jalseva Training Institute (GJTI) conducted only routine tests instead of conducting specific tests and could not act as a referral laboratory due to non-availability of high end equipment/instruments. Due to less number of Taluka Level Laboratories (TLLs), there was vast shortfall in the number of water sources to be tested as per norms. Mobile Laboratory Vans were not being utilised optimally. Field Test Kits meant for water quality testing were not utilized by Gram Panchayats (GPs) and Multi Purpose Health Workers (MPHWs) in test-checked habitations.
- GoG's claim of no Quality Affected habitations in the State was not correct. About 10 per cent habitations in the State had no fit source of potable water.

- In the test-checked Districts, bacteriological testing was not being done for all sources of water except for water supplied from RWSS, which is supplied after treatment in Water Treatment Plants (WTPs).
- Irregular booking of expenditure under Research and Development (R&D) schemes by GWSSB and the test-checked Districts respectively, non-surrender/non-refund of unspent funds by WASMO, and nonpayment of water charges by Gram Panchayats were noticed in Audit.
- Periodical monitoring of completed schemes was not being done.

2.1.1 Introduction

Water is a State subject and the State Government is responsible to ensure access to a minimum quantity of potable water. Gujarat has 185 river basins and the available quota of water in the State is 55,608 million cubic metres¹.

As of August 2018, the State has 17,843 villages, of which drinking water was being supplied to about 12,840 villages (72 *per cent*) through water supply schemes implemented by Government of Gujarat (GoG). Of these 12,840 villages, 8,947 villages (70 *per cent*) have been covered under Narmada Canal Based Projects/Programmes and 3,893 villages (30 *per cent*) have been covered under other source² based water supply projects.

According to the data available on the Integrated Management Information System³ (IMIS), as on 01st April 2018, 91.11 *per cent* habitations of Gujarat had the facility of Piped Water Supply (PWS) against the all India percentage of 41.91.

Government of India (GoI) launched (April 2009) the National Rural Drinking Water Programme⁴ (NRDWP) for providing grants to State Governments for implementation of Rural Water Supply Schemes (RWSSs) with special focus on water-stressed and water quality affected areas. NRDWP prioritises coverage of uncovered/partially covered/slipped back/water quality affected habitations⁵ to make them fully covered habitations⁶ by carrying out various water supply related works, recharging of ground water, establishing water testing laboratories for quality control purposes, *etc*.

As per the NRDWP guidelines, GoG had prepared (February 2015) a 'Draft Water Policy 2015' based on the 'National Policy Framework'. However, the policy was not yet finalized (May 2019).

In addition to NRDWP, GoG also implemented State sponsored Water Supply Schemes (WSSs) like Rural Water Supply Programme (RWSP), Scheme for

Surface water: 38,100 million cubic metres and Underground water resources: 17,508 million cubic metres
 Dams, Rivers, Irrigation Canals, Underground water, *etc.*

² Dams, Rivers, Irrigation Canals, Underground water, *et*

³ A web-based platform launched by Ministry of Drinking Water and Sanitation (MoDWS) to enable online monitoring of the status of water supply projects and coverage across rural India. It consists of data relating to habitation, scheme implementation, water source and quality of water.

⁴ Successor of Accelerated Rural Water Supply Programme.

⁵ Uncovered habitation is one which has never been provided with drinking water supply or supplied with less than 10 litre per capita per day (lpcd) by the Government; Partially covered habitation is one in which the average supply of drinking water is equal to or less than 40 lpcd but more than 10 lpcd; Slipped back habitation is one which had the status 'Fully Covered' at one point of time but presently is 'Partially Covered'; Quality Affected Habitation is one where water samples tested in laboratories have indicated levels of chemical contamination (limited to Arsenic, Fluoride, Iron, Nitrate and Salinity) higher than the permissible limits set by the Bureau of Indian Standards.

⁶ **Fully covered habitation** is one in which the average supply of drinking water is equal to or more than 40 lpcd. within a distance of 100 meters from the household.

Water Conservation and Prevention of Wastage of Water, Mukhya Mantri Mahila Pani Samiti Protsahan Yojana, *etc.* during 2013-18.

2.1.2 Organisational set-up

The Water Supply Department (WSD) is responsible for implementation of rural drinking water supply programmes in the State. **Chart 1** shows the organisational set-up of the WSD and a brief of the functioning of the agencies under it involved in the implementation of various programmes:



(i) GWSSB gets the raw water from the bulk pipeline and executes the work of the group distribution schemes to provide potable water upto the underground sump of villages. It implements the Regional Water Supply Schemes (RWSSs), Individual Water Supply Schemes (IVWSSs), Mini Piped Water Supply Schemes and Hand Pump Schemes. Gujarat Jalseva Training Institute (GJTI) and its water testing laboratories at District and Taluka levels are also under the control of GWSSB.

(ii) WASMO provides water supply by way of stand post and household connections by laying distribution pipeline under 'In-village Water Supply Schemes' and 'Mini Piped Water Supply Schemes'. WASMO also plans and oversees the execution of this activity by formation of Pani Samitis through people's participation.

(iii) GWIL lays and maintains the bulk pipeline for transmission of Inter District Narmada Canal Water in bulk.

2.1.3 Audit Objectives

The broad objectives of the Performance Audit were to ascertain whether -

• there was proper planning to achieve the goals set by GoI/GoG and to provide sufficient coverage and availability of drinking water at the habitation level;

- the implementation of schemes and utilisation of funds was effective and efficient; and
- necessary institutional mechanism existed for effective implementation and monitoring of various rural drinking water supply schemes.

2.1.4 Audit Criteria

The main sources of Audit criteria applied for the Performance Audit were -

- Strategic plans, notifications, orders and circulars issued by the MoDWS, GoI;
- Guidelines for NRDWP issued by GoI;
- Guidelines/Manuals/Orders issued by GoG relating to implementation of rural drinking water supply schemes; and
- Gujarat Financial Rules, Gujarat Public Works Manual, Manuals published by the Central Public Health and Environmental Engineering Organisation (CPHEEO) of Ministry of Urban Development on water supply and treatment and Operation and Maintenance of Water Supply Schemes.

2.1.5 Audit scope and methodology

The Performance Audit covered activities undertaken by the WSD during the period 2013-18 for the implementation of various Rural Drinking Water Supply Programmes including NRDWP. The Audit was conducted between February 2018 and August 2018.

Audit commenced with an entry conference (February 2018) with the Principal Secretary of WSD wherein the audit objectives, audit criteria, scope and methodology of audit were discussed and the inputs of the Department were obtained. Audit examined the records covering the period 2013-18 at WSD, GWSSB, GWIL, WASMO, GJTI and their field offices in test-checked Districts. Audit selected eight Districts⁷ out of 33 Districts in the State for detailed test-check by adopting Simple Random Sampling without Replacement (SRSWOR) method. Audit, alongwith officials of GWSSB and/or WASMO conducted joint physical verification of assets created for water supply and beneficiary survey of 78 habitations in the Districts selected for test-check in Audit. Details of the statistical frame work and selection are given in **Appendix-IV and V**.

An exit conference was held (30 May 2019) with the Principal Secretary, WSD to discuss the audit findings. The views of the State Government have been considered and incorporated in the report.

Audit Findings

2.1.6 Planning and Organisation

2.1.6.1 Planning

• Long term planning

The GoG prepared (May 2013) a Narmada Master Plan for creation of State Wide Water Supply Grid as a long term strategy for drought proofing of the

^{7 (}i) Bharuch, (ii) Dahod, (iii) Dang, (iv) Jamnagar, (v) Patan, (vi) Porbandar, (vii) Sabarkantha and (viii) Valsad

water supply sector and with the objective to supply drinking water to almost 75 *per cent* population of the State⁸ by 2021. The master plan identified that the State had 18,066 villages and 242 towns as of May 2013. The GoG planned to implement 387 projects under the Grid to be completed by 2021. Of these, 174 projects covering 9,633 villages and 131 towns of Narmada Master Plan were being implemented under Sardar Sarovar Canal Based Water Supply Project programme and Sujalam Sufalam Yojana. The remaining 213 projects covering 5,318 villages and 15 towns based on surface/sub-surface sources were being implemented under the RWSP. As of August 2018, out of 17,843 villages⁹ in the State, 8,947 villages have been covered under Narmada Canal based projects/ programmes and 3,893 villages have been covered under other source based water supply projects.

The Principal Secretary in the exit conference (30 May 2019) stated that preparation of a new plan for replacing ground water with surface water and to cover all the villages of the State through piped water supply is under consideration.

• Short term planning

As per NRDWP guidelines, Water Security Plans (WSPs) are required to be prepared at the Village, District and State levels to optimise the use of water resources to meet basic needs and also for taking decisions with regard to water resources management including investment. The District WSP is prepared based on the WSPs of the villages in the District, which in turn is used to prepare the State WSP. The WSP comprises of details such as demography, physical features, water sources, available drinking water infrastructure, availability of funds, funds required for RWSP, *etc.*

Audit observed that the WSP was prepared only for the villages where the rural drinking WSS was to be undertaken by WASMO. However, test-checked Districts had not prepared the WSP but GoG had prepared the State WSP for the period 2012-17 in respect of drinking water supply sector. However, such plan was not prepared thereafter. The State WSP was prepared without obtaining the WSPs of the Districts/Villages, which consists of core level planning.

NRDWP guidelines also required each State to prepare their Annual Action Plan (AAP) detailing activities in the rural drinking water sector proposed to be taken up during the year and the financial costs of such proposals. AAP, *inter alia*, includes broad directions/thrust and tangible targets planned to be achieved in the financial year.

Audit observed that the GoG was regular in submitting the AAP to the GoI in all the years under review. However, it was also observed that during preparation of AAP, convergence of various WSSs was not considered. There was no provision in the State to meet the labour cost of recharging systems/surface water impounding structures, de-silting of ponds under sustainability component from Mahatma Gandhi National Rural Employment Guarantee Scheme/Integrated

⁸ The population of the State as per Census 2011 is 6.04 crore but the master plan considered the population of the State as 5.06 crore as per Census 2001

^{9 223} villages are not in existence as they might have been merged with towns on their expansion.

Watershed Management Programme funds. Further, no baseline survey had been conducted to check the availability of potable water to habitations/households, to access and locate the sources/delivery points of water in use for drinking and cooking purposes, to identify new sources, *etc.*, which was required for effective planning.

The Principal Secretary in the exit conference (30 May 2019) stated that henceforth efforts would be made for convergence while preparing the AAP. In respect of baseline survey, it was stated that the next AAP for 2020-21 is being prepared by covering multiple water sources so that no village would depend on a single water source.

2.1.6.2 Coverage of habitations

As per NRDWP guidelines, coverage depends on percentage of people within habitation getting basic minimum quantity of potable water within the prescribed distance of the household, from either a public or community source. The NRDWP guidelines envisaged that by 2017, at least 50 *per cent* of rural population have access to 55 lpcd potable water within their household premises or within 100 meter radius.

GoG claimed that as on 01 April 2018, all the 35,996 habitations in the State were fully covered. As per the information furnished to Audit by the District Water and Sanitation Units (DWSUs) of the test-checked Districts, 41 (53 *per cent*) out of 78 test-checked habitations had been fully covered and the remaining 37 habitations were partially covered.

The Principal Secretary in the exit conference (30 May 2019) stated that necessary steps would be taken for covering the habitations fully.

2.1.6.3 Households with Piped Water Supply (PWS)

The Strategic Plan (2011-22) prepared by MoDWS envisaged to provide PWS to at least 50 *per cent* of rural households by 2017. GoG claimed (July 2018) through IMIS that out of 35,996 habitations in the State, 33,044 habitations (92 *per cent*) had PWS. As per information furnished by the DWSU of the test-checked Districts in respect of status of PWS facility in 78 test-checked habitations, 64 habitations (82 *per cent*) were having facility of PWS. However, during joint physical verification (April 2018 to August 2018) of assets in these 64 habitations, it was observed that the facility was defunct in 32 habitations as on the date of physical verification.

The Principal Secretary in the exit conference (30 May 2019) stated that identification of non-functional/defunct schemes is in progress and remedial action for reviving the scheme would be taken.

2.1.7 Implementation of schemes

As claimed by GoG, the State had already achieved the targets to be achieved by the year 2017 *viz.* ensuring at least 50 *per cent* of rural households are provided with PWS, at least 35 *per cent* of rural households have PWS with household

connection, less than 20 *per cent* use public taps and less than 45 *per cent* use hand pumps or other safe and adequate private water sources, *etc*.

2.1.7.1 Implementation of Regional Water Supply Schemes

Drinking water is being supplied to about 12,840 (71.96 *per cent*) out of 17,843 villages in the State through 347 RWSSs.

• Non-supply of water through Regional Water Supply Schemes

As per the District profile maintained by the test-checked eight Districts, as on 31 March 2018, out of 3,727 villages, 2,352 villages¹⁰ (63 *per cent*) were covered under 91 RWSSs while remaining 1,375 villages (37 *per cent*) were dependant on other source of water. Of these 2,352 villages, 1,587 villages¹¹ (67.47 *per cent*) were getting water through RWSSs. Of the remaining 765 villages, 258 villages¹² had no access to RWSSs water due to low water pressure at the tail end villages under the schemes, damaged pipes of the supply networks, non-creation of internal distribution networks in the villages and insufficient quantity of water at the sources. Other 507 villages were not drawing water from the RWSSs because the Gram Panchayats (GPs) did not want to pay the water charges. Unwillingness to use water through RWSS indicates that the Information, Education and Communication (IEC) activities undertaken by the authorities (WASMO and GWSSB) were ineffective as they failed to persuade the habitants of these villages/GPs to use treated potable water available through RWSS.

During joint physical verification (April 2018 to August 2018) of assets in 78 test-checked habitations, Audit observed that 37 habitations¹³ were covered under different RWSSs. Out of these, 18 habitations¹⁴ were getting water through RWSSs while 16 habitations¹⁵ were not getting water through RWSS due to non-supply of water and non-connectivity of RWSS with village sumps/Elevated Storage Reservoirs (ESRs). Therefore, these habitations were using ground water, the quality of which was not tested and assured. Remaining three habitations¹⁶ were unwilling to take water supplied through RWSS. It was also observed that Devla habitation of Bharuch District was getting water from RWSS, however, the supply of water was done at an interval of 15 to 20 days due to insufficient water at source. Similarly, although Ranjitpar habitation of Jamnagar District was covered under RWSS, the households did not get water due to low height of the cistern¹⁷.

The EE of concerned division of GWSSB stated (May 2018 to July 2018) that efforts would be made in the current AAP, to provide water to the villages not getting the same due to various technical reasons.

¹⁰ Bharuch - 363, Dahod - 158, Dang - 145, Jamnagar - 430, Patan - 516, Porbandar - 146, Sabarkantha – 467 and Valsad - 127

¹¹ Bharuch - 220, Dahod - 117, Dang - 143, Jamnagar - 300, Patan - 402, Porbandar - 98, Sabarkantha – 190 and Valsad - 117

¹² Bharuch - 85, Dahod - 37, Dang - 2, Jamnagar - 23, Patan - 49, Porbandar - 18, Sabarkantha - 38 and Valsad - 6

¹³ Bharuch - 6 out of 7, Dahod - 0 out of 14, Dang - 8 out of 11, Jamnagar - 5 out of 5, Patan - 6 out of 9, Porbandar - 4 out of 4, Sabarkantha - 4 out of 12 and Valsad - 4 out of 16

¹⁴ Bharuch - 1, Dang - 1, Jamnagar - 3, Patan - 6, Porbandar - 4, Sabarkantha - 2 and Valsad - 1

¹⁵ Bharuch - 4, Dang - 7, Jamnagar - 2 and Valsad - 3

¹⁶ Bharuch-1 and Sabarkantha-2

¹⁷ A tank/reservoir for storage of water constructed for supplying water to hilly areas

The Principal Secretary in the exit conference (30 May 2019) stated that technical problems leading to interruption in water supply through RWSS would be addressed.

In addition to the above, during the course of test-check, Audit also observed that:-

(i) RWSS (Rundh Rajpardi, Bharuch) started (December 2010) with the tendered cost of ₹ 30.48 crore for covering 70 villages of the Jhagadia Taluka was stipulated to be completed by November 2014. However, it was observed that even after an expenditure of ₹ 27.68 crore, the work was still in progress (June 2018), as an intake well constructed for ₹ 1.25 crore under the scheme, got tilted (October 2013) beyond the permissible limit due to faulty design and was found unfit for future use.

The Principal Secretary in the exit conference (30 May 2019) stated that efforts are being made and the project would be completed within two months. Audit observed that the project was still not complete (September 2019).

(ii) Narmada No-Source RWSS, Part II was approved (May 2010) under NRDWP to provide potable water to the habitants of fluoride affected 12 villages of Narmada District. As per the tender condition and work order, the pipes for the work were to be procured by the contractor from the approved vendors of GWSSB. The work of supplying and laying of pipelines was completed in August 2014 at the cost of ₹ 3.73 crore. However, these pipes failed in field hydro-testing done between October 2013 and December 2013 and leakages appeared in pipes at various locations. Hence, hydro-testing of full stretch of pipelines could not be done. GWSSB instructed the contractor to replace all the pipelines laid; however, the same was not done. Finally, GWSSB terminated (June 2016) the contract and en-cashed performance guarantee (PG) of ₹ 23.49 lakh and also deducted liquidated damage (LD) of ₹ 3.27 lakh from the running account (RA) bills of the contractor. Audit observed that GWSSB had not taken any action to complete the work, as a result of which the objective of providing potable water to the villagers was defeated.

The Principal Secretary in the exit conference (30 May 2019) stated that necessary remedial action would be taken.

2.1.7.2 Implementation of other Water Supply Schemes

In Gujarat, in addition to RWSS, other WSSs *viz*. IVWSS, Mini Pipe WSSs, Invillage WSSs and Hand Pump schemes are also implemented¹⁸.

• Under reporting of non-functional Water Supply Schemes

As per IMIS data for June 2018, GoG reported that 2,050 out of 93,794 WSSs in the State were non-functional. On comparison of the same with the physical records of test-checked Districts during the course of audit (April 2018 to August 2018), non/under-reporting of non-functional schemes in IMIS was

¹⁸ The above schemes are collectively called as Piped Water Supply (PWS) schemes (excluding the Hand Pump Scheme)

observed. As per records of DWSUs/Divisions of GWSSB of test-checked Districts, there were 377 non-functional schemes in these eight test-checked Districts. However, only 76 schemes (20 *per cent*) were reported as non-functional schemes in IMIS.

Similarly, Audit also observed that as on 31 March 2018, against 2,68,181 functional and 14,975 non-functional hand pumps in the State as per records of GWSSB, the figures reported in IMIS were only 5,785 functional and 86 non-functional hand pumps.

The DWSUs (WASMO) of test-checked Districts accepted the facts and assured that the same would be corrected in due course. GWSSB stated that the details of hand pumps were entered wrongly through oversight by the field offices in the IMIS. It was also assured that the data already entered would be corrected in consultation with the IMIS authority of GoI.

• In-village WSS/IVWSS

As per records of eight test-checked Districts maintained by DWSUs/Divisions of GWSSB, there were 6,346 in-village WSSs/IVWSS¹⁹ (March 2018). Out of these, 139 in-village WSS/IVWSSs²⁰ (2.19 *per cent*) were reported (April to August 2018) as non-functional. Further, as per records there were 49 in-village WSSs/IVWSS (April to August 2018) in the 78 test-checked habitations of the test-checked Districts and all were reported functional. However, during joint physical verification (April 2018 to August 2018) of assets in these 78 test-checked habitations, audit found 16 defunct in-village WSSs/IVWSSs (32.65 *per cent*) though as per records, these were reported as functional schemes.

The above audit observation is of a nature that may reflect in other Districts also, which were not covered in the test-check conducted during audit. The Department/Government may internally examine all such cases to ensure functioning of all in-village WSSs/IVWSSs.

Management of in-village WSSs was the responsibility of the concerned GPs/Pani Samitis with institutional and technical support of WASMO/GWSSB. However, no efforts were made by WASMO/ GWSSB, as neither the IEC activities were undertaken nor any technical guidance was provided to the GPs/Pani Samitis for operation and maintenance of these schemes.

Audit recommends that the State Government may identify non-functional water supply schemes and operationalise them.

• Mini Pipeline Schemes

In Gujarat, most of the Scheduled Tribe populations are concentrated in hilly terrain and forests. The habitations in these areas are small and scattered across considerable distances. Owing to the undulating hilly terrain, it was difficult to implement the RWSS in these areas and hence execution of mini pipeline

¹⁹ Bharuch-843, Dahod-986, Dang-500, Jamnagar-756, Patan-551, Porbandar-251, Sabarkantha-868 and Valsad-1,591

²⁰ Bharuch-9, Dahod-10, Dang-34, Jamnagar-2, Patan-0, Porbandar-0, Sabarkantha-39 and Valsad-45

WSSs²¹ and installation of hand-pumps were made to provide drinking water to this geographically dispersed population. Contractors were responsible for repair and maintenance of mini schemes during the operation and maintenance period of five years and if by any reason, the scheme was not in working condition; contractor had to supply required quantity of potable water through tanker without any extra payment. Mini schemes have been executed in five out of eight test-checked Districts²². As per records, there were 1,474 mini schemes²³ (March 2018) in these five test-checked Districts.

Out of these, only 239 mini schemes (16.21 *per cent*) executed by GWSSB at Bharuch District were reported (April 2018 to August 2018) as non-functional. Further, as per records (April 2018 to August 2018) there were 16 mini schemes in the 78 test-checked habitations and all were reported functional. However, during joint physical verification (April 2018 to August 2018) of assets in these 78 test-checked habitations, 12 mini schemes (75 *per cent*) were found defunct though as per records, these were reported as functional schemes.

The above audit observation is of a nature that may reflect in other Districts also, which were not covered in the test-check conducted during audit. The Department/Government may internally examine all such defunct schemes and take necessary remedial measures for their restoration.

The Principal Secretary in the exit conference (30 May 2019) stated that identification of non-functional/defunct schemes is in progress and remedial action for reviving the scheme would be taken.

2.1.7.3 Dropped schemes

As per NRDWP guidelines, for in-village schemes, the village shall deposit 10 *per cent* of the estimated cost of the scheme as public participation, except for tribal villages, where the same is borne by the Tribal Development Department of GoG.

Audit observed that out of 1,597 in-village schemes²⁴ approved for the eight test-checked Districts during 2013-18, 77 schemes²⁵ had been dropped later. Out of these 77 dropped schemes, 22 schemes²⁶ (29 *per cent*) were dropped due to insufficient/no pubic contribution/internal dispute among villagers. Remaining 55 schemes²⁷ were dropped due to source failure (53), delay in commencement of work by Pani Samiti (1) and non-availability of land (1). Audit observed that WASMO did not explore alternate source of water for the schemes, where the earlier identified sources failed. Further, WASMO did not undertake effective

²¹ These were implemented for habitations with a population of 150 to 250 and the components of the work are installation of a single phase power pump on a borewell of depth up to 150 meters, a PVC or concrete storage tank of 5,000 to 10,000 litres capacity and distribution line to one or more stand posts.

²² Except Jamnagar, Patan and Porbandar Districts

²³ Bharuch-285 (239 of GWSSB and 46 of WASMO), Dahod-420 (203 of GWSSB and 217 of WASMO), Dang-125 of GWSSB, Sabarkantha-245 (110 of GWSSB and 135 of WASMO) and Valsad-399 (380 of GWSSB and 19 of WASMO)

²⁴ Bharuch - 328, Dahod - 370, Dang - 129, Jamnagar - 86, Patan - 103, Porbandar - 28, Sabarkantha – 254 and Valsad - 299

 $^{25 \}quad Dahod - 25, Jamnagar - 7, Patan - 4, Porbandar - 6, Sabarkantha - 30 and Valsad - 5, Sabarkantha - 30 and Valsad - 5, Sabarkantha - 30 and Valsad - 5, Sabarkantha - 30, Sabarkantha - 30$

²⁶ Dahod - 1, Jamnagar - 7, Patan - 4, Porbandar - 6, Sabarkantha - 1 and Valsad - 3

²⁷ Dahod - 24, Sabarkantha - 28 and Valsad - 1 (failure of source), Sabarkantha - 1 (delay in commencement) and Valsad - 1 (land problem)

IEC activities to pursue the habitants to resolve the issues involved in other cases so that these schemes could be implemented. Therefore, WASMO needs to put in more concerted efforts to revive the dropped/ failed schemes.

The Principal Secretary in the exit conference (30 May 2019) assured to do the needful in this regard.

• Non-execution of work by NGOs

With the objective to provide potable water to 31 villages of Dahod District, the EE (GWSSB) awarded (August 2012) the work of 31 WSSs with estimated cost of ₹ 4.40 crore to two NGOs²⁸ with stipulation to complete the works within four months. In contravention to the provisions of the guidelines, the EE released (August 2012) ₹ 1.26 crore²⁹ to the NGOs as advance. Audit observed that one NGO (Kabir Trust) after executing work of ₹ 50.50 lakh had abandoned (2014-15) the work while the other NGO had not executed any work. GWSSB issued repeated instructions to these NGOs for refund of advance but they refused to do the same and finally issued (March 2015) instructions to file court case against the concerned EE and the NGOs, the outcome of which was still awaited and no action had been initiated to get the work completed to provide potable water to the targeted habitants.

The Principal Secretary in the exit conference (30 May 2019) stated that departmental action has been taken against the EE. However, details of action taken by the Department have not yet been provided to Audit.

• Abandonment of work

GWSSB awarded (December 2010) the work of WSS for six villages/hamlets³⁰ of Zalod Taluka, District Dahod to an agency at the tendered cost of \gtrless 64.69 lakh with stipulation to complete the works by June 2011. Scrutiny revealed that the agency³¹ had abandoned the work after executing work to the tune of \gtrless 48.28 lakh till March 2012. The reason for the abandonment of work by the contractor was not on records. As the agency had not re-started the work despite issuance of several reminders, the Deputy EE recommended (September 2014) for termination of the contract and for blacklisting of the agency. Audit observed that the agency had completed the work of only one village (Sanjeli) while the works of remaining five villages were lying incomplete though more than six years had elapsed since the work was abandoned by the agency. This indicated that adequate steps were not taken by the GWSSB to get the work completed in deprival of scheme benefits to the habitants of these five villages.

The Principal Secretary in the exit conference (30 May 2019) assured that they would take necessary action after verification of the facts.

²⁸ Kabir Trust, Gandhinagar – 13 WSSs (₹ 2.17 crore) and Navjagruti Sarvjanik Trust, Gandhinagar – 18 WSSs (₹ 2.23 crore)

²⁹ Kabir Trust, Gandhinagar –₹ 82.00 lakh and Navjagruti Sarvjanik Trust, Gandhinagar – ₹ 43.70 lakh

 ^{30 (}i) Nimevarod (Gamtal), (ii) Raliyati Bhura (Gamtal), (iii) Mundaheda (Talav Faliya), (iv) Kararh (Kalimahudi),
 (v) Bhamela (Damor) and (vi) Sanjeli (Bhagat Faliya)

³¹ M/s. R.M. Patel, Dahod

2.1.7.4 Idle Elevated Storage Reservoir and Sumps

Elevated Storage Reservoir (ESR) is an integral part of PWS schemes. Information furnished by the GWSSB and WASMO stated that there were 212 ESRs in the eight test-checked Districts (August 2018). It was also stated by GWSSB/WASMO that out of these, 26 ESRs in five test-checked Districts³² (21 constructed by WASMO and five constructed by GWSSB) were not being utilised as on that date. The main reasons stated for their non-utilisation were (i) failure of water from source, (ii) damage of internal pipelines, (iii) VWSCs not willing to utilise the same, (iv) supply of water directly from source instead of storing in ESR, *etc.* Audit observed that no corrective actions were taken by both GWSSB and WASMO to ensure the utilisation of these ESRs.

During joint physical verification (August 2018) of assets in selected habitations, Audit observed that -

- In Bharuch District, two ESRs constructed at Rajpardi and Bhimpor habitations and two sumps constructed at Rajpardi and Madhavpura habitations under Rundh Rajpardi RWSS were found not being utilised. Thus, the villagers were denied of the benefit of treated water of RWSS. Though these structures were not in use, the same were reported as being used in the records of GWSSB. Similarly, a sump constructed under an RWSS in Bhodar village was also not being used since its construction, as inlet tap facility was not created to release water in the sump. Further, the villagers were also not willing to take water from the RWSS.
- In Valsad District, ESRs and sumps constructed in Dungri Faliya and Dhodiyavad habitations (GP-Tumbh, Taluka-Umbergaon) under Umbergaon East RWSS were not being used since its construction, as distribution networks were yet to be created (August 2018). Though these structures were not put to use, the same was being reported as put to use as per the records of GWSSB.

The above audit observations are of a nature that may reflect in other habitations also, which were not covered in the test-check conducted during audit. The Department/Government may internally examine all such cases with a view to ensure that the structures constructed for water supply are functioning.

The DWSU, Himatnagar (Sabarkantha District) stated that budget provision for connecting the pipelines from ESR has been made in the Annual Action Plan for the year 2018-19 and the work would be taken up after getting the approval of DWSC. It was also stated that thereafter, the ESR would be put to use. The DWSU, Valsad stated that the distribution pipelines got damaged during the course of widening of internal village road which would be got repaired during 2018-19. The District authorities of remaining test-checked Districts assured that the ESRs would be put to use in near future.

2.1.7.5 Drinking water facilities in rural schools and Anganwadis

• Drinking water facilities in rural schools

One of the goals of NRDWP to be achieved by the year 2017 was to ensure access to safe drinking water in all Government schools. Education Department decided

³² Dahod-4, Jamnagar-2, Patan-12, Sabarkantha-6 and Valsad-2

(July 2015) to provide drinking water facility to 2,920 identified primary schools in the State, where there were no definite sources of drinking water. WASMO conducted (2015-16) a survey of schools and found that out of 2,920 schools, 1,921 schools did not have definite source of drinking water. Accordingly, funds of \gtrless 12.00 crore (2015-17) was released to WASMO for providing drinking water facility in these 1,921 schools.

Audit observed that WASMO had completed the work in 1,384 schools and in two schools, the works were in progress (February 2019). However, as on February 2019, no work was taken up in the remaining 535 schools on the plea of non-finalisation of water source.

The Principal Secretary in the exit conference (30 May 2019) stated that the remaining schools will be covered at the earliest.

• Drinking water facilities in Anganwadis

NRDWP guidelines envisage provision of drinking water facilities to Anganwadis on priority basis by the State Governments. During joint physical verification (April 2018 to August 2018) of Anganwadis of selected habitations of testchecked Districts, Audit found that 43 (37.07 *per cent*) out of 116 Anganwadis in 32 test-checked GPs had no facility of drinking water. It was also found that though Ultra Violet (UV)/Reverse Osmosis (RO) Water purifier systems had been provided to 62 out of 116 Anganwadis, 47 systems were non-functional due to non-availability of PWS, electric connection, water facility, over head water tank, *etc*.

The Principal Secretary in the exit conference (30 May 2019) stated that the remaining Anganwadis would be covered at the earliest.

2.1.8 Infrastructure for Water Quality

The standards set by Bureau of Indian Standards (BIS) for drinking water were followed by MoDWS in the preparation of Uniform Drinking Water Quality Monitoring Protocol (UDWQMP). This protocol describes specific requirements for monitoring drinking water quality to ensure provision of safe drinking water to the consumers.

2.1.8.1 Availability of infrastructure for water quality testing

NRDWP and UDWQMP guidelines envisage establishment of water quality testing laboratories at State, District and Taluka levels. The State had a Central Laboratory at GJTI designated as State Level Laboratory (SLL), 32 District Level Laboratories (DLLs) and 47 Taluka Level Laboratories (TLLs).

• State Level Laboratory

NRDWP and UDWQMP guidelines envisage that the SLL shall have facility for analysing a full range of physical, chemical and microbiological parameters specific to drinking water quality and shall act as a State Referral Institute (SRI) to analyse specific or new/emerging water quality problems. The SLL shall also monitor the performance of DLLs and TLLs to ensure quality assurance and quality control in these laboratories. In addition, the SLL was required to cross verify five *per cent* of the samples found unfit by DLLs. MoDWS instructed (May 2013) GoG to expedite setting-up of SLL with instruments such as Atomic Absorption Spectrophotometer and High Pressure Liquid Chromatography, *etc.* for analysis of heavy metals and pesticides residues in drinking water sources.

Audit observed that GoG could set-up the SLL cum SRI³³ only in 2015. However, instruments/equipment estimated to cost ₹ 4.00 crore were yet to be procured (May 2019). Due to non-availability of high end instruments/ equipment, Audit observed that the SLL was conducting only routine testing of water supplied in Gandhinagar District instead of conducting specific tests for analysis of heavy metals and pesticides residues. Further, during 2013-18, no samples had been called for from the DLLs for re-testing to cross verify the tests done by them. Thus, the objective of establishing SLL to act as SRI was not achieved.

The Joint Director (Scientific) of GJTI attributed the reasons for not conducting specific tests and re-test of samples of DLLs to non-availability of instruments/ equipment and shortage of manpower. It was also assured that re-testing of the unfit samples of DLLs would be carried out after providing training to the existing manpower.

GJTI instructed (2017-18) 12 randomly selected DLLs to conduct re-test of the samples found unfit by them. Audit observed that these DLLs re-tested 249 samples from the water sources found unfit by taking fresh samples from the same source; however, the results of re-test varied widely as compared to the original test result as detailed in **Appendix-VI**. This shows that the tests conducted by the DLLs were not reliable.

The Principal Secretary in the exit conference (30 May 2019) stated that the purchase of equipment for SLL is in process. It was further stated that the TLL of Kalol Taluka has been converted into Gandhinagar DLL and testing of water samples of water supplied in Gandhinagar District is being carried out at TLL, Kalol.

• District and Taluka level water testing laboratories

As per UDWQMP, DLLs and TLLs should undertake drinking water quality monitoring of the sources under their jurisdiction by analysing physico-chemical and microbiological parameters in drinking water sources prescribed under IS 10500-2012. These laboratories shall share the test results with the stakeholders³⁴ and spread awareness about water quality in rural areas.

Audit observed that against 245 Talukas in the State, GoG had established 47 TLLs till date (February 2019). Thus, 198 Talukas in the State had no laboratory for testing the quality of water, which was being done by the respective DLLs or by nearby TLLs in the adjoining Talukas. Though NRDWP guidelines envisage that 10 *per cent* of the TLL samples found unfit should be re-tested by the concerned DLL, Audit observed that none of the DLLs had re-tested the water samples found unfit³⁵ by the TLLs.

³³ GJTI campus at Gandhinagar

³⁴ Including District/State Public Health Departments and also with other laboratories established/proposed under Food Security Act, *etc.*

^{35 1,46,546} water samples during 2013-18

The Joint Director (Scientific) of GJTI stated that after establishing requisite infrastructure in the DLLs, re-testing would be carried out.

NRDWP guidelines also provide that each and every source of water shall be tested for chemical parameters once in a year and twice for bacteriological parameters *i.e.* once during pre-monsoon period and once during post-monsoon. There are 5,78,866 reported water sources in the State as of February 2018. As per norms,

at least 5,78,866 water samples should have been tested for chemical parameters and 11,57,732 water samples should have been tested for bacteriological parameters during the year 2017-18. However, Audit observed from the information furnished by GJTI that only 1,86,431 samples (32 *per cent*) were tested for chemical parameters and only 1,23,771 samples (11 *per cent*) were tested for bacteriological parameters during the year 2017-18. The reasons for shortfall in testing were attributed to insufficient TLLs in the State.



Picture 1: Various water samples received in DLL, Himatnagar for testing (25-04-2018)

In addition to the above, Audit also observed that as per UDWQMP, quantity of samples for general analysis should be two litres in non-acidified container and for bacteriological analysis, the quantity should be 250 ml. in sterilized bottles. GJTI informed that as normal practice, the laboratories in the State collect samples for chemical and microbiological tests in one litre polyethylene container and 300 ml. sterilised bottles respectively. However, during visit to test-checked DLLs, it was observed that the samples were being collected even in discarded plastic bottles of cold drinks and packaged drinking water bottles (**Picture 1**). Consequently, the test results were not free from risk of incorrect finding. The Laboratory Assistant of DLL Himatnagar accepted ignorance about the type of container required to be used.

The Principal Secretary in the exit conference (30 May 2019) stated that necessary action would be taken for strengthening the DLLs and TLLs.

• Mobile Laboratories

To strengthen the work of water quality, monitoring and surveillance under NRDWP, GoG procured (January 2014) six mobile laboratory vans at the cost of $\mathbf{\overline{T}}$ 1.55 crore. Of these, five vans were allotted (August 2014) to five zonal offices³⁶ of GWSSB for use by the DLL of the concerned District and the remaining one was allotted to GJTI. The staff requirement for operating these vans was to be outsourced.

Audit observed that the mobile vans were not being optimally used by the DLLs as shown in Table 1 -

³⁶ Ahmedabad, Bhuj, Junagadh, Rajkot and Vadodara

Zonal office	Reasons for non-use
Vadodara	Not utilised since January 2016 for want of driver and chemist.
Ahmedabad	Utilised intermittently till April 2017. Not utilised thereafter for want of chemist.
Rajkot	Utilised intermittently till March 2018.
Bhuj	Utilised intermittently till January 2017. Not utilised thereafter for want of chemist.
Junagadh	Utilised intermittently till February 2018. Not utilised thereafter for want of repairs of instruments/equipment.

Table 1: Details of utilisation of mobile vans by five DLLs

(Source: Information provided by GJTI)

In case of mobile van with GJTI, Audit observed that the van was used intermittently for 25 months. During the course of field visit by Audit (April 2018), it was noticed that all the instruments/equipment from the van had been removed and were kept in the SLL building. Further, inner condition of the van was found frail. This indicated that the van was not being used optimally for conducting the tests and the expenditure incurred for the procurement of these vans remain unutilized.

The Principal Secretary in the exit conference (30 May 2019) stated that regular testing through mobile vans would be ensured.

2.1.8.2 Manpower in Laboratories

Uniform Drinking Water Quality Monitoring Protocol (UDWQMP) issued by Ministry of Drinking Water and Sanitation, GoI prescribed a suggestive list of staff required for various levels of laboratories. Audit observed that GoG had not sanctioned any post for SLL, DLLs and TLLs. Majority of staff in these laboratories had been filled through outsourcing.

Details of staff available *vis-à-vis* the list suggested as per UDWQMP as on 31 March 2018 are given in the **Table 2** below -

Name of the Laboratories in the State	Number of staff suggested as per UDWQMP	Number of staff available	Shortage
State Level Laboratory	14	12	02
District Level Laboratories	256	196	60
Taluka Level Laboratories	376	209	167

 Table 2: Details of staff available in the Laboratories vis-à-vis staff suggested under UDWQMP

(Source: Data furnished by GJTI)

UDWQMP further suggested that each laboratory should have at least one regular post of water analyst/chemist. Audit observed that GoG had not sanctioned any regular post for the same. The work of chemist/analyst was being discharged by outsourced personnels.

Shortage of staff and non-availability of TLLs contributed to non-achievement of targets prescribed for testing the required number of water samples.

Audit is of the view that GoG may review the requirement of technical staff for water testing laboratories and fill up the vacancy.

2.1.8.3 Non-examination of prescribed parameters by the laboratories

UDWQMP stipulates that SLL shall examine 76 parameters, DLL shall examine 34 parameters and TLL shall examine 19 parameters (**Appendix-VII**). However, Audit observed that against these, the SLL, DLLs and TLLs examined only 16, 14 and 14 parameters respectively. Thus, none of the Laboratories in the State examined the full set of envisaged parameters due to non-availability of required instruments/equipment and chemicals.

UDWQMP also stipulates that the DLLs and TLLs shall atleast mandatorily examine 13 basic parameters, which *inter-alia* included pH, TDS, total hardness, alkalinity, fluoride, chloride, nitrate, arsenic, iron, E-coli, *etc.* However, Audit observed that none of the laboratories in the State conducted tests for iron and arsenic because they were not having the instruments/equipment required for testing these parameters.

The Principal Secretary in the exit conference (30 May 2019) stated that the testing of at least 34 parameters in the State would be ensured in future.

2.1.8.4 Field Testing Kits (FTKs)

WASMO procured (2013-16) 35,900 FTKs³⁷ at a cost of ₹ 3.14 crore³⁸ with the objective to carry out rural community based quality monitoring and surveillance programme in the State. The FTKs were allotted to GPs (Sarpanch/Pani Samiti/ Asha workers) and Multi Purpose Health Workers (MPHW) of the Public Health Sub-Centres through DWSUs.

Out of 32 GPs in 78 test-checked habitations, only 13 GPs³⁹ had received 17 FTKs from the concerned DWSU. Audit observed that only one FTK was being used by Kamalpur GP of Sabarkantha District while the remaining 12 GPs were not using the 16 FTKs (94 *per cent*) provided to them and the same were not usable now, as the life span of these FTKs was only one year. Further, out of 45 FTKs provided to MPHWs for 78 test-checked habitations, only 12 FTKs had been utilised by the MPHWs in 12 out of 78 test-checked habitations. Remaining 33 FTKs were lying unutilised whose shelf-life had expired. As WASMO/DWSUs did not provide new FTKs or refilling materials after 2016, the FTKs which were being utilised also remained unusable. Thus, the expenditure incurred on the purchase of these FTKs proved unfruitful.

The Principal Secretary in the exit conference (30 May 2019) stated that training programmes for GP level functionaries and MPHWs would be conducted to ensure proper utilisation of FTKs.

³⁷ It helps to identify unsafe water supply system on immediate basis and the consumer can have general idea about the water being used.

^{38 2013-14 : ₹ 1.36} crore for 13,000 FTKs, 2014-15 : ₹ 0.37 crore for 3,900 FTKs and 2015-16 : ₹ 1.41 crore for 19,000 FTKs

³⁹ Bharuch District – Devla, Bhodar, Ranipara and Rajpoardi GPs (April 2014), Dang District – Don, Chichali, Gavdhad and Dahar GPs (May-June 2014), Sabarkantha District – Kamalpur GP (February 2016) and Valsad District – Motidholdungri, Pipalpada, Tumbh and Maroli GPs (June-July 2014)

2.1.9 Quality of potable water supplied

The IS 10500:2012 standards set by BIS for drinking water quality, which is followed in UDWQMP, has two limits *i.e.* desirable limits and maximum permissible or cause for rejection limits. If any parameter exceeds the permissible limit, the water is considered unfit for human consumption. Broadly, water is defined unfit for drinking if it is bacteriological contaminated (presence of indicator bacteria particularly E-coli, viruses, *etc.*) or if chemical contamination such as fluoride, Total Dissolved Solids (TDS), iron, manganese, arsenic, nitrates *etc.* exceeds maximum⁴⁰ permissible limits.

In Gujarat, as per the data of the CGWB, 20 Districts in the State are affected by salinity contamination, 18 Districts by fluoride, 17 Districts by chloride, six Districts by iron and 22 Districts by nitrate.

Audit scrutiny revealed that there was no provision for filtration of water in the habitations covered under in-village PWS schemes based on local sources or mini WSSs or IVWSSs based on ground water and in the villages getting water through hand pumps/tube wells.

GoG claimed in its Annual Action Plan for the year 2016-17 that the State is now free from Quality Affected habitations but some slip back habitations may emerge in near future. The claim of GoG was not correct as 20,906 samples out of 1,30,857 samples (15.98 *per cent*) failed in the chemical examination conducted by the laboratories of GJTI during 2015-16. Similar trend continued in 2016-17 and 2017-18 when 19,171 samples (15.60 *per cent*) out of 1,22,909 samples and 36,427 samples (19.54 *per cent*) out of 1,86,431 samples failed in chemical examination. Audit observed that the GJTI during the pre-monsoon survey of 35,433 habitations in 2017-18 found that the sources of 3,714 habitations (10.48 *per cent*) were unfit and during post-monsoon survey of these 35,433 habitations in 2017-18, the sources of 3,694 (10.43 *per cent*) habitations were found unfit. This indicates that about 10 *per cent* habitations in the State had no fit source of potable water.

The Principal Secretary in the exit conference (30 May 2019) assured to verify the number of quality affected habitations and to take necessary measures.

2.1.9.1 Chemical Contamination in potable water

The presence of certain chemicals in drinking water above the prescribed limit causes major diseases *e.g.* arsenic causes cancer, fluoride causes fluorosis, nitrate hampers the blood's capacity to transport oxygen resulting in brain damage, iron causes hemochromatosis, *etc.* GoG stated (March 2016) to GoI that the State was not water quality affected.

As per the information furnished to Audit by GJTI, the results of potable water samples tested in the laboratories of the State during 2013-18 are shown in Chart 2 –

⁴⁰ Fluoride (>1.5 mg/litre), TDS (>2,000 mg/litre), iron (>0.3 mg/litre), manganese (>0.3 mg/litre), arsenic (>0.05 mg/litre, amended to >0.01 mg/litre in June 2015) and nitrates (>45 mg/litre)


Chart 2: Showing the results of potable water samples tested in the Laboratories



From the above, it can be seen that out of 6,29,517 water samples tested in the State during 2013-18, 1,15,224 samples (18.30 *per cent*) were found chemically unfit. Of these, 27,269 samples (4.33 *per cent*) had excess content of fluoride, 74,866 samples (11.89 *per cent*) had excess content of nitrate and 19,245 samples (3.06 *per cent*) had excess content of TDS.

During joint physical verification (April 2018 to August 2018) of assets in 78 test-checked habitations, the staff of DLL collected 188 water samples⁴¹ in the presence of Audit. These samples were tested by the concerned DLL for chemical parameters. Test results revealed that 54 samples⁴² (29 *per cent*) out of 188 (Appendix-VIII) were unfit due to excess chemical contaminations than the maximum permissible limit. Further, the samples collected included 40 samples from RWSSs, which supplied water after treatment at Water Treatment Plant (WTP). Out of these 40, eight⁴³ (20 *per cent*) samples were found unfit.

Thus, the above facts prove that the claim (March 2016) of GoG in the IMIS furnished to the GoI that not a single habitation was quality affected was not correct.

• Nitrate and Fluoride contamination in drinking water

Excess nitrate in drinking water causes Methaemoglobinaemia, which decreases the ability of blood to carry vital oxygen around the body, "blue baby syndrome⁴⁴" disease among infants and children which may have breathing trouble, vomiting and diarrhoea. Some cases may be fatal. Excessive consumption of fluorides for a long period results in deleterious effects on different tissues of the body such as teeth (dental fluorosis), bone (skeletal fluorosis) and soft tissues (non-skeletal fluorosis). Dental fluorosis is irreversible and its treatment requires complex and expensive procedures which are time consuming and are not easily available to rural population. In case of skeletal fluorosis, there is no specific treatment.

As mentioned in the preceding Paragraph, overall contamination as regards nitrate and fluoride as per samples tested during 2013-18 in the State was 11.89 *per cent* and 4.33 *per cent* respectively. Districts which had high contamination

^{41 (}i) Bharuch - 21, (ii) Dahod - 36, (iii) Dang - 37, (iv) Jamnagar - 18, (v) Patan - 11, (vi) Porbandar - 14, (vii) Sabarkantha - 22 and (viii) Valsad - 29

 $^{42 \}quad Bharuch-5, Dahod-17, Dang-2, Jamnagar-7, Patan-3, Porbandar-3, Sabarkantha-16 and Valsad-1$

^{43 (}i) Sonasan - Sabarkantha, (ii) Songadh habitation - Sabarkantha, (iii) Songadh near primary school – Sabarkantha, (iv) Umra headworks - Bharuch, (v) Thakor Talavdi Sub-headworks - Bharuch, (vi) Devla habitation - Bharuch, (vii) Devla navi nagri – Bharuch and (viii) Pati - Patan

⁴⁴ Infant may seem healthy but show signs of blueness around the mouth, hands and feet

of nitrate in the State were Chhotaudepur, Dahod, Banaskantha, Panchmahal and Vadodara. Similarly, the Districts worst affected by fluoride contamination were Dahod, Chhotaudepur, Panchmahal, Banaskantha and Kheda. The position as regards nitrate and fluoride contamination in the eight test-checked Districts based on the samples tested during 2013-18 is depicted in **Appendix-IX**.

Audit observed that out of 54 water samples found unfit from the 188 samples collected during joint physical verification, 41 samples were unfit due to content of nitrate/fluoride being more than the maximum permissible limit. However, the water was being used for drinking and cooking purposes from these sources as these habitations had no alternate source.

• Community Water Purification Plant (CWPP)

MoDWS advised (October 2016) all the States to install CWPPs in reported arsenic and fluoride affected habitations by March 2017. However, Audit observed that though 27,269 samples in the State during 2013-18 were found unfit due to excess content of fluoride as discussed above, GoG did not procure any CWPPs during 2013-18. This indicated that despite instructions from GoI, GoG did not install CWPPs at all fluoride affected source/delivery points.

The Principal Secretary in the exit conference (30 May 2019) stated that in the fluoride affected areas, where CWPP were not installed, the availability of alternate source of water would be explored.

2.1.9.2 Bacteriological contamination in potable water

Bacteriological contamination (E-coli, total coliform) in drinking water may cause water borne diseases such as diarrhea, cramps, nausea, headaches, vomiting, gastroenteritis, typhoid fever, cholera, *etc.* Audit observed that as per UDWQMP, all water sources should be tested at least twice every year for all parameters. However, in the test-checked Districts, water samples were collected for bacteriological examination only from RWSSs owned and managed by GWSSB. Water samples were not collected from sources such as in-village schemes, mini schemes, local body schemes, *etc.*

The pre-monsoon and post-monsoon bacteriological testing done in the State during 2013-18 revealed that 31,322 water samples (5.61 *per cent*) out of 5,58,156 samples checked during that period were found unfit for bacteriological parameters. Out of 1,23,771 water samples tested in the State during 2017-18 for bacteriological examinations, 3,494 samples (three *per cent*) were found unfit.

2.1.9.3 Non-reporting and non-marking of unfit sources/delivery points

NRDWP guidelines provide that the laboratories shall inform the concerned authorities (GWSSB, WASMO and GP) about the results of the water samples tested by it. GWSSB and WASMO were also required to inform the concerned GP about the test results and make them aware of the health hazards of using unfit water. They were also responsible to mark the source/delivery point as unsafe. Further, for water supplied through RWSS, GWSSB was responsible to provide quality water after treatments through WTPs.

During joint physical verification (April 2018 to August 2018) of assets in 78 testchecked habitations, Audit observed that though the laboratories had found 81⁴⁵

 $^{45 \}quad Bharuch - 11, Dahod - 9, Dang - 9, Jamnagar - 22, Patan - 1, \ Sabarkantha - 26 \ and \ Valsad - 3$

out of 1,400 samples collected from these habitations during 2013-18 as unfit, the sources were not marked to restrict the use of water from these sources. As such, the habitants were using the contaminated water and were not even aware about the same. Even the test results had not been communicated to the concerned GP. During joint survey, 308 (16 *per cent*) out of 1,920 households surveyed reported that they were not satisfied with the quality⁴⁶ of water being supplied.

The above facts indicate that the very objective of testing the samples of water was defeated as the concerned GPs/habitations were not aware of the contamination and continued usage which may lead to health risks as discussed in **Paragraphs 2.1.9.1 and 2.1.9.2**.

The Principal Secretary in the exit conference (30 May 2019) stated that corrective measures would be taken for marking the unsafe sources of water.

2.1.10 Financial Management

WSD had incurred expenditure of ₹ 13,037.63 crore in the implementation of various RWSSs including ₹ 2,379.48 crore of GoI grant under NRDWP during 2013-14 to 2017-18. The details of funds received and expenditure incurred under various schemes during 2013-18 are shown in **Table 3** –

Table 3: Receipt and expenditure of funds under various schemes durin	ng 2013-18
	(₹ in crore)

Name of the schemes	Am	ount
	Receipts	Expenditure
Research and Development	18.00	17.35
NRDWP (GoI Share)	1,663.55	2,379.48
RWSSs including NRDWP – GoG Share	5,935.64	6,612.79
RWSS based on Sardar Sarovar Canal	3,310.80	3,982.46
Drinking Water Infrastructure Protection Task Force	23.75	15.19
Water Conservation and Prevention of Wastage of Water	8.00	2.65
Mukhya Mantri Mahila Pani Samiti Protsahan Yojana	6.00	4.28
Local 10 per cent contribution under Tribal Area Sub Plan	30.00	23.43
Total	10,995.74	13,037.63

(Source: Annual Administrative Report of the WSD)

In case of expenditure exceeding against the received grant, the excess expenditure is incurred for WSSs from the GWSSB funds. Year-wise details of expenditure under different schemes are given in **Appendix-X**.

2.1.10.1 Retention of Flood Relief Fund by the implementing agencies

Finance Department (FD) of GoG released (October 2017) ₹ 164.05 crore to WSD from State Disaster Relief Fund (SDRF) for immediate restoration of WSSs, which were damaged during the flood of July 2017 in the different parts of the State. This grant was to be utilized by 10th March 2018 and the unspent amount was required to be surrendered to Government account. WSD released (November 2017) the funds to GWSSB, who in turn released (November 2017) ₹ 77.29 crore⁴⁷ to three implementing agencies based on their demand

⁴⁶ As perceived by them (through colour, taste, odour, etc.)

^{47 ₹ 15.38} crore to GWIL, ₹ 15.45 crore to GJTI and ₹ 46.46 crore to WASMO

and retained the balance of ₹ 86.76 crore with it. Audit observed that these implementing agencies could utilise only ₹ 6.96 crore⁴⁸ and had refunded ₹ 60.19 crore⁴⁹ to GWSSB. Remaining ₹ 4.77 crore, ₹ 4.90 crore and ₹ 0.47 crore had been retained (April 2018) by WASMO, GJTI and GWIL respectively. GJTI had retained the funds for purchase of instruments for SLL and GWIL had retained the funds for strengthening of 1,650 mm diameter Bulk Pipeline SPP-3A in the river respectively. This was not permissible as the said grant was to be utilized only for the restoration of the damaged water supply schemes and not for the regular works. The details of expenditure and unutilized amount by GWSSB were not made available to Audit.

Audit further observed that GWSSB had neither furnished Utilization Certificate (UC) on the expenditure incurred nor surrendered (May 2019) the unutilized funds (including funds refunded by the three implementing agencies) to FD as stipulated in the grant release order.

2.1.10.2 Research and Development fund

WSD provides funds to GWIL, GWSSB and WASMO for carrying out Research and Development (R&D) activities such as (i) assessment of best technology in bulk transmission/distribution systems, (ii) auditing of pumping systems and energy efficiency performance improvement activity, (iii) water use efficiencynon revenue water, (iv) water conservation and water recharging, *etc*.

• Irregular expenditure of ₹ 4.57 crore by GWSSB

GWSSB received ₹ 18.00 crore from WSD during 2013-18 for R&D activities. As reported by GWSSB, an expenditure of ₹ 15.98 crore out of ₹ 18.00 crore had been made during 2013-18. Audit observed in five test-checked Districts that an amount of ₹ 4.57 crore from R&D funds had been utilised irregularly for works other than R&D during 2013-18 as shown in **Table 4** –

Table 4: Details of R&D funds utilised for other works by test-checked Districts

Name of the test-checked Districts	Year	Amount utilised for other works	Details of works executed
Sabarkantha	2016-17	0.37	Lift of office building, colouring of building, furnishing of conference hall, <i>etc</i> .
Bharuch	2016-18	0.22	Renovation work of the Division office of GWSSB and of DLL
Valsad	2013-18	1.53	Survey work, preparation of Draft Project
Dang	2013-18	0.05	Report (DPR) and Draft Tender Paper (DTP) for water supply schemes, preparation of agenda for the meeting, <i>etc.</i> ,
Patan	2013-18	2.40	Construction of office building
Total		4.57	

(₹ in crore)

(Source: Information obtained from test-checked District offices of GWSSB)

From the above, it may be seen that \gtrless 4.57 crore were spent irregularly on works other than R&D, for which it was given.

^{48 ₹ 0.71} crore by GWIL, ₹ 0.55 crore by GJTI and ₹ 5.70 crore by WASMO

^{49 ₹ 14.20} crore by GWIL, ₹ 10.00 crore by GJTI and ₹ 35.99 crore by WASMO

The above audit observation is of a nature that may reflect in other Districts also, which were not covered in the test-check conducted during audit. The Department/Government may internally examine all such cases with a view to avoid irregular expenditure out of funds meant for R&D.

The Principal Secretary in the exit conference (30 May 2019) stated that the Department has defined the works/items falling under R&D activities. GWSSB replied (October 2019) that necessary oral instructions had been given by competent authority to concerned offices to adhere to the norms defined in R&D activities while incurring the expenditure.

2.1.10.3 Non-surrender of unspent grant to GoI

MoDWS released (2009-10) an amount of ₹ 14.04 crore to WASMO for startup, communication, capacity development, quality check, monitoring and administrative cost, *etc.* under the erstwhile Swajaldhara scheme. In addition, WSD had also provided (2010-15) ₹ 4.52 crore for the said purpose. Audit observed that WASMO could utilise only ₹ 10.23 crore up to 2013-14 and the remaining unspent amount of ₹ 17.14 crore (including interest of ₹ 8.81 crore) was lying unutilised as of August 2018. Though GoI grant release order stipulated for refund of unspent grant, WASMO had not surrendered the unspent grant of ₹ 17.14 crore to GoI.

Similarly, an unspent grant of \gtrless 0.79 crore (since 2013-14) and \gtrless 1.21 crore (since 2014-15) under Reverse Osmosis (RO) plant scheme and Earthquake Rehabilitation Reconstruction (ERR) scheme of GoI respectively were also not surrendered (April 2018) to GoI.

WASMO assured (August 2018) that it would surrender the unspent balance under the Swajaldhara scheme after necessary verification and reconciliation of figures. However, the reply did not give any reason for non-utilization or non-surrender of unspent balances in time under the above schemes.

The Principal Secretary in the exit conference (30 May 2019) stated that the unspent grant would be refunded to GoI.

2.1.10.4 Non-payment of water charges by Gram Panchayats

GWSSB procures raw water from Irrigation Department, Sardar Sarovar Narmada Nigam Limited (SSNNL) and GWIL and supplies potable water after its treatment to Industries, Educational and other Institutes, GPs, Nagarpalikas and Municipal Corporations as per the rates⁵⁰ of water charge prescribed (February 2007) by GoG.

Audit observed that GPs did not pay the water charges for the potable water supplied to them by GWSSB. The details of water charges outstanding for recovery as on 31 March 2018 are shown in Table 5-

⁵⁰ For industries: ₹ 15.00 per 1,000 litres, for GPs: ₹ 2.00 per 1,000 litres, Nagarpalikas: ₹ 4.00 per 1,000 litres and Municipal Corporation: ₹ 6.00 per 1,000 litres

Test-checked Districts and State as a whole	Opening balance as on 01 April 2013	Water charges demanded from GPs during 2013-18	Total amount to be recovered	Amount recovered during 2013-18	Percentage of recovery	Outstanding recovery as on 31 March 2018
Bharuch	7.20	4.33	11.53	0.11	0.95	11.42
Dahod	1.89	0.93	2.82	0.00	0.00	2.82
Dang	3.11	2.08	5.19	0.10	1.93	5.09
Jamnagar	1.25	48.77	50.02	4.62	9.24	45.40
Patan	14.01	6.65	20.66	0.70	3.39	19.96
Porbandar	2.26	2.75	5.01	0.51	10.18	4.50
Sabarkantha	6.58	7.75	14.33	0.05	0.35	14.28
Valsad	2.41	3.36	5.77	0.15	2.60	5.62
State	279.17	363.91	643.08	48.92	7.61	594.16

Table 5: Details of water charges outstanding for recovery from GPs

(₹ in crore)

(Source: Information provided by division/circle and headquarters office of GWSSB)

Audit observed that GWSSB issued the demand bills on quarterly basis but did not follow-up the same thereafter. Thus, due to inadequate follow-up by GWSSB, the percentage of recovery of water charges was only 7.61 *per cent* in the State during 2013-18. It may be seen from the above table that there was outstanding recovery of ₹ 594.16 crore as on 31 March 2018 from GPs in the State. Audit also observed that in the test-checked Districts, the percentage of recovery during 2013-18 ranged between zero *per cent* (Dahod) and 10.18 *per cent* (Porbandar). It was further observed that the figures of closing balance of outstanding recovery of a year did not match with the opening balance of the succeeding year and GWSSB had incurred operational loss of ₹ 2,505.74 crore⁵¹ during 2013-18 due to water charges being lower than operating costs.

The Principal Secretary in the exit conference (30 May 2019) stated that the proposal for providing subsidy to the consumers/GPs for payment of water charges is under consideration.

2.1.10.5 Improper billing due to absence of water meters

Audit observed that no metering system existed to measure the quantity of water being supplied to the GPs by GWSSB. GWSSB raised the bills to GPs on the basis of estimated population of the concerned GP and notional supply of water based on the installed capacity of the scheme for each habitant. Audit also observed that most of the tail end villages of a particular scheme were either not getting water or got very less quantity of water as mentioned in **Paragraph 2.1.7.1**. Further, though two out of 32 test-checked GPs were not using water from RWSS, but bills were raised by GWSSB against them. As mentioned in **Paragraph 2.1.10.4**, an amount of ₹ 594.16 crore was outstanding to be recovered from the GPs against the bills raised by GWSSB as on 31 March 2018. Audit is of the view that instead of raising demand on the basis of estimated population and notional supply of water, GWSSB may install water meters to record actual consumption, which would be easier to pursue for recovery.

 ⁽A) Expenses: Raw water cost ₹ 788.77 crore + O&M expenses ₹ 2,316.85 crore = ₹ 3,105.62 crore (minus)
 (B) Incomes: O&M grant ₹ 292.50 crore + water charges recovery ₹ 307.38 crore = ₹ 599.88 crore. (A) - (B) = ₹ 2,505.74 crore

Chief Engineer (Planning Cell) of GWSSB stated (March 2018) that metering was a costly affair. It was also assured that WSD would install water meters in a phased manner. Reply is not tenable as WSD had planned to cover 50 villages with metering device in the five year plan (2012-17) and based on the results achieved and response of the community, further strategy was to be developed for the whole State. However, Audit observed that WSD had not taken any action in this respect till March 2018.

The Principal Secretary in the exit conference (30 May 2019) reiterated that the water meters would be installed in phased manner. It was further stated that installation of water meter for water distributed through bulk pipe line is in progress.

2.1.11 Community participation

Pani Samitis, *i.e.* Village Water and Sanitation Committee (VWSC), are the key level organisation constituted by the Gram Sabha through consensus. It is a 10-20 member elected sub-committee of the GP and represent different castes and marginalized groups in the village. The Pani Samitis are responsible for planning, designing, implementing, managing, owning and carrying out operation and maintenance of village water supply system. Audit observed that community participation for implementation and management of all WSSs in the villages was ensured in the State by engaging VWSCs. During 2017-18, there were 17,452 Pani Samitis in the State. Audit further observed that participation of women in the VWSCs was also ensured through Mukhya Mantri Mahila Pani Samiti Protsahan Yojana by providing additional grant of ₹ 25,000 to VWSCs with 50 *per cent* or more women members. Number of Mahila Pani Samities⁵² had increased to 495 (79 *per cent*) in the year 2017-18 from 276 in the year 2016-17.

2.1.12 Information, Education and Communication activities

Information, Education and Communication (IEC) activities is an important tool for the success of any programme/scheme, particularly, where people are directly involved.

In the eight test-checked Districts, Audit observed that 507 villages were not drawing water from the RWSSs. This indicated that the Department did not provide the information to the GPs and villagers about the benefits of RWSS and health risks posed by using water, the quality of which was not tested and assured. Audit further observed that the test results of water samples tested in laboratories were not being communicated to the concerned GPs and villagers, even the sources of water found unfit were not marked as unfit source to avoid use of water by the habitations. As a result, habitants with unfit source were not aware of the same and were using the contaminated water. During joint survey of 1,920 HHs, Audit observed that none of the members of the HHs surveyed had ever attended any IEC programme on water related issues arranged by the Department.

⁵² Pani Samitis having 50 *per cent* or more women members

NRDWP guidelines provide for establishment of Computerised Grievance Redressal System by each State Government with financial support from the MoDWS. Audit observed that though computerised system was not established in the State, a toll free number 1916 for grievance redressal was introduced in the State in November 2016. This was done for registration of complaints relating to water supply and quality issue and its redressal. There were 426 complaints received during 17 months (November 2016 to March 2018). During joint survey of 1,920 households, Audit observed that only one household had the knowledge of this toll free number. This indicated that the toll free number was not popular due to lack of IEC activities by the concerned authorities.

The above indicate that the IEC activities undertaken by the Department were not effective. Department may ensure effective implementation of IEC activities to make the rural population aware of the health hazards of using underground water so as to increase the coverage of habitations under RWSS. This would help to mitigate health hazards related to use of ground water.

The Principal Secretary in the exit conference (30 May 2019) stated that the Computerised Grievance Redressal System has now been developed.

2.1.13 Monitoring and Inspection

2.1.13.1 Institutional mechanism

As per NRDWP guidelines, a State Water and Sanitation Mission (SWSM) was to be set up in the State as an apex body for water supply and sanitation to provide policy guidance, convergence of water supply and sanitation activities, co-ordinating with various Departments of GoG, *etc.* GoG constituted (September 2003) the mission consisting of Chief Secretary and Secretaries⁵³ of various Departments of GoG as members with provision to meet at least twice a year. Audit observed from the information furnished by WSD (February 2018) that the mission had neither met nor any consultation were held since September 2005.

The Principal Secretary in the exit conference (30 May 2019) stated that the work of sanitation is being handled by the Rural Development Department.

2.1.13.2 Incorrect reporting by the State

In Gujarat, the information is fed in the IMIS at Taluka and District levels on monthly basis by field offices of WASMO and GWSSB, which is validated by their respective head offices. The information in IMIS is utilised for financial planning and budget allocation by the Central and State Governments.

Audit observed that the data was not being entered on regular basis. It was also observed that the data entered was not supported by any documentary evidences. An analysis of information available in the IMIS in Audit revealed that the figures of the closing balance of a particular financial year did not match the opening balance of the succeeding year as shown in **Table 6** –

⁵³ Water Supply, Rural Development, Panchayats, Finance, Health, Planning, etc.

Year	Total households in the State	Households having PWS in the beginning of the year	Households provided with PWS during the year	Total households having PWS at the end of the year
2014-15	71,19,197	45,26,352	85,244	46,11,596
2015-16	63,23,672	29,56,260	43,295	29,99,555
2016-17	64,77,558	45,18,434	2,34,967	47,53,401
2017-18	64,77,637	47,03,323	23,855	47,27,178

Table 6: Details of households having PWS connection in the State during 2013-18

(Source: March ending IMIS data of each year)

The above table shows that the total number of households in the State during 2014-15 reduced by 7,95,525 in 2015-16 which normally should increase. Similarly, the total number of households having PWS at the end of 2014-15 reduced by 16,55,336 households in the beginning of the year 2015-16. Also the figures of closing balance did not match with the opening balance in the succeeding two years (2016-17 and 2017-18). These indicated that the figures reported of households provided with PWS connections in the State were not correct.

The Principal Secretary in the exit conference (30 May 2019) stated that training would be provided to the functionaries who are involved in data entry in the IMIS.

2.1.13.3 Absence of periodical monitoring of completed schemes

Management of in-village schemes is the responsibility of the GPs/Pani Samitis with institutional and technical support of WASMO. As per NRDWP guidelines, periodical monitoring and review of the functioning of completed schemes should be arranged through officers, experts, NGOs, institutions, *etc.* However, Audit observed that WASMO monitored only the schemes, which were ongoing. The completed schemes were not being monitored either by WASMO or any other authorities.

The Principal Secretary in the exit conference (30 May 2019) assured conduct of periodical monitoring.

2.1.14 Conclusion

Audit observed that the test-checked Districts had not prepared the WSP for the period 2012-17; however, the State WSP was prepared without considering the core level of planning *i.e.* District WSPs or Village WSPs. However, such plan was not prepared thereafter.

GoG reported that all 35,996 habitations in the State were fully covered with water supply; however, as per information provided by test-checked DWSUs, 37 out of 78 test-checked habitations had been partially covered. Out of 2,352 villages covered under 91 RWSSs in eight test-checked Districts, only 1,587 villages were getting water through RWSSs. Of the remaining 765 villages, 258 villages had no access of water due to insufficient water at source, non-creation of internal distribution networks, damaged pipes, *etc.*

As per records of DWSUs/Divisions of GWSSB of test-checked Districts, there were 377 non-functional schemes in these eight test-checked Districts. However, only 76 schemes (20 *per cent*) were reported as non-functional schemes in IMIS. During joint physical verification (April 2018 to August 2018) of assets in 78 test-checked habitations, 28 out of 65 in-village schemes/ IVWSS/mini schemes were found non-functional though as per records, these were reported as functional schemes. In the test-checked Districts, 77 schemes had been dropped due to insufficient public contribution, source failure, non-availability of land, *etc.*

SLL was found not working as State Referral Laboratory. Out of 245 Talukas in the State, 198 Talukas had no facility of TLLs. In absence of TLLs in each Taluka, only 32 *per cent* samples were tested for chemical parameters and 11 *per cent* samples were tested for bacteriological parameters during 2017-18. Two compulsory chemical parameters of water quality testing *i.e.* Iron and Arsenic, was not being tested in any laboratories. In the test-checked Districts, bacteriological testing was not being done for all sources except for water supplied from RWSS. Mobile Laboratory Vans allotted to GJTI and five zonal offices of GWSSB remained unutilized for want of driver, chemist and repairs of instruments/equipment. Field Test Kits meant for water quality testing was not utilized by GPs and MPHWs in test-checked habitations.

Eighteen *per cent* water samples tested during 2013-18 for chemical parameters in the State, were found unfit due to excess content of nitrate, fluoride, TDS, *etc.* Test results of 188 samples collected by the DLL staff in presence of Audit from 78 test-checked habitations and tested by the concerned DLL revealed the existence of above contaminations more than the permissible limit in 54 samples.

The IEC activities undertaken by the Department were not effective. Periodical monitoring of completed schemes was not being done.

2.1.15 Recommendations

State Government may -

- *identify non-functional water supply schemes and operationalise them; and*
- review the requirement of technical staff for water testing laboratories and fill up the vacancy.

CHAPTER-III

COMPLIANCE AUDITS

CHAPTER - III

COMPLIANCE AUDITS

This Chapter contains three theme based paragraphs on "Implementation of National Programme of Nutritional Support to Primary Education", "Implementation of Underground Drainage System under Rurban Scheme" and "Functioning of Residential Schools under Gujarat State Tribal Education Society", and two long compliance paragraphs on "Implementation of Indira Gandhi National Old Age Pension Scheme" and "Unfruitful expenditure on procurement of Refuse Compactor Vehicles".

EDUCATION DEPARTMENT

3.1 Implementation of National Programme of Nutritional Support to Primary Education

3.1.1 Introduction

The National Programme of Nutritional Support to Primary Education (commonly known as the Mid Day Meal (MDM) Scheme) was launched (August 1995) as a Centrally Sponsored Scheme. The scheme was intended to boost the universalisation of primary education by increasing enrolment, retention and attendance in primary classes. The programme covers children studying in primary and upper primary classes in Government, Government Aided and Local Bodies schools, children studying under the Educational Guarantee Scheme (EGS) and Alternative and Innovative Education (AIE) Centres (now known as Special Training Centres) and children of recognised Madarasas/Maktabs supported under Sarva Shiksha Abhiyan (SSA). In Gujarat, the scheme was in operation since 1984 and was merged (August 1995) with the GoI scheme.

The revised scheme guidelines (September 2006) require providing to eligible children cooked meals with minimum nutritional value of 450 calories energy and 12 grams protein for primary students¹ and 700 calories energy and 20 grams protein for upper primary students². Under the State sponsored scheme of "Doodh Sanjivani" the Government of Gujarat (GoG) in addition to cooked meal also provides 200 ml. flavored milk to the students of schools managed by Tribal Development Department and schools of developing Talukas managed by the Education Department. Additionally, 60 kilograms of food grains *per* annum to each girl students of a tribal family (maximum two girls in a family) is also provided by GoG under "Ann Triveni" scheme. Besides, a sweet under "Sukhadi³ Project" to students once in a week as an additional nutritive food was also provided by GoG. For community participation, meal to the students once in a month is provided by the village community sponsors under "Tithi Bhojan" scheme of GoG.

The Principal Secretary (PS), Education Department (ED) is in-charge of overall implementation of the scheme in the State. The Commissioner (MDM) implements the scheme through Deputy Collectors (MDM) at District level and Mamlatdars assisted by Deputy Mamlatdars at Taluka level. At the school level, the scheme is implemented through Sanchalak-*cum*-Cooks (SCCs), who are

¹ Foodgrains (100 grams), Pulses (20 grams), Vegetables (50 grams), Oil and Fat (5 grams)

² Foodgrains (150 grams), Pulses (30 grams), Vegetables (75 grams), Oil and Fat (7.5 grams)

³ A sweet prepared using wheat, jaggery and oil

engaged on honorarium to supervise cook-*cum*-helpers in cooking the food and for co-ordinating with the Mamlatdar for getting food grains and cooking cost as per the norms, and for submitting the accounts. Civil Society Organisations (CSOs) and Non-Government Organisations (NGOs) are involved in implementing the scheme in urban areas (Municipal Corporation areas) as well as in Districts by operating centralised kitchens. The Gujarat State Civil Supplies Corporation (GSCSC) is the nodal transport agency for delivery of food grains, pulses and edible oil up to Fair Price Shops (FPS). A flow chart of implementation of the MDM scheme is given in **Appendix-XI**.

A compliance audit of MDM scheme was conducted to assess whether the scheme was being implemented in a planned manner to cover all eligible primary and upper primary school children; the objective of improving the nutritional status of children were achieved; funds allocated were utilised in an economic and efficient manner; and the implementation of the scheme was effectively monitored. Audit test-checked the records of the scheme covering the period from 2015-16 to 2017-18 maintained at the Commissioner of MDM, Gujarat State Civil Supply Corporation (GSCSC) and implementing agencies of five selected Districts⁴ and 11 selected Talukas⁵. Audit also visited (June to August 2018) 96 schools⁶ jointly with the officials of Taluka Mamlatdar/Vadodara Municipal Corporation (VMC). Additional 11 schools of five⁷ Talukas were also visited for checking utilisation of modern kitchen equipment.

An exit conference was held (19 June 2019) with the Secretary, Primary and Secondary Education Department to discuss the audit findings. The views of the State Government have been considered and incorporated in the report.

3.1.2 Funding Pattern of the scheme

The financial assistance under the scheme is shared between GoI and GoG in the ratio of 60:40 for cooking cost⁸ and honorarium to cook-*cum*-helpers. In addition to this, GoI also provides free food grains (100/150 grams per student per day for primary and upper primary) and transportation subsidy at the rate of ₹ 75 per quintal for transporting food grains from godowns of Food Corporation of India (FCI) to schools and assistance for Management, Monitoring and Evaluation (MME) at the rate of 1.8 *per cent* of total assistance on cooking cost, free food grains and transportation subsidy.

Audit findings

3.1.3 Planning and coverage

3.1.3.1 Coverage of schools and students

As per the instructions issued (April 2002) by the Commissioner, the Mamlatdar of each Taluka shall obtain the details of school-wise enrolment from the Taluka

⁴ Amreli, Banaskantha, Panchmahal, Vadodara including Vadodara Municipal Corporation and Valsad

Amreli (Dhari and Savarkundla), Banaskantha (Danta (one additional covered during pilot study), Deodar and Vav), Panchmahal (Godhra and Sahera), Vadodara (Karjan, and Vadodara rural) and Valsad (Valsad and Kaprada)
 Eight schools in each Taluka including eight schools in Vadodara Municipal Corporation selected on the basis

of Simple Random Sampling without Replacement method

⁷ Danta, Godhra, Kaprada, Karjan and Sahera

⁸ Cooking cost includes cost of pulses, vegetable oil, vegetable and condiments, fuel and miscellaneous expenditure. From July 2016, rate of cooking cost has been fixed at ₹ 4.13 and ₹ 6.18 per student per day for primary and upper primary students respectively. In addition to this, GoG provides additional ₹ 0.45 and ₹ 0.23 for extra cooking oil per student per day for primary and upper primary students respectively.

Education Authorities and shall enter the same in a register. Monthly details of total number of students covered along with daily average coverage under MDM scheme shall be entered in the register based on the accounts submitted by the SCCs. The Monthly Progress Reports (MPRs) shall be prepared by the Mamlatdar for submission to the District Authorities based on the data of the register.

Audit observed that none of the 11 test-checked Talukas had maintained the said register. Consequently, the veracity of the data relating to coverage of schools and students reported could not be vouchsafed in Audit. The data reported in the MPR by the test-checked Talukas was found to be incorrect as discussed in the succeeding paragraphs –

• Incorrect reporting of coverage of schools

The Education Department submits the Annual Work Plan and Budget (AWP&B) for each financial year to the Programme Approval Board (PAB)⁹ of GoI for approval by February of the preceding year. The numbers of schools covered in the preceding year are approved as the target in the AWP&B for the next year by PAB. The details of number of Primary Schools (PSs) and Upper Primary Schools (UPSs) managed by Government (including schools managed by Local Bodies) and Private Grant-in-Aid (GIA) schools as provided by the State Project Director (SPD) of Sarva Shiksha Abhiyan (SSA), number of schools approved in the AWP&B and number of schools reported by GoG as covered under MDM scheme during 2015-16 to 2017-18 are shown in **Table 1** –

Year	Number of schools in the State as per SSA			Number of schools ap- proved in AWP&B			Coverag GoI i	ge repo n AWP	
	Govern- ment	GIA	Total	Govern- ment	GIA	Total	Govern- ment	GIA	Total
1	2	3	4	5	6	7	8	9	10
2015-16	31,535	523	32,058	33,666	845	34,511	33,358	413	33,771
2016-17	31,512	502	32,014	33,358	413	33,771	33,041	412	33,453
2017-18	31,567	513	32,080	33,041	412	33,453	32,368	365	32,733

Table 1: Coverage of schools

(Source: Information provided by Director (SSA) and Commissioner of MDM)

The above table shows that the number of schools approved in the AWP&B as well as those reported as covered under the Scheme was higher than the number of schools in the State as per SSA records. Further, Audit observed that against actual coverage of 6,755 schools by the test-checked Districts, the Commissioner had reported 7,105 schools as covered in AWP&B during 2015-16. In the remaining two years (2016-17 and 2017-18), the coverage has been under reported. This indicated that incorrect data of coverage of schools were being reported by the State to GoI.

The Commissioner attributed (August 2018) the reason for variation in the data to the incorrect information furnished by the District authorities. The reply indicates that the Commissioner failed to get the regular reconciliation done so as to ensure

⁹ It consists of (1) Secretary, School Education and Literacy as Chairman, (2) Nutrition experts and (3) Representatives from the Departments of Women and Child Development, Ministry of Rural Development, Ministry of Panchayat Raj, FCI, *etc.* The PAB in its meeting discusses the proposals received from various States and accords its approval.

that correct information is reported to GoI. The Secretary in the exit conference (19 June 2019) accepted the audit observation and stated that they are in the process of taking approval for developing a software which would integrate the entire information related to the scheme like number of schools, beneficiary children stock utilised, *etc.* It was further stated that the implementation of the software would be undertaken considering audit issues. Audit is of the view that the State Government may ensure correct reporting of coverage of schools to GoI.

3.1.3.2 Incorrect reporting of coverage of students

Ministry of Human Resource and Development (MHRD) approves the daily average number of students to be covered in the ensuing year based on the number of students covered during the preceding year reported in the AWP&B.

MHRD had approved coverage of 42.27 lakh, 43.95 lakh and 43.67 lakh students for the years 2015-16, 2016-17 and 2017-18 respectively against which the Commissioner reported to GoI that the coverage in these years was 43.95 lakh, 43.67 lakh and 43.97 lakh students respectively.

On comparison of the data of coverage of students reported by the Commissioner to the GoI and data reported by the test-checked Districts to the Commissioner through MPRs, Audit observed variation in the number of daily average beneficiaries covered. In 2017-18, the coverage of daily average number of students as reported by the Commissioner to GoI was higher by six *per cent* (8,05,073 students) as against the coverage reported (7,58,278 students) by four¹⁰ out of five test-checked Districts.

Audit compiled the data of Detailed Contingent Bills of the talukas which included the actual coverage of students at school level and found that the coverage of students reported in the MPRs was more than the actual students covered in DC bills by 8, 12 and 19 *per cent* for the period 2015-16 to 2017-18 in respect of six¹¹ out of 11 test-checked Talukas.

Thus, the above facts indicated that there was higher reporting in respect of coverage of students to GoI due to incorrect reporting by the Talukas and also at the Commissioner level. Accordingly, food grains and cooking cost were being allocated more than the actual ground-level requirement leading to increase in closing stock of food grains as discussed in **Paragraph 3.1.4.1**.

The Secretary in the exit conference (19 June 2019) accepted the audit observation and stated that they are in the process of taking approval for developing a software which would integrate the entire information related to the scheme like number of schools, beneficiary children, stock utilised, *etc.* It was further stated that the implementation of the software would be undertaken considering audit issues. Audit is of the view that the State Government may ensure correct reporting of coverage of students to GoI.

¹⁰ Except Valsad where average daily beneficiaries as reported by the Commissioner (1,17,989) were less by 5,403 than the figures shown by the Districts (1,23,392).

¹¹ Dhari (Amreli District), Danta, Deodar and Vav (Banaskantha District), Karjan (Vadodara District) and Valsad (Valsad District). At Savarkundla Taluka of Amreli and Godhra and Sahera Talukas of Panchmahal District, there was no variation between DC bill and MPR. At Kaprada Taluka of Valsad District and Vadodara (Rural), the numbers of beneficiaries were not mentioned in the DC bills.

• Incorrect reporting of coverage of students of Special Training Programme

Section 4 of the Right of Children to Free and Compulsory Education (RTE) Act, 2009 provides that the local authorities shall arrange Special Training Programme (STP) for identified Out of School Children (OoSC) and mainstream them for regular schooling. As per MDM guidelines, the students of STPs are entitled for meals under MDM.

The details of number of STPs sanctioned and students enrolled in them during 2015-16 to 2017-18¹² *vis-a-vis* details of coverage of STP and its students reported in the AWP&B by the Commissioner of MDM¹³ are shown in **Table 2**–

Year	As per reco	ords of SSA	As reported in AW to school	/P&B (in addition coverage)
	Number of STPs sanctioned	Number of students enrolled	Number of STPs reported as covered	Number of students reported as covered
2015-16	2,646	26,942	2,514	31,345
2016-17	2,496	31,966	2,107	26,939
2017-18	2,500	47,139	1,827	18,124

Table 2: Coverage of STPs and its students as per AWP&B for the period 2015-16 to 2017-18

(Source: Information provided by SSA and the Commissioner of MDM)

The above table shows the coverage of STPs students reported by the Commissioner of MDM varied from those reported by SSA. Scrutiny of records at test-checked Talukas revealed that the Mamlatdars had no information about the number of STP held in the Taluka and had never reported the coverage of STPs and its students in the MPRs. Thus, the Commissioner had been reporting in the AWP&B incorrect data of coverage of STPs and students.

The Commissioner stated (August 2018) that the coverage of STP students was included on the basis of information received from SSA. The State Project Director, SSA stated (September 2018) that the details of STP sanctioned were being communicated to the Commissioner of MDM for their coverage under MDM scheme. Audit is of the view that non-availability of data at Taluka level indicated incorrect reporting by the Commissioner of MDM in this respect.

3.1.4 Supply and utilisation of food items

Food grains are supplied by GoI through Food Corporation of India (FCI) which are lifted by the Gujarat State Civil Supplies Corporation (GSCSC). Pulses and edible oil are procured and supplied by GoG through GSCSC. The Mamlatdar issues permits every month to Fair Price Shops (FPS) for lifting of food items from the godowns of GSCSC situated in the Taluka. The SCCs lifts the food items from FPS as per the quota of stock allotted to him by the Mamlatdar based upon the expected number of students for the month. Audit findings on utilization of different food articles are described in the succeeding paragraphs.

¹² As provided by the State Project Director (SPD) of SSA to Audit

¹³ In addition to the students covered under schools

3.1.4.1 Over-reporting of utilisation of food grains

Audit observed variation in the closing stock of food grains as reported by the Commissioner to GoI and closing balance as maintained by the GSCSC. The yearwise details of food grains allocated by GoI, lifted and utilised under the scheme during 2015-16 to 2017-18 as provided by the Commissioner and the year-wise closing stock of food grains as provided by GSCSC are given in **Table 3** –

Year		As repor	ted by the Co	Closing	Difference in			
	Open- ing stock	Alloca- tion	Quantity lifted from FCI by GSCSC	Quantity utilised	Closing stock	stock as reported by GSCSC		
1	2	3	4	5	6 (2+4-5)	7	8(7-6)	
2015-16	4,781	1,15,348	1,07,047	1,10,013	1,815	27,423	25,608	
2016-17	1,815	1,23,287	1,20,794	1,19,653	2,956	38,003	35,047	
2017-18	2,956	1,21,489	1,20,505	1,19,903	3,558	49,939	46,381	

Table 3: Details of utilisation and closing stock of food grains

(Quantity in metric tonnes)

(Source: Information provided by the Commissioner and GSCSC)

The above table shows that though huge stock of food grains were lying at the godowns of GSCSC, the Commissioner has been under-reporting the closing stock of food grains to GoI during 2015-16 to 2017-18 by over-reporting of the utilisation of food grains. Audit scrutiny revealed that the utilisation of food grain was being reported without obtaining the details of actual utilisation from the District/Taluka levels and without ensuring the actual closing stock of foodgrain with GSCSC. Instead the utilisation of food grain was being calculated based on the coverage of students which was also being inflated by the Commissioner as discussed in **Paragraph 3.1.3.2**.

The Secretary in the exit conference (19 June 2019) stated that the data available with the GSCSC would be reconciled and correct quantity of food grains available with the Corporation would be adjusted by indenting from GoI. To this Audit stated that the situation has to be addressed after verification of internal records.

3.1.4.2 Improper implementation of uniform menu

As per the scheme guidelines, the daily menu of meal is to be decided locally at District level. The menu was being decided locally up to August 2017 since the implementation of the scheme. Thereafter, with the objective of having a uniform menu throughout the State and to enhance the nutritional intake of students, the Education Department of GoG as a new initiative, divided the single meal into breakfast and lunch, without changing the cooking cost. Further, supply of Chana (gram) for three days and mixed Kathod (whole pulses) for a day as menu for breakfast was prescribed.

During joint field visit (June to August 2018) of 72 schools (managed by SCCs) in test-checked Districts, Audit observed that breakfast was not served in 28 schools on the day of visit of Audit, while in the remaining 44 schools, the SCCs served breakfast along with lunch/meal. In Valsad Taluka of Valsad District, breakfast was being served along with lunch/meal but was not as per the prescribed menu.

Supply of breakfast together with lunch/meal defeated the objectives of enhancing the nutritional intake of the students by bifurcating the meal into breakfast and lunch.

The Secretary in the exit conference (19 June 2019) stated that the implementation of uniform menu would be reviewed and corrective action to implement it as intended would be taken.

3.1.4.3 Supply of milk under Doodh Sanjivani Scheme

Education Department of GoG introduced (2014-15) "Doodh Sanjivani Scheme" on pilot basis in two developing Talukas of the State *i.e.* Santalpur of Patan District and Modasa of Aravalli District. The objectives of the scheme were to address the issues of malnutrition. The scheme was to be scaled up on ascertaining positive impact on students' health after carrying out health check-up of the students and after conducting an evaluation study. The District Co-operative Milk Unions working under the umbrella of "AMUL" was to supply the milk and get the expenditure reimbursed through the Deputy Collectors (MDM). The scheme was extended to other Districts gradually.

Of the five test-checked Districts, the scheme was implemented in three Districts (Banaskantha, Panchmahal and Valsad¹⁴). In Banaskantha District, Audit observed that the daily average number of students covered under the scheme decreased from 1,25,961 to 91,489 students and in Panchmahal District, it decreased from 31,574 to 18,188 students during 2015-16 to 2017-18.

Of the 11 test-checked Talukas, the scheme was being implemented in three Talukas¹⁵ by the Education Department. Scrutiny of records revealed that none of the schools in three test-checked Talukas had submitted the report of receipt and consumption of milk pouches to the Mamlatdar though it was required as per the instructions issued by the Commissioner. In five out of eight schools visited, in Sahera Taluka of Panchmahal District, out of 270 milk pouches received on the day of visit, 142 (53 *per cent*) pouches were lying unused and the schools had no facility for storing the same in cold condition for its use later or next day. Audit further observed during joint field visit that used milk pouches were being thrown in the open or being burnt in the open, which could cause environmental risk.

The Department did not furnish any reply. However, in the exit conference, the Secretary stated (19 June 2019) that information from the Districts would be obtained and corrective actions would be taken.

3.1.5 Serving of Meal

3.1.5.1 Centralised kitchens managed by NGOs

The scheme guidelines (2006) and MHRD instructions issued in September 2010 and September 2017 provide for engagement of NGOs in urban areas for operating centralised kitchens, where there are space constraints. Accordingly, three NGOs have been engaged in five District places¹⁶ and five Municipal Corporations (MCs)¹⁷ areas.

¹⁴ The scheme was implemented by Tribal Development Department, hence, the extent of implementation of the scheme was not covered in Audit

¹⁵ Deodar and Vav (Banaskantha) and Sahera (Panchmahal)

¹⁶ Ahmedabad, Gandhinagar, Navsari, Vadodara and Valsad

¹⁷ Ahmedabad MC, Bhavnagar MC, Rajkot MC, Vadodara MC and Surat MC

Audit test-checked the records of two NGOs¹⁸ operating centralised kitchens in test-checked Districts (VMC area and District places of Vadodara and Valsad). The audit findings are discussed below -

• Hot meal not served

As per instructions issued (September 2017) by MHRD, food delivered from centralized kitchens to schools should have minimum temperature of 65°C at the time of serving. During joint field visit of schools in Valsad District, Audit observed that the food served by the NGO was not hot and none of the schools visited, had the facility to check the temperature. In Vadodara District, audit checked the temperature of the food at the time of serving in a school and found that the temperature was below the norms.

The Secretary in the exit conference (19 June 2019) stated that a system for measuring the temperature at the time of serving would be developed and delivery of hot cooked food as per scheme guidelines would be ensured.

• Non-verification of quantity and nutritional value of cooked food

MDM Rules, 2015 issued under the National Food Security Act, 2013, *interalia*, provide that hot cooked meal provided to children shall be evaluated and certified by the Government Food Research Laboratory or any other laboratory accredited or recognized by law so as to ensure that the meal meets with the prescribed nutritional standards and quality.

Audit observed that the Commissioner had not developed any mechanism to check whether the NGOs served the prescribed quantity and quality of food as neither the Commissioner nor the District authorities of Vadodara and Valsad Districts took samples of cooked food for testing to measure the nutritive value during 2015-16 to 2017-18. The Report of Joint Review Mission¹⁹ (JRM) team which visited (March 2018) the schools of Vadodara pointed out that the food served by the NGO did not meet the nutritional value prescribed under MDM.

Revised scheme guidelines (2017) of centralized kitchens envisage that the weight norms per cooked meal in accordance with the menu should be finalized through mutual consultation between the State authorities and the NGO to ensure adequate supply of hot cooked food as per the norms. However, Audit observed that the Commissioner had not prescribed any weight norms for cooked meal. Further, there was no system for test-checking the weight of food delivered at schools.

The Commissioner stated (January 2019) that a system to measure nutritional value, temperature and weight norms would be developed. This indicated lack of monitoring by the Department over the NGOs for ensuring the supply of meals as per prescribed norms. The Secretary in the exit conference (19 June 2019) stated that instructions in this respect would be issued and its implementation accordingly would be ensured.

¹⁸ Akshaya Patra serving MDM in schools run by Vadodara VMC and District place (Vadodara (City), Vadodara (Rural), Padra and Waghodia) and Stree Shakti serving MDM in Valsad District (Valsad, Pardi, Umargaon and Vapi)

¹⁹ Constituted in 2009 by GoI in various States across the country to review the performance of the Scheme in the light of the guidelines of MDM Scheme and to suggest policy measures for effective implementation of the Scheme. The team consists of health and nutritional expert drawn from various Universities and Government Organizations.

3.1.6 Financial Management

3.1.6.1 Budget and Expenditure

GoG makes budget provision for the expected GoI share along with its own share²⁰. GoI share is credited into the Consolidated Fund of the State which is placed at the disposal of the Education Department along with State share, who, in turn, releases the grants to District and Taluka level implementing agencies of the scheme through the Commissioner MDM. The details of budget allocation, grant released and expenditure incurred under the scheme during 2015-16 to 2017-18 are shown in **Table 4** –

										(< in crore)
Year	Budget allocation			Gra	Grant released			kpenditu	Percentage	
	GoI	GoG	Total	GoI	GoG	Total	GoI	GoG	Total	of expenditure to grant released
2015-16	432.32	470.14	902.46	388.30	458.22	846.52	396.35	442.44	838.79	99
2016-17	424.68	523.44	948.12	330.66	498.22	828.88	323.46	485.02	808.48	98
2017-18	408.50	517.48	925.98	398.56	503.25	901.81	386.33	386.53	772.86	86
	(5	Source:	[nforma	tion pro	vided by	the Co	mmissio	ner of N	IDM)	

Table 4: Details of budget allocation and expenditure

The shortfall in expenditure during 2017-18 was mainly due to the failure of GSCSC in procurement of food grains for State sponsored scheme of free food grains to tribal girls, decline in the prices of pulses and shortfall in pulse procurement.

3.1.6.2 Over-reporting of expenditure

The scheme guidelines provide for grant under the component of Management, Monitoring and Evaluation (MME), 50 *per cent* of which can be utilized at State level and the remaining 50 *per cent* at school level for expenditure relating to man power, transportation, furniture, *etc.* as the State Government may think fit.

During 2015-16 to 2017-18, MHRD released ₹ 21.62 crore to GoG under MME. Of this, the ED released ₹ 20.16 crore to the Commissioner (MDM). Scrutiny of records revealed that the Commissioner had submitted utilisation certificate for ₹ 20.17 crore stated as fully utilised, though only ₹ 7.46 crore had been utilised by the Commissioner for office expenses and salary of contractual staff at the Commissioner, District and Taluka levels and an unspent balance of ₹ 28.62 crore was lying in the Bank account with the Commissioner (includes unspent balance of previous years and interest earned). Audit further observed that no funds have been expended at the school level during 2015-16 to 2017-18. The Commissioner stated (October 2018) that the MME funds are of permanent nature and non-lapsable so utilisation certificate for entire funds was given. Thus, incorrect utilisation certificate had been submitted by the Commissioner to the Ministry.

²⁰ Including provision for two State Sponsored Scheme ("Doodh Sanjivani" and "Ann Triveni")

3.1.6.3 Wasteful expenditure on modern kitchen equipment

The Principal Secretary (PS) of ED based on a letter from MHRD proposed (April 2014) to upgrade the kitchens by providing high capacity cooking equipment such as pressure cooker, pans, dhokla maker, chutney maker, gas burner, *etc.* on pilot basis in 500 schools having more than 500 students, with a view to increase the nutritional value of the food as the existing kitchens were traditional and labour intensive.

It was proposed (April 2014) that a school kitchen would be converted into centralized kitchen from where nearby schools could be served MDM. Based upon this, a provision of ₹ 25.00 crore was made in the budget for the year 2014-15 for modernizing 500 schools. In September 2014, the Additional Chief Secretary (Finance Department) instructed the ED to implement this project initially in 50 schools on pilot basis as against 500 schools proposed by the ED. Accordingly, ED accorded administrative approval (September 2014) for 50 schools with the condition that the project should be implemented on turnkey basis, with one year's warranty and two years' annual maintenance contract. It further provided that the project in the remaining 450 schools shall be implemented only after conducting third party analysis of the impact of the project and specific proposal of the Commissioner of MDM. However, ED in February 2015, accorded administrative approval for the remaining 450 schools without assessing the fulfillment of the conditions contained in the earlier approval. The ED provided equipment worth ₹ 53.42 crore to 756 schools²¹ during 2014-15 and to 500 schools in 2015-16.

Audit observed that the letter of MHRD referred and considered by ED for implementation of the project had no mention about modernizing kitchens, but it mentioned only the poor nutritional status of school students in the country. During joint visit (June to August 2018) of schools, it was observed that the equipment provided during 2015-16 and 2016-17 to 64 schools in seven test-checked Talukas²² were not put to use and were lying idle since their supply.

The Secretary in the exit conference (19 June 2019) stated that the Department was much concerned about the non-utilisation of equipment; however, the possibility of its utilisation in some other Department where they could serve with utility would be evaluated.

3.1.7 Quality control

3.1.7.1 Checking the quality of food grains on delivery

As per instructions issued (August 2012 and January 2017) by the Commissioner MDM, each Deputy Collector and Mamlatdar at the District and Taluka levels are required to take 10 samples per month randomly of uncooked food items from the schools and get them tested from Government Laboratories of Food and Drugs Control Administration (FDCA), Municipal Corporations and Forensic Science Laboratories (FSL).

From the records of Annual Work Plan and Budget furnished by the Commissioner (MDM) for 2017-18, Audit observed that 220 samples were tested. The

²¹ During 2014-15 out of savings from the grant 256 more schools were covered

²² Banaskantha (Danta-14, Deodar-07 and Vav-13), Panchmahal (Godhra-12 and Sahera-11), Vadodara (Karjan-02) and Valsad (Kaprada-05)

records also mentioned that out of these, 52 samples (24 *per cent*) were found sub-standard. Audit could not vouchsafe whether adequate number of quality checks were excercised or not at Districts and Talukas during 2015-18, as no records were found maintained in this regard.

The Commissioner stated (January 2019) that GSCSC is responsible for taking necessary action for sub-standard quality.

3.1.7.2 Testing of cooked food

MDM Rules (September 2015) in accordance with National Food Security (NFS) Act, 2013 provide for testing of cooked food for checking the nutritive value by FDCA. During 2015-18, FDCA had taken 1,850 samples of cooked food for quality testing from MDM Centers and centralized kitchen operated by NGOs. Of these, 16 samples had failed the quality test. However, Audit observed that FDCA had not conducted any testing to check the nutritive value of food as envisaged in the MDM Rules.

The Secretary in the exit conference (19 June 2019) stated that testing of cooked food by the Commissioner (FDCA) would be ensured.

3.1.8 Availability of Manpower

The status of availability of staff against the posts sanctioned under the scheme as of March 2018 at State, District and Taluka levels are shown in Table 5-

Levels	Posts	Sanc-	As on	31 Marc	h 2015	Sanc-	As on 31 March 2018		
		tioned posts	Posts filled up	Vacant posts	Percent- age of vacancy	tioned posts	Posts filled up	Vacant posts	Percent- age of vacancy
State	Commissioner	1	1	0	0	1	1	0	0
	Joint Commis- sioner	1	1	0	0	1	0	1	100
	Assistant Commis- sioner	2	1	1	50	2	1	1	50
	Deputy Mamlatdar	3	3	0	0	3	3	0	0
District	Deputy Collector	31	8	23	74	33	16	17	52
	District Primary Education Officer	11	3	8	73	12	6	6	50
Taluka	Deputy Mamlatdar	410	226	184	45	410	176	234	57
	MDM supervisor	129	100	29	22	201	182	19	9

Table 5: Status of availability of staff as on 31 March 2018

(Source: Information provided by the Commissioner, MDM)

The above table shows that there was shortfall of staff at the District and Taluka levels. The posts of Deputy Collector and Mamlatdar/Deputy Mamlatdar are the key posts for the efficient implementation of the scheme. The vacancy in these posts was 52 and 57 *per cent* respectively as of March 2018. The shortfall in key posts had resulted in deficiencies in inspection and monitoring of the scheme as discussed in the succeeding paragraphs.

3.1.8.1 Shortfall in inspection of schools

The scheme guidelines provide that modalities for inspection of MDM schools shall be developed by the State Government. The ED prescribed norms of inspection in April 1985 and reiterated them in April 2002²³.

As per the Quarterly Progress Report (QPR) submitted to the GoI during 2015-16 to 2017-18, the Commissioner had reported conduct of inspection of 73,999 schools (219 *per cent*), 61,991 schools (185 *per cent*) and 56,398 schools (172 *per cent*) during 2015-16, 2016-17 and 2017-18 respectively as against 34,511 schools, 33,771 schools and 33,453 schools reported as covered in AWP&B during 2015-16, 2016-17 and 2017-18 (shown in Table 1). However, Audit observed shortfall in inspection by the Deputy Collectors in test-checked Districts and by the Mamalatdars, Deputy Mamlatdars and MDM supervisors in test-checked Talukas during 2015-16 to 2017-18 as against the number of inspections prescribed by ED as shown in **Table 6**, which shows over reporting of inspection of schools by the Commissioner to GoI.

Year		Test chec	ked Distric	ts	cked Taluk	ukas		
	Target ²⁴	Achieve- ment	Shortfall	Percentage of Shortfall	Target	Achieve- ment	Shortfall	Percentage of shortfall
2015-16	1100	213	887	81	22110	6219	15891	72
2016-17	1320	187	1133	86	31350	10917	20433	65
2017-18	1320	177	1143	87	31350	8808	22542	72
Total	3740	577	3163		84810	25944	58866	

Table 6: Shortfall i	inspection	during 2015-16 to 2017-18	
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(Source: Information obtained from the MPRs of test-checked Districts)

The above table shows that the shortfall in inspection at District level carried out by the Deputy Collectors ranged between 81 *per cent* (2015-16) to 87 *per cent* (2017-18) and the shortfall in inspection at Taluka level by the Mamlatdars, Deputy Mamlatdars and MDM supervisors ranged between 65 *per cent* (2016-17) and 72 *per cent* (2015-16 and 2017-18).

Further, the MPRs of the test-checked Districts reported only the number of inspections done during a particular period and not the number of schools inspected, so the reporting by Commissioner to GoI was done without any basic information from the Districts. Audit further observed that the inspections claimed to have been done, were not supported by inspection reports, action taken thereon and/or follow-up of inspection.

The Commissioner replied (Janaury 2019) that due to acute shortage of staff at District and Taluka levels, inspection could not be done as per norms. The Secretary in the exit conference (19 June 2019) also attributed the reasons for shortfall in inspection to huge vacancy in various cadres and stated that they would review the vacancy position and efforts would be taken to fill the vacancies at the earliest.

Thus, the inspection mechanism envisaged by ED was not effectively implemented.

Deputy Collector - 20, Mamlatdar -10, Deputy. Mamlatdar (Inspection) - 20, Deputy Mamlatdar (Administration)
 - 10 and MDM supervisor - 20

²⁴ During 2015-16 inspection data for Banaskantha was not available so not included.

3.1.8.2 Working of School Management Committees

MDM Rules 2015 envisage that the School Management Committee (SMC) mandated under RTE Act, 2009 shall also monitor the implementation of MDM scheme and shall oversee quality of meals provided to the children, cleanliness of the place of cooking and maintenance of hygiene.

During joint field visit (June to August 2018) of schools, Audit scrutinised the minutes of the SMC which revealed that issues relating to MDM scheme were not discussed. Interaction with SMC members by Audit revealed that they were not aware of the entitlements of students, status of food stock received at school, quality of food stock and other scheme related issues. This issue was also pointed out by the Joint Review Mission team of the MHRD in its report of 2013. The Commissioner stated (January 2019) that SMC members have been given the scheme information and they would be provided training about scheme implementation. Thus, community monitoring of the scheme was not functioning effectively.

3.1.9 Impact Assessment by Joint Review Mission

GoI constituted (2009) Joint Review Missions (JRMs) to review the implementation of the scheme. The 10th JRM team visited the State between 05 March and 12 March 2018 and covered 1,000 students of Banaskantha and Vadodara Districts. The mission reported that 30 *per cent* students were moderately thin and 13 *per cent* students were severely thin. The prevalence of high stunting²⁵ was reported between 4.2 and 5.4 *per cent* of students and moderate stunting was reported in 18.70 *per cent* students. Prevalence of severe underweight was reported in 12.90 *per cent* students whereas 34 *per cent* students were moderately underweight. JRM analysed the nutritional value of food taken by the students and reported that it was deficient in both the component of energy and protein against the norms of MDM for the measured quantity of food.

3.1.10 Conclusion

Audit observed incorrect reporting by the Commissioner (MDM) to the GoI in respect of coverage of schools and students under the scheme. The number of schools reported as covered in AWP&B was more than the actual number of schools in the State as per the records of SSA. Similarly, there was variation in coverage of students reported by Commissioner with respect to the figures reported by test-checked Districts.

The Commissioner has been under-reporting the closing stock of food grains to GoI during 2015-18, however, there was huge closing stock of food grains at the godowns of GSCSC. The objective to have a uniform menu throughout the State to enhance the nutritional intake of students by dividing single meal into breakfast and lunch was not achieved. Checks to ensure use of quality food articles for supply of cooked food to children were not being applied effectively.

²⁵ Prevents from growing and developing properly

PANCHAYATS, RURAL HOUSING AND RURAL DEVELOPMENT DEPARTMENT

3.2 Implementation of Underground Drainage System under Rurban Scheme

3.2.1 Introduction

Government of Gujarat launched (March 2009) "Rurban Scheme" with the objective of providing urban type facilities in rural areas. The larger outcome of the Scheme was to bridge the rural-urban divide *viz*. economic, technological and those related to facilities and services. The Scheme was, initially planned to be implemented in all Taluka Headquarters having Gram Panchayats (GPs) with population more than 10,000 (7,000 in case of tribal villages). The Scheme envisaged execution of seven components namely, drinking water, approach/ internal roads, health facilities, quality education, underground drainage system, solid and liquid waste management and transportation.

Of the seven components, the State Government decided to implement one component *i.e.* underground drainage system (UDS) in 255 targeted villages in two phases. In first phase, 84 villages were identified, which included three villages where UDS was taken up as pilot project. Following the success of pilot projects, UDS was to be introduced on a larger scale in 81 villages.

The objective of UDS is to ensure that sewage discharge from the communities is properly collected, transported, treated and disposed of safely/reused without causing health or environmental risks. A typical UDS consists of a sewer network, manholes, service connections, sewage lifting/pumping stations, oxidation pond/ decentralised waste water treatment system/a sewage treatment plant (STP), as shown in the schematic diagram below.



The first phase commenced in 2011. As of November 2018, 68 of 84 UDS projects had been completed, 11 were under execution while five had been abandoned largely due to public agitation, land acquisition problem, *etc.* Thereafter, as of September 2019, only one ongoing project has been completed. The UDS project in the remaining 171 villages, proposed to be taken up in second phase, did not commence as of September 2019.

In order to seek an assurance that UDS projects taken up in first phase had been implemented effectively and efficiently, Audit selected 19²⁶ of 84 projects (16 completed and three ongoing) from 11 of 33 District Panchayats²⁷ (DPs) across four regions of Gujarat through simple random sampling without replacement method. For this purpose, Audit test-checked (February 2018 to July 2018) the records of 19 GPs and 11 DPs, Development Commissioner (DC), Panchayat, Rural Housing and Rural Development Department (PRH&RDD) for the period 2012-18.

The District Development Officers (DDOs) of DPs were responsible to implement the projects approved by State Government. Thereafter, the completed projects were to be handed over to the concerned GPs for providing house connections and operations and maintenance (O&M).

Audit also conducted joint inspection of assets created under 16 completed UDS projects along with the Talati-*cum*-Mantri²⁸ (TCM) of the concerned GP. In order to assess health and environmental issues, Audit along with officials of the Gujarat Pollution Control Board (GPCB) collected samples of treated water from various oxidation ponds/decentralised waste water treatment system and got the same tested in the laboratories of GPCB.

The findings of audit were benchmarked against detailed project reports (DPRs), Gujarat Public Works Manual, resolutions/instructions issued by the State Government from time to time for implementation of UDS projects, Manual of Central Public Health and Environmental Engineering Organisation (CPHEEO) *etc.*

An exit conference was held with the Principal Secretary, PRH&RDD on 29 November 2018 to discuss the audit findings. The response of the State Government was received in November 2018 and the same had been suitably incorporated in the audit paragraphs.

Audit findings

3.2.2 Adequacy of planning

3.2.2.1 Non-preparation of city sanitation plan

As per Manual on Sewerage and Sewage Treatment Systems issued by CPHEEO in November 2013, urban local bodies (ULBs) should have a city sanitation plan (CSP) and undertake to implement it for all its citizens in an economic, environment-friendly and sustainable manner. The CSP should be prepared

²⁶ DP Aravalli (02 projects at Dhansura and Meghraj GPs); DP Banaskantha (02 projects at Ambaji and Deodar GPs); DP Dahod (02 projects at Garbada and Limkheda GPs); DP Gandhinagar (01 project at Randheja GP); DP Jamnagar (02 projects at Jodiya and Lalpur GPs); DP Junagadh (02 projects at Bhesan and Mendarda GPs); DP Kutch (02 projects at Mundra and Naliya GPs); DP Mahisagar (02 projects at Kadana and Virpur GPs); DP Mehsana (01 project at Gozariya GP); DP Tapi-Vyara (02 projects at Nizar and Valod GPs); and DP Valsad (01 project at Kaprada GP)

²⁷ The DPs were responsible for execution of UDS projects.

²⁸ A Government officer who administers the affairs of GP.

keeping in view the city's current sanitation arrangement and their technical and financial capability to take up new projects. It would be prudent to assess and improve the effectiveness of the existing facilities before embarking on new projects. The State Government decided (January 2011) to follow the same criteria for UDS projects taken up under Rurban as fixed by CPHEEO for the ULBs. Audit observed that none of the 11 selected DPs had prepared CSP before embarking on UDS projects.

The Development Commissioner stated (August 2018) that the projects were undertaken based on the DPRs.

3.2.2.2 Deficiencies in detailed project reports

The planning for a project and achievement of the desired objectives is primarily based on DPRs. Faulty DPRs result in inaccurate cost estimates and leads to significant time and cost overrun.

As per Manual on Sewerage and Sewage Treatment Systems issued by CPHEEO in November 2013, physical aspects such as, sub-soil conditions, depth of ground water, design of sewers and location of STPs, location of streets and adjoining areas, effluent disposal sites and their availability *etc.* should be surveyed before preparation of DPRs.

The Gujarat Rural Housing Board (GRHB) was designated as the State nodal agency for village surveys and preparation of DPRs for UDS projects through private Consultants selected *via* tendering process. In 19 selected UDS projects, Consultants hired by GRHB prepared the DPRs by collecting data from the GPs, without actually conducting physical surveys of villages. As a result, Audit came across instances of improper selection of sites, under-coverage of existing area by sewer network, delay in completion of projects due to non-assessment of soil strata, leading to time and cost overrun. There was also no oversight mechanism in PRH&RDD to check the veracity and accuracy of DPRs prepared by private Consultants.

Incidentally, the Secretary, PRH&RDD acknowledged (June 2014) that there had been deficiencies in preparation of DPRs in that they deviated from the ground realities and thus, led to either redesigning of components or employment of alternate technology, which had attendant cost implications.

The State Government also acknowledged (November 2018) that the Consultants prepared the DPRs through topography instead of physical survey, which led to deficiencies during execution of projects.

3.2.2.3 Non-inclusion of operations and maintenance cost

PRH&RDD issued directives in December 2010 that all UDS projects taken up under Rurban shall have an element of O&M which would invariably form part of the tender. In line with above directives, only one²⁹ of 84 UDS projects was implemented along with O&M for five years. However, in the remaining 83 UDS projects (including 19 selected projects), PRH&RDD, while vetting the tenders, accorded approval only for civil works (excluding the O&M component), on the grounds that policy for O&M had not been finalised.

²⁹ Randheja pilot project

As a result, of the 16 completed projects in the selected GPs, nine³⁰ projects (including Randheja pilot project) had been taken over by the GPs for O&M purpose. The remaining seven³¹ projects were not taken over by the GPs due to their poor financial condition, and these were being maintained by the concerned DPs. Even eight of nine projects, which had been taken over by the GPs, were beset with high O&M costs. The estimated cost of O&M in 15 of the 16 completed UDS projects ranged from ₹ 5.20 lakh per year to a staggering ₹ 34 lakh per year.

In order to tide over the problem, PRH&RDD decided (March 2015) to provide a uniform grant of $\overline{\mathbf{x}}$ five lakh per year to each GP for a period of five years for O&M, without considering the size or scale of the projects. Audit observed that despite extending the grant of $\overline{\mathbf{x}}$ five lakh per year, the GPs continued to struggle due to their poor financial condition and high cost of O&M, coupled with lack of technical expertise, skilled manpower and modern equipment.

In essence, the responsibility for O&M of UDS projects was thrust upon the GPs without assessing their financial and institutional capacity.

3.2.2.4 Inadequate supply of water

Adequate supply of water to households facilitates generation of more waste water in the sewage lines and thus, avoids choking of pipelines and emission of toxic gases.

The PRH&RDD in its directives of March 2009 emphasised that UDS projects should be taken up only after ascertaining the availability of water in the villages for next five years. In the meeting held with DPR Consultants (January 2011) under the Chairmanship of Additional Chief Secretary, Rural Development Department, it was decided that the rate of water supply for Rurban drainage projects shall not be less than 100 litre per capita per day (lpcd). Further, while according technical sanctions to UDS projects, Gujarat Water Supply and Sewerage Board (GWSSB) reiterated the requirement of water supply at 100 lpcd prior to commencement of all drainage projects.

Audit observed that only DP, Banaskantha had ensured 100 lpcd of water for the Deodar drainage project. In the remaining 18³² selected projects, the supply of water was 24 lpcd to 82 lpcd. During joint inspection of selected GPs with TCMs, Audit observed overflowing house chambers and manholes, due to choking of pipelines/main sewer lines in 10³³ of 19 selected projects. As a result, waste water was not reaching the pumping stations for further treatment in oxidation ponds/decentralised waste water treatment system/STP.

The State Government accepted that water supply at 100 lpcd could not be achieved before implementation of UDS projects. However, all out efforts were being made to ensure adequate supply of water to Rurban villages.

³⁰ Deodar, Dhansura, Gozariya, Lalpur, Naliya, Nizar, Randheja, Valod and Virpur

³¹ Ambaji, Bhesan, Garbada, Jodiya, Kaprada, Limkheda and Mendarada

³² Ambaji: 66 lpcd, Bhesan:79 lpcd, Dhansura: 31 lpcd, Garbada: 32 lpcd, Gozariya: 75 lpcd, Jodiya: 36 lpcd, Kadana: 76 lpcd, Kaprada: 45 lpcd, Lalpur: 56 lpcd, Limkheda: 28 lpcd, Meghraj: 31 lpcd, Mendarada: 83 lpcd, Mundra: 67 lpcd, Naliya: 53 lpcd, Nizar: 26 lpcd, Randheja: 80 lpcd, Valod: 24 lpcd and Virpur: 63 lpcd

³³ Bhesan, Dhansura, Gozariya, Jodiya, Mendarada, Naliya, Nizar, Randheja, Valod and Virpur

3.2.3 Financial management

The funds for UDS projects under Rurban Scheme are released to the DPs by PRH&RDD through the DC. During 2009-18, PRH&RDD released ₹ 949.68 crore³⁴ for execution of 84 UDS projects under first phase. As of March 2018, DPs incurred an expenditure of ₹ 681.75 crore out of ₹ 797.79 crore received from PRH&RDD, leaving an unspent balance of ₹ 116.04 crore.

Of the unspent balance of ₹ 116.04 crore, ₹ 18.96 crore pertained to 11 ongoing projects while ₹ 97.08 crore pertained to 68 completed projects which lay unspent with the respective DPs and not surrendered to Government, in contravention of Rule 154 (5) of Gujarat Financial Rules, 1971. Further, holding of unspent balances (₹ 97.08 crore) by the DPs made little economic sense considering the fact that the State Government was paying an interest of 6.75 *per cent* per annum to NABARD on the borrowed funds. Had the State Government credited the unspent amount into the loan account timely, the interest liability of the Government could have been reduced.

The State Government accepted the audit observation and stated that instructions would be issued to all the DPs to refund the unspent balances.

3.2.4 Implementation of UDS projects

3.2.4.1 Inadequate coverage of households

One of the objectives of the UDS is to tap the domestic waste water and excrement of the households by providing connectivity with the main sewer. Optimum coverage of households with completed drainage systems is essential to avoid accumulation of solid waste in sewer lines, generation of toxic gases and backflow of drainage. The GPs were responsible for house connections with completed UDS projects.

In the meeting held with DPR Consultants (January 2011) under the Chairmanship of Additional Chief Secretary, Rural Development Department, it was emphasised that sanitation coverage should be more than 80 *per cent*, but, 100 *per cent* was always desirable, for successful functioning of drainage systems. Further, Manual on Sewerage and Sewage Treatment Systems issued by CPHEEO in November 2013 envisaged the compelling need to amend the by-laws to make it compulsory for the population to avail of house service sewer connections, wherever a public sewer is provided and if this is not forthcoming, the local authority shall affect the house sewer connection and institute revenue recovery proceedings. Accordingly, PRH&RDD issued directives (February 2013) to all GPs to prepare by-laws for house connections with completed drainage projects.

Audit observed that the DC did not have any information on the number of households connected with 68 completed UDS projects under first phase. On enquiry by Audit, DC collected and provided information on 42 of 68 completed UDS projects. Information provided by DC revealed that only 53,848 of 1,04,883 households (51 *per cent*) had been connected with 38 completed UDS projects. In 19 selected UDS projects, only 27,302 of 64,003 households (43 *per cent*) had been connected with 16 completed UDS projects. Further, none of the 19

^{34 ₹ 797.79} crore released to DPs, which includes a loan of ₹ 528.17 crore from NABARD; ₹ 7.09 crore released to GRHB for village surveys; and ₹ 144.80 crore released to GWSSB for second phase of UDS projects

selected GPs prepared by-laws for house connections, despite PRH&RDD's directives of February 2013.

The State Government stated that instructions would be issued to DPs to ensure that all the houses are connected with completed UDS projects by the GPs on top priority.

3.2.4.2 Time and cost overrun in 19 selected UDS projects

Of the 19 selected UDS projects, 16 projects had been completed and three were in progress/incomplete as of November 2018. These 16 projects registered a time overrun of five months to 67 months and cost overrun of ₹ 22.23 crore (total expenditure incurred ₹ 202.23 crore). A brief account of time and cost overrun in 19 selected UDS projects is given below.

- As per work orders, all the UDS projects were to be completed within one year from the dates of award. The 16 completed projects were awarded between July 2011 and January 2014. These were, however, completed after delays ranging from five months to 45 months *i.e.* four months to 12 months (seven projects), 12 months to 23 months (six projects) and 33 months to 45 months (three projects). The delays were mainly due to formulation of defective DPRs, non-acquisition of land for pumping stations/oxidation ponds, delay in receipt of permission for road crossings, change of sites for pumping stations/oxidation ponds *etc.* An expenditure of ₹ 174.36 crore was incurred on these 16 completed projects (against tendered cost ₹ 152.13 crore), leading to cost overrun of ₹ 22.23 crore.
- Three projects³⁵ were in progress (expenditure incurred ₹ 27.87 crore), with time overrun of 51 months to 67 months as of November 2018. The UDS projects in Kadana and Mundra GPs, awarded in April 2012 and August 2013 respectively, remained incomplete due to non-acquisition of land for oxidation ponds. The UDS project in Meghraj GP also awarded in April 2012 remained incomplete for want of electricity connection for pumping station. There was no cost overrun in these three projects (tendered cost ₹ 28.38 crore).

3.2.4.3 Status of implementation of 16 completed UDS projects

Of the 16 completed projects, five were operational, six were partially operational and the remaining five were non-operational/idle. Audit observed that of the five operational projects, only Randheja pilot project in Gandhinagar district was running successfully.

Success Story of Randheja project

The contract for Randheja pilot project was awarded in July 2011 along with O&M for five years. The project was completed in June 2013 at a total cost of \gtrless 7.53 crore. The project was functioning successfully with coverage of 89 per cent households and recurring expenses were being borne by the GP even after completion of O&M period of five years. The success of the project may possibly be due to the reasons that the contract for civil works along with O&M for all the five years was awarded together, adequate water supply was available, and villagers were more aware, etc. Test reports of treated waste water from Randheja treatment plant showed (June 2018) biochemical oxygen demand³⁶ (BOD) to the extent of only 12 mg/l against the ideal level of 25 mg/l.

³⁵ Kadana, Meghraj and Mundra

³⁶ BOD has traditionally been used to measure the strength of effluent released from conventional sewerage treatment plants to surface water or streams. A high BOD indicates high concentration of contaminants in the waste water.

The remaining four³⁷ operational projects, completed between May 2014 and October 2018 at a cost of ₹ 44.51 crore, showed high BOD levels between 47 mg/l and 300 mg/l against the benchmark of 25 mg/l. The treated waste water with high BOD was being discharged in open course/nallahs, thus, exposing the environment and public health at risk. This also indicated that the oxidation ponds/decentralised waste water treatment plants in these four projects were either not functioning properly or not designed appropriately to treat waste water.

The six³⁸ partially operational projects were completed between November 2013 and April 2015 at a cost of ₹ 77.08 crore. During joint inspection of these projects, Audit observed that due to inadequate supply of water and fewer household connections (52 *per cent*) with the sewerage infrastructure, there was severe clogging of sewer lines/manholes, leading to overflowing of waste water into open course/water bodies (village pond/river). This also leads to less intake of waste water into the oxidation ponds/decentralised waste water treatment systems for treatment purpose, and defeated the very objective of reuse of waste water.

The remaining five³⁹ projects (total expenditure incurred ₹ 45.24 crore) were non-operational/idle (November 2019) since their completion between June 2014 and August 2016. In three of five completed projects (Ambaji, Kaprada and Limkheda), the GPs did not take over the projects due to their poor financial condition. Consequently, none of the 8,917 households in these three GPs could be connected with the completed drainage systems. In one project (Garbada), only three *per cent* of households had been connected with the drainage system. In Jodiya GP, the UDS project remained dysfunctional due to disconnection of electricity by the electricity distribution company, as the GP failed to pay the arrears of electricity bills. Due to non-availability of electricity, the pumping station remained non-operational for long periods leading to choking of sewer lines and overflowing of manholes at various locations. In Ambaji GP, manholes and house chambers of the UDS were also found to be permanently covered by asphalt/reinforced cement concrete roads, thus, rendering future cleaning and house connections impossible.

Thus, except for Randheja pilot project, 15 of 16 projects completed between November 2013 and October 2018 at a total capital cost ₹ 166.83 crore had been saddled with multiple problems and therefore, either not being used or partially used. Moreover, the success story of Randheja pilot project could not be replicated in other UDS projects, as most of them were implemented simultaneously with the pilot project.

Apart from above, Audit observed that six⁴⁰ pumping stations, two⁴¹ oxidation ponds, five⁴² decentralised waste water treatment systems and the STP at Ambaji had been constructed alongside rivers/open nallahs, in contravention of the provisions⁴³ of the Manual on Sewerage and Sewage Treatment Systems issued by CPHEEO in November 2013. The pumping station at Naliya GP was

³⁷ Gozariya, Lalpur, Nizar and Valod

³⁸ Bhesan, Deodar, Dhansura, Mendarada, Naliya and Virpur

³⁹ Ambaji, Garbada, Jodiya, Kaprada and Limkheda

⁴⁰ Kadana: 01, Lalpur: 01, Meghraj: 03 and Naliya: 01

⁴¹ Deodar and Virpur

⁴² Kaprada: 02 and Ambaji: 03

⁴³ The pumping stations should be so located and constructed that it will not get flooded at any time.

constructed in the vicinity of village pond. The pumping station was found damaged due to ingress of rain water during monsoon season. Similarly, an open nallah runs through the STP at Ambaji GP which has severely eroded the foundation of the STP.



The State Government accepted the facts and stated that instructions would be issued to DPs to take necessary action to make all the projects fully operational on highest priority. Besides, instructions would also be issued to all the GPs to conduct awareness programmes to achieve maximum house connections for optimum utilisation of UDS projects.

The State Government added that sites for waste water treatment infrastructures were selected based on the availability of Government land in the respective GPs.

The reply is not tenable because (i) the selection of sites *per se* was wrong for which the DPR Consultants along with DPs and GPs were jointly responsible, and (ii) the sites in question should have been verified/checked before these were finally released for construction of waste water treatment infrastructures.

3.2.5 Other significant issues

3.2.5.1 Employment of manual scavengers

The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 and Rules made there under by GoI prohibits manual cleaning, carrying, disposing of, or otherwise handling in any manner, human excreta in any insanitary latrine or in an open drain or pit into which the human excreta are disposed of. PRH&RDD also issued instructions (June 2014) to all DPs, Taluka Panchayats and GPs to prohibit employment of manual scavengers for cleaning of UDS with immediate effect.

Audit observed that 10⁴⁴ of 15 selected GPs (except Gozariya) did not have jetting-*cum*-cleaning machinery. During joint inspection of two GPs (Mendarada and Valod), Audit observed that manholes were being cleaned by employing manual scavengers, without any safety equipment/gear. Incidentally, the onus of procurement of jetting-*cum*-cleaning machinery for cleaning of UDS lied with DPs. However, none of the selected DPs procured the requisite machinery as of November 2018.

⁴⁴ Bhesan, Deodar, Dhansura, Gozariya, Lalpur, Mendarada, Naliya, Nizar, Valod, and Virpur (excluding 05 nonoperational projects)

The State Government stated that DPs have been instructed again to stop the practice of employment of manual scavengers. During exit conference, Principal Secretary instructed all the DDOs to purchase jetting-*cum*-cleaning machinery and stop employment of manual scavengers.

3.2.5.2 Follow-up of Audit Report

Mention was made in Paragraph 2.2 of the Report of the Comptroller and Auditor General of India on Local Bodies for the year ended 31 March 2016 (Report No. 2 of 2017), Government of Gujarat regarding idle expenditure of ₹ 13.24 crore on three⁴⁵ UDS projects on account of failure of concerned GPs to provide house connections till December 2016, since completion of these projects between September 2013 and October 2013.



As part of follow-up protocol, Audit visited (November 2019) one of the three GPs (Morva Hadaf) to verify whether the UDS project completed in October 2013 at cost of ₹ 4.69 crore was functional. Audit observed that the project has eventually become redundant as the oxidation pond constructed under the project was subsequently converted into cement concrete ground for a Government College.

3.2.6 Conclusion and recommendations

Implementation of 18 out of 19 UDS projects taken up under Rurban Scheme was far from satisfactory even after spending ₹ 194.70 crore⁴⁶ and lapse of six years (from 2012 to 2018), due to flaws in planning. Projects were taken up without city sanitation plans; project reports were prepared without site surveys; adequate supply of water was not ensured before commencement of projects; house connections with completed UDS was poor; sites selected for pumping stations and treatment plants were prone to water-logging during monsoon season; and responsibility of operation and maintenance of completed projects was thrust upon Gram Panchayats without assessing their institutional and financial capacity. The District Panchayats did not ensure availability of jetting-*cum*-cleaning machinery.

Recommendations: The State Government may (i) ensure adequate supply of water to households in completed UDS projects for their efficient functioning, and (ii) develop a mechanism to operate and maintain the sewerage infrastructures on a sustainable basis.

⁴⁵ Bakor, Jambughoda and Morva Hadaf

^{46 ₹ 166.83} crore spent on 15 completed projects + ₹ 27.87 crore spent on 03 incomplete projects

SOCIAL JUSTICE AND EMPOWERMENT DEPARTMENT

3.3 Implementation of Indira Gandhi National Old Age Pension Scheme

3.3.1 Introduction

Article 41 of the Constitution of India *inter-alia* directs the State to provide public assistance to its citizens in the case of unemployment, old age, sickness and disablement, *etc.* The Government of Gujarat (GoG) had been implementing "Old Age Pension Scheme" with monthly pension of ₹ 200 (amount revised in July 1995). The Ministry of Rural Development, Government of India (GoI) in August 1995 introduced the National Old Age Pension Scheme (NOAPS) under the National Social Assistance Programme (NSAP) with the objective of providing monthly pension of ₹ 75 to below poverty line (BPL)⁴⁷ male or female persons of 65 years or above. GoG merged (September 1995) its existing scheme with NOAPS and decided to continue the monthly pension of ₹ 200 with central share of ₹ 75 and State share of ₹ 125.

GoI renamed (November 2007) the scheme as "Indira Gandhi NOAPS (IGNOAPS)" and enhanced monthly pension to ₹ 200 under the scheme. Subsequently, from time to time, with a view to cover more beneficiaries and enhance the subsistence support, GoI changed the eligibility criteria of destitute persons to be covered, reduced the age limit and increased the rate of monthly pension. Effective from April 2011, GoI decided to increase the rate of monthly pension from ₹ 200 to ₹ 500 for beneficiaries of age 80 years and above. Accordingly, GoG, by including its share, fixed the monthly pension for beneficiaries of age limit from 60-79 years as ₹ 400 and for beneficiaries of 80 years and above as ₹ 700. The monthly pension was further revised by GoG in April 2017 to ₹ 500 for beneficiaries of age limit 60-79 years and ₹ 1000 for beneficiaries of 80 years and above by increasing its share.

The Director, Social Defence under the Social Justice and Empowerment Department (SJED) is the Nodal officer at the State level and is responsible for implementation of IGNOAPS. The Mamlatdar and Revenue Talati of the Revenue Department assists the Director in implementation of the scheme at District/Taluka/village levels.

Audit verified the extent and scope of coverage of the scheme, mechanism adopted for identification of eligible beneficiaries, timeliness in disbursement of pension and system in place for monitoring of the outcomes of the scheme. For this purpose, Audit test-checked (between April 2018 and December 2018) the records of Director, Social Defence and Mamlatdars of eight selected Talukas of four selected Districts (**Appendix-XII**) covering the period 2013-18. Audit also conducted a beneficiary survey⁴⁸ of up to 30 beneficiaries from three Gram Panchayats/Wards of Nagarpalikas of each selected Taluka (total 611 beneficiaries) to assess the level of awareness and outcome of the scheme. Audit made use of Socio-Economic Survey (SES) 2002⁴⁹ detailed data provided by

⁴⁷ Poorest of the poor, having little or no regular means of subsistence from his/her own sources of income or through financial support from family members or other sources.

⁴⁸ Alongwith Revenue Talati and Talati-cum-Mantri/Sarpanch of selected GPs/Wards

⁴⁹ The Survey was conducted by the Ministry of Rural Development for all State/Union Territories. The scores are calculated based on 13 socio economic parameters viz. size, group of operational holding of land, type of house, food security, sanitation facility, ownership of consumer durables, literacy status, means of livelihood, etc. (website:http://ses2002.guj.nic.in)

the National Informatics Centre through Panchayats, Rural Housing and Rural Development Department of GoG and data of BPL cards issued provided by the Nagarpalikas (NPs) of test-checked Talukas to assess the enrolment of rural and urban beneficiaries respectively under the scheme.

Audit findings

Audit could not conduct a detailed audit at the Director's office and test-checked Mamlatdars for the period 2013-15, as the records maintained and produced to Audit were not in complete form *viz*. registers/records relating to disbursement of pensions prior to September 2016 (pre-Direct Benefit Transfer (DBT) period), treasury bills with details of beneficiaries, cash book, *etc.* Further, during beneficiary survey, no major complaints were received. Hence, Audit could depend only on the data/information⁵⁰ provided by the Director and the test-checked Mamlatdars, and the findings are included in the report accordingly.

3.3.2 Registration/Enrolment procedure

During the period covered in Audit (2013-18), for registration under the scheme, the rural beneficiaries were required to submit the prescribed application to the Mamlatdar alongwith prescribed documents⁵¹. The urban beneficiaries were required to submit the BPL cards (in addition to proof of identity, proof of age and proof of address) issued by the Municipal Corporations (MCs) and NPs under Swarnim Jayanti Shaheri Rojgar Yojana (SJSRY)⁵². The Mamlatdar accepted or rejected the application within 60 days from the date of receipt of application, after scrutinising the eligibility based on the correctness of the application and documents submitted and after verifying the BPL status of the applicant with the data of SES⁵³ 2002. In test-checked Talukas, audit observed that all applications received for registration under the scheme were disposed by the Mamlatdars within the prescribed time period of 60 days.

3.3.2.1 Non-coverage of rural population

The Scheme guidelines (2014) envisage that based on the available BPL list, the beneficiaries should be identified proactively by reaching out to their households. It also envisages that if an eligible person's name does not figure in the BPL list, he/she should not be left out.

Based on the poverty ratio⁵⁴ of 2004-05 and projected population as on 01 March 2016, GoI approved the target of 5.81 lakh persons out of estimated 7.21 lakh population (60 years and above) in the State for enrolment under the scheme. Audit observed that as of March 2018, GoG had enrolled 5.60 lakh persons (96 *per cent*) under the scheme as against the target of 5.81 lakh approved by GoI.

⁵⁰ Register of application forms, database of SES 2002 for rural population, database of Swarnim Jayanti Shaheri Rojgar Yojana (SJSRY) for urban population, database of NSAP portal, Bank statement of DBT linked Savings Bank Account, treasury challans and information/data provided by the auditees to Audit

⁵¹ Proof of Identity (Voter ID or Driving license), proof of age (Birth Certificate/School Leaving Certificate/ Election Photo Identity Card (EPIC)/Ration Card/Certificate of age issued by Government Medical Officer) and proof of address (Voter ID/local tax receipts)

⁵² It is a centrally sponsored scheme for providing gainful employment to unemployed/under-employed urban poor implemented by Urban Housing and Poverty Alleviation Ministry, GoI.

⁵³ Survey carried out in 2002 and updated every year upto 2006-07

⁵⁴ It indicates the percentage of population below the poverty line. In 2004-05, it stood at 31.60 *per cent* for Gujarat and 37.20 *per cent* at national level. (Data source: Ministry of Social Justice and Empowerment, GoI).
Audit observed that as of March 2018, out of total 2,949 eligible BPL persons in the test-checked 21 GPs, 1,288 eligible BPL persons remained uncovered under the scheme. The Talati-*cum*-Mantri (TCM)/Sarpanch of the concerned GPs confirmed that these uncovered persons were still living in the village and had not got the benefit of the scheme.

As regards urban population, Audit observed that neither UD&UHD nor the MCs/NPs had maintained any unified BPL database of urban population. Out of the eight Talukas test-checked in Audit, six Talukas had NPs for administering the affairs of urban areas (except Limkheda and Kaprada Talukas). Only three NPs (Dahod, Kalavad and Vapi Talukas) could provide the database of BPL cards issued under Swarnim Jayanti Shaheri Rojgar Yojana (SJSRY). Scrutiny of the database revealed that it contained only the name, age and address of the head of the family and only the name of the other family members. As the database did not contain the age/date of birth of all the family members, the scope for proactive identification of eligible population under the Scheme was not possible.

Deputy Secretary (SJED) accepted (March 2019) that the State could not achieve the projected target (5.81 lakh beneficiaries) approved by GoI. It was further stated that to achieve the target approved by GoI, persons with 17-20 scores were included from November 2017 and GoG has approached (December 2018) the GoI for increasing the target.

3.3.3 Under-utilisation of grant

From September 2016, GoI introduced the Direct Benefit Transfer (DBT) system for disbursement of pension to the beneficiaries by creating an online portal *nsap.nic.in*. The Mamlatdars have access to this portal for entering the details of existing beneficiaries alongwith bank/postal account details and for addition/ deletion of beneficiaries. The Director, Social Defence disburses pension directly to the bank accounts of these beneficiaries, through the Public Financial Management System (PFMS) of GoI. Prior to September 2016, funds released by the Director for payment of pension were being released to the Regional Post Master by the Mamlatdars for issuance of money orders to the beneficiaries.

During 2013-18, SJED received ₹ 1,416.63 crore as grant under the scheme from GoI (₹ 927.76 crore) and GoG (₹ 488.87 crore). Of this, SJED could utilise ₹ 1,178.80 crore (83 *per cent*) during 2013-18. Audit observed that as of March 2018, ₹ 42.82 crore were lying unutilised in Bank Account operated by the Director, Social Defence. Audit further observed that this amount was kept outside the treasury accounts in contravention of the General Financial Rules (GFR), which envisage surrendering of the same to Government at the end of the financial year.

During the test-check, Audit observed in Limkheda Taluka that double payment of ₹ 25.54 lakh was made in September 2016 to the beneficiaries. This happened because the Mamlatdar made advance payment of pension for the month of September 2016 by crediting the amount to Postal account for issuance of money order while on the other hand, Director, Social Defence also disbursed pension for the same month through DBT. This remained unnoticed until pointed out during the course of Audit due to non-reconciliation of disbursements from the Bank Account of the Department with the beneficiaries' account.

The Director, Social Defence stated (September 2018) that the grant transferred from the treasury to the Bank Account of the Department was being reconciled. The reply is not tenable, as the amount disbursed from the Bank Account of the Department to the beneficiaries' account is also required to be reconciled to ascertain the correctness of disbursement. Besides, Audit also observed instances of non-disbursement of pension despite availability of sufficient grant and disbursement of pension to incorrect bank accounts which have been discussed in **Paragraph 3.3.4.3**.

As regards unutilised funds, the Director, Social Defence and Deputy Secretary (SJED) stated (September 2018 and March 2019) that the unutilised funds relate to the payments not credited into the beneficiaries' account due to various reasons such as incorrect linkage of Aadhaar, incorrect entry of bank account number, *etc.* These funds are not credited back into Government account, as they are required to be paid alongwith arrears to the beneficiaries and is also utilised for making pension payment in the initial months of next financial year due to late receipt of grants. It was further stated that henceforth as per Government norms, the savings would be credited back into Government account at the end of the financial year.

3.3.4 Deficiencies in implementation of the scheme

3.3.4.1 Rejection of eligible beneficiaries

As per the scheme guidelines, birth certificate or school leaving certificate or Electoral Photo Identity Card (EPIC) or ration card shall be considered as the primary document for determination of age of the applicant for enrolment under the Scheme. In the absence of any such document, age-certificate issued by any Medical Officer (MO) of any Government hospital would also serve the purpose. The Director, Social Defence had issued (April 2015) instructions to all Mamlatdars to consider either Birth Certificate/School leaving certificate or MO's certificate as proof of age.

Audit randomly scrutinised 200 applications each at three out of eight testchecked Talukas (100 each processed in 2016-17 and 2017-18). Audit scrutiny revealed that the Mamlatdars did not follow a uniform methodology for determining the age of the applicant. Out of 600 applications scrutinized in three test-checked Talukas (Dahod, Jamnagar and Limkheda), Mamlatdars sanctioned 435 applications and rejected the remaining 165 applications for not fulfilling the age criterion. Out of the 435 sanctioned applications, 127 applications were sanctioned based on the Certificate of MO, though the Aadhaar/EPIC showed the age of the applicant as less than 60 years. However, out of 165 applications rejected, 120 applications were rejected on the ground that the age in Aadhaar/EPIC was less than 60 years though the certificate issued by the MO attached with these applications exhibited the age of the applicant as 60 years and above. Rejection of these 120 applications was in contravention to the provisions of the scheme guidelines and instructions issued by the Director, Social Defence and also reflected an arbitrary and discretionary approach followed by the Mamlatdars for determining the age criteria for enrolment under the scheme.

The Mamlatdars of test-checked Talukas and Deputy Secretary (SJED) accepted the audit observation and stated (June 2018 and March 2019) that the scrutiny process would be streamlined in compliance with the scheme guidelines.

3.3.4.2 Inclusion of ineligible persons

As per the Scheme guidelines, only BPL persons with SES score of 0-16 are eligible for enrolment/registration under the Scheme. On comparing the data of IGNOAPS with the data of SES-2002 in respect of selected wards and GPs of the test-checked Talukas, Audit observed in 16 out of 24 test-checked GPs/Wards that the Mamlatdars had enrolled 151 beneficiearies having SES score higher than 16. It was also observed that GoG included persons with SES score from 17 to 20 in the eligibility of the scheme with effect from November 2017. Data analysis in Audit of pension payment made through pension portal (*nsap.nic.in*) and SES data revealed that 55 persons (out of 151) had score ranging from 17 to 20 but they were provided benefit under the scheme prior to November 2017 also. Further, 96 persons had scores ranging from 21 to 38 and hence were not eligible for enrolment under the scheme but were provided benefit under the scheme. This resulted in irregular payment of pension of ₹ 24.85 lakh⁵⁵ to 151 ineligible persons under the scheme from the date of sanction of pension to March 2018.

The Deputy Secretary (SJED) stated (March 2019) that the payments made to these ineligible beneficiaries have been stopped and the process of recovery is under progress.

The above audit observation is of a nature that may reflect in other Talukas also, which were not covered in the test-check conducted during audit. The Department/Government may internally examine all such cases to ensure inclusion of eligible beneficiaries under the scheme.

3.3.4.3 Non-disbursement of Pension

• Returned Money orders

Prior to introduction of DBT (September 2016), the Mamlatdars on receipt of grant, drew cheques from the treasury in favour of Regional Post Master and forwarded the same alongwith the list of beneficiaries with required details to the Post offices. The Post offices made payment by issuing money orders favouring the beneficiaries. Audit observed that after introduction of DBT, the mechanism of disbursement of pension has been shortened and disbursement of pension was being done in time.

In the test-checked Talukas, Audit observed that the Mamlatdars received back some funds from the post offices due to undisbursed money orders. These funds were credited back into the treasury through challans except for Mamlatdar, Jamnagar, who credited the undisbursed amount of ₹ 76.15 lakh⁵⁶ into a Savings Bank Account opened (September 2011) without any authorization

^{55 17-20} scores – 55 beneficiaries (₹ 8.03 lakh) and 21-38 scores – 96 beneficiaries (₹ 16.82 lakh)

⁵⁶ Includes a few amount of Indira Gandhi National Disability Pension Scheme (IGNDPS) also, as exact amount of IGNOAPS was not available.

of the Director, Social Defence or Finance Department. Scrutiny of records of test-checked Talukas revealed that there were 728 beneficiaries who were receiving pension through DBT as on March 2018 but their pension amounting to ₹ 9.93 lakh⁵⁷ were received back by the Mamlatdars from the Post offices prior to introduction of DBT in September 2016. Audit observed that the same has not been paid to these beneficiaries till date (December 2018). However, the Mamlatdars made no attempts for re-disbursement of this pension in the subsequent months. It was also observed that re-disbursement was done only if any beneficiary approached the Mamlatdar and claimed the same. Thus, the Mamlatdars did not adopt a proactive follow-up mechanism to ascertain and re-disburse the same to the beneficiaries in the subsequent months. As a result, 728 beneficiaries have been deprived of their pension amounting to ₹ 9.93 lakh for intervening months due to their absence from their place of stay at the time of delivery of money orders or any other reasons as mentioned by the Post offices.

The Deputy Secretary (SJED) stated (March 2019) that the undisbursed pension is credited back into treasury account only after making three attempts of re-disbursement by issuing the money order again to the beneficiaries and finally approaching of beneficiary for the same. The reply is not correct as in test-checked Talukas, Audit observed that no such attempts were made for re-issuance of money order and this fact was accepted by the concerned Mamlatdars.

The above audit observation is of a nature that may reflect in other Talukas also, which were not covered in the test-check conducted during audit. The Department/Government may internally examine all other cases to ensure payment of undisbursed pension to the beneficiaries.

• Disbursement of pension in incorrect bank account of ineligible beneficiaries

Direct Benefit Transfer (DBT) system considers bank accounts linked with Aadhaar details. It does not verify the name of the account holder with the name of the beneficiary registered under NSAP database. Audit observed in the three test-checked Talukas that the pension of 107 beneficiaries (Dahod-7, Jamnagar-98 and Palanpur-2), was being wrongly credited in the bank accounts of other persons (who were not the beneficiaries under the scheme) since the introduction of DBT from September 2016 onwards. Audit analysis revealed that this had occurred due to incorrect linkage of Aadhaar or incorrect entry of bank account number by the Mamlatdars. The affected beneficiaries approached the concerned Mamlatdars repeatedly (during November 2017 to March 2018) regarding the non-receipt of pension. Mamlatdar, Jamnagar took action by reporting these cases to the Director, Social Defence (March 2018) but the Mamlatdars of Dahod and Palanpur did not escalate the matter to the Director, Social Defence. It was also observed that though the beneficiaries reported these cases of credit of pension to incorrect bank accounts since November 2017, no action had been taken by any authority (Mamlatdar or Director, Social Defence) till March 2018 to stop further payments to the incorrect accounts. Further, no action has been taken to rectify the discrepancy or recall the wrong credits from the banks.

⁵⁷ Jamnagar- 544 (₹ 7.90 lakh), Kalavad- 13 (₹ 0.12 lakh), Dahod- 79 (₹ 0.78 lakh), Limkheda- 42 (₹ 0.49 lakh), Kaprada- 50 (₹ 0.64 lakh)

The Mamlatdars, Jamnagar and Palanpur have rectified the errors in respect of 86 and two cases respectively in April 2018; however, the arrears for the previous period are yet to be paid (March 2019). This resulted in irregular disbursement of \gtrless 10.18 lakh⁵⁸ pension to ineligible beneficiaries and deprived the eligible beneficiaries from receipt of pension from September 2016 onwards till March 2018/November 2018.

Mamlatdar, Dahod stated (June 2018) that necessary action to rectify the discrepancy would be taken. Mamlatdar, Jamnagar and Palanpur attributed the reason for not making payment of arrears to absence of provision for the same in the scheme guidelines. The Deputy Secretary (SJED) stated (March 2019) that such discrepancies brought out by the beneficiaries are being rectified by the concerned Mamlatdars.

The above audit observation is of a nature that may reflect in other Talukas also, which were not covered in the test-check conducted during audit. The Department/Government may internally examine all other cases to ensure payment of pension in correct accounts only.

3.3.5 Monitoring

3.3.5.1 Annual verification of beneficiaries and conduct of Social Audit

Scheme guidelines stipulate conduct of annual personal verification of existing beneficiaries by setting up Special Verification Teams⁵⁹. It also enumerates conduct of Social Audit every six months by setting up committees for efficiency in implementation of scheme, transparency and grievance redressal.

Audit observed that none of the test-checked Mamlatdars or State level authorities had conducted personal verification of existing beneficiaries or Social Audit during the review period of 2013-18. While selecting beneficiaries for conduct of Survey, audit observed that in 24 test-checked GPs/Wards, 32 beneficiaries belonging to five test-checked GPs had expired; however, their pension continued to be disbursed to their bank account. This could have been avoided, had the department conducted personal verification. Further, had Social Audit been conducted, matters of non-covering of eligible beneficiaries, non-receipt of pension, *etc.* as discussed in the preceeding paragraphs could have been resolved.

The Mamlatdars of the test-checked Talukas confirmed non-conduct of annual personal verification and stated (May 2018 and June 2018) that the same would be done in due course. The Deputy Secretary (SJED) stated (March 2019) that instructions have been issued (December 2018) to all District Collectors for verification of all beneficiaries. As regards Social Audit, the Director, Social Defence stated (September 2018) that the matter would be ascertained from the District Collector. Audit is of the view that the State Government may ensure annual verification as per scheme guidelines.

⁵⁸ Calculated up to March 2018 for 88 beneficiaries and up to November 2018 for 19 beneficiaries

⁵⁹ Committee shall consist representatives of reputed Non-Government Organisations which are active in the locality under an authorized officer.

3.3.6 Conclusion

Audit concludes that GoG had not covered all the BPL beneficiaries both rural and urban BPL populations under the scheme. As against the estimated BPL beneficiaries of 5.81 lakh approved as a ceiling by GoI based on poverty ratio of 2004-05, GoG could cover 5.60 lakh BPL beneficiaries under the scheme as of March 2018.

In the test-checked Talukas, Audit observed that the Mamlatdars have provided pension to ineligible persons with BPL scoring higher than fixed scoring criterion and eligible beneficiaries had been rejected in an arbitrary fashion in contravention to the provisions of the scheme guidelines and instructions issued by the Director, Social Defence.

Instances of non-disbursement of pension in cases of return of money orders were noticed in test-checked Talukas. In Dahod, Jamnagar and Palanpur Talukas, Audit observed that pension of 107 beneficiaries (₹ 10.18 lakh) was being credited wrongly to the bank accounts of others due to incorrect linkage of Aadhaar and incorrect entry of bank account number by the Mamlatdars. The test-checked Mamlatdars had not conducted annual personal verification of existing beneficiaries.

TRIBAL DEVELOPMENT DEPARTMENT

3.4 Functioning of Residential Schools under Gujarat State Tribal Education Society

3.4.1 Introduction

The Government of India (GoI), Ministry of Tribal Affairs (MoTA) launched (1997-98) 'Eklavya Model Residential Schools (EMRSs)' scheme with the objective of providing free quality residential education up to higher secondary level (Standard VI to XII) to the students of tribal community, in remote areas of the States. The scheme *inter alia* envisaged establishment of an Autonomous Society in every State to manage the EMRSs. Accordingly, Gujarat State Tribal Education Society⁶⁰ (Society) was set up (January 2000) as an Autonomous Society under Tribal Development Department (TDD), Government of Gujarat (GoG) under the Societies Registration Act, 1860 and also registered as a Trust under Bombay Public Trusts Act, 1950.

The MoTA under the scheme of 'Strengthening education among Scheduled Tribe (ST) girls in low literacy Districts' set up (April 2008) the Girls Literacy Residential Schools⁶¹ (GLRSs), which aimed to bridge the gap in literacy level between the general female population and tribal women through facilitating 100 *per cent* enrolment of tribal girls in identified Districts or Blocks.

The Society is responsible for management and control of 79 residential schools (27 EMRSs under GoI, nine EMRSs under GoG and 43 GLRSs) spread over 43 Tribal Talukas under 16 Districts of the State during 2017-18 as shown in **Appendix-XIII**. These schools are affiliated with the Gujarat Secondary and Higher Secondary Education Board (GSHSEB).

The Secretary of TDD is the *ex-officio* Chairman of the Society. The Executive Director of the Society responsible for the overall management of the Society is assisted by one Assistant Commissioner, one Accounts Officer and Project Managers. At District level, the Project Administrator (PA) of the Integrated Tribal Development Project (ITDP) designated as *ex-officio* Joint Executive Director of the Society is responsible to look after the affairs of the schools situated in the ITDP area and is also designated as *ex-officio* Chairman of the Local Management Committee (LMC) of the schools. The PA is assisted by one District Project Co-ordinator appointed by the Society on contractual basis.

The Audit of functioning of residential schools under the Society was conducted to assess whether the funds given to the Society by GoI/GoG were being spent economically, efficiently and effectively and adequate physical and human infrastructure was available for imparting quality education, and also to ensure that an effective system of inspection and monitoring was in place.

Audit examined the records covering the period 2015-16 to 2017-18 of the Society, TDD, Commissioner of Tribal Development (CoTD), six PAs out of 14

⁶⁰ Formerly known as Gujarat State Tribal Development Residential Educational Institutions Society (GSTDREIS) or EMRS Society

⁶¹ Formerly known as Low Literacy Girls Residential Schools (LLGRSs) or Eklavya Girls Residential Schools (EGRSs)

PAs and 12 selected schools (five EMRSs⁶² under GoI out of 27, one EMRS⁶³ under GoG out of nine and six GLRSs⁶⁴ out of 43).

An exit conference was held on 27th May 2019 with the Joint Secretary of TDD to discuss the Audit findings. The views and replies of the Department have been considered and incorporated in the report.

3.4.2 Funding pattern and funds flow

The land required for setting up an EMRS is given free of cost by the State Government while GoI finances the capital cost (non-recurring) of school complex including hostel and residential quarters up to \gtrless 12 crore. GoI also finances the recurring cost (a) \gtrless 42,000 *per* child *per* annum and \gtrless 10 lakh *per* school for every five years for purchase of non-recurring items such as furniture, equipment, *etc.*

As per the scheme provision, the GLRSs shall run in rented buildings. GoI finances the recurring cost $@ \notin 27,100 \text{ per}$ girl student per annum and $\notin 3.75$ lakh per 100 students once in five years. In 2014-15, GoI decided to finance capital costs for construction of building for GLRSs $@ \notin 6.00$ crore per school. GoG decided (April 2015) to contribute towards recurring cost $@ \notin 10,000 \text{ per}$ student per annum from 2015-16 for EMRSs and GLRSs, over and above the contribution of GoI, to meet the cost inflation. GoG also bears the excess capital cost on construction of building for both EMRSs and GLRSs. The funding pattern for recurring cost between GoI and GoG for the schools managed by the Society is given in **Appendix-XIII**.

Audit findings

3.4.3 Planning

3.4.3.1 Uneven distribution of EMRSs

The Society appraises the TDD, the need for setting up of EMRSs/GLRSs in the State, who, in turn, submits the proposals for approval to MoTA. During 2015-18, GoG obtained approval for setting up of five new EMRSs and as of March 2018, 36 EMRSs (27 of GoI) and 43 GLRSs were functioning under the Society.

In Gujarat, 43 tribal Talukas have been identified under 14 ITDP areas. EMRS guidelines (June 2010) provide for establishment of at least one EMRS in each Tribal Taluka. As the EMRSs were primarily meant for the Scheduled Tribe (ST) children, it was expected of the State Government to fix some criteria for deciding the inter-se priority for establishing EMRSs in these Tribal Talukas. Audit observed that GoG had not fixed/prescribed any criteria for the same. As a result, 18 out of 43 Tribal Talukas had no EMRSs while three Talukas had more than one EMRS *viz*. Bhiloda Taluka with three EMRSs⁶⁵, Waghodia and Bardoli Talukas with two EMRSs⁶⁶ each. Further, Talukas having greater concentration of the ST

⁶² Ambaji, Jagana, Kadana, Kaprada and Ukai

⁶³ Waghodiya-I

⁶⁴ Jethy, Khadakwada, Mogra, Poshina, Sarotra and Sutharpada

⁶⁵ Kherancha, Shamalaji-I and Shamalaji-II

⁶⁶ Waghodiya Taluka: Waghodiya-I and Waghodiya-II, Bardoli Taluka: Mota and Bilvan

population viz. Uchchal (97 per cent), Umarpada (96 per cent), Dediyapada (95 per cent), Garbada (94 per cent), Fatehpura (92 per cent), Zalod (88 per cent), etc. had no EMRSs, in contrast to Palanpur (four per cent) and Waghodiya (30 per cent) Talukas with lower ST population which had such schools.

Audit further observed that though the number of applications received for admission to EMRS was high, the Society could admit only six *per cent* students during 2015-18 due to lesser number of EMRS in the State *vis-a-vis* desired applicant. Details of applications received were on an average 15 times more than the total intake capacity of EMRSs in the State as shown in **Table 1** below -

Period	Number of applications received	Number of students who appeared in EMRSET	Total annual intake capacity of EMRSs	Number of students admitted
2015-16	26,072	23,296	1,820	1,731
2016-17	28,917	26,111	1,880	1,594
2017-18	37,347	34,280	2,180	2,035
Total	92,336	83,687	5,880	5,360

Table 1: Details of number of applications received forEMRS Entrance Test (EMRSET) during 2015-18

(Source: Information provided by the Society)

The above table shows that the Society needs to enhance its coverage in the State.

The Joint Secretary in the exit conference (27 May 2019) stated that the availability of land, ST population and number of applications received for EMRS entrance test were considered while making proposal for setting up of EMRSs. It was further stated that GoI had decided (December 2018) to cover by the year 2022, all remaining Tribal Talukas having 50 *per cent* tribal population and atleast 20,000 tribal population.

3.4.4 Financial Management

The Society receives grants from GoI and GoG for construction, operation and maintenance of EMRSs/GLRSs. The details of grants received and expenditure incurred by the Society between the period 2015-16 and 2017-18 are shown in **Appendix-XIV.**

3.4.4.1 Loss of central assistance in respect of GLRSs

The Society submits the component-wise budget estimates of expenditure (recurring and non-recurring) for the forthcoming financial year in respect of GLRSs to GoI through the GoG. GoI approves and releases the same to GoG in installments. Any excess or savings in a particular year is adjusted in the subsequent year after assessment of the annual accounts.

In 2016-17, GoI approved ₹ 34.76 crore⁶⁷ and released ₹ 26 crore⁶⁸ (75 *per cent*). The Society had incurred recurring expenditure of ₹ 33.89 crore against the approved cost of ₹ 30.64 crore during 2016-17. Audit observed that the recurring expenditure under some components were either below or above the admissible cost. It was also observed that in respect of ₹ 0.40 crore sanctioned for giving watches and bicycles to students, no expenditure had been incurred by the Society. As a result, GoI admitted the claim of ₹ 30.64 crore

^{67 ₹4.12} crore as non-recurring expenditure and ₹ 30.64 crore as recurring expenditure

^{68 ₹ 3.02} crore as non-recurring grant and ₹ 22.98 crore as recurring grant

recurring cost by adjusting the expenditure which exceeded the limit fixed for each component and the proportion of savings. In addition, the GoI had not admitted the non-recurring cost of ₹ 4.12 crore as the Society failed to take up the capital works which comprised ₹ 2.75 crore for furniture/equipment, ₹ 0.82 crore for bedding and ₹ 0.55 crore for recreation. Consequently, against the approved cost of ₹ 34.76 crore, GoI approved only ₹ 20.64 crore and adjusted ₹ 5.36 crore (₹ 26 crore less ₹ 20.64 crore) excess released in 2016-17 from the grants released in 2017-18 resulting in loss of central assistance.

On scrutiny of the accounts of the Society, Audit observed that the Society failed to receive the admissible recurring cost of ₹ 27,100 *per* student *per* annum between 2015-16 and 2017-18 as shown in **Table 2** –

Year	As pe	r Budget e	stimates	As p	oer final ap	proval	Recurring	Shortfall in
	Number of estimated students	Amount claimed (₹ in crore)	Amount approved by GoI (₹ in crore)	of actual claimed app students (₹ in by crore) (₹		Amount approved by GoI (₹ in crore)	grant per student per annum	utilisation of recurring grant per student per annum
1	2	3	4	5	6	7	8 (Col.7/ Col.5)	9 (₹ 27100 – Col.8)
2015-16	7,509	30.25	18.93	10,965	28.57	18.60	16,964	10,136
2016-17	11,981	33.52	30.64	11,981	33.89	20.63	17,227	9,873
2017-1869	12,182	33.42	29.92	12,182	33.42	28.75	23,993	3,107

Table 2: Details of recurring expenditure of the Society between 2015-16 and 2017-18

(Source: Budget estimates of the Society and GoI approvals)

Audit observed that the Society has been managing the shortfall in recurring grant due from GoI from the additional grant of \gtrless 10,000 provided by GoG. This indicated that the Society and the schools failed to utilise the recurring grant as per the component-wise ceiling prescribed in the guidelines and the sanctioned budget estimates.

The Joint Secretary in the exit conference (27 May 2019) accepted the audit observation.

3.4.4.2 Excess release of recurring grants

As per revised guidelines (2010) for setting up EMRSs, the State Government may opt for any feasible/suitable mode of management by autonomous education societies; Public-Private Partnership (PPP) with reputed educational institutions; in arrangement with the State Department of Education or any other mode found suitable. Accordingly, the Society on behalf of GoG entered (November 2008 and November 2010) into a Memorandum of Understanding (MoU) with Sukhi Parivar Foundation (SPF), New Delhi and Muni Sewa Ashram Trust (MSAT), Waghodiya, Vadodara for managing EMRS (Kawant) and EMRS (Waghodiya-I⁷⁰) respectively. The MoUs were renewed in October 2017.

As per MoU entered into with MSAT, the Society would release 50 *per cent* of the annual recurring expenses as recurring grant⁷¹ subject to maximum of $\overline{\mathbf{c}}$ 60.00 lakh. Remaining 50 *per cent* of the recurring expenses shall be borne by MSAT by collecting fees from non-tribal/day scholars, donations, *etc.* The cost of

⁶⁹ Final approval is awaited, hence, figures of budget estimates have been considered by Audit

⁷⁰ Both the EMRSs are GoG initiative under Vanbandhu Kalyan Yojana

⁷¹ Calculated at ₹ 36,000 per student per annum

(₹ in lakh)

providing infrastructure, equipment and other fixed assets would be borne between the Society and MSAT in the ratio of 75:25 subject to maximum of ₹ 7.00 crore.

Scrutiny of records revealed that the Society had released excess grants to MSAT between 2015-16 and 2017-18 without considering the financial ceiling agreed in the MoU as shown in **Table 3** -

							· · · · · · · · · · · · · · · · · · ·
Year	Number of stu-	recurring share		Recurring expenses sharable byRecurring expenses shared/borne by		Excess grants released by	
	dents	expenses	Society	MSAT	Society	MSAT	the Society ⁷²
2015-16	193	85.60	42.80	42.80	69.81	22.59	9.81
2016-17	215	97.20	48.60	48.60	67.45	25.89	7.45
2017-18	234	113.16	56.58	56.58	76.55	37.80	16.55
Total	642	295.96	147.98	147.98	213.81	86.28	33.81

 Table 3: Details of excess recurring grants released to MSAT during 2015-18

(Source: Information provided by the School/Society)

The above table shows that the Society had released more than 50 *per cent* of recurring expenses, rendering financial benefit of ₹ 33.81 lakh to MSAT besides, defeating the purpose of entering into PPP mode.

In case of EMRS, Kawant, the terms and conditions of MoU entered into between the Society and SPF were similar as those of MoU entered into with MSAT. Audit observed that the Society had rendered excess financial benefit of \gtrless 1.73 crore to SPF by releasing more than 50 *per cent* of annual recurring expenses.

The Joint Secretary in the exit conference (27 May 2019) accepted the audit observation and stated that the relevant clause of the MoUs would be amended shortly.

3.4.5 Academics

3.4.5.1 Admissions in EMRSs

The students are admitted in Standard VI on the basis of an Entrance Test called Eklavya Model Residential School Entrance Test (EMRSET) conducted by the Society.

Details of number of students admitted in Standard VI based on EMRSET in the EMRSs in the State during 2015-18 are shown in Table 4 -

Intake capacity of EMRSsYearin the State				Students admitted in Std. VI			
	Boys	Girls	Total	Boys	Girls	Total (percentage)	
2015-16	950	870	1,820	929	802	1,731 (95)	
2016-17	980	900	1,880	831	763	1,594 (85)	
2017-18	1,130	1,050	2,180	1,069	966	2,035 (93)	
Total	3,060	2,820	5,880	2,829	2,531	5,360 (91)	

 Table 4: Details of number of students admitted in Standard VI

(figures in numbers)

(Source: Information provided by the Society)

The above table shows that against the intake capacity of 5,880 students for Standard VI during 2015-18, the Society could admit 5,360 students (91 *per cent*).

⁷² Recurring expenses borne by the Society minus ₹ 60 lakh

The Joint Secretary in the exit conference (27 May 2019) attributed the reasons for vacancy aginst in-take capacity due to students cancelling their admission.

3.4.5.2 Admissions in GLRSs

As per the instructions issued (May 2016) by the Society, each GLRS shall have intake capacity of 60 ST girls students in each class. Year-wise details of students admitted against the intake capacity in test-checked GLRSs during the period 2015-18 are shown in **Table 5** –

Test-checked		2015-16	2	016-17	2017-18		
GLRSs	Intake capacity	Number of students (percentage)	Intake Number of capacity students (percentage)		Intake capacity	Number of students (percentage)	
Jethy	300	285 (95)	300	283 (94)	300	280 (93)	
Khadakwada	300	275 (92)	300	295 (98)	360	336 (93)	
Mogra	300	290 (97)	360	344 (96)	480	441 (92)	
Poshina	240	174 (73)	300	236 (79)	300	240 (80)	
Sarotra	300	281 (94)	300	283 (94)	360	343 (95)	
Sutharpada	300	300 (100)	300	299 (100)	360	333 (93)	
Total	1740	1605 (92)	1860	1740 (94)	2160	1973 (91)	

 Table 5: Details of students admitted in test-checked GLRSs during 2015-18

(Source: Information provided by the test-checked GLRSs)

The above table shows that as against the intake capacity in test-checked GLRSs, the Society could admit 91 to 94 *per cent* students during 2015-18.

3.4.5.3 Achievement in Board examinations

Audit observed that the results of Std. X and XII in the 12 test-checked schools were better as compared to State average pass percentage as shown in Table 6-

Period	Std. X				Std. XII			State average pass percentage	
	Appeared	Passed	Pass percentage	Appeared	Passed	Pass percentage	Std. X	Std. XII ⁷³	
2015-16	370	330	89	103	101	98	67	60	
2016-17	484	414	86	225	173	77	68	61	
2017-18	686	583	85	221	163	74	67	59	
Total	1540	1327	86	549	437	80	67	61	

Table 6: Results of Std. X and XII in 12 test-checked schools

(Source: Information provided by the Society)

3.4.5.4 Non-commencement of higher secondary streams

EMRSs are established with the objective of providing free quality residential education up to higher secondary level (Standard VI to XII) to the students of tribal community, in remote areas of the States on the pattern of Jawahar Navodaya Vidyalayas. As per revised guidelines (June 2010) of EMRS, each EMRS would have Standard VI to X and higher secondary (Standard XI and XII) with three streams. Further, GoG decided to introduce Standard XI in all the 43 GLRSs of the State from academic session 2017-18. The status of higher secondary education in EMRSs and GLRSs in the academic session 2017-18 are shown in Table 7 –

⁷³ Average of Science and General (including Commerce and Arts) stream

Type of	Number			Number of sc	hools impa	rting educati	ion		
schools	of schools	Started recently (Out of Col.2)	Upto Standard X only	For all the three streams (Science, Arts and Commerce)	Science and Arts only	Science and Commerce only	Science only	Arts only	Com- merce only
1	2	3	4	5	6	7	8	9	10
EMRS (GoI)	27	5	3	4	3	3	9	0	0
EMRS (GoG)	9	1	5	0	0	0	3	0	0
GLRS	43	0	19	0	0	0	8	12	4
Total	79	6	27	4	3	3	20	12	4



(Source: Information provided by the Society)

Audit observed that

- Out of 27 GoI funded EMRSs, five⁷⁴ were started between 2015-16 and 2017-18, while the remaining 22 EMRSs were started prior to 2012-13. Thus, all these 22 EMRSs should have classes up to Standard XII in 2017-18. However, three EMRSs⁷⁵ had classes only up to Standard X during 2017-18. Of the remaining 19 EMRSs, higher secondary with all the three streams as envisaged in the guidelines was available in only four EMRSs (Ambaji, Jagana, Khodada and Tilakwada) while others had either two streams or one stream *i.e.* three EMRSs had science and arts stream, three EMRSs had science and commerce streams and nine EMRSs had only science stream.
- Out of nine EMRSs funded by GoG, except for EMRS, Bilvan established in 2017-18, five EMRSs⁷⁶ had classes only upto Standard X while the remaining three EMRSs⁷⁷ imparted higher secondary education for science stream only.
- The Society could start Standard XI in only 24 GLRSs during 2017-18, as additional classrooms were not available in other GLRSs. Of these 24 GLRSs, 12 GLRSs offered education in only arts stream, eight GLRSs offered education in only science stream and four GLRSs offered education in only commerce stream.

The Joint Secretary in the exit conference (27 May 2019) attributed the reason for not starting higher secondary classes offering all the three streams to nonavailability of sufficient infrastructure in the school building. It was further stated that in EMRS Kadana, Standard XI (science stream) has since been started from the academic session 2018-19.

3.4.5.5 Recruitment of teaching and non-teaching staff

(i) Teaching staff

EMRS guidelines (1997-98) envisage that the Principal and teaching staff of an EMRS would have higher pay scales than those of the teachers in the Government schools so that best talents would be attracted to these schools. EMRS guidelines (June 2010) also envisaged that the State Government shall ensure and maintain the highest quality in the selection of teachers and staff for academic and extracurricular excellence.

⁷⁴ EMRS, Poshina (2015-16), EMRS, Vagalkhod (2016-17), and EMRSs, Mandvi, Sagbara and Naswadi (2017-18)

⁷⁵ EMRS, Indu (2011-12), EMRS, Kadana (2011-12) and EMRS, Pardi (2001-02)

⁷⁶ Ashram Schools run on EMRS pattern

⁷⁷ Kawant, Kherancha and Waghodiya-I

Audit observed that though EMRSs and GLRSs were in operation since 1997-98 and 2008-09 respectively, the Society had not fixed any guidelines for appointment of Principals and teaching staff on permanent basis. Only in December 2016, after a lapse of 17 years⁷⁸, GoG sanctioned 76 posts of Principals and 685 posts of teaching staff for schools managed by the Society. Prior to December 2016, the Society appointed Principals and teaching staff on contract basis with monthly remuneration of ₹ 16,500 and ₹ 7,500 for three to five years. The remuneration paid to teachers was much below the minimum wages for skilled labourers⁷⁹ notified (December 2014) by the Labour and Employment Department of GoG. The details of teachers recruited by the Society and attrition rate of teachers are shown in **Table 8** –

Year of recruit- ment	Number of vacancies advertised	Number of teachers recruited	Number of teachers still in service as of February 2019 (in percentage)	Number of teachers, who left the job	Rate of attrition (in percentage)
2010-11	149	126	45(36)	81	64
2012-13	316	312	32(10)	280	90
2013-14	341	301	177(59)	124	41
2015-16	255	108	26(24)	82	76
Total	1061	847	280(33)	567	67

Table 8: Details of teachers recruited by the Society and attrition rate of teachers

(Source: Information provided by the Society)

The above table shows that out of 847 teachers appointed by the Society on contract basis, 567 teachers (67 *per cent*) left the job mainly due to payment of low remuneration, lack of permanency and for better opportunities.

Audit further observed that even the pay-scales fixed for the posts of Principals and teaching staff sanctioned in December 2016 was lower than those being paid to the staff of Jawahar Navodaya Vidyalayas (JNV) as shown in **Table 9** -

Sr. No.	Section	Standard	Designation	Number	Pay-scale	Corresponding pay-scale in JNV
	Upper Primary	6 to 8	Teachers (Vidya Sahayaks)	377	₹ 10,000 (fixed) for first five years, thereafter ₹ 5200-20200, GP-₹ 2400	₹ 9300-34800, GP - ₹ 4200
2.	Second-	9 to 10	Principal	61	₹ 9300-34800, GP-₹ 4400	₹ 9300-34800, GP- ₹ 5400
	ary		Teachers (Shiskan Sahayaks)	219	₹ 15000 (fixed) for first five years, thereafter ₹ 9300-34800, GP-₹ 4200	₹9300-34800, GP-₹4600
3.	Higher	11 to 12	Principal	15	₹ 9300-34800, GP-₹ 4600	₹ 9300-34800, GP- ₹ 7600
	Second- ary		Teachers (Shiskan Sahayaks)	89	₹ 15500 (fixed) for first five years, thereafter ₹ 9300-34800, GP-₹ 4400	₹ 9300-34800, GP- ₹ 4800

Table 9: Comparison of pay-scales fixed by GoG with JNV

(Source: Information provided by the Society and obtained from website of JN)

The above table shows that the teaching staff are given fixed pay for five years and the Grade Pay assigned for the Principal and teaching posts are lower than those for Jawahar Navodaya Vidyalayas though their educational qualifications were same.

⁷⁸ The Society was set up in January 2000.

⁷⁹ Minimum Wages for skilled (non-teaching) staff in private non-GIA educational institute between October 2017 and March 2018 for 30 days was ₹ 9,678 (₹ 293 (one day basic salary) + ₹ 29.60 (dearness allowance) x 30 days)

The Joint Secretary in the exit conference (27 May 2019) accepted that the high rate of attrition was mainly due to lack of permanency coupled with low remuneration. It was further stated that the Society had recently enhanced the fixed pay of contractual teachers/principals by ₹ 5,000. Audit is of the view that GoG may consider taking measures necessary to attract the best talent and aptitude as teachers.

(ii) Non-teaching staff

The clerk-*cum*-accountants and peons are appointed by Local Management Committee (LMC), while services of other supporting staff such as security, sweeper, cook and helpers are outsourced. Audit observed that the monthly remuneration paid by the Society to clerk-*cum*-accountants and peons was $\overline{\mathbf{x}}$ 6,000 and $\overline{\mathbf{x}}$ 3,500 respectively, which was below the minimum wages fixed by GoG for non-teaching staff⁸⁰ (skilled, semi-skilled and unskilled) of private educational institutions.

The Joint Secretary in the exit conference (27 May 2019) accepted the audit observation and stated that a proposal would be placed for approval before the Governing Board of the Society to enhance the remuneration of non-teaching staff in conformity with the Minimum Wages Act, 1948.

3.4.6 Infrastructure facilities in EMRSs and GLRSs

On approval of a school by MoTA, the Society starts the functioning of the approved school from the next academic year in the building of other schools or by creation of temporary facilities. The GoI on approval of an EMRS, releases 50 *per cent* of capital cost for infrastructure to the Society whereas GLRSs are to be accommodated in rented building.

Audit observed that as of September 2018, six out of 27 GoI funded EMRSs, ten out of 43 GLRSs and two out of nine GoG-funded EMRSs have neither pucca building nor pre-fab building. They are functioning from other Society managed schools (13), in other Government buildings (3) and in rented premises (2), as shown in **Table 10** –

Type of	Num-	Number of schools functioning in							
schools	ber of schools	Own pucca building	Pre-fab building	Building of other schools	Other Government buildings	Rented accommodation			
EMRS (GoI)	27	20	1	4	2	0			
EMRS (GoG)	9	7	0	2	0	0			
GLRS	43	18	15	7	1	2			
Total	79	45	16	13	3	2			

Table 10: Status of buildings of EMRSs/GLRSs

(Source: Information furnished by the Society)

3.4.6.1 Delay in construction of schools

For construction of school building and infrastructure, GoI accorded (2010-11) approval for two EMRSs and released ₹ 24 crore. GoI accorded approval

⁸⁰ Minimum Wages for 30 days between October 2017 and March 2018 – skilled (₹ 9,678) and semi-skilled (₹ 9,408) and unskilled (₹ 9,168)

for construction of school buildings for five EMRSs and eight GLRSs between 2015-16 and 2017-18. As of March 2018, GoI released grant of ₹ 46 crore for these five EMRSs and ₹ 40 crore for eight GLRSs to the Society. However, Audit observed that none of the above works had been started by the Society. Scrutiny of records revealed that the required land was not acquired in six cases, estimates for the works was under preparation in seven cases and tendering for the work was under process in two cases. Consequently, an amount of ₹ 110 crore⁸¹ received from GoI remained unutilized with the Society and also deprived the students from quality infrastructure as envisaged in the scheme guidelines. Further, running of schools for a longer duration beyond three years without good infrastructure (*i.e.* by conducting classes in other schools) would result in overcrowding/excessive sharing of infrastructure.

The Joint Secretary in the exit conference (27 May 2019) attributed the reasons for delay in construction mainly due to administrative delay in obtaining land allotment, removal of encroachment in allotted lands, change in land location, making additional budgetary provision and other local issues. It was further stated that majority of the works are entrusted to Roads and Buildings Department, which are delayed as they were overburdened with other priority works.

3.4.6.2 Non-availability of classroom, laboratory and hostel facility

The educational complex at Amirgadh, Banaskantha consisted of school buildings, staff quarters and hostels for GLRS, Sarotra and Model School, Amirgadh. The Society on approval of GLRSs, Jethy and Virampur, decided to accommodate these schools in the above educational complex. GLRS, Jethy was functioning in the school building of GLRS, Sarotra and GLRS, Virampur was functioning in the hostel building of GLRS, Sarotra. As the resources meant for two schools were being used by four schools, the classrooms, laboratories and hostels were found overcrowded. Against the capacity of 700 students in the hostel building, around 1,500 students were found accommodated in the hostel during 2017-18 leading to overcrowding in rooms and lack of sufficient toilets and urinals.

Audit further observed that EMRS, Jagana (Banaskantha) was functioning in a pre-fabricated campus consisting of classrooms, staff quarters, hostels and mess, constructed at a cost of ₹ 4.44 crore at Jagana by the Society, which was vacated in June 2016 on construction of new building for EMRS, Jagana. Though, this pre-fabricated campus was lying unutilised, the Society failed to utilise it for accommodating GLRS, Jethy and GLRS, Virampur, and instead continued to run these schools with GLRS, Sarotra though it was overcrowded. This clearly indicated poor management by the Society, apart from idling of structure worth ₹ 4.44 crore.

The Joint Secretary in the exit conference (27 May 2019) stated that GLRS, Jethy and GLRS, Virampur were started in the premises of GLRS, Sarotra with an aim for promoting girls education and to reduce dropout ratio without waiting for construction of school building. Shifting of any school is not easy as it required prior permission of the parents/guardians and the pre-fab campus at Jagana required additional repairs worth ₹ 25 lakh to make it liveable. The Joint Secretary further assured that both the GLRSs would be shifted either to pre-fab campus of EMRS, Jagana or in rented buildings.

^{81 ₹24} crore received during 2010-11 and ₹86 crore received between 2015-16 and 2017-18

3.4.6.3 Non-availability of beds, linen and mattresses

As per the scheme guidelines, the EMRSs and GLRSs are required to provide facility of bed, mattress and linen to each student on their joining. However, in test-checked schools, Audit observed that –

- Against 479 students in EMRS, Jagana during 2017-18, only 294 sets of bed, mattress and linen was available with the school. Thus, 185 students were not provided with the facility. These students were being accommodated on the bed by combining all the beds together.
- In EMRS, Kadana, against 338 students during 2017-18, the school had 338 mattresses and linens but had only 155 beds. Thus, 183 students were not provided with the facility of bed and were accommodated on the floor.
- Shortages of beds were noticed in all six test-checked GLRSs. The overall shortage of beds in these schools was 27 *per cent* with highest shortage above 60 *per cent* in GLRSs, Poshina and Khadakwada (Appendix-XV).

The procurement of above items by the schools, the need and sufficiency of the comfort of the students were neither monitored by the Society nor by the LMC.

The Joint Secretary in the exit conference (27 May 2019) stated that special budget provision has been made under New Gujarat Pattern in the year 2018-19 for procurement of beds and the process of purchasing beds as against the demand of 11,514 beds is under progress.

3.4.6.4 Non-availability of water

The Gojariya educational complex at Kawant Taluka in Chhotaudepur District consists of two school buildings, four hostel buildings and four buildings as staff quarter each having capacity for 18 families. Of the two school buildings, one school building is used for three GLRSs (Mogra, Chodavani and Saidivasan) and the other is used for Model School, Kawant and Adarsh Nivasi Shala (ANS), Kadipani. The four hostel buildings are used for accommodating the students of GLRSs and ANS. The entire complex caters to almost 2,000 students, out of which almost 1,300 reside on the campus.

Audit observed that the complex had no facility of direct water connection except for six bore wells in the campus. As sufficient water was not available from the bore wells, arrangement of water was being done through water tankers. Consequently, major part of the recurring grant⁸² of GLRS, Mogra



was spent for purchasing water. During joint visit of the school, Audit observed

^{82 2015-16 - ₹ 1,62,400, 2016-17 - ₹ 3,44,000} and 2017-18 - ₹ 1,53,500

that most of the toilets and urinals did not have the facility of running water and students were found collecting water from the tankers for storing them in the buckets for their use (**Picture**).

The Joint Secretary in the exit conference (27 May 2019) accepted the Audit observation and stated that PA Chhotaudepur has sanctioned and released an amount of ₹ 17.17 lakh under New Gujarat Pattern to the Public Health Works Department for laying water pipelines in the campus.

3.4.7 Monitoring and evaluation

3.4.7.1 Non-constitution of School Management Committee

Section 21 and Section 22 of the Right of Children to Free and Compulsory Education Act, 2009 provides for constitution of School Management Committee⁸³ (SMC) and preparation of School Development Plan (SDP) respectively by every school other than an unaided school. Accordingly, the Society instructed (March 2011 and January 2014) all the schools to constitute SMC. However, Audit observed that none of the 12 test-checked schools had constituted SMC and had not prepared the SDP. In absence of SMC, the involvement of the parents in management of the school affairs was not ensured.

The Joint Secretary in the exit conference (27 May 2019) accepted the Audit observation and stated that the Society would initiate setting-up of SMCs in all schools.

3.4.7.2 Evaluation

The objective of EMRS is to provide quality middle and high level education to ST students in remote areas, not only to enable them to avail of reservation in high and professional educational courses and as jobs in Government, public and private sectors but also to have access to the best opportunities in education at par with non-ST students. However, except for submission of quarterly demand for grants along with expenditure statement of previous quarter by the schools, no other returns (*e.g.* monthly/quarterly progress reports) have been prescribed by the Society. As a result, the Society had no information regarding curricular and extra-curricular progress of the students, compiled data of EMRS students, who got admission in higher educational institutions and details of drop-outs in the Talukas. In the absence of these vital data, the Society was not in a position to evaluate the efficacy of the EMRSs and GLRSs functioning under it.

The Joint Secretary in the exit conference (27 May 2019) stated that the Society would be initiating a process to capture the data of EMRS pass-outs and tribal female literacy rate in the Talukas in which GLRSs are situated and a periodic return would be prescribed for all the schools to ensure monitoring of curricular and extra-curricular progress of students on regular basis.

⁸³ SMC shall consist of the elected representatives of the local authority, parents or guardians of children admitted in such schools and teachers. Three-fourth of the members of SMC shall be parents or guardians. Proportionate representation shall be given to parents or guardians of children belonging to disadvantaged group and weaker section. Fifty *per cent* of the members of SMC shall be women.

3.4.8 Conclusion

Audit observed that horizontal spread of residential schooling for STs was not uniform and self-evident in the absence of transparent criteria for setting up of EMRSs as 18 out of 43 tribal Talukas had no EMRSs while three Talukas had more than one EMRS. The Society and the GLRSs failed to utilise the recurring grant as per the budget estimates and as prescribed in the guidelines resulting in loss of central assistance of ₹ 5.36 crore. The Society had extended extra financial benefit to two NGO-run EMRSs (₹ 2.07 crore) managed on PPP mode by releasing excess recurring grants.

Due to non-starting/part commencement of higher secondary section, the students of eight EMRSs and 19 GLRSs were deprived of higher secondary education. Out of 36 EMRSs and 43 GLRSs, the choice of all the three streams was available in only four EMRSs. The teachers were appointed on monthly fixed remuneration on contract basis which was lower than the minimum wages of the State for skilled labourers. As a result, many of them left the job in between leading to vacancies and affecting regular conduct of classes.

The Society could not start the construction work of seven EMRSs and eight GLRSs though GoI had provided funds to the tune of ₹ 110 crore. Due to nonavailability of buildings, these schools were being run in the buildings of other schools. As a result, the classrooms and hostels were found overcrowded in ITDP Banaskantha. Shortage of bed and mattress was noticed in two EMRSs and six GLRSs test-checked. In EMRS, Jagana, against 479 students, only 294 sets of bed, mattress and linen were available; in EMRS, Kadana, against 338 students, only 155 beds were available and the overall shortage of beds in eight out of 12 test-checked schools was 27 *per cent*. During visit of three test-checked GLRSs of ITDP, Chhotaudepur, students were found collecting water from the water tankers for storing them in the buckets for their use as the building had no facility of direct water connections.

Monitoring and evaluation of the schools by the Society was found deficient as it had not established any mechanism to assess curricular and extra-curricular progress of the students, data of EMRS students, who got admission in higher educational institutions and details of drop-outs in the Talukas.

URBAN DEVELOPMENT AND URBAN HOUSING DEPARTMENT

3.5 Unfruitful expenditure on procurement of Refuse Compactor Vehicles

Gujarat Urban Development Company Limited procured 25 Refuse Compactor Vehicles of uniform capacity and payload for the Nagarpalikas (NPs) at a total cost of ₹ 9.94 crore for efficient handling of municipal solid waste. Of the 25 vehicles, 15 could not negotiate the narrow roads/streets in the NP areas for garbage collection due to their large size, while three could not be made functional due to non-availability of matching garbage containers and non-fulfilment of warranty repairs by the contractor, leading to unfruitful expenditure of ₹ 7.16 crore.

Department of Urban Development and Urban Housing (UD&UH) Government of Gujarat nominated (September 2005) Gujarat Urban Development Company Limited (GUDCL) as the nodal agency for implementation of "Municipal Solid Waste (Management & Handling) Rules, 2000" in Nagarpalikas (NPs) of Gujarat.

In September 2013, GUDCL decided to procure Refuse Compactor Vehicles⁸⁴ (RCVs) for the NPs for efficient handling of municipal solid waste in NP areas. Accordingly, GUDCL called for requirement of RCVs from the NPs, through the Commissioner of Municipalities (CoM). Of the 159 NPs, 25 NPs⁸⁵ projected a requirement of one RCV each.

GUDCL placed three procurement orders (between March 2014 and August 2014) on TPS Infrastructure Limited, New Delhi (contractor) for supply of 25 RCVs, each having a volumetric capacity of 18 cubic meters (cum) and payload capacity of 12 tonnes per trip, at a total cost of ₹ 9.94 crore. All the 25 RCVs were supplied to the designated 25 NPs between June 2014 and November 2014. GUDCL released ₹ 9.84 crore to the contractor between July 2014 and May 2016.

In order to examine the procurement, supply and utilisation of RCVs, Audit testchecked (April-May 2018) the records of GUDCL, CoM and 23⁸⁶ of 25 NPs. Audit also conducted joint physical inspection of NPs along with NP officials to check the utilisation of RCVs. Audit scrutiny revealed the following:

(i) Of the 25 RCVs procured, only six were in use while one met with a fatal accident in June 2017 and not being used since September 2017 (the matter was under legal adjudication in the trial court). The remaining 18 RCVs procured at a cost of ₹ 7.16 crore were not in use for almost one to five years from the dates of their supply (June 2014 to November 2014) till September 2019.

⁸⁴ RCVs are used for collection, compaction and transportation of solid waste to landfill/dumping sites.

⁸⁵ Anand, Bharuch, Botad, Bardoli, Chhotaudepur, Dandhuka, Dhangadhra, Godhra, Kalol (Panchmahal district), Kadi, Kalol (Gandhinagar district), Kathlal, Mansa, Nadiad, Padra, Patan, Porbandar, Prantij, Surendranagar, Umargam, Umreth, Valsad, Vapi, Veraval and Visnagar

⁸⁶ Bharuch and Kalol NPs (Gandhinagar district) had two RCVs each. The RCVs supplied to Bardoli and Mansa NPs were subsequently transferred to Bharuch and Kalol NPs.

Of these 18 RCVs, 15 RCVs⁸⁷ could not be operated at all, as these were found to be extremely difficult to manoeuvre through the narrow⁸⁸ streets/ roads of NP areas for collection of garbage. Incidentally, the decision of GUDCL to procure RCVs of 18 cum capacity for the NPs did not emanate from the provisions of Manual on Municipal Solid Waste Management, 2000, which clearly stipulated that the selection of the type of vehicles should *inter alia* be guided by the road widths/road conditions of the cities/towns.

Further, while collecting details of RCVs from the NPs in September 2013, GUDCL neither mentioned the specifications of RCVs (capacity and payload) proposed to be procured nor did the NPs mention the exact specifications of RCVs whilst raising their demands. Consequently, all the 23 NPs were saddled with single-sized RCVs of 18 cum capacity, despite the fact that 11 of these 23 NPs had waste generation capacity of merely 6.5 tonnes per day to 15 tonnes per day.

The remaining two RCVs at Kadi and Prantij could not be put to use pending demonstration by the contractor for want of 4.5 cum mild steel closed-body garbage containers, which were to be supplied by GUDCL. One RCV at Porbandar NP was not operational due to non-functioning of hydraulic system, thus, severely hampering the loading-unloading and compacting activities.

Picture 1 and 2 illustrates the RCVs lying idle/un-utilised in Umargam and Umreth NPs.



The Principal Secretary, Urban Development and Urban Housing Department stated during exit conference (August 2019) that after being pointed out by Audit, the idle RCVs were put to use by transferring them to other NPs.

However, documents furnished to Audit during exit conference revealed that RCVs claimed to have been transferred to other NPs showed either

⁸⁷ Bharuch, Botad, Chhotaudepur, Dandhuka, Dhangadhra, Godhra, Kalol (Panchmahal district), Kathlal, Patan, Surendranagar, Umargam, Umreth, Valsad, Vapi and Veraval

⁸⁸ The RCVs require larger space to load garbage from containers which are normally placed on the narrow streets or roads sides of NPs.

the same odometer readings as noted earlier by Audit during joint physical inspection of the NPs, or slightly elevated readings on account of distances covered by the RCVs during transfers from one NP to other. This raised doubts whether the RCVs were actually transferred.

(ii) As per tender specifications Section-III – "Other Extra Fitments", RCVs were to have an extra fitment of two footsteps and two hand bars, one each on the left and right side at the rear, to facilitate the equipment operators to stand and travel when the compactor is moving (Picture 3). During joint physical inspection of NPs, Audit observed that none of the 25 RCVs supplied by the contractor had extra fitments of footsteps and hand bars (Picture 4).



Even as the RCVs supplied by the contractor did not conform to tender specifications, these were certified to have been delivered correctly in good condition as per tender conditions by the Technical Approval Group $(TAG)^{89}$, the third party agency appointed by GUDCL for pre and post-despatch inspection of RCVs. Consequently, GUDCL, as contract Manager, had no reasons to either withhold the last tranche of 10 *per cent* of the contract value payable to the contractor after submission of inspection report or, invoke the performance bank guarantee of ₹ 49.72 lakh (five *per cent* of total procurement value) furnished by the contractor, which was valid until the warranty period of 36 months. The contractor, thus, escaped punitive action/financial penalties due to erroneous certification of equipment by the TAG.

The Principal Secretary stated that the matter of extra fitments of footsteps and hand bars in the RCVs would be taken up with the contractor at the earliest.

(iii) In its bid document (December 2013), the contractor had offered to provide after-sales service support, including supply of spares for

⁸⁹ TAG comprised of one Chairman and two Members – Shri K.C. Bharti, Chairman (retired Chief Engineer, Mechanical, Water Resources Department); Shri V.R. Patel, Member (retired Chief Engineer, Mechanical, Water Resources Department); and Shri Vijay H. Mistry, Member (Joint Director, Mechanical, Ahmedabad Municipal Corporation)

RCVs, for a period of 10 years. However, GUDCL did not enter into an after-sales service agreement/maintenance contract with the contractor after the expiry of warranty period of 36 months. Thus, the vital issues relating to long-term repairs and maintenance needs of RCVs remained unaddressed.

Even during the warranty period, the contractor did not respond to the numerous calls of Porbandar NP to fix the fault(s) encountered (December 2016) in the hydraulic system of the RCV.

Thus, GUDCL incurred an unfruitful expenditure of ₹ 7.16 crore on procurement of 18 RCVs due to their limited ability to navigate the narrow streets of NP areas, non-availability of matching garbage containers and non-fulfilment of warranty repairs by the contractor. GUDCL also did not ensure that supply of RCVs was as per tender specifications. Further, it also did not enter into maintenance contract for the RCVs post-warranty, to address the long-term repairs and maintenance requirements of vehicles.

(I) mer

(YASHWANT KUMAR) Principal Accountant General (General and Social Sector Audit), Gujarat

Rajkot The 16 March 2020

Countersigned

how nue

(RAJIV MEHRISHI) Comptroller and Auditor General of India

New Delhi The 18 March 2020

APPENDICES

APPENDIX - I

Statement showing the details of year-wise outstanding IRs/Paragraphs as of 31 December 2018

(Reference: Paragraph 1.6.1; Page 7)

Year	IRs	Paras
1993-94	15	39
1994-95	34	79
1995-96	91	239
1996-97	77	179
1997-98	102	291
1998-99	64	166
1999-2000	83	309
2000-01	121	454
2001-02	181	578
2002-03	233	593
2003-04	343	924
2004-05	192	603
2005-06	188	497
2006-07	241	1,194
2007-08	504	1,914
2008-09	483	2,002
2009-10	343	1,599
2010-11	379	1,911
2011-12	299	1,903
2012-13	269	1,332
2013-14	246	1,408
2014-15	300	1,521
2015-16	486	2,215
2016-17	546	2,904
2017-18	379	2,616
2018-19	87	548
Total	6,286	28,018

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NPPENDIX	
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Statement showing Detailed Explanations on Audit Reports pending as of 31 December 2018

(Reference: Paragraph 1.6.3; Page 7)

			(Refe	rence: Para	(Reference: Paragraph 1.6.3; Page 7)	Page 7)					
SI. No.	Department	2007-08	2008-09	2009-10	2010-11	2011-12	2013-14	2014-15	2015-16	2016-17	Total
П	Education	ł	1	01	1	ł	01	01	01	01	05
2	Fisheries	ł	1	01	1	ł	1	ł	;	1	01
3	Forest and Environment	ł	01	ł	01	ł	1	ł	1	1	02
4	General Administration	1	1	ł	1	ł	1	1	ł	01	01
5	Health and Family Welfare	ł	01	01	ł	01	01	01	01	01	07
9	Home	1	1	ł	1	01	1	01	1	01	03
~	Labour and Employment	;	1	1	;	1	;	01	;	01	02
8	Legal	ł	ł	ł	ł	ł	01	ł	01	ł	02
6	Panchayats, Rural Housing and Rural Development	01	01	01	1	01	1	01	01	01	07
10	Revenue	ł	ł	ł	01	ł	;	ł	1	ł	01
11	Roads and Buildings	ł	ł	01	01	ł	ł	ł	ł	ł	02
12	Science and Technology	ł	ł	01	I	ł	ł	I	ł	I	01
13	Social Justice & Enpowerment	01	01	ł	1	01	1	ł	01	ł	04
14	Urban Development and Urban Housing	1	ł	ł	01	01	01	02	02	01	08
15	Water Resources	01	01	01	01	ł	1	ł	ł	ł	04
16	Water Supply	1	01	ł	1	ł	1	1	01	01	03
17	Women & Child Development	;	1	ł	1	01	1	1	ł	ł	01
18	Youth Services and Cultural Activities	1	1	ł	01	ł	01	1	ł	01	03
	Total	03	90	07	90	90	05	07	80	60	57
		Ì									

APPENDIX - III Paragraphs to be discussed by Public Accounts Committee as of 31 December 2018

SI. No. 2 E. 3 Fij 4 F.	¢								ł												
	Department	2000 C.A.	5-07 P.A.	2007-08 C.A. P.A	1	2008-09 C.A. P.A.	ں ر	2009-10 C.A. P.A.	ں د ا	2010-11 A. P.A.		2011-12 .A. P.A.		2013-14 .A. P.A.		2014-15 A. P.A.	201£ C.A.	2015-16 .A. P.A.	2016-17 C.A. P.A		Total C.A. P.
	Co-operation	04	;	1	;	•	1		+	1	-	1	1	1	1	ł	1	1	1		04
	Education	ł	ł	ł	ł	•	01	1 01	1 01	-	1	1	01	1	01	ł	03	ł	01	ł	08
	Fisheries	01	ł	ł	ł	'	01	-	-	1	1	ł	ł	ł	ł	ł	ł	ł	ł	ł	02
	Forest and Environment	ł	ł	ł	ł	0	- 01	1	1	01		ł	ł	ł	ł	ł	ł	ł	ł	ł	ı.
5 G	General Administration	ł	ł	ł	ł	' 1	1		+	1	+	ł	ł	1	ł	ł	ł	ł	01	ł	01
6 H	Health and Family Welfare	ł	ł	ł	ł	0	01 01	1 02		1	. 01	01	01	01	01	01	03	01	03	01	10
7 H	Home	ł	ł	01	ł	1	1	1	1	-	-	1	1	ł	01	ł	ł	ł	ł	ł	02
8 H	Home (Transport)	ł	ł	ł	01	'	i	1	1	-	. 01	01	1	ł	ł	ł	ł	ł	ł	ł	01
9 L:	Labour and Employment	ł	ł	ł	ł	1	1	1	1	-	1	1	1	ł	ł	01	ł	ł	01	ł	01
10 D	Panchayats, Rural Housing and Rural Development	01	ł	02	1	- 10	- 02	1	1	1	. 01	01	03	01	02	I	02	ł	02	01	16
11 P(Ports	ł	ł	1	ł	•	i 	1	- 01	1	1	1	ł	ł	ł	ł	ł	1	ł	ł	01
12 R	Revenue	ł	ł	ł	ł	1	i	1	1	01	 _	1	1	ł	ł	ł	ł	ł	ł	ł	I
13 R	Roads and Building	01	01	ł	ł	1	05	5 -	- 02		1	1	1	ł	ł	ł	ł	ł	ł	ł	08
14 Sc	Science and Technology	ł	ł	ł	ł	1	i	01	1	-	1	1	1	ł	ł	ł	ł	ł	ł	ł	I
15 Sc	Social Justice & Empowerment	01	01	ł	01	0	- 01		+		. 01	1	ł	1	ł	ł	01	ł	ł	ł	03
16 U	Urban Development and Urban Housing	01	ł	ł	ł	1	i	1	- 01		1	01	05	ł	04	02	03	02	05	ł	19
17 W	Women & Child Development	1	ł	ł	ł	1	1	1	1	-	1	01	1	ł	ł	I	ł	ł	I	ł	I.
18 W	Water Resources	01	ł	05	01	- 02	- 01	1 01	1 02		1	1	1	ł	ł	ł	ł	ł	ł	ł	11
19 W	Water Supply	01	ł	ł	ł	- 03	- 01	-	- 02	2 01	!	1	1	ł	ł	ł	01	ł	03	ł	11
20 Y	Youth Services and Cultural Activities	ł	ł	ł	ł	' !	i	1	1	01	 _	1	01	ł	ł	ł	ł	ł	01	ł	02
21 L(Legal	ł	ł	ł	ł	•	i	1	1	1	1	1	01	ł	ł	ł	01	1	ł	ł	02
22 G	General paragraphs	01	ł	01	ł	•	- 01	-	1	1	1	1	ł	ł	ł	ł	ł	ł	ł	ł	03
	Total	12	02	60	03	0 90	03 1	13 05	5 09	04	4 04	05	12	02	60	04	14	03	17	02	105

APPENDIX - IV

Statement showing statistical framework

(Reference: Paragraph 2.1.5; Page 12)

1st stage:

1

- State had been divided into four geographically contiguous regions and samples had been taken from each region to make the sample representative of the entire State.
- Two Districts from each region (total eight Districts¹) had been selected by Simple Random Sampling Without Replacement (SRSWOR) method.
- In each selected District, the concerned circle/divisions/sub-divisions of GWSSB, DWSU of WASMO and District/Taluka Water Testing Laboratory of GJTI had been selected for detailed examination.

2nd Stage (For Joint Physical verification and Joint Survey of beneficiaries)

- Within each selected District in the 1st stage, two rural blocks (Talukas) had been selected by SRSWOR method.
- After having selected the sample Talukas, two Gram Panchayats from each Taluka had been selected by SRSWOR method.
- From each selected Gram Panchayat, based on SRSWOR method, four habitations (subject to availability) were selected.
- For the purpose of impact assessment, 15 households had been selected from each of the four selected habitations randomly (Total 60 households per GP). If the number of habitations were less than four in any GP, the number of households surveyed was distributed amongst the existing habitations by keeping the number of households fixed for GP, *i.e.* 60.

The beneficiary survey involved issues impacting the beneficiaries' *viz.* supply of drinking water, water quality, training and community involvement and O&M of the scheme. Total 1,920 HHs of 78 sampled habitations (details of selected habitation given in Appendix-V) were jointly surveyed (March 2018 to July 2018) by Audit Team alongwith officials of GWSSB, WASMO and District/Taluka Laboratories.

⁽i) Bharuch, (ii) Dahod, (iii) Dang, (iv) Jamnagar, (v) Patan, (vi) Porbandar, (vii) Sabarkantha and (viii) Valsad

APPENDIX - V

Statement showing units selected for Audit

(Reference: Paragraph 2.1.5; Page 12)

Sr.	Name of the	Name of the selected	Name of the selected	Name of Selected
No.	selected District	Block (Taluka)	Gram Panchayat	Habitations
1	Bharuch	Jambusar	Devla	(i) Devla
2	-do-	-do-	Bhodar	(i) Bhodar
3	-do-	Jhagadia	Ranipara	(i) Ranipara
4	-do-	-do-	Rajpoardi	(i) Madhavpura(ii) Navivasahat(iii) Bhimpor(iv) Rajpardi
5	Dahod	Jhalod	Nan Salai	(i) UmarimalFaliya (Nansalai)(ii) UplaFaliya (Melaniya)(iii) NichaluFaliya (Melaniya)(iv) Gamtal (Melaniya)
6	-do-	-do-	Bambela	(i) GamtalFaliya(ii) LuchaniaFaliya(iii) DamorFaliya(iv) GarasiyaFaliya
7	-do-	Limkheda	Mander	(i) NaniManderFaliya (ii) Gamtal
8	-do-	-do-	P. Khakhariya	(i) BariaFaliya(ii) NinamaFaliya(iii) Patel Faliya(iv) TadviFaliya
9	Dang	Ahwa	Don	(i) Don
10	-do-	-do-	Chichali	(i) Karadiamba(ii) Hanvantpada(iii) Chichali(iv) Mahardhar
11	-do-	Subir	Gavdhad	(i) Borthadi (ii) Gavdhad (iii) Girmal
12	-do-	-do-	Dahar	(i) Dahar (ii) Ghana (iii) Uga
13	Jamnagar	Dhrol	Khakhara	(i) Khakhara (ii) Khakhara II
14	-do-	-do-	Katda	(i) Katda
15	-do-	Jamnagar	Gordhanpar	(i) Gordhanpar
16	-do-	-do-	Ranjitpar	(i) Ranjitpar
17	Patan	Harij	Jaswantpura	(i) Jaswantpura
18	-do-	-do-	Kathi	(i) Kathi
19	-do-	Santalpur	Amarapur	(i) Amarapur (ii) Hansnagar (iii) Pati
20	-do-	-do-	Jarusa	(i) Fulpura(ii) Gamdi(iii) Jarusa(iv) Sherpura

Sr. No.	Name of the selected District	Name of the selected Block (Taluka)	Name of the selected Gram Panchayat	Name of Selected Habitations
21	Porbandar	Kutiyana	Bhogsar	(i) Bhogsar
22	-do-	-do-	Choliyana	(i) Choliyana
23	-do-	Porbandar	Garej	(i) Garej
24	-do-	-do-	Morana	(i) Morana
25	Sabarkantha	Prantij	Kamalpur	(i) Kamalpur (ii) Sandoliya
26	-do-	-do-	Sonasan	(i) Sonasan (ii) Songadh
27	-do-	Vijaynagar	Bhankhara	 (i) Zer (Zer) (ii) Vadari (Khervada) (iii) Toldungari (Toldungari) (iv) Golvada (Golvada)
28	-do-	-do-	Kalvan	 (i) Kathvavadi (Kathvavdi) (ii) Tokra (Vireshwar) (iii) Jadisimbal (Kathvavdi) (iv) Prithvipura (Pruthvipura)
29	Valsad	Dharampur	Motidholdungri	(i) Gundi Faliya(ii) Patel Faliya(iii) Dungri Faliya(iv) Nishal Faliya
30	-do-	-do-	Pipalpada	 (i) NishalFaliya (Pipalpada) (ii) Chespada (Pipalpada) (iii) Wellpada (Mordahad) (iv) KhoriFalia (Mordahad)
31	-do-	Umbergaon	Tumbh	(i) Doharpada(ii) Bhandarpada(iii) Dhodiyavad(iv) Dungri Faliya
32	-do-	-do-	Maroli	(i) Agra Faliya (ii) Dandi Faliya (iii) Dungri Faliya (iv) Macchiwad
TOTA	AL			78 Habitations

APPENDIX – VI

Statement showing results of samples re-tested by DLLs

(Reference: Paragraph 2.1.8.1; Page 22)

(Figures in numbers)

Name of	Gap between	Unfit	Fluo	oride	Nit	rate	TI	DS	Samples
DLLs	the date of original collection and date of re-collection (in days)	samples re-tested	Samples found unfit in original testing	Samples found unfit after re-testing	Samples found unfit in original testing	Samples found unfit after re-testing	Samples found unfit in original testing	Samples found unfit after re-testing	found fit after re-testing
Panchmahal	84 to 130	26	26	20	26	10	7	2	5
Vadodara	72 to 143	17	0	2	17	12	9	5	3
Banaskantha	95 to 151	30	17	7	30	29	4	1	0
Patan	109 to 146	8	5	3	2	0	5	2	3
Chotaudepur	87 to 149	57	9	7	15	13	2	0	2
Kheda	87 to 119	12	8	7	0	2	5	3	1
Mahisagar	94 to 135	10	0	7	9	9	3	2	0
Dahod	74 to 142	44	28	36	31	37	10	2	0
Modasa	60 to 74	10	6	2	10	3	7	2	7
Kachchh	82 to 99	18	14	8	0	2	14	6	4
Amreli	4 to 5	12	0	1	12	10	7	2	0
Suren- dranagar	91 to 115	5	4	3	2	2	1	0	1
TOTAL	4 to 151	249	117	103	154	129	74	27	26

APPENDIX - VII List of parameters to be tested in SLL, DLLs and TLLs

(Reference:	Paragraph	2.1.8.3;	Page 25)
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Sr. No.	Characteristic	Whether required at SLL	Whether required at DLL	Whether required at TLL
	Physical parameters			•
1.	Temperature	Yes	Yes	Yes
2.	Colour	Yes	Yes	Yes
3.	Odour	Yes	Yes	Yes
4.	Taste	Yes	Yes	Yes
5.	Turbidity	Yes	Yes	Yes
6.	Ph	Yes	Yes	Yes
	Chemical Parameters	1		
7.	Total Dissolve Solids (TDS)/ Elect. Conductivity	Yes	Yes	Yes
8.	Total Alkalinity	Yes	Yes	Yes
9.	Chloride	Yes	Yes	Yes
10.	Fluoride	Yes	Yes	Yes
11.	Ammonia	Yes	Yes	No
12.	Nitrate	Yes	Yes	Yes
13.	Nitrite	Yes	No	No
14.	Sulphate	Yes	Yes	Yes
15.	Silica	Yes	No	No
16.	Sodium	Yes	Yes	No
17.	Potassium	Yes	Yes	No
18.	Boron	Yes	No	No
19.	Calcium (as Ca)	Yes	No	No
20.	Magnesium (as Mg)	Yes	No	No
21.	Total Hardness	Yes	Yes	Yes
22.	Sulphide	Yes	No	No
23.	Chloramines (as Cl2)	Yes	No	No
	Heavy Metals			
24.	Iron	Yes	Yes	Yes
25.	Manganese	Yes	Yes	Yes
26.	Copper	Yes	Yes	No
27.	Total Chromium (as Cr)	Yes	Yes	No
28.	Cadmium	Yes	No	No
29.	Lead	Yes	Yes	No
30.	Nickel	Yes	Yes	No
31.	Total Arsenic (as As)	Yes	Yes	Yes
32.	Mercury	Yes	No	No
33.	Barium	Yes	No	No
34.	Zinc	Yes	Yes	No
35.	Aluminium	Yes	Yes	No
36.	Antimony	Yes	No	No
37.	Selenium	Yes	Yes	No
38.	Silver	Yes	Yes	No
39.	Molybednum (as Mo)	Yes	No	No

				прренинеез
Sr. No.	Characteristic	Whether required at SLL	Whether required at DLL	Whether required at TLL
	Microbiological	OLL		TEE
40.	Total coliform	Yes	Yes	Yes
41.	E. Coli/ Thermotolerant coliforms	Yes	Yes	Yes
42.	Virus	Yes	No	No
43.	V. Cholera, S. Typhi, S. Dysentrae, Staphiloccocus, F. Strep in the State Level Laboratory and viral parameters in certai disease burden.		-	•
	Specific parameters			
44.	Total pesticide residue	Yes	No	No
45.	Radioactive elements	Yes	No	No
46.	Cyanide	Yes	No	No
47.	Poly Aromatic Hydrocarbons (PAH)	Yes	No	No
48.	Free Residual Cholorine	Yes	Yes	Yes
49.	Polychlorinated Biphenyls	Yes	No	No
50.	NDMA	Yes	No	No
51.	Anionic Detergents (as MBAS)	Yes	No	No
52.	Oils & Grease	Yes	Yes	No
53.	Dissolved Oxygen (DO)	Yes	Yes	No
54.	Biological Oxygen Demand (BOD)	Yes	Yes	No
55.	Chemical Oxygen Demand (COD)	Yes	Yes	No
56.	Mineral oil	Yes	No	No
57.	Phenolic Compound	Yes	No	No
58.	Trihalomethanes a. Bromoform b. Dibromomethane c. Bromodichloromethan d. Chloroform	Yes	No	No
	Individual Pesticides			
59.	Alachlor	Yes	No	No
60.	Atrazine	Yes	No	No
61.	Aldrin/ Deildrin	Yes	No	No
62.	Alpha HCH	Yes	No	No
63.	Beta HCH	Yes	No	No
64.	Butachlor	Yes	No	No
65.	Chloropyriphos	Yes	No	No
66.	Delta HCH	Yes	No	No
67.	2, 4- Dichlorophenoxyacetic acid	Yes	No	No
68.	DDT (o, p and p, p iomers of DDT, DDE and DDE)	Yes	No	No
69.	Endosulfan (alpha, beta and sulphate)	Yes	No	No
70.	Ethion	Yes	No	No
71.	Gamma- HCH (Lindane)	Yes	No	No
72.	Isoproturon	Yes	No	No
73.	Malathion	Yes	No	No
74.	Methyl parathion	Yes	No	No
75.	Monocrotophos	Yes	No	No
76.	Phorate	Yes	No	No

APPENDIX – VIII

Statement showing the results of samples tested in respect of 78 test-checked habitations

District	Total number of test-	samples of	of test-cheo	re and post mo ked habitation ring the year 2	ns done by	habitations co	llected and	ter samples of I tested in pres and August 20	ence of Audit
	checked habita- tions	Number of habitations from where water samples were collected	of water	Number of water samples found unfit (percentage)	Number of habitations found with unfit water source (percentage)	Number of habitations from where water samples were collected	Number of water samples collected	Number of water samples found unfit (percentage)	Number of habitations found with unfit water source (percentage)
Bharuch	7	7	29	5 (17)	3 (43)	7	21	5 (24)	3 (43)
Dahod	14	4	6	0 (0.00)	0 (0.00)	14	36	17 (47)	10 (71)
Dang	11	11	210	1 (0.48)	1 (9)	11	37	2 (5)	2 (18)
Jamnagar	5	5	16	8 (50)	3 (60)	5	18	7 (39)	3 (60)
Patan	9	6	12	0 (0.00)	0 (0.00)	9	11	3 (27)	2 (22)
Porbandar	4	4	8	0 (0.00)	0 (0.00)	4	14	3 (21)	2 (50)
Sabarkantha	12	12	70	8 (11)	5 (42)	12	22	16 (73)	10 (83)
Valsad	16	16	51	0 (0.00)	0 (0.00)	16	29	1 (3)	1 (6)
TOTAL	78	65	402	22 (5)	12 (18)	78	188	54 (29)	33 (42)

(Reference: Paragraph 2.1.9.1; Page 27)

APPENDIX – IX

Statement showing the details of samples examined in test-checked Districts during 2013-18

Test-checked	Number of pre	1	Number of water sa	mples (percenta	ge)
Districts	and post water samples tested	Found unfit	Unfit due to excess content of fluoride	Unfit due to excess content of nitrate	Unfit due to excess content of TDS
Bharuch	14516	1873 (13)	49(0.34)	1187(8)	1005(7)
Dahod	49836	12331(25)	4077(8)	5178(10)	589 (1)
Dang	17431	599(3)	0(0)	595 (3)	1 (0.01)
Jamnagar	5923	2182(37)	65(1)	1980(33)	155 (3)
Patan	6880	1680 (24)	983(14)	193(3)	608 (9)
Porbandar	2481	476(19)	78(3)	330(13)	92(4)
Sabarkantha	15523	2401(15)	264 (2)	2185(14)	138 (0.89)
Valsad	49992	510(1)	83 (0.17)	41(0.08)	358(0.72)
Total	162582	22052 (14)	5599 (3)	11689 (7)	2946(2)

(Reference: Paragraph 2.1.9.1; Page 28)

APPENDIX – X

Statement showing year-wise details of expenditure under different schemes

(Reference: Paragraph 2.1.10; Page 29)

(₹ in crore)

Name of the Schemes	2013	3-14	201	4-15	201	5-16	201	6-17	201	7-18
	Funds received	Expen- diture								
1	2	3	4	5	6	7	8	9	10	11
Research and Development	1.00	3.00	3.00	1.91	2.00	7.31	6.00	3.09	6.00	2.04
RWSS including NRDWP State Govt. Share	861.20	837.93	909.50	784.17	795.67	1430.34	1369.85	1557.58	1999.42	2002.77
WSS based on Sardar Sarovar Canal	439.80	903.78	837.00	1217.82	648.00	485.37	693.00	673.27	693.00	702.22
Drinking Water Infrastructure Protection Task Force	3.75	0.00	5.00	0.73	5.00	3.61	5.00	10.85	5.00	0.00
Water Conservation and Pre- vention of Wastage of Water	1.00	0.40	1.00	0.17	2.00	0.41	3.00	1.08	1.00	0.59
Mukhya Mantri Mahila Pani Samiti Protsahan Yojana	0.00	0.00	1.50	0.86	1.50	1.14	1.50	0.99	1.50	1.29
Local 10 <i>per cent</i> contribution under Tribal Area Sub Plan	0.00	0.00	0.00	0.00	20.00	6.11	5.00	7.87	5.00	9.45
NRDWP (GoI Share)	515.06	438.10	362.36	485.12	281.55	760.34	242.61	448.53	261.97	247.39
Total	1821.81	2183.21	2119.36	2490.78	1755.72	2694.63	2325.96	2703.26	2972.89	2965.75

(Source: Annual Administrative Report of the Water Supply Department)

APPENDIX – XI

Flow chart of implementation of the MDM scheme

(Reference: Paragraph 3.1.1; Page 38)



APPENDIX – XII

Statement showing details of selected Districts, Talukas and GPs/Wards, and beneficiary survey

(Reference: Paragraph 3.3.1; Page 59)

Name of selected Districts	Name of test-checked Talukas	Name of GPs/Wards visited by Audit	Number of beneficiaries surveyed	
		Khodla	30	
	Palanpur	Madana (Gadh)	30	
Banaskantha		Rampura (Karaza)	30	
Danaskantna		Runi	30	
	Dhanera	Jadiya	30	
		Vinchhivadi	25	
		TarvadiyaHimat	30	
	Dahod	SimaliyaKhurd	30	
Dahod		Varvada	30	
Danod	Limkheda	Jada Kheria	30	
		Lukhavada	12	
		Patwan	22	
		Chibbhad Kutch	19	
	Vapi	Koparali	29	
Valsad		Salvav	21	
vaisau		Burla	30	
	Kaprada	Varoli jungle	30	
		MotiVahiyal	30	
		Dhunvav	19	
	Jamnagar	Jivapar	08	
Jampagar		Ward-5 (Urban)	30	
Jamnagar		Murila	6	
	Kalavad	Ward- 2 (Urban)	30	
		Ward- 3 (Urban)	30	
Total	611			

APPENDIX - XIII

Statement showing details of schools managed by the Society with number of students and funding pattern

Sr. No.	Type of schools	Number of schools	Number of students	Sharing of recurring cost <i>per</i> student <i>per</i> annum (figures in ₹)		
				GoI	GoG	
EMF	RS Schools					
1.	EMRS of GoI	27	8,991	42,000	10,000	
2.	EMRS – Vanbandhu Kalyan Yojana (VKY) of GoG	2	498	0	36,000	
3.	Ashram Schools of Dangs District of GoG	5	1,297	0	42,000	
4.	EMRS, Kherancha and EMRS, Bilvan - Sainik Schools of GoG	2	525	0	52,000	
	Sub-total	36	11,311			
5.	GLRS of GoI	43	13,252	27,100	10,000	
	Sub-total	43	13,252			
	Grand Total	79	24,563			

(Reference: Paragraph 3.4.1 and 3.4.2; Page 67 and 68)

(Source: Information provided by the Society)

														! ≩)	(7 in crore)
Year	Opening			Receipts	ipts			Total			Expenditure	liture			Closing
	Balance	Grants fo	r EMRSs	Grants fo	Grants for EMRSs Grants for GLRSs		Interest	available - funds	EM	EMRSs	GL)	GLRSs	Misc.	Total	balance
		Capital	Capital Revenue Capital Revenue	Capital	Revenue	grants	and other income		Capital	Capital Revenue Capital Revenue	Capital	Revenue			
2015-16	75.51	37.15	39.71	34.65	23.93	23.93 65.96	77.17	354.08	51.05	40.54	40.60	36.39	36.39 128.87	297.45	56.63
2016-17	56.63	79.54	56.96	40.86	42.64	76.74	22.57	375.94	26.77	42.56	9.77	43.59	89.53	212.22	163.72
2017-18	163.72	50.43	62.37	29.56	54.18	29.99	8.24	398.49	4.59	59.53	4.50	41.36	97.39	207.37	191.12
Total		167.12	159.04	159.04 105.07	120.75	172.69	107.98		82.41	142.63	54.87	121.34	121.34 315.79	717.04	

APPENDIX - XIV

Statement showing details of grants received and expenditure incurred during 2015-18

(Reference: Paragraph 3.4.4; Page 69)

(Source: Information provided by the Society)

APPENDIX – XV

Statement showing shortfall in availability of beds and mattresses in test-checked schools

Test-checked	Beds			Mattresses			Dining Tables		
schools	Re- quired	Available	Short- fall	Re- quired	Available	Short- fall	Re- quired	Available	Short- fall
EMRSs		<u> </u>			<u> </u>		1	<u> </u>	
Ambaji	477	500	0	477	500	0	80	0	80
Jagana	479	294	185	479	294	185	60	35	25
Kadana	338	155	183	338	338	0	42	0	42
Kaprada	423	423	0	423	423	0	59	59	0
Ukai	420	420	0	420	117	303	41	0	41
Waghodiya-I	250	250	0	250	250	0	43	0	43
Sub-total	2387	2042	368	2387	1922	488	325	94	231
GLRSs									
Jethy	300	200	100	300	200	100	50	50	0
Khadakwada	340	120	220	340	300	40	42	0	42
Mogra	540	450	90	540	290	250	90	0	90
Poshina	300	100	200	300	150	150	60	0	60
Sarotra	420	207	213	420	270	150	50	50	0
Sutharpada	333	260	73	333	263	70	70	60	10
Sub-total	2233	1337	896	2233	1473	760	362	160	202
Grand Total	4620	3379	1264	4620	3395	1248	687	254	433

(Reference: Paragraph 3.4.6.3; Page 77)