CHAPTER – I

SOCIAL SECTOR

CHAPTER-I: SOCIAL SECTOR

This Chapter of the Audit Report for the year ended 31 March 2016 deals with Audit findings on State Government units under the Social Sector.

During 2015-16, total budget allocation of the State Government in major Departments under Social Sector was ₹ 3863.57 crore, against which the actual expenditure was ₹ 2911.93 crore. Details of Department-wise budget allocation and expenditure are given in the following table.

Table- 1.1.1

(₹ incrore)

SL. No.	Department	Total Budget Allocation	Expenditure
1	Education	1667.31	1277.36
2	Sports & Youth Affairs	98.44	54.47
3	Library	9.62	10.21
4	Social Welfare	161.96	160.56
5	Relief & Rehabilitation	78.30	68.11
6	Food & Civil Supplies	41.40	38.47
7	Labour	24.38	6.86
8	Social & Cultural Affairs	2.51	2.50
9	Health & Family Welfare	734.75	515.12
10	Public Health Engineering	555.49	438.70
11	Urban Development	256.91	161.24
12	Housing	69.27	62.77
13	Panchayat Raj	163.23	115.56
Total		**3863.57**	**2911.93**

(Source: Appropriation Accounts 2015-16)

1.1.1 Planning and Conduct of Audit

The audit process starts with the assessment of risks faced by various Departments of the Government based on expenditure incurred, criticality/complexity of activities, level of delegated financial powers and assessment of overall internal controls.

Audit of 15 units involving expenditure of the State Government amounting to ₹ 670.23 crore was conducted under the Social Sector.

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

Major observations noticed in Audit pertaining to the Social Sector during 2015-16 are discussed in subsequent paragraphs of this Chapter. This Chapter contains *two* Performance Audit Reports on *(i) 'National Rural Health Mission'* and *(ii) 'Implementation of Right of children to free and compulsory education (RTE) Act 2009'* and three Compliance Audit Paragraphs.

Performance Audit

Health & Family Welfare Department

1.2 National Rural Health Mission

The National Rural Health Mission (NRHM) was launched throughout the country in April 2005 with the aim to establish a fully functional decentralized healthcare delivery system, and to increase access to quality health service for all. The NRHM has three main components, namely, (i) Reproductive and Child Health (RCH), (ii) Strengthening of Health Systems and (iii) National Disease Control Programme. Performance Audit was undertaken on NRHM in the State covering activities/programmes under the component RCH. Some of the significant audit findings are highlighted below:

Highlights

- ***The availably of functional health centres as per population norms was in excess of the requirement in Community Health Centre and Primary Health Centre, but there was shortage of 38 Sub-Centres. However, there was shortfall of functional Primary Health Centres and Sub Centres to the extent of 26 (18 per cent) and 302 (51 per cent) respectively vis-à-vis number of such centres actually approved by the State Government.***

  (Paragraph 1.2.8)

- ***The shortfall of health care professionals in the sampled District Hospitals was upto 157 (35 per cent). While the shortage in 6 CHCs was 133 (57 per cent), 11 PHCs had shortfall of 33 (33 per cent) against the requirement as per Indian Public Health Standards norm.***

  (Paragraph 1.2.9.1 (i), (ii) and (iii))

- ***As of March 2016, out of 685 Accredited Social Health Activists (ASHAs) in the four sampled districts, only 262 (38 per cent) ASHAs were trained. Moreover, ASHA kits were not provided to 55 per cent of ASHAs in position.***

  (Paragraph 1.2.10.1 and 1.2.10.2)

- ***Achievement of institutional delivery was 40 per cent of registered pregnant women during 2011-16.***

  (Paragraph 1.2.11.1)

- ***Antenatal mandatory check-ups were availed by 37 per cent of pregnant women registered. The postnatal care at the health centres was availed by only 42 per cent of institutional deliveries in the four sampled districts.***

  (Paragraph 1.2.11.3 and 1.2.11.5)

- ***There was low coverage of full immunisation of children in the health centres between 11 per cent and 58 per cent. The achievement of administration of Vitamin A solution was also only between 8 and 26 per cent of the targeted children.***

(Paragraph 1.2.12 and 1.2.12.1)

- ***The coverage under Janani Suraksha Yojana (JSY) for institutional and home deliveries was 60 per cent and 56 per cent respectively during 2011-2016. There was shortfall in payment of incentive to the extent of ₹ 165.89 lakh for institutional deliveries and ₹7.09 lakh for home deliveries.***

(Paragraph 1.2.13)

1.2.1 Introduction

The NRHM was launched throughout the country in April 2005 with an aim to provide accessible, affordable and quality healthcare to the rural population especially to poor and vulnerable sections. The main components of the programme include (i) Reproductive, Maternal Health, New Born and Child Health, Immunisation, etc. for reduction of maternal and infant mortality (ii) Strengthening of Health Systems[1] and (iii) National Disease Control Programmes[2]. Major emphasis was laid on strengthening service delivery in health centres by equipping them with adequate physical infrastructure, health care personnel and by ensuring availability of medical equipment and drugs. A Performance Audit was undertaken on Reproductive and Child Health (RCH) interventions to assess as to what extent the health care services have been delivered as per requirement by examining the availability of physical infrastructure, healthcare professionals and various support services.

In order to achieve the overall NRHM's objectives, Government of India (GoI) in its Millennium Development Goals during the 12th Five Year Plan (2012-17) put an increased emphasis on delivery of essential RCH interventions[3] to reduce Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR) and Total Fertility Rate (TFR).

1.2.2 Organizational structure.

At the State level, NRHM functions under the overall guidance of the State Health Mission (SHM) headed by the Chief Minister. The programme activities are implemented through the State Health Society (SHS), headed by the Mission Director. The Commissioner, Health and Family Welfare, Government of Arunachal Pradesh (GoAP) is the overall administrative head of NRHM.

At the district level, the programme is implemented by the District Health Society (DHS) headed by the Deputy Commissioner of the district with District Medical Officer as

1 Mobile Medical Units, Infrastructure, Human Resource, Drugs and Logistics, etc.

2 National Vector Borne Disease Control Programme, Revised National TB Control Programme, National Blindness Control Programme, National Iodine Deficiency Disorders Control Programme, etc.

3 Outcome indicators: Infant Mortality Rate (IMR)-25/1000 live births, Maternal Mortality Rate (MMR)-100/100000 live births and Total Fertility Rate (TFR)-2.1.

Member Secretary (NRHM) and implemented by District Programme Management Units (DPMUs) headed by District Programme Managers.

1.2.3 Audit Objectives

The audit objectives were to examine and assess:

- adequacy and effectiveness of financial management and utilization of financial resources.
- adequacy of physical infrastructure and support services for providing health care services.
- availability of adequate health care professional at health care centres.
- to what extent various components of Reproductive and Child Health programme were implemented.
- adequacy and effectiveness of monitoring mechanism.

1.2.4 Audit Criteria

The Audit findings were benchmarked against the following audit criteria:

- NRHM Framework for Implementation (2005-12 & 2012-17).
- NRHM Operational Guidelines for Financial Management.
- Indian Public Health Standards (IPHS) - Guidelines (2007) for Sub-Centres, Primary Health Centres, Community Health Centres and District Hospital.
- Indian Public Health Standards (IPHS) - Guidelines (Revised 2012) for Sub-Centres, Primary Health Centres, Community Health Centres and District Hospital.

1.2.5 Scope of Audit and Methodology

The Performance Audit on **"National Rural Health Mission"** covering the period from 2011-12 to 2015-16 was carried out (April 2016 to August 2016) through examination of the records of the SHS, Director of Health Services, Director of Family Welfare and DHS of four sampled districts *viz.*, *Lohit, East Siang, Lower Subansiri* and *East Kameng* selected by using Simple Random Sampling Without Replacement (SRSWOR) method. A test check of records was conducted in 52 health centres (1 District and 3 General Hospitals), 6 Community Health Centres (CHCs), 11 Primary Health Centres (PHCs) and 31 Sub-Centres (SCs) in the four sampled districts. Joint inspection was also conducted by audit along with state government officials of various health centres.

The Performance Audit commenced with an Entry Conference held on 18 April 2016 with the Mission Director (NRHM) and other programme implementing Officers, where the audit methodology, objectives, criteria, scope, etc., of the Performance Audit were explained in detail.

An Exit Conference was held with the State Government on 29 November 2016 to discuss the audit findings contained in the Audit Report. The report was finalized incorporating the replies of the Department wherever received.

1.2.6 Acknowledgement

Indian Audit & Accounts Department acknowledges the assistance extended by Department of Health & Family Welfare, State Health Mission (NRHM), District Health Mission (NRHM) and Health Centres of the sampled districts in facilitating this audit.

Audit findings

The results of the Performance Audit are discussed in the succeeding paragraphs.

1.2.7 Fund Management

Government of India (GoI) provided 90 *per cent* and the State Share was 10 *per cent* of the total programme funds in the State.

1.2.7.1 Fund flow and expenditure

In Arunachal Pradesh, the total funds released by GoI and the State for implementation of various programmes under NRHM during the period 2011-12 to 2015-16 was ₹ 630.80 crore, out of which ₹ 477.00 crore (76 *per cent*) was allocated for implementation of RCH interventions. Up to the year 2013-14, GoI released funds directly to the State Health Society (SHS) but from the year 2014-15 funds were released by GoI to the State Government, which in turn released it to the SHS.

Status of release of funds and expenditure on RCH during the period from 2011-12 to 2015-16 was as follows:

Table -1.2.1: Funds release and expenditure during 2011-16

(₹ in crore)

Year	Opening balance	Fund released		Interest earned	Total fund available	Total Expenditure	Closing balance (unspent)	% of expenditure
		Centre	State					
2011-12	37.87	49.65	15.00	1.55	104.07	79.42	24.65	76
2012-13	24.65	59.93	10.00	2.22	96.8	69.13	27.67	71
2013-14	27.67	55.69	10.50	1.96	95.82	80.56	15.26	84
2014-15	15.26	115.83	15.24	1.23	147.56	77.37	70.19	52
2015-16	70.19	134.07	11.09	0.98	216.33	104.39	111.94	48
Total		**415.17**	**61.83**	**7.94**		**410.87**		**79**

Source: State Health Society (SHS). (The expenditure figures for 2015-16 are provisional).

Audit observed that during the period 2011-2016,

- Out of the available funds of ₹ 522.81 crore (OB+Fund released+Interest), the SHS could utilize only ₹ 410.87 crore. Year wise utilization of funds ranged from 48 *per cent* to 84 *per cent* of the total funds available each year. However, utilization of funds during the last two years of 2014-15 and 2015-16 was only 48 *per cent* to 52 *per cent* of the available funds due to delay in release of funds by the State Government.
- There was delay ranging from 44 to 390 days in releasing of fund (₹ 121 crore) from the State Government to SHS during 2014-15.
- During 2015-16, out of ₹ 134.07 crore released by GoI, the State Government released only ₹ 88.35 crore (66 *per cent*) to SHS with delays ranging from 56 to

138 days. The balance amount was lying with the State till the date of audit (August 2016).

As a result of inadequate utilisation of fund, the planned activities for the year could not be completed as per target and spilled over to the subsequent years. The SHS had to approach GoI for revalidation of funds as the funds could not be spent during the respective years. Further, GoI adjusted unspent balances from further releases.

While accepting the audit contention, the Department stated (December 2016) that fund release from State Government through treasury on an average takes 120 days, which consequently results in unspent balance at the year end and added that necessary steps would be taken for timely release of funds.

1.2.7.2 Outstanding Utilization Certificates

Rule 212 (1) of General Financial Rules (GFR) and Operational guidelines of NRHM stipulate that SHS should submit Utilization Certificates (UCs) against the funds received within 12 months of the closure of the financial year. GoI was also required to release subsequent grants-in-aid only after the SHS submitted UCs upto 75 *per cent* of funds received.

It was noticed in audit that there were delays in submission of UCs, which ranged from 12 to 48 months. There was a need for streamlining of fund management at all levels to ensure monitoring of flow of fund and expenditure of various programme activities.

1.2.7.3 Award of works without tendering

Rule 129(vi), Rule 132(iv), (v), (vi), Rule 150 and 151of GFR stipulate that no work shall commence without inviting tenders and formal execution of agreement with the contractors/suppliers. For works costing ₹ 5.00 lakh and above, and for procurement of goods above ₹ 25.00 lakh, open tenders should be invited; and for work costing less than ₹ 5 lakh and for goods costing above ₹ 1.00 lakh to ₹ 25.00 lakh, limited tender should be called.

A test check of records in four sampled districts for the period 2011-2016 revealed that the DHSs awarded 77 civil works (each costing ₹ 2.50 lakh to ₹ 250.00 lakh) for ₹ 12.28 crore to various local contractors without inviting tenders at a lump sum cost. District wise details are given in the following table:

Table 1.2.2

Sl. No.	Name of the District	No. of works	Value of the works (₹ in lakh)
1.	Lohit	18	491.28
2.	Lower Subansiri	16	202.40
3.	East Siang	14	175.80
4.	East Kameng	29	358.68
Total		**77**	**1228.16**

Source: Information furnished by DHSs.

Audit observed that in none of the works, formal agreements were executed with the local contractors to safeguard the interest of the Government. As tender procedure was

not followed, competitive pricing and transparency was not ensured in the award of these works by the DHSs.

1.2.8 Health Care Infrastructure

The NRHM aimed at reducing the gap in the existing health infrastructure by establishing new health centres and improvement and strengthening of existing centres. It also sought to upgrade and strengthen support services and facilities at all levels of health centres.

According to the NRHM guidelines, health centres are to be set up based on population norms[4]. The population of the State as per 2011 Census was 13,83,727 and based on the norm, the State was required to have 461 SCs, 69 PHCs and 17 CHCs. Considering rural villages being sparsely populated in the State and to reduce the distances of health centres from one habitation to another for the rural public, the State Government had approved 588 SCs, 143 PHCs and 63 CHCs as of March 2016. The position of health centres as on March 2016 in the State vis-à-vis the norms was as under:

Table 1.2.3

Level	Requirement as per population	Actually Approved	Functional	Excess(+)/ Shortfall (-)	Excess(+)/ Shortfall (-)
				w.r.t population norms	w.r.t approved
CHC	17	63	63	(+) 46	Nil
PHC	69	143	117	(+) 48	(-) 26
SC	461	588	286	(-) 175	(-) 302

It can be seen that availability of functional health centres as per population norm was in excess of the requirement in CHCs and PHCs but there was shortage of 38 *per cent* in SCs as on March 2016. However, there was shortfall of PHCs and SCs by 18 *per cent* and 51 *per cent* respectively vis-à-vis actually approved by the State Government. While the State Government could not even meet the norms of 461 SCs, excess of 127 SCs were approved.

The position of availability of functional health centres in the four sampled districts as on March 2016 was as under:

Table 1.2.4

Health Centre	Sub Centre				Primary Health Centre				Community Health Centre			
District	*ES*	*L*	*EK*	*LS*	*ES*	*L*	*EK*	*LS*	*ES*	*L*	*EK*	*LS*
Approved	40	27	51	36	15	8	11	8	5	3	4	2
Functional	33	8	23	23	5	3	4	4	5	0	3	2
Shortfall	**(-)7**	**(-)19**	**(-)28**	**(-)13**	**(-)10**	**(-) 5**	**(-) 7**	**(-) 4**	**Nil**	**(-) 3**	**(-) 1**	**Nil**
Percentage of shortfall	*18*	*70*	*55*	*36*	*67*	*63*	*64*	*50*	*0*	*100*	*25*	*0*

ES- East Siang, L- Lohit, EK- East Kameng, LS- Lower Subansiri

[4] A village with a population of 5000 (3000 in hilly and tribal areas) should have one SC, 30,000 population (20,000 in hilly and tribal areas) one PHC and 150,000 population (80,000 in hilly and tribal areas) a CHC.

As can be seen from the above table, there were shortfall in functional SCs (ranging between 18 and 70 *per cent*) and PHCs (ranging between 50 and 67 *per cent*) in all the four sample districts. As regards functional CHC, there was not even single functional CHC in Lohit district.

The shortfall of SCs being the most peripheral health centre which link the primary and community health centre, indicated that the health services were not adequately available to the rural population. Moreover, the actual shortage of PHCs as per State assessment was 18 *per cent* of the requirement. Thus, the objective of creating decentralized health care facilities remained to be achieved in the state.

1.2.8.1 Establishment of new health centres

Target and achievement of construction of new health centres during the five year period 2011-16 was as follows:

Table 1.2.5

Year	Sub Centre				Primary Health Centre			
	Approved	Target	Achieve-ment	Function-al	Approv-ed	Target	Achieve-ment	Functional
2011-12	464	15	15	286	118	Nil	-	97
2012-13	472	66	66	286	127	Nil	-	97
2013-14	544	Nil	-	286	138	3	3	117
2014-15	588	31	31	286	143	Nil	-	117
2015-16	588	17	17	286	143	1	1	117
		129	129			4	4	

Source: Information furnished by SHS

The above table reveals that;

- During the period 2011-16 the State Government approved to increase the number of SCs by 124. However, the State Government set a target to construct 129 new SCs, which has been shown as achieved.
- Though all 129 SCs were stated to have been constructed, the number of functional SCs remained 286 throughout the period, which indicates that none of the newly constructed SCs were made functional.
- Similarly, at the PHC level, the State Government approved to increase the number of PHCs from 118 to 143. However, actual target set for construction of new PHCs was only four, which has been shown as achieved. However, the number of functional PHCs witnessed an increase from 97 to 117 during the period.

There was nothing on record to clarify reasons for

- setting target higher than approved increase in number of SCs;
- increase in number of functional PHCs by 20 whereas only four newly PHCs were constructed.

In view of the discrepancies in number of functional SCs and PHCs, the integrity of the data provided by the State Government and also uploaded on Health Management

Information System which forms the basis of planning does not appears to be reliable. The State Government needs to identify the reasons for these discrepancies and take corrective action.

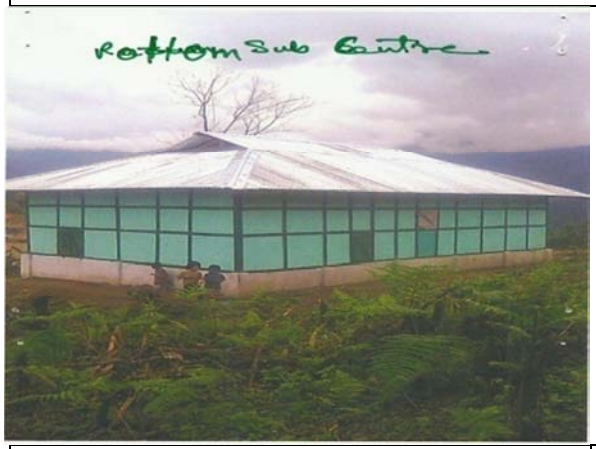
Thus, the State Government was not only unable to address the gap in existing SC and PHC but also failed to make the newly constructed SCs functional.

In response, the Department while accepting the audit observations stated (December 2016) that necessary corrective action would be taken to reduce the gap.

During joint physical verification, it was noticed that eight[5] SCs constructed (at a total cost of ₹ 103.16 lakh) by the DHSs, in Lower Subansiri and East Kameng districts between March 2013 to November 2015 were not operationalised as of July 2016 even after a lapse of 8 to 41 months of their construction. The photographs of some of such facilities which are yet to be operationalised are given below.

Unoccupied Sub Centre building at Khodaso, East Kameng

Unoccupied Sub Centre building at Alangtopte, East Kameng



Unoccupied Sub Centre building at Rottom, Lower Subansiri

Unoccupied Sub Centre building at Radphu, Lower Subansiri

The reasons for non-operationalisation of the newly constructed five SCs (₹ 68.08 lakh) in Lower Subansiri district was stated to be due to non-deployment of manpower and

[5] Lower subansiri: Seya, Radhpu, Bas camp, Rottom & Repari Sub Centres (Completed at a total cost of ₹ 68.08 lakh between March 2013 and October 2015);
East Kameng: Khodaso, Alangtopte & Gumtung Sub centres (Completed at a total cost of ₹ 35.08 lakh between August 2013 and November 2013).

lack of equipment/furniture. In East Kameng district, three SCs (₹ 35.08 lakh) were not operationalised due to non-provision of water and electrical connection, and lack of equipment/furniture.

1.2.8.2 Availability of basic amenities

As per the guidelines of the NRHM, basic amenities are to be provided in different health centres. Joint physical verification **(Appendix-1.2.1)** revealed the following:

- Out of 31 SCs test checked, seven SCs were not having functional toilets; 24 SCs were not having separate toilet for male and female; 13 SCs were not having regular water supply; 29 SCs did not have water storage facilities; 14 SCs did not have electric power supply and 13 SCs were not provided with weighing machine.
- Out of 11 PHCs test checked, four PHCs were not having regular water supply; six PHCs did not have water storage facilities; two PHCs did not have electric power supply; four PHCs were not having separate toilets for male and female; and eight PHCs were not having power back up/generator.
- Out of six CHCs test checked, four CHCs did not have water storage facility as well as power back up/generator.
- Out of four DHs test checked, one DH did not have power back up/generator.

Thus, non-availability of essential amenities in the above test checked health centres would have adversely affected the quality of health care services provided in these centres.

1.2.8.3 Provision of medical facilities/equipment

The joint physical verification **(Appendix-1.2.2)** revealed the following shortfall in availability of medical facilities and equipment:

- Out of 31 SCs test checked, 19 SCs were not provided with examination table, 30 SCs were not having new born corner and 26 SCs did not have labour rooms.
- Out of 11 PHCs test checked, two PHCs were not providing in-patient services; 11 PHCs did not have Vasectomy and Tubectomy facilities; two PHCs did not have examination table; and five PHCs did not have new born corners.
- Out of 6 CHCs test checked, none of the CHCs were having operation theatre and blood storage facilities; five CHCs did not have x-ray services, and one CHC was not providing diagnostic services.
- Out of four DHs test checked, two DHs did not have X-ray services and blood storage facility.

Thus, non-availability of the basic medical facilities/equipment would have an adverse effect on providing emergency medical care.

In response, the Department agreed that gaps existed in infrastructure which would require budgetary support and necessary steps would be taken in this direction.

1.2.8.4 Availability of Cold chain equipment

Under immunisation programme of RCH, the NRHM guidelines envisaged providing equipment for cold chain to ensure vaccines are preserved at the required range of temperature in health centres (PHCs, CHCs and DHs).

Audit observed that cold chain equipment were provided to 78 out of 117 PHCs, 50 out of 63 CHCs and 15 out of 16 DHs in the State as of March 2016. The availability of cold chain equipment in test checked healthcare centres in the sampled districts (Details in **Appendix 1.2.3**), as noticed in joint physical verification during field visits, was as under:

- Walk-in-coolers and walk-in-freezers were not provided in any of the health centres of the four sampled districts.
- In East Kameng district, two PHCs did not have ice lined freezer, deep freezer and refrigerator and one CHC (Pakke Kasang) did not have deep freezer.

1.2.8.5 Mobile Medical Units

As per GoI norm, a Mobile Medical Unit (MMU) was to be provided under NRHM in every district to enable outreach services particularly in hilly and difficult areas of the State and 20 health camps were to be conducted by each district in a month. A MMU consists of three vehicles, one for carrying medical and para-medical personnel, second for carrying basic laboratory facilities and the third for carrying diagnostic equipment. Each unit was to be provided with dedicated manpower (one doctor, one nurse, one radiologist, one lab attendant, one pharmacist and a helper and driver) and diagnostic equipment such as X-Ray, ultrasound, ECG machine and generator. Besides, the suggested list of life-saving drugs and for common ailments along with a cold storage device for storage of heat sensitive drugs and vaccines were to be provided.

Audit observed that:

- As on March 2016, except of Longding district, 16 district had one MMU for each district.
- Diagnostic vehicle, in which USG, X-ray machine and ECG machine, laboratory equipment, etc. were to be housed, was not provided to East Kameng district.
- Diagnostic vehicle was lying idle in Lohit district for about four years and for more than six months in East Siang.
- No dedicated manpower including Doctors, Staff Nurses/ANMs, laboratory technicians were attached in the MMUs in the sampled districts.

In the sample districts, during the period 2011-2016, against the target of 1200 camps in each district only 34 (2.83 *per cent*), 21 (1.75 *per cent*), 235 (19.58 *per cent*) and 14 (1.17 *per cent*) camps were conducted in Lohit, Lower Subansiri, East Siang and East Kameng districts respectively and a total of 8,450 beneficiaries were treated.

Thus, the MMUs were not put to optimal use.

1.2.9 Human resource management

The objective of NRHM was to make the health centres provide round the clock medical services and maximize access of health care services to all section of the society especially to the rural areas. It also envisaged to make human resource available in all facilities at par with IPHS norms.

Audit, however, observed that the Department of Health Services did not have any centralized database on the sanctioned strength and deployment of health care professional in various health centres in the State.

1.2.9.1 Availabilityof Manpower

Audit examined availability of manpower based on IPHS norms in the test checked Health Care Centres in the four sampled districts. The position of availability of manpower against requirement as of March 2016 has been discussed in the subsequent paragraphs.

(i) District Hospitals

As per IPHS norms, District Hospital (DH)/General Hospital (GH) which are First Referral Units (FRUs) should have 29 Medical Specialists, 45 Nurses, 31 Para Medical staff and 6 Support staff for Blood Bank. The position of availability of manpower in four sampled districts as of March 2016 was as follows:

Table 1.2.6

Category of post/ (Number of posts)	Position of manpower (+) Excess / (-) Shortage)			
	GH, Tezu, Lohit	GH Pasighat, East Siang	GH Ziro, Lower Subansri	DH Seppa, East Kameng
Medical Officers (29)	(-) 17	(+) 20	(-) 6	(-) 20
Staff Nurses (45)	(-) 9	(-) 7	(-) 15	(-) 16
Para Medical Staff (31)	(-) 7	(-) 6	(-) 14	(-) 20
Blood Bank (6)	(-) 6	(-) 3	(-) 5	(-) 6

Source: Data collected from health centres.

It can be seen from the above that

- There was uneven deployment of Medical Officers across districts while General Hospital Pasighat, East Siang district had 20 Medical Officers in excess of the norms, there was shortage of Medical Officers in General Hospitals at Lohit and Lower Subansiri and District Hospital East Kameng, which ranged between 6 and 20 Medical Officers.
- In all four districts, there was shortage of Staff Nurses and Paramedical Staff. Substantial shortage of 16 and 20 Staff Nurses and Paramedical staff respectively was noticed in District Hospital, Seppa, East Kameng district followed by General Hospital Ziro, Lower Subansiri district with a shortage of 14 to 15 Paramedical staff and Staff Nurses.

- The shortfall in supporting staff in Blood Bank was to the extent of 83 *per cent*.

Further, Audit observed that specialists as shown in the following table, required as per IPHS norms were not available in the sample district hospital as on March 2016.

Table 1.2.7: List of Specialist not available at District Hospital

Sl No.	*District Hospital*	*Specialist not available*
1	Pasighat (East Siang)	Radiologist
2	Tezu (Lohit)	Medicine, Orthopaedics, Radiology, Pathology, Ear Nose and Throat (ENT) and Psychiatry
3	Ziro (Lower Subansiri)	Medicine, ENT and Psychiatry.
4	Seppa (East Kameng)	Medicine, Surgery, Obstetrics and Gynaecology, Anaesthesia, Ophthalmology Orthopaedics, Radiology, Pathology, Psychiatry.

It was also noticed that there was excess deployment of four and one Dental Surgeon in DHs at Pasighat (East Siang) and Ziro (Lower Subansiri) while there were no dental surgeons in three sample CHCs (at Ruskin, Yazali and Old Ziro).

Despite being First Referral Units (FRUs), the District/General Hospitals in the four sampled districts had substantial shortfall in availability of different category of specialist which must have posed serious constraints on the delivery of health services.

(ii) Community Health Centres

As per IPHS norms, CHCs are required to have 12 Medical Specialists, 10 Nurses, 17 Paramedical staff. Position of manpower in 6 selected CHCs of the four sampled districts as of March 2016 was as under:

Table 1.2.8

Category of the post/ (Number of posts)	Position of manpower (+) Excess/ (-) Shortage)					
	East Siang		East Kameng		Lower Subansiri	
	Ruksin CHC	Mebo CHC	Seijosa CHC	PakkeKasang CHC	Yazali CHC	Old Ziro CHC
Medical Officers (12)	(-) 3	(-) 6	(-) 7	(-) 9	(-) 10	(-) 8
Staff Nurses (10)	(+) 3	(-) 3	(-) 4	(-) 8	(-) 6	(-) 3
Paramedical Staff (17)	(-) 7	(-) 14	(-) 9	(-) 15	(-) 11	(-) 10

Source: Data collected from health centres.

It can be seen from the above table that there was shortfall of manpower in various category of health care professionals and supporting staff in the six CHCs.

Further, Audit observed that specialists as shown in the following table, required as per IPHS norms were not available in the sampled CHCs as on March 2016.

Table 1.2.9: List of Specialist not available at CHCs

Sl. No.	*Name of the CHC*	*Specialist not available*
1	Mebo, CHC	General Surgeon, Physician, Obstetrician and Gynaecologist, Anaesthetist.
2	Ruksin, CHC.	Paediatrician, Dental Surgeon
3	Yazali CHC	General Surgeon, Physician, Obstetrician and Gynaecologist, Paediatrician, Anaesthetist, Dental Surgeon.
4	Old Ziro, CHC	General Surgeon, Physician, Obstetrician and Gynaecologist, Paediatrician, Anaesthetist, Dental Surgeon.
5	Seijosa, CHC	General Surgeon, Physician, Obstetrician and Gynaecologist, Paediatrician, Anaesthetist.
6	Pakke Kesang, CHC	General Surgeon, Physician, Obstetrician and Gynaecologist, Paediatrician, Anaesthetist.

It was also noticed that there was excess deployment of General Surgeon (one), Physician (one) and Anaesthetist (one) in Ruksin CHC. Also, there was excess deployment of General Duty Medical Officers in Mebo CHC (one) and Old Ziro CHC (two).

Shortage of Medical Officers in CHCs against IPHS norms would have affected health services in these test checked CHCs. Besides, the objective of developing the CHCs as the First Referral Unit (FRU) have not been achieved to that extent and the required health care professionals need to be in position to deliver to the expected health services.

(iii) Primary Health Centres

As per IPHS norms, PHCs should have one Medical Officer (MBBS), three Staff Nurses and five Paramedical staff. The actual deployment of manpower position in 11 PHCs test checked in four sampled districts was as indicated in the following table:

Table 1.2.10

Posts	Position of manpower (+) Excess / (-) Shortage)										
	East Kameng		Lower Subansiri		Lohit			East Siang			
	Veo	Rilloh	Deed Neelam	Yachuli	Wakro	Sunpura	Lailiang	Sille	Bilat	Borguli	Namsing
Medical Officers (one)	(-) 1	0	(+) 1	0	0	0	0	0	0	(-) 1	0
Staff Nurse (three)	(-) 2	(-) 1	(-) 2	(+) 1	(-) 3	(-) 1	(-) 3	(-) 3	0	(-) 2	(-) 1
Paramedical Staff (five)	(-) 3	(-) 5	(+) 3	(-) 1	(+) 5	(-) 1	(+) 7	(+) 5	(+) 1	(-) 1	(-) 2

Source: Data collected from health centres

As can be seen from the table

- No Medical Officer was posted in Veo PHC (East Kameng district) and Borguli PHC (East Siang district) where as one Medical Officer was in excess in Deed Neelam PHC (Lower Subansiri district).

- Shortage of Staff Nurse was across all PHCs test checked except PHC Yachuli (Lower Subansiri district).
- There was no proper distribution of Paramedical Staff, while on the one hand some PHCs (Deed Neelam PHC, Wakro PHC, Lailiang PHC and Sille PHC) had excess staff ranging between three and seven, on the other hand in Rilloh PHC no paramedical staff was posted and in Veo PHC there was shortage of three staff.

(iv) Sub Centres

As per IPHS norms, a Sub Centre should have one ANM/Female Health Worker, one Male Health Worker along with one Sweeper. Analysis of the actual deployment *vis-à-vis* requirement of manpower in 31 test checked SCs of four sampled districts as on March 2016 revealed that:

- In all 31 SCs test checked, ANM/Female Health Workers were in position but with an overall excess of 12 personnel[6] who should be redeployed in other SCs where there were shortages.
- While 21out of 31 SCs did not have Male Health Workers, four SCs (Hari, Bulla, Hong and Manypolyang) under Lower Subansiri and one SC (Danglat) under Lohit district had seven excess Male Health Workers.
- In East Siang district, no Male Health Workers were posted in 9 out of 10 SCs and in East Kameng district, 3 out of 5 SCs did not have Male Health Workers.
- There was substantial shortfall in the category of Safai Karamchari in all 31 SCs ranging from 5 to 8 personnel under each sampled district.

Efficiency of health care centres suffered due to deficiency in manpower and non-availability of basic infrastructure and equipment as brought out in the earlier paragraphs. As a result, these health care centres were not able to deliver the expected services. Staff at all levels need rational redeployment from excess to where there are shortages.

In reply, the Department accepted the audit observations and stated that wherever manpower gaps are, efforts are being made to fill the gaps.

1.2.10 Availability of Accredited Social Health Activist (ASHA)

The NRHM aimed at promoting access to improved healthcare at household level through a trained female community health worker called Accredited Social Health Activist (ASHA) in every village, in the ratio of one per 1,000 populations and one per habitation in tribal, hilly and desert areas. ASHA was expected to act as an interface between the community and the public health system, who would be an honorary volunteer, receiving performance based compensation for promoting universal immunisation, referral and escort services for RCH and other health delivery programmes. ASHA plays an important role in promoting right health practices and facilitate effective utilization of health services among the rural people. In order to

[6] Lower Subansiri: eight; East Siang: two; Lohit and East Kameng: one each.

enhance their skills and knowledge in motivating pregnant women for institutional deliveries, Antenatal Care, Postnatal Care, Care of new-born baby, Immunisation, prevention and control of non-communicable disease, etc., ASHAs were to undergo a series of training programmes.

Audit observed that:

- As on March 2016, against the requirement of 4015 ASHAs, there were 3826 ASHAs in position in the State.
- In the four sampled districts, there were 685 ASHAs in position against the requirement of 756 as on March 2016. While there was no shortage in Lohit and East Siang districts, in Lower Subansiri district shortage was 5 *per cent* and in East Kameng district shortage was more pronounced (20 *per cent*).
- In the four sampled districts, out of 685 ASHAs in position, only 262 ASHAs were imparted training, which indicated that a large number of ASHAs were not adequately trained to discharge their assigned roles.

1.2.10.1 Providing of ASHA kits

ASHAs are to be provided with a drug kit containing a set of 24 items of drugs/equipments and products to enable her to provide basic level care. The drug kits mainly contain drugs for minor ailments to be replenished every month.

Analysis of provision of ASHA kits in the four sample district revealed that out of 685 ASHAs to be supplied with kits as on March 2016, only 311 ASHAs were provided the kits. Thus, 55 *per cent* of ASHAs were not provided with kits.

Audit further noticed that even in those cases where kits were provided, only 10 items instead of 24 prescribed items were included in the kits. Essential items which were not provided were Paracetamol syrup, Zinc tablets, Spirit, Soap, Nischay kit, Rapid diagnostic kit, slides for malaria and lancets, sanitary napkins, etc. This fact also emerged in the survey of ASHAs conducted by audit in four sample districts as highlighted in Paragraph 1.2.14.1.

Thus, the purpose of appointing ASHAs without imparting training to enhance their skills and not providing necessary kits frustrated the objective of providing basic health services at household level through ASHAs.

1.2.11 Reproductive and Child Health

Reproductive and Child Health programme under NRHM aimed at reducing maternal and infant mortality. Accordingly, the programme emphasised institutional deliveries to provide reliable access to Antenatal Care, Skilled Birth Attendants, Delivery Care, Postnatal Care and emergency obstetric care, etc. In order to give impetus to institutional deliveries, a *'Janani Suraksha Yojana (JSY)'* scheme provided financial package to all pregnant women registered for institutional deliveries.

Under this scheme registered pregnant women are tracked and followed up by ASHAs from the stage of Antenatal Care, Delivery and Post-delivery care. Micro Birth Plans

(MBP) and Mother and Child Health (MCH) card are also to be maintained at the health centres for effective monitoring of the antenatal and post-delivery care.

1.2.11.1 Status of Institutional deliveries

The details of pregnant women registered and actual institutional delivery during the five year period from 2011-12 to 2015-16 were as given in the following table:

Table 1.2.11

Year	Number of pregnant women registered	Number of pregnant women who opted institutional delivery	Shortfall	Percentage shortfall	Domiciliary deliveries
2011-12	26,290	11,330	14,960	60	532
2012-13	30,809	12,203	18,606	60	751
2013-14	34,633	12,968	21,665	63	695
2014-15	35,542	13,283	22,259	63	1053
2015-16	29,631	13,578	16,053	54	1207
Total	**156,905**	**63,362**	**93,543**	**60**	**4238**

Source: Data furnished by SHS.

As per the information provided by SHS, it can be seen that during the period 2011-2016, out of 156,905 pregnant women registered, only 63,362 (40 *per cent*) opted for institutional delivery in the State Government managed healthcare centres and 4238 (3 *per cent*) had domiciliary delivery. No information in respect of the remaining pregnant women registered were available on records, which indicated that the tracking system of the mother and the child from the antenatal care to postnatal care was inadequate. MBP and MCH card were not maintained in any of the PHCs and SCs test checked. As a consequence, all the registered pregnant women could not be tracked and followed up for check-ups, institutional delivery and postnatal care as is evident from the low achievement in the institutional deliveries, postnatal care as brought out in subsequent paragraphs.

1.2.11.2 Target and achievement

Year wise target fixed by SHS and achievement on institutional deliveries during 2011-2016 was as given below:

Table 1.2.12: Target and achievement

Year	Target	Achievement	Percentage
2011-12	27,475	11,330	41
2012-13	28,187	12,203	43
2013-14	28,918	12,968	45
2014-15	29,670	13,283	45
2015-16	24,730	13,578	55
Total	**138,980**	**63,362**	**46**

Source: Data furnished by SHS.

It can be seen that the achievement of target was showing an increasing trend, however, the achievement against the target during the five year period was only between

41 *per cent* and 55 *per cent*. This is indicative of low performance of the health centres in providing maternal and child care services.

Year wise achievement of target in institutional deliveries in four sampled districts during 2011-2016 was as detailed in **Appendix 1.2.4**.

Analysis of achievement revealed that though the achievement of institutional delivery against target fixed was 88 *per cent*, this needs to be seen against the low target fixed by DHS of all the four sampled districts as compared to actual number of registered pregnant women. It can be seen that only 19,240 (45 *per cent*) out of 42,701 pregnant women registered during 2011-16 opted for institutional deliveries in the health centres in the sampled districts.

Lack of specialist doctors at health centres, as evident from the finding in paragraph 1.2.9.1 may be a reason for registered pregnant women not coming for delivery to health centres.

1.2.11.3 Antenatal Care

Under RCH, to enhance safe motherhood, pregnant women are to be registered in the health centre within 12 weeks of pregnancy and have to be provided with services of four antenatal check-ups, 100 days Iron Folic Acid (IFA) tablets, two doses of Tetanus Toxoid (TT), correct diet and vitamin supplements. Moreover, early detection of complications during pregnancy through the prescribed antenatal check-ups is an important intervention for preventing maternal mortality and morbidity.

The position of Antenatal Care service delivery in the State during 2011-16 was as given in the following table (Centralised data for first and second visits of registered pregnant women was not available):

Table- 1.2.13

Year	Number of pregnant women registered						
	Received check-ups				Given Tetanus Toxoid (TT) immunisation		Given 100 IFA tablets
	At the stage of registration	First Visit (20-24 weeks)	Second Visit (28-32 weeks)	Third Visit (34-36 weeks)	First round	Second round	
2011-12	26,290	NA	NA	9,851	15,306	11,492	7,641
2012-13	30,809	NA	NA	9,995	18,019	12,802	13,647
2013-14	34,633	NA	NA	11,985	21,456	14,518	14,295
2014-15	35,542	NA	NA	13,517	21,379	14,977	21,692
2015-16	29,631	NA	NA	12,771	18,260	14,149	18,866
Total	**156,905**	**-**	**-**	**58,119**	**94,420**	**67,938**	**76,141**

Source: Data furnished by SHSNA-Data not available in HMIS Portal.

The Audit observations are as under:

- Out of 1,56,905 pregnant women registered during 2011-16, only 58,119 (37 *per cent)* came for third visit (34-36th week) check-ups. The shortfall in attendance of the registered pregnant women during third visit ranged between 57 *per cent* and 68 *per cent* during the period 2011-16.

- Similarly, the shortfall in immunisation of first dosage of TT was between 38 *per cent* and 42 *per cent*; the shortfall in second dosage was even higher at 52 *per cent* to 58 *per cent* of the total registered pregnant women.
- In administration of IFA tablets, the shortfall was 38 *per cent* to 71 *per cent* of registered pregnant women during the period 2011-16.

The above position indicated that the antenatal care for maintaining maternal and child health was not availed by 63 *per cent* of registered pregnant women and the tracking system for follow up of mother and child was ineffective.

The shortfall in administration of IFA tablets had to be viewed in light of the fact that for IFA syrup/tablets worth ₹ 379.08 lakh were not procured as planned in Programme Implementation Plan (PIP) even though an amount of ₹ 920.10 lakh earmarked for medicines was not utilized during 2014-15 and 2015-16 which constituted 74 *per cent* and 80 *per cent* of the allocation during those years.

A total of 42,701 pregnant women were registered in the sample district during the five year period 2011-16 as detailed in the following table:

Table - 1.2.14

Name of the district	Number of pregnant women (in per cent)							
	Registered	Received check-ups				Given Tetanus Toxoid (TT) immunisation		Given 100 IFA tablets
		At the stage of registration	First Visit (20-24 weeks)	SecondVisit (28-32 weeks)	Third Visit (34-36 weeks)	First round	Second round	
Lohit	20,709	0 *(0.00)*	6,636 *(32.04)*	0 *(0.00)*	8,446 *(40.78)*	20,519* *(99.08)*		7,454 *(35.99)*
Lower Subansiri	5,424	1,523 *(28.08)*	0 *(0.00)*	0 *(0.00)*	1,320 *(24.34)*	2,700 *(49.78)*	1,667 *(30.73)*	1,454 *(26.81)*
East Kameng	6,759	2,731 *(40.41)*	2,731 *(40.41)*	2,409 *(35.64)*	2,409 *(35.64)*	3,617 *(53.51)*	2,376 *(35.15)*	4,244 *(62.79)*
East Siang	9,809	4,490 *(45.77)*	4,490 *(45.77)*	0 *(0.00)*	4,305 *(43.89)*	10,422* *(106.25)*		5,354 *(54.58)*
Total	**42,701**	**8,744** *(20.48)*	**13,857** *(32.45)*	**2,409** *(5.64)*	**16,480** *(38.59)*			**18,506** *(43.34)*

Source: Data furnished by DHSs. ** Collective figure for 1st & 2nd TT as bifurcation was not available.*

The above table reveals that the position of antenatal care provided to pregnant women in the sampled districts was not encouraging. The required check-ups and administration of immunisation and IFA tablets were availed by only 39 *per cent* of the registered pregnant women. This indicated weakness in the tracking of expectant mothers for antenatal care.

Moreover, as the nearest functional SCs/PHCs in sampled districts were located at a distance of more than 10 to 15 km, this may have acted as deterrents for regular check-ups at the health centres. There is a need for strengthening of tracking and follow up system through MCH card to improve the position of maternal care.

1.2.11.4 Deficiency in delivery care

RCH emphasised providing of antenatal care, essential obstetric drugs, neonatal resuscitation, and equipment for new-borns in the health centres.

Audit, however, observed that equipment for neonatal care and neonatal resuscitation were not available in all the 31 SCs[7] test checked. Similarly, in six out of 11 PHCs, (Wakro, Tezu-Sunpura, Veo, Namsing, Borguli and Rilloh PHCs), and in two out of six CHCs (Pakke Kasang and Old Ziro CHCs) these above facilities were not available.

Further, caesarean section with specialists in obstetrics and gynaecology was not available in five CHCs (Mebo, Pakke Kasang, Seijosa, Old Ziro and Yazali CHC) out of the six CHCs test checked.

Thus, in majority of the health centres test checked, adequate delivery care facilities were not available. Unless all the obstetrics care facilities along with adequate manpower are available, the position of institutional deliveries in these health centres would remain low and the objective of providing intended maternal and child care in these centres would remain unachieved.

1.2.11.5 Postnatal Care

Postnatal care includes monitoring the weight of the child, physical examination of the mother, advice on breast feeding, etc.

The position of postnatal care in the four sampled districts during the period 2011-2016 was as detailed in **Appendix1.2.5**. Analysis of postnatal care services in the four sampled districts revealed that:

- Out of 19,240 institutional deliveries, only 8102 (42 *per cent*) women availed postnatal care.
- The number of women who availed postnatal care in the health facilities was highest in East Siang district at 54 *per cent* of total institutional deliveries, followed by 42 *per cent* in East Kameng district.
- Whereas, in Lohit and Lower Subansiri districts only 30 *per cent* and 41 *per cent* of the women who had institutional deliveries availed postnatal care.

Audit also noticed that 66 cases were treated with postnatal complications, and 14,337 cases were registered as Reproductive Tract Infection in Lohit district.

Thus, the extent of postnatal care provided by the health centres in the sampled districts was only 42 *per cent* as compared to the total number of institutional deliveries. This also indicated that the tracking system of mothers after child birth in the health centres was weak. There is a need for strengthening of the tracking system through MCH card and MBP to improve the services of maternal and child care from antenatal to postnatal care.

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[7] **Lohit**- Changliang, Danglat, Tafragram, Paya, Medo.
Lower Subansiri- Hari, Bulla, Siiro, Hong, Monypolyang, Joram, Miya, Depo, Kushkut, New Pania, Dem.
East Kameng- Pakro, Palin, Gumtung, Golaso, Niti Darlong (Lower Seijosa).
East Siang- Remi, Ngorlung, Niglok, Mikong, Debing, Mirem, Ayeng, Motum, Bodak, Siluk.

1.2.12 Child health care services

In order to maintain healthy childhood, RCH programme emphasised complete immunisation of all children from 0 to one year age group followed by secondary immunisation and Vitamin A solution through five doses for vaccine preventable infants and child diseases.

1.2.12.1 Full Immunisation Programme

The target fixed and achievement made under full immunisation programme in the State during the period 2011-16 were as under:

Table 1.2.15

Year	Target (Number of children)	Actual achievement			
		Upto one year (%)	Above one and a half year (%)	Above five years (%)	Above 10 years (%)
2011-12	25,657	13,750 (54)	6,290 (25)	2,056 (08)	4,462 (17)
2012-13	27,342	16,514 (60)	7,670 (28)	2,810 (10)	4,945 (18)
2013-14	28,016	17,759 (63)	8,056 (29)	3,637 (13)	5,781 (21)
2014-15	28,712	15,656 (55)	8,654 (30)	3,239 (11)	4,524 (16)
2015-16	29,432	17,049 (58)	10,003 (34)	3,871 (13)	4,687 (16)
Total	**139,159**	**80,728 (58)**	**40,673 (29)**	**15,613 (11)**	**24399 (18)**

Source: Data furnished by SHS

Audit analysis revealed the following position during the period 2011-16:

- The achievement against the target of immunisation[8] of children between 0 to 1 year age group was only between 54 *per cent* and 63 *per cent*.
- Immunisation of children above one and a half year age was lower at 25 *per cent* to 34 *per cent* of the target.
- Secondary immunisation was even lower ranging between 8 and 13 *per cent* in respect of children above five year.
- For children above 10 year, immunisation was between 16 *per cent* and 21 *per cent*.

Shortfall in immunisation coverage has to be seen against the prevalence of vaccine preventable infant and child diseases such as Neonatal tetanus (11 cases), Diphtheria (60 cases), Tetanus (135 cases), Whooping Cough (69 cases) and Acute Respiratory Infection (22,296 cases) in the State during the period 2011-16.

Target and achievement for immunisation in the four sampled districts during 2011-16 was as indicated in **Appendix1.2.6**. Analysis of immunisation efforts in four sampled districts revealed that:

- In East Siang, no targets were fixed for immunisation during five year period and in East Kameng, target was not fixed for the first three years of 2011-14.

[8] Bacillus of Calmette and Guerin (BCG), Measles, Diphtheria Pertusis Tetanus (DPT) and Oral Polio Vaccine (OPV), Diphtheria Tetanus (DT) for children above five year and Tetanus Toxoid (TT) for children above 10 years.

- Immunisation of children upto the age of one year in Lohit and Lower Subansiri was only to the extent of 46 *per cent* and 63 *per cent* respectively.
- Immunisation of children above one and a half year in Lohit and Lower Subansiri went down to 37 *per cent* and 46 *per cent* respectively while in East Siang and East Kameng, it was 53 *per cent* and 40 *per cent* respectively.
- Immunisation of children of age five years and above; and above 10 years was even less when compared to earlier stages.

Audit observed shortfall in immunisation which may be due to lack of awareness among the beneficiaries and less frequency of holding of immunisation sessions. Government needs to identify reasons for this shortfall and ensure complete immunisation.

1.2.12.2 Administration of Vitamin A solution

Administration of Vitamin A solution was for all children less than three years of age. The first dose of Vitamin A was to be administered at nine months of age along with measles vaccine and the second dose along with Diphtheria Pertusis Tetanus(DPT)/Oral Polio Vaccine (OPV). The subsequent three doses were to be administered at six monthly intervals.

Target and achievements of State during the period 2011-2016 was as follows:

Table 1.2.16

Year	Nos. of children targeted	Actual achievement		
		First dose (%)	Second dose (%)	Third to fifth dose (%)
2011-12	25,657	3,725 (15)	2,075 (08)	1,264 (05)
2012-13	27,342	11,816 (43)	6,827 (25)	3,068 (11)
2013-14	28,016	2,126 (08)	1,554 (06)	509 (02)
2014-15	28,712	7,699 (27)	4,759 (17)	2,635 (09)
2015-16	29,432	10,944 (37)	8,113 (28)	3,161 (11)
Total	**139,159**	**36,310 (26)**	**23,328 (17)**	**10,637 (08)**

Source: Data furnished by SHS

It can be seen that first dose of Vitamin A solution was administered to children only to the extent of eight *per cent* to 43 *per cent* of the total targeted children during the five year period. While the achievement of second doses was just between six *per cent* to 28 *per cent,* the third to fifth doses was only between two *per cent* to 11 *per cent* of the children targeted during the five year period.

The target and achievement of administration of Vitamin A solution in the sampled districts during the period 2011-2016 was as detailed in **Appendix 1.2.7**. Analysis of this data revealed that:

- Against the target fixed, the achievement of first dose in Lower Subansiri and Lohit was 36 *per cent* and 24 *per cent* respectively during the five year period. In these two districts, there was no turn out for the second dose. Whereas, for third to fifth doses, the achievement was only upto 18 *per cent* and 14 *per cent* in Lower Subansiri and Lohit district respectively.

- In East Siang and East Kameng districts, no target was fixed by the DHSs. However, turn out for second dose was 47 *per cent* and 64 *per cent* in East Siang and East Kameng respectively when compared to the first dose. The number of children who took third to fifth doses reduced substantially to 13 *per cent* and 29 *per cent* of number of children who took the first dose in East Siang and East Kameng respectively. One of the reason for shortfall in administration of Vitamin A solution may be due to lack of awareness among the beneficiaries. Government needs to examine the reasons for the same.

Thus, from the above analysis it can be seen that post-delivery child health care services and full immunisation programme provided by the health care centres were far from satisfactory.

Child health care in the State was not effective as immunisation was achieved only upto 58 *per cent* of the targeted children and Vitamin A solution was administered to only 26 *per cent* of the children targeted during the entire five year period 2011-12 to 2015-16. There is a need for strengthening the post-delivery child care services and full immunisation programme by making the mother and child tracking system more efficient. Government needs to identify reasons for shortfall in immunisation as well as administration of Vitamin A solution and take remedial action by conducting awareness campaign and increasing the frequency of immunisation session.

In response, the Department accepted the audit observations and agreed that there is a need for extra effort to ensure linkage of mother and child health for institutional delivery, antenatal and postnatal care and full immunisation.

1.2.13 Coverage of Janani Suraksha Yojana scheme

To encourage institutional delivery, '*Janani Suraksha Yojana (JSY)*' was launched in April 2005 to provide all pregnant women and ASHAs cash assistance for bringing pregnant women to the health centres. Cash assistance was fixed at ₹ 700/- and ₹ 500/- for institutional and home delivery respectively in Arunachal Pradesh. Cash assistance to ASHA was fixed at ₹ 600/- for institutional and ₹ 400/- for home delivery respectively.

The status of JSY covered in the State during 2011-2016 was as follows:

Table 1.2.17

(₹in lakh)

Year	Number of pregnant women holding JSY card[9]	Number of institutional deliveries by beneficiaries holding JSY card	Number of women covered	Amount paid	Number of Home deliveries	Number of women covered	Amount paid
2011-12	17,707	11,630	NA	NA	505	NA	NA
2012-13	17,382	11,529	10,343	72.40	671	301	1.50
2013-14	24,191	11,057	12,383	86.68	605	392	1.96
2014-15	21,327	12,428	3,934	27.54	478	173	0.87
2015-16	29,631	13,227	9,512	66.58	972	947	4.73
Total	**110,238**	**59,871**	**36,172**	**253.20**	**3231**	**1813**	**9.06**

Source: Data furnished by SHS NA-Data not available

[9] All registered pregnant women need not possess JSY card and hence the difference. Only pregnant women holding JSY card are entitled for incentive under the scheme.

It can be seen that out of 110,238 pregnant women holding JSY Card, 59,871 (54 *per cent*) women had institutional deliveries. Of which, only 36,172 (60 *per cent*) were paid the cash assistance totalling to ₹ 253.20 lakh. Thus, cash assistance worth ₹ 165.89 lakh was not paid to 23,699 beneficiaries during 2012-2016. Similarly, against 3231 home deliveries, only 1813 (56 *per cent*) were paid an amount of ₹ 9.06 lakh, resulting in non-payment of incentive to 1418 (44 *per cent*) home delivery cases amounting to ₹ 7.09 lakh. Consequently, 25,117 (40 *per cent*) out of the total 63,102 (59,871 Institutional delivery + 3,231 Home delivery) eligible beneficiaries who had deliveries were deprived of the incentive under JSY scheme during the period 2012-2016.

As regards payment of incentives to ASHAs, during 2012-16, in only 24,403 out of 27,578 cases an amount totalling to ₹ 146.42 lakh were paid wherein the beneficiaries were assisted by ASHAs leaving out 3175 (12 *per cent*) cases involving incentives of ₹ 19.05 lakh without recorded reasons.

The status of coverage of JSY scheme in the four sampled districts during the period 2011-2016 was as follows:

Table 1.2.18

(₹ in lakh)

Name of the district	Number of pregnant women holding JSY card	Number of institutional deliveries by beneficiaries holding JSY card	Number covered	Amount paid	Number of Home deliveries	Number covered	Amount paid
Lower Subansiri	5424	2544	1385	9.70	128	31	0.16
Lohit	6136	6949	5374	37.60	394	394	1.97
East Siang	9812	7240	4128	28.90	276	135	0.68
East Kameng	6759	2507	1845	12.92	305	305	1.52
Total	**28,131**	**19,240**	**12,732**	**89.12**	**1103**	**865**	**4.33**

Source: Data furnished by DHSs.

It can be seen that:

- Though 19,240 (68 *per cent*) out of 28,131 pregnant women having JSY Card had institutional deliveries, only 12,732 (66 *per cent*) of them were paid the cash incentive totalling to ₹ 89.12 lakh. Thus, there was non-payment of incentive totalling to ₹ 45.56 lakh to 6508 eligible beneficiaries.
- Similarly, against 1103 home deliveries, only 865 beneficiaries holding JSY Card were paid incentive totalling to ₹ 4.33 lakh while 238 eligible beneficiaries were deprived ₹ 1.19 lakh.
- Besides, out of 10,825 cases assisted by ASHAs[10] eligible for incentive, only in 9,418 (87 *per cent*) cases incentive totalling ₹ 56.51 lakh were paid. ASHAs involved in 1407 eligible cases (12 *per cent)* were deprived of the incentive.

Thus, due to non-payment of incentive meant for the purpose of maternal care through the provision of cash incentive was not fully achieved and resulted in denial of benefits to the intended beneficiaries.

[10] Lohit-4347 cases, Lower subansiri-1316 cases, East siang-4163 cases and East Kameng-1009 cases.

1.2.14 Impact assessment

Infant Mortality Rate (IMR)[11] measures the health condition in infancy and reflects the health condition of the mother, the environment in which the infant is born, and in which his/her infancy is spent.

In 2005 when NRHM was first launched in the country, Arunachal Pradesh had an IMR of 77 per 1000 live births. The trend of IMR in the State during 2011-15 was as follows:

Table 1.2.19

Year	IMR	
	Target as per XII Plan Document	Achievement
2011-12	19	32
2012-13	19	33
2013-14	19	32
2014-15	19	30
2015-16	19	Not yet declared

Source: Data furnished by SHS and SRS 2014 data.

From the above, it can be seen that IMR of the State has reduced from 77 per 1000 live births in 2005 to 30 per 1000 during 2014-15, which was lower than the all India average of 40 per 1000 live births as per Sample Registration System 2014[12]. However, the State could not achieve the target of 19 per 1000 fixed for Arunachal Pradesh in the 12th Five Year Plan. The reasons for non-achievement of target have not been analysed by the State Government.

1.2.14.1 ASHA Survey

Audit conducted a survey of 119 ASHAs who were in the age group of 21 to 60 years in the sampled districts in order to assess to what extent the intended services on mother and child health as envisaged in the guidelines were delivered effectively. The survey was carried out through a pre-designed format covering various health related activities/services of ASHAs and the findings are as under:

- 81 (68 *per cent*) of ASHAs surveyed have been trained to conduct normal delivery in case of emergency. However, while 60 *per cent* (71) did not have thermometer, up to 94 *per cent* (112) and 62 *per cent (*74) did not have Pregnancy and Disposable Delivery kits respectively. Further, up to 99 *per cent* (118) of them did not possess Blood Pressure Monitor, and 49 *per cent* (58) of the ASHAs were not in possession of the Weighing Scale.
- Regarding provision of Drug, 66 *per cent (*78) of the ASHAs did not have Paracetamol tablets in their kits and 81 *per cent* (96) and 78 *per cent* (93) of them did not possess Iron pills and de-worming pills.

[11] The figure for MMR and TFR are not available as the denominator is too low i.e. pregnant women are less than 100000 population.

[12] The Sample Registration System (SRS) is the most regular source of demographic statistics in India. It is based on a system of dual recording of births and deaths in fairly representative sample units spread all over the country.

- As regards maintenance of prescribed records, 47 *per cent* (56) of 119 ASHAs surveyed did not maintain register of *Janani Suraksha Yojana* Scheme, 15 *per* cent (18) did not maintain register for antenatal/intra-natal/postnatal and under age five children immunisation records. While 32 *per cent* (38) ASHAs did not maintain register for under age five for growth monitoring, 30 *per cent* (36) informed that the above five age child immunisation register was not maintained.
- 63 *per cent* (75) of ASHAs received their incentives with a delay ranging from one to three months.

Thus, it can be seen from above that though ASHAs were in place to provide a link between the community at the household levels and the health care system, full complements of drugs/equipment as laid down in the guidelines were not provided to them which would impinge upon their effectiveness in discharging health services to the rural community. Moreover, the linkage between ASHAs and the maternal and child care from antenatal to child immunisation post-delivery was weak as vital records were not maintained by substantial number of ASHAs.

1.2.15 Monitoring and Evaluation

The NRHM envisaged accountability framework through a three pronged mechanism of internal monitoring, community based monitoring and external evaluation.

1.2.15.1 State level

At the State level, NRHM functions under the overall guidance of State Health Mission (SHM) with the Chief Minister as Chairperson and State Health Society (SHS)[13] who were to meet periodically and review the progress of implementation of NRHM. The meeting of the SHM was required to be held at least once every six months to monitor and evaluate the implementation of the programmes.

Audit, however, observed that SHM met only twice (2014 and 2015) and Governing Body of SHS never met during the last five years (2011-2016). Though the Executive Committee (EC) met at regular intervals but deliberated only on administrative and financial matters and not on monitoring of activities of health facilities.

1.2.15.2 District level

At the district level, NRHM functions under the District Health Mission (DHM) chaired by the Minister in charge of the District and District Health Society (DHS)[14].

Audit observed that in four sampled districts, though the DHM and DHS were constituted in September 2005, no meetings of DHM and Governing Bodies/Executive

[13] State Health Society (SHS): Governing Body (GB) chaired by the Chief Secretary, Executive Committee (EC) chaired by the Commissioner/Secretary (Health & Family Welfare); and State Project Management Unit (SPMU) headed by the Mission Director.

[14] District Health Society (DHS): Governing Body (GB) headed by the Deputy Commissioner, Executive Committee headed by the District Medical Officer; and District Programme Management Unit (DPMU) headed by the District RCH Officer.

Committees of the DHS were convened during the five year period from 2011-12 to 2015-16.

1.2.15.3 Gram Panchayat

Panchayati Raj Institutions (PRIs) were to be involved in planning and implementation of the programme.

Audit observed that PRIs was not involved in planning, implementation and monitoring of NRHM activities at the district level. In most cases, Deputy Commissioner functioned as de-facto Chairperson of DHM instead of Chairperson of Gram Panchayats.

1.2.15.4 Evaluation by Evaluation Team

Evaluation of the implementation of NRHM in Arunachal Pradesh was conducted by the Seventh Common Review Mission from the Ministry of Health and Family Welfare, GoI in November 2013. The Action Taken Report on the observations/recommendations in this regard was submitted by the State Health Mission to GoI after a delay of nearly 16 months in February 2015.

1.2.15.5 Social audit of health facilities

Community monitoring or social audit was an integral part of NRHM wherein community members are to assess, review and suggest recommendation in the implementation of health programmes.

Audit observed that no steps have been initiated to put in place an institutional mechanism for social audit of the activities of the health centres.

Thus, the existing institutional mechanism for monitoring of NRHM activities remained largely inactive. Inadequate monitoring of the programme would allow deficiencies in delivery of health services to rural population to remain unattended.

1.2.16 Conclusion

The availability of functional health centres as per population norm was in excess of the requirement in CHCs and PHCs but there was shortage of 38 *per cent* in SCs as on March 2016. However, there was shortfall of PHCs and SCs by 18 *per cent* and 51 *per cent* respectively vis-à-vis actually approved by the State Government. Moreover, newly constructed Sub Centres were not utilized for a period of 8 to 41 months after completion till the date of audit (August 2016). Basic amenities such as separate toilets for male/female, water supply and electricity, etc. were not available in test checked health centres. There were overall deficiency in manpower at all level of health care centres. Moreover, there was need to rationalize the existing manpower as there were excess in some health care centres while there was shortage in other.

The utilization of funds was between 48 *per cent* and 84 *per cent* of the total available funds. Funds from the State Government to SHS were released with a delay of 44 to 390 days. The works were awarded without inviting tender and also no agreements were entered into with the Contractor to safeguard the interest of the State.

During 2011-16, only 40 *per cent* of the total pregnant women registered had intuitional delivery in the State Government run health care centres. Antenatal care services was weak as only 37 *per cent* of registered pregnant women availed mandatory three check-ups during pregnancies, immunisation of TT and administration of IFA tablets. Moreover, postnatal care was attended by only 42 *per cent* of the women who had institutional deliveries.

Child care services provided at the health centres for immunisation was not encouraging as the coverage of immunisation from 0 to 1 year till attaining the age of 10 years and above was only between 11 *per cent* to 58 *per cent.* Administration of Vitamin A solution for children upto 3 years of age in different doses was availed by 8 *per cent* to 26 *per cent* of the children targeted.

Monitoring of programme activities was weak as State Health Mission met only twice (2014 and 2015) against the requirement of 10 meetings during 2011-16. State Health Society never met during this period. The District Health Missions and District Health Societies of four sampled districts did not conduct any meetings during the entire review period. Social audit of the Mission's activities by the community was not conducted.

1.2.17 Recommendations

The State Government may

- streamline fund flow to ensure timely release of funds to the SHS so that the implementation of the NRHM is not adversely affected.
- ensure that all completed Sub Centre and Primary Health Centre are made functional.
- augment and rationalize deployment of health care professionals to ensure round the clock availability of health services in various health centres.
- strengthen Antenatal and Postnatal services provided at the health centre by ensuring mother and child tracking system in health centres.
- strengthen monitoring and evaluation mechanism of the NRHM activities at all levels.

Education Department

1.3 Implementation of the Right of Children to Free and Compulsory Education (RTE) Act, 2009.

The Right of Children to Free and Compulsory Education (RTE) Act, 2009 provides for free and compulsory elementary education to all children in the age group of 6-14 years, by ensuring compulsory admission and completion of elementary education by every eligible child. The programme also provides for creating infrastructure, adequate classrooms, playground, library and learning equipment, kitchen shed for mid-day meal, etc. The Government also laid emphasis on ensuring favourable pupil teacher ratio, availability of qualified teachers in different stream and providing of uniforms and text books to students enrolled in primary schools and upper primary schools. *Sarva Shiksha Abhiyaan* (SSA) was the main vehicle for implementing the provision of the RTE Act. Some major audit findings are highlighted below:

Highlights:

- ***School mapping and household survey for identification of children eligible for elementary education has not been carried out since April 2010. As on March 2016, out of school children were 57,032 (18 per cent).***

(Para 1.3.7.1 & 1.3.7.3)

- ***232 primary school buildings and 130 upper primary school buildings constructed during 2014-16 were yet to be handed over to school authorities.***

(Para 1.3.8.1 & 1.3.8.2)

- ***As of March 2016, there was 42 per cent shortfall in Science & Mathematics teachers.***

(Para 1.3.9.1)

- ***Despite excess procurement of text book by Director Elementary Education during 2010-11 to 2012-13, there was shortfall in receipt of text book in test checked schools in the sampled districts.***

(Para 1.3.10.1)

- ***Work books worth ₹123.02 lakh was not received from State Project Director, Sarva Shiksha Abhiyan by the test checked schools in each of four sampled districts.***

(Para 1.3.10.3)

- ***There was shortfall in supply of uniform in the test checked schools of the sampled districts to the extent of ₹30.98 lakh.***

(Para 1.3.11)

- ***2760 number of boys' uniform (₹ 11.04 lakh) and 13700 number of girls' uniform (₹54.80 lakh) were not delivered by the Suppliers.***

(Para 1.3.12.3)

- ***Text books worth ₹ 10.88 lakh was not delivered to State Project Director, Sarva Siksha Abhiyaan by the Supplier.***

(Para 1.3.12.3)

1.3.1 Introduction

The Right of Children to Free and Compulsory Education (RTE) Act, 2009, operative with effect from 1st April 2010, provides that all children in the age group of 6 to14 years have a right to free and compulsory elementary education (Class I to VIII) in a neighbourhood school. Free education is defined as 'removal of any financial barrier by the state that prevents a child from completing eight years of schooling.' 'Compulsory education' means obligation of the appropriate government to provide free elementary education. The key objective of the Act was to be achieved by taking such steps required for:

- ensuring compulsory admission, attendance and completion of elementary education of every eligible child;
- ensuring availability of neighbourhood school where it has not been established within 3 years i.e, 31st March 2013;
- ensuring that no child of weaker section and disadvantaged group are discriminated against and prevented from pursuing and completing elementary education on any ground;
- providing infrastructure including school building, teaching staff and learning equipment; and
- providing training facility for teachers.

Sarva Shiksha Abhiyaan (SSA) was the main vehicle for implementing the provision of the RTE Act. For the purpose of implementation of RTE Act, 2009, the Government of Arunachal Pradesh framed its State RTE Rules, 2010 to regulate the activities of the State and local authorities to provide free elementary education in the State.

1.3.2 Organizational Set-up

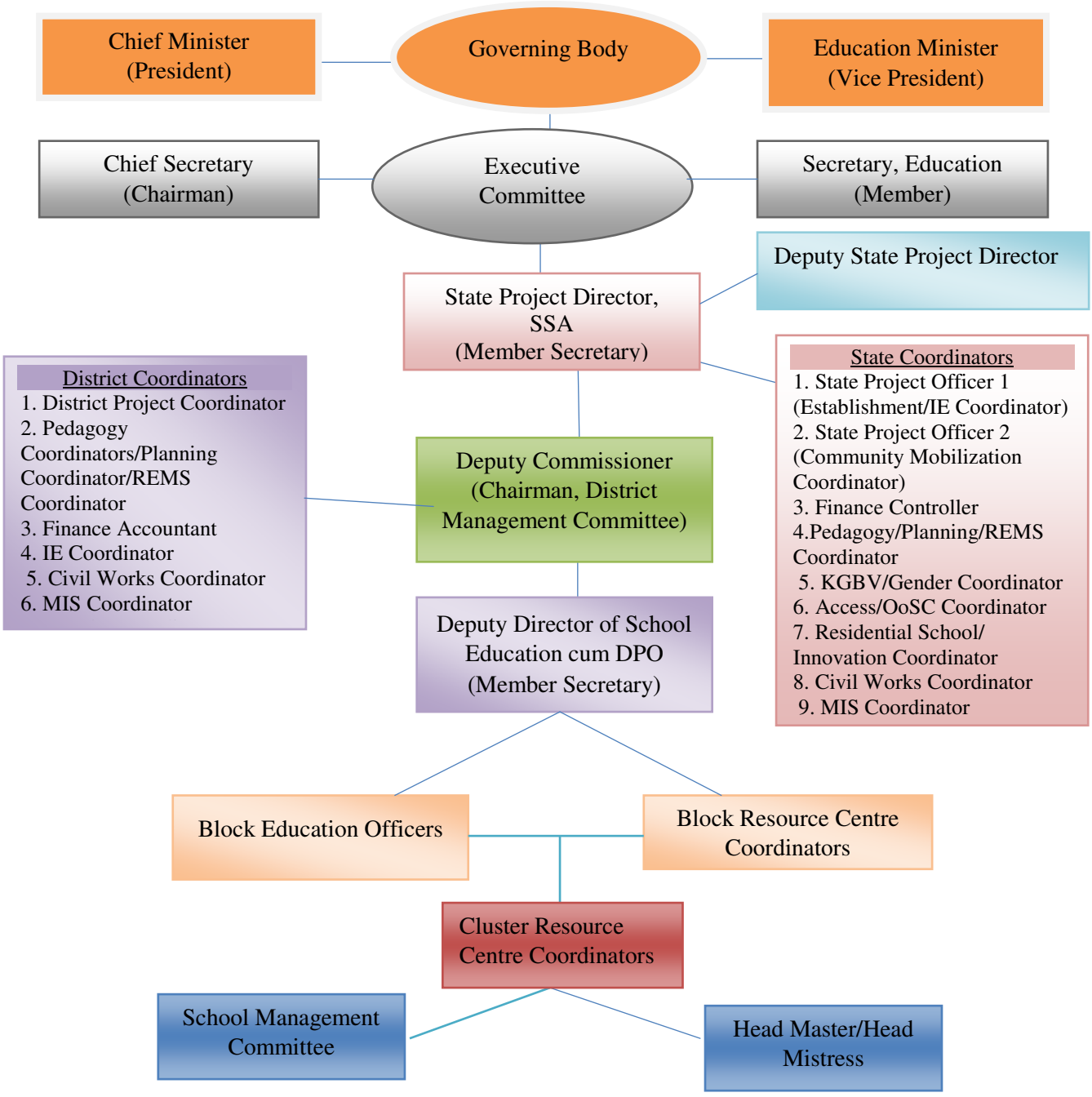
RTE Act is implemented by Arunachal Pradesh State Implementing Society, SSA, Rajya Mission, Itanagar. The Executive committee under the Governing body is empowered to carry out day to day functions of the scheme. The Chief Secretary as chairman of the Executive Committee is assisted by the Secretary (Education).

At the District level, the scheme is implemented through District Management Committee (DMC) where Deputy Commissioner (DC) is the Chairman and Deputy Director of School Education (DDSE) cum District Project Officer (DPO) is the Member-Secretary. The DPO in each district is assisted by a District Project Coordinator, District coordinators, Block Education Officers, Block Resource Centre Coordinators, Cluster Resource Centre coordinators, School Management Committees, Head Master/Mistress.

Organisational set up for implementation of RTE Act is given in the chart below:

Chart-1.3.1

Organisational set-up for implementation of RTE Act



1.3.3 Audit Objectives

The Performance Audit was conducted to ascertain whether:

- the objective of RTE Act for making elementary education a fundamental right for all children between ages of 6-14 years has been achieved;
- the funds allocated were being utilized in an economic and efficient manner; and
- an effective monitoring mechanism was in place.

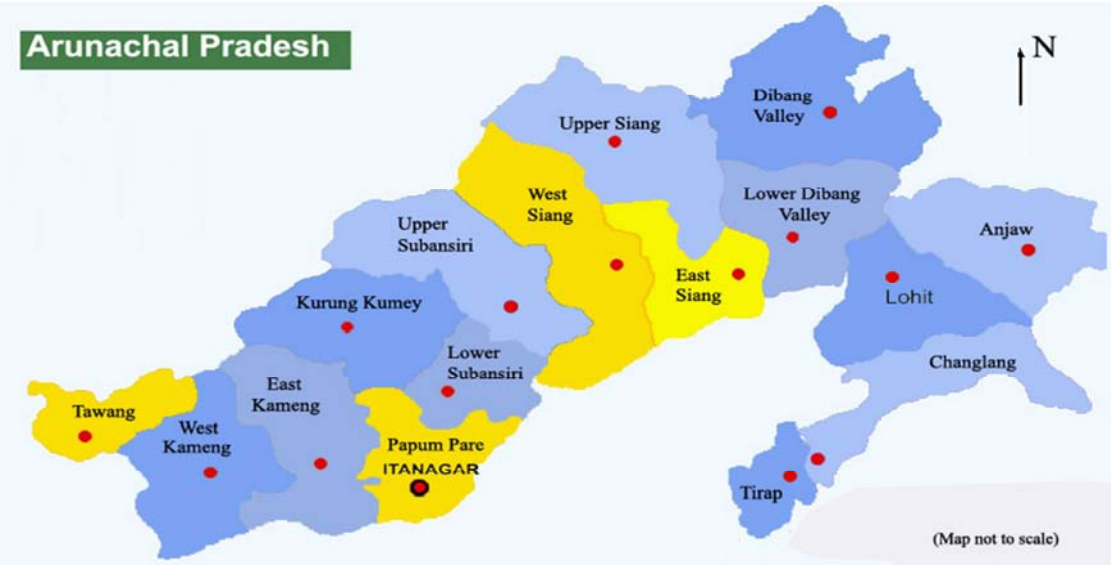
1.3.4 Audit Criteria

Audit findings are benchmarked against the criteria contained in the following sources:

- Right to Free and Compulsory Education Act, 2009.
- Rules laid down for Right to Free and Compulsory Education Act, 2009.
- Scheme guidelines based on Right to Free and Compulsory Education Act, 2009.
- Norms framed by respective states for expenditure under RTE Act.
- Various orders, notifications, circulars, instructions issued by Ministry of Human Resource Development (MHRD)/State Government.
- Annual Work Plan and Budget prepared by MHRD/various states.
- District Information System for Education.

1.3.5 Audit Scope & Methodology

The Performance Audit covered the period of 2010-11 to 2015-16. Four districts viz. East Siang, West Siang, Papumpare and Tawang Districts were selected for detailed examination. Physical verification was conducted in 30 schools each selected through Simple Random Sampling without Replacement (SRSWOR) method in the four districts as shown in the map below:



Selected Districts

Audit covered implementation of the Act at the following levels:

State Level	State Project Director, SSA, Rajya Mission, Itanagar; Directorate of Elementary Education, Itanagar; and State Council of Educational Research and Training Centre, Chimpu.
District	District Project Officer cum DDSE office of East Siang, West Siang, Papumpare and Tawang Districts.
Local Level	30 schools/SMCs each from the four Districts.

The Performance Audit commenced with an Entry Conference held with the Commissioner of Education on 26 April 2016 where the objectives and scope of audit were discussed. Audit examined the records of SPD, SSA and Directorate of Elementary Education and records of DPOs.

Audit findings were discussed with the Commissioner of Education and the State Project Director (SPD), SSA in the Exit Conference held on 23 December 2016. Replies and views of the Department have been incorporated in the report wherever found appropriate.

1.3.6 Acknowledgement

Indian Audit and Accounts Department places on record its acknowledgment of the State Government for their assistance in facilitating this audit.

Audit findings

Audit findings are discussed in subsequent paragraphs.

1.3.7 Planning

1.3.7.1 School mapping and identification of eligible children not conducted

In order to achieve the objectives of RTE Act, the State Government is required to undertake school mapping for establishing new neighbourhood schools with specific reference to difficult areas, small hamlets and high density population area, and identify all children, including children belonging to weaker and disadvantaged sections within a period of one year from April 2010, and every year thereafter.

Audit noticed that the State Government has not carried out any school mapping as required for establishing new neighbourhood schools since the Act came in effect in April 2010. Survey for identification of children between the age group of 6 and 14 years in the State was also not carried out as required under the Act.

Norms adopted by the State Government for establishing new schools were:

- for primary schools, 1 km radius of habitation and with a population of 150 and above and minimum enrolment of 20 children (age between 6 and 11 years); and
- for upper primary schools, 3 km radius of habitation with 250 population and above, and minimum 20 passed out primary school children and two feeder schools.

During 2010-16, 722 new primary schools and 301 upper primary schools were proposed by the SPD, SSA under the RTE Rules.

It was noticed in audit that 6 habitations[15] having eligible children for primary schools and 2 habitations[16] with eligible children for upper primary schools have not been covered for providing new schools under the RTE as on March 2016. Also, in the absence of survey and school mapping, the State could not identify eligible children for providing elementary education residing in small hamlets, difficult terrain and high density population neighbourhood which would grant them special relaxation from the prescribed norms for new schools/residential accommodations.

While accepting the audit observations, the Department stated (December 2016) that school mapping and household survey are under process and will be completed by March 2017.

1.3.7.2 Target and achievement of enrolment

With a view to providing compulsory education to every child (age 6-14 years), the State Government and local authorities were to ensure compulsory admission, attendance and completion of elementary education by identifying and enrolling eligible children in the neighbourhood schools.

In order to assess the achievement of the above objective, maintenance of database of all children eligible for enrolment (6-14 years) was a prerequisite. Since, the State Government had not conducted household survey to identify all eligible children for compulsory elementary education, audit could not assess the extent to which the objectives of the Act were achieved. However, Audit assessed the position based on the projection[17] made by the SPD, SSA, Rajya Mission, Itanagar of children who attained the age of enrolment (6 to 14 years) with that of actual enrolment as per Unified District Information on School Education (UDISE)[18].

Table-1.3.1

Year	Nos. of Children with age of enrolment (6-14 years)			Nos. of student enrolled (*per cent*)		Shortfall in enrolment (*per cent*)		
	PS	*UPS*	*Total*	*PS*	*UPS*	*PS*	*UPS*	*Total*
2010-11	247,218	102,005	349,223	203,253 *(82.22)*	79,562 (78.00)	43,965 *(17.78)*	22,443 *(22.00)*	66,408 *(19.02)*
2011-12	250,785	95,250	346,035	209,403 *(83.50)*	76,387 (80.20)	41,382 *(16.50)*	18,863 *(19.80)*	60,245 *(17.41)*
2012-13	236,478	100,291	336,769	200,033 *(84.59)*	87,756 (87.50)	36,445 *(15.41)*	12,535 *(12.50)*	48,980 *(14.54)*
2013-14	196,493	102,080	298,573	190,159 *(96.78)*	77,515 (75.94)	6,334 *(3.22)*	24,565 *(24.06)*	30,899 *(10.35)*
2014-15	211,555	100,948	312,503	203,826	83,104	7,729	17,844	25,573

[15] (1) Kra-Dadi District: (i) Gillo Tabing, (ii) Kikum (Serek), (iii) Paka, (iv) Kamrung-I (v) Sojam. (2) Kurung Kumey District: (i) Medical Colony, Lower Nyapin.

[16] (i) Dokio Pop and (ii) Challo of Kra- Dadi District.

[17] Based on Census 2011 and population growth rate of children in Arunachal Pradesh.

[18] U-DISE is a database of information about schools in India.

Year	Nos. of Children with age of enrolment (6-14 years)			Nos. of student enrolled (*per cent*)		Shortfall in enrolment (*per cent*)		
	PS	*UPS*	*Total*	*PS*	*UPS*	*PS*	*UPS*	*Total*
				(96.35)	(82.32)	*(3.65)*	*(17.68)*	*(8.18)*
2015-16	209,458	102,797	312,255	201,814 *(96.35)*	84,432 *(82.13)*	7,644 *(3.65)*	18,365 *(17.87)*	26,009 *(8.33)*

(Source: Departmental Records and U-DISE)

Analysis of Table 1.3.1 revealed that:

- Shortfall in enrolment declined from 19.02 *per cent* in 2010-11 to 8.33 *per cent* in 2015-16. At the end of March 2016, the number of children not enrolled stood at 26,009 (primary: 7,644 and upper primary: 18,365) after six years of implementation of RTE Act, which was still substantial.
- In primary class, the percentage of enrolment rose from 82.22 *per cent* in 2010-11 to 96.35 *per cent* in 2015-16 and the shortfall in enrolment considerably decreased to 3.65 *per cent* in 2015-16.
- In upper primary class, the percentage of enrolment rose from 78 *per cent* in 2010-11 to 87.50 *per cent* in 2012-13, but declined during subsequent years and stood at 82.13 *per cent* in 2015-16.

This indicated that the local authorities did not ensure admission and attendance of every eligible child and also failed to motivate the parents of those children who were responsible to admit his or her child to an elementary education in the neighbourhood school.

The reason for shortfall in achievement of compulsory admission of all eligible children has not been analysed by the State Government.

1.3.7.3 Dropout rate and out of school children

The primary objective of the RTE Act was to ensure attendance and completion of elementary education by every child (age 6 to 14 years). For this purpose, local authorities are required to ensure attendance and completion of elementary education within their jurisdiction.

The number of students who dropped out of primary and upper primary classes during 2010-16 is shown below:

Table-1.3.2

Year/Class	Number of student enrolled		Number of Dropout student		Dropout percentage	
	PS	*UPS*	*PS*	*UPS*	*PS*	*UPS*
2010-11	203,253	79,562	38,913	5,005	*19.15*	*6.29*
2011-12	209,403	76,387	35,769	3,150	*17.08*	*4.12*
2012-13	200,033	87,756	46,422	4,628	*23.21*	*5.27*
2013-14	190,159	77,515	35,770	7,363	*18.81*	*9.50*
2014-15	203,826	83,104	24,996	5,594	*12.26*	*6.73*
2015-16	201,814	84,432	24,234	6,789	*12.01*	*8.04*
Average	***201,415***	***81,459***	***34,351***	***5,421***	***17.09***	***6.66***

(Source: Departmental Records and U-DISE)

As can be seen from the above table:

- Against average enrolment of 282,874 children (Primary: 201,415 and Upper Primary: 81,459) during the six year period (2010-16), on an average 39,772 students dropped out of the elementary schools which constituted 14 *per cent* of average enrolment.
- The dropout rate was higher in primary schools ranging between 12.01 and 23.21 *per cent* as compared to 4.12 and 9.50 *per cent* in upper primary schools.

As on March 2016, out of school children was 57,032 (26,009 not enrolled and 31,023 dropped out) which constituted 18 *per cent* of 312,255 eligible children during 2015-16.

Thus, there is a need to take remedial action to ensure that all out of school children are admitted in schools to accomplish the objective of compulsory elementary education as envisaged in the Act.

1.3.7.4 Seats not reserved for weaker section

As per the RTE Act, unaided schools shall admit in Class I, to the extent of 25 *per cent* of the strength of that class, children belonging to weaker section and disadvantaged group in the neighbourhood and provide free and compulsory elementary education till completion and expenditure so incurred would be reimbursed. RTE Rules framed by the State Government also provided for such admission.

However, it was noticed that provision of 25 *per cent* reservation for children belonging to weaker section had not been enforced upon unaided schools in the State. As per the information provided by SPD, SSA, as on March 2016 there were 398 private unaided schools in the State with intake capacity of 16,320 students in Class I. Thus, had the State enforced the provision of 25 *per cent* admission for children belonging to weaker and disadvantaged groups in Class I, 4080 would have availed free education in private unaided schools.

1.3.7.5 Age appropriate admission

Every child above six years of age were to be admitted in a class appropriate to his or her age according to the RTE Act.

Scrutiny of records revealed that out of 14,14,429 students enrolled during the audit there were instances of admission to a class not appropriate to his or her age as detailed in **Appendix 1.3.1**. Summarised position was as follows:

- 2,04,876 (14 *per cent*) students were admitted to higher classes than the prescribed appropriate age of the students.
- 46,118 children admitted in Class I were four to five years old instead of the prescribed six years.
- 2,72,386 students (19 *per cent*) were admitted in lower classes as compared to their appropriate age. 35,773 overaged students in Class I aged 7 to 12 years as against prescribed 6 years of age. 29,877 students were above 12 years but admitted in Class II to VI.

- 20,409 students from Class III to VIII were above 14 years of age who should have completed their elementary education.

Thus, it is clear that the provision of admitting students at appropriate age was not complied with by the State Government.

1.3.7.6 Retention in the same class

No child admitted in a school was to be held back in any class or expelled from school till the completion of elementary education according to the RTE Act (Section 16). The position as existed in the State during the period covered under performance audit was as under:

- Retention in the same class ranged between 1430 and 4365 students during the five year period 2011-2016, which constituted 0.50 *per cent* to 1.53 *per cent* against the total enrolment from Classes I to VIII.
- Retained children in the same class were higher in the primary classes as compared to the upper primary classes. At the end of March 2016, 1430 children were retained in the same class at different levels.

Thus, the provision of non-retention of students in the same class was not complied with.

1.3.8 Establishment of new schools

According to the provision of the Act, the State Government was to establish schools for providing compulsory elementary education where such schools have not been established within a period of three years from the commencement of the Act.

The position of new schools (Primary and Upper Primary School) proposed and actually constructed in the State during the five year period 2010-16 was as under:

Table-1.3.3

Year	Planned		Constructed		Handed over	
	PS	***UPS***	***PS***	***UPS***	***PS***	***UPS***
2010-11	194	54	194	54	194	54
2011-12	124	42	121	42	121	42
2012-13	123	49	123	49	123	49
2013-14	49	26	49	26	49	26
2014-15	214	106	214	106	0	0
2015-16	18	24	18	24	0	0
Total	**722**	**301**	**719**	**301**	**487**	**171**

Source: Departmental records.

It can be seen from above that construction of 722 new primary schools were planned during the period 2010-16. Of 441 new schools planned for construction by March 2013, 438 schools were actually constructed, balance 3 new schools were yet to be constructed till March 2016. 281 schools planned for construction during 2013-16 were also actually constructed. However, 214 schools constructed in 2014-15 and 18 schools constructed in 2015-16 were yet to be handed over as on March 2016 to the school

authorities because of non-payment of liabilities by the implementing units. As a result, 232 schools could not be made operational though planned for establishment.

Similarly, construction of 301 new upper primary schools were planned during the period 2010-16, (145 by March 2013 and balance 156 schools during 2013-16) and all of them were actually constructed within the stipulated time schedule. However, 106 schools constructed in 2014-15 and 24 schools constructed in 2015-16 were yet to be handed over as on March 2016 to the school authorities on account of non-payment of liabilities by the implementing units. As a result, 130 schools could not be made operational though planned for establishment.

1.3.8.1 Primary /Upper Primary schools

The position of new schools (Primary and Upper Primary School) in sample districts during the five year period 2010-16 was as under:

Table-1.3.4

Name of Districts	Year	Planned		Constructed		Handed over	
		PS	*UPS*	*PS*	*UPS*	*PS*	*UPS*
East Siang	2010-16	18	18	18	18	18	18
West Siang	2010-16	49	22	49	22	27	13
Papumpare	2010-16	83	22	83	22	59	13
Tawang	2010-16	7	3	7	3*	7	-
Total		**157**	**65**	**157**	**65**	**111**	**44**

Source: Departmental records. ** No new construction only three PS upgraded to UPS.*

Analysis of establishment of new primary and upper primary schools in the sample district revealed the following:

- ***East Siang District***: 18 new primary schools planned were constructed. However, during joint inspection it was noticed that in two new schools (3rd Mile Primary School and Tulap Primary School), child friendly elements, fire extinguisher, garden, drinking water facility, electricity supply and ramps with handrails were not provided which were included in approved estimate and expenditure also incurred.

  In case of upper primary school, 18 new schools were planned and constructed, and handed over.

- ***West Siang District***: 49 new primary schools were planned and constructed. However, 22 new schools constructed during 2014-15 were yet to be handed over to the school authorities as of March 2016 even after one and a half year of completion.

  Nine new schools constructed during 2014-15 were yet to be handed over to the school authorities as of March 2016 because of non-payment of liabilities.

- ***Papumpare District***: 83 new primary schools planned were actually constructed. However, 24 new schools constructed during 2014-15 were yet to be handed over to the school authorities as of March 2016 even after one and half year of

completion. It was also noticed in Audit that in three new schools (DNGC Primary School, Nunpu Residential Middle School and Primary School, Kimin Town) constructed during 2012-13 to 2014-15, child friendly elements, fire extinguisher, garden and ramps with handrails, which were included in approved estimate and expenditure incurred, were not provided.

24 new schools constructed during 2014-15 were yet to be handed over to the school authorities as of March 2016 on account of non-payment of liabilities.

- ***Tawang District***: 7 new primary schools planned were constructed and handed over within the stipulated period of three years by March 2013 as per specification.

  In case of upper primary schools, no new construction had been taken up. However, three primary schools were upgraded to upper primary schools during 2012-13 to 2014-15.

Thus, new schools required for implementation of RTE was not fully achieved even upto March 2016.

Audit also noticed that detailed estimates and measurement books were not maintained by the DPOs in three[19] of the sampled districts. Thus, in the absence of estimate and design and authentic measurement book as prepared by qualified Engineers, the quality of work and the quantity of materials used for construction of the schools could not be verified in Audit.

1.3.8.2 Availability of infrastructure

In order to achieve the objective of RTE Act, appropriate Government was obligated to provide infrastructure such as school building, teaching staff, etc. The provision of the act stated that no school shall be established or recognized unless it fulfils the norms and standards specified which were: (i) at least one class room for every teacher and an office-cum-store-cum-head teacher's room; (ii) barrier-free access; (iii) separate toilets for boys and girls; (iv) safe and adequate drinking water facility; (v) kitchen for mid-day meal; (vi) play ground; (vii) boundary wall; and (viii) library.

As of 31 March 2016 there were 3335 schools in the State. The position of schools having required facilities and shortfall in the State as of March 2016 was as under:

Table-1.3.5

Facilities	Number of Schools		
	With facilities	Without facilities	*Per cent* without facilities
At least one class room for every teacher	3329	6	0.36
Boys Toilets	3184	151	4.53
Girls Toilets	3279	56	1.68
Safe and adequate drinking water facility	1762	1573	47.17
Toilets for CWSN*	225	3110	93.25

[19] East Siang, Papumpare and Tawang.

Facilities	Number of Schools		
	With facilities	Without facilities	*Per cent* without facilities
Ramps	812	2523	75.65
Handrails	516	2819	84.53
Play Ground/Play fields	1156	2179	65.34
With Boundary walls	1639	1696	50.85
Library with books	666	2669	80.03
Kitchen Sheds	2004	1331	40.00

*(Source: U-DISE) *CWSN - Children With Special Need*

It can be seen from the above table that almost all the schools providing elementary education in the State had at least one class room for every teacher. However, certain basic facilities were not available in all schools such as safe drinking water facilities (47.17 *per cent*); kitchen sheds (40 *per cent*); and library with books (80.03 *per cent*). Non-availability of facilities for children with special need was noticeable.

Thus, the infrastructure facilities as per the prescribed norm of the RTE Act had not been provided.

1.3.9 Availability of qualified teachers

Teachers who at the commencement of the RTE Act, did not possess minimum qualification as laid down by the academic authority, shall acquire such minimum qualification within a period of five years. The minimum qualification prescribed by the State Government for teachers was Senior Secondary (SS) and professional was Diploma (D.El.Ed) (for primary classes) or Bachelor (B.El.Ed) (for upper primary classes). This was also mandatory for teachers who were already employed and for appointment of new teachers in the State.Year-wise position of qualified teachers during the six year period was as under:

Table-1.3.6

Year	Number of teachers				
	Total	With Senior Secondary	*Per cent*	with D.El.Ed/ B.El.Ed	*Per cent*
2010-11	12,876	NA	NA	3651	28.36
2011-12	12,876	12,209	94.82	3095	24.04
2012-13	13,057	12,360	94.66	3276	25.09
2013-14	13,147	12,762	97.07	3366	25.60
2014-15	13,284	12,912	97.20	3503	26.37
2015-16	13,282	12,990	97.80	6311	47.52

(Source: Departmental Records)

It can be seen from above that the teachers with Senior Secondary was showing an increasing trend during the period covered in the performance audit. In case of professional qualification, teachers with the prescribed diploma/bachelor degree was less than 30 *per cent* during the period 2010-15 but the position improved during 2015-16 as the teachers with prescribed diploma/bachelor degree rose to 47.52 *per cent*.

At the end of the six year of implementation of the RTE Act, there were 292 teachers without Senior Secondary and about 52 *per cent* of teachers did not possess minimum professional qualifications prescribed by the State Government.

While accepting the audit observations, the Department (December 2016) stated that professional qualification would be ensured for all elementary teachers as per National Council for Teacher Education (NCTE) norms by the end of 2016-17.

1.3.9.1 Availability of Mathematics and Science teachers

Any school established before commencement of this Act shall take steps to fulfil norms and standards within a period of three years from the date of such commencement (April 2010). According to the norm, each upper primary school (VI to VIII) should have one teacher for Science and Mathematics. The position of availability of Science and Mathematics teachers during the period 2011-16 was as below:

Table-1.3.7

Year	Number of Upper primary schools	Number of Science & Mathematics teachers	Shortfall (in *per cent*)
2011-12	998	916	82(08%)
2012-13	1025	839	186 (18%)
2013-14	1093	762	331 (30%)
2014-15	1155	841	314 (27%)
2015-16	1237	722	515 (42%)

(Source: U-DISE) (Data for 2010-11 was not available)

As can be seen from the above table, shortfall in number of Science and Mathematics teachers increased from 82 in 2011-12 to 515 in 2015-16. This was due to an increase in the number of Upper primary schools from 998 in 2010-11 to 1237 in 2015-16 and decrease in number of Science and Mathematics teachers from 916 in 2010-11 to 722 in 2015-16.

Thus, it is evident that the requirement of at least one teacher for Science and Mathematics, as per RTE norms was not adhered to which would have adversely impacted the quality of education imparted.

While accepting the audit observations, the Department stated (December 2016) that the State has initiated to recruit mathematics and science teachers to ensure availability of subject teachers as per the RTE Act.

1.3.9.2 Pupil Teacher Ratio

According to the RTE Act, the State Government was to ensure the Pupil-Teacher Ratio (PTR) as per the norms specified in the Schedule within six months from the commencement of the Act. As per the norms, primary schools should maintain PTR in the ratio of 30:1 and in upper primary schools 35:1. In any case, the PTR should not be more than 40 students for primary classes.

The availability of teachers and number of students in primary schools and upper primary schools during the six year period 2010-16 was as under:

Table-1.3.8

Year	Primary Schools			Upper Primary Schools		
	Nos. of students	*Nos. of teachers*	*PTR*	*Nos. of students*	*Nos. of teachers*	*PTR*
2010-11	2,08,091	8,107	26	74,388	4,709	16
2011-12	1,82,016	8,131	22	69,489	4,796	14
2012-13	1,72,055	8,423	20	75,209	4,343	17
2013-14	1,58,127	8,526	19	74,683	4,405	17
2014-15	1,56,368	8,651	18	74,234	4,039	18
2015-16	1,50,921	8,549	18	73,346	3,868	19
Total	**10,72,459**	**50,295**	**21**	**4,47,437**	**26,316**	**17**

(Source: Departmental Records)

As it can be seen from above that in primary schools, the PTR was between 18:1 and 26:1 during the six years period 2010-16. In upper primary schools, for every teacher there were 14 to 19 students per class. Thus, the PTR in the State was well within the norms prescribed by the RTE Act.

Though PTR in the State was within norms prescribed by the RTE Act, during test check of 120 schools in the sampled districts it was noticed that 25 schools were having less teachers than required under norm while in the remaining schools there were deployment of excess teachers. This was indicative of the fact that posting of teachers was not rational and the position may be the same in other districts of the State.

Moreover, from the U-DISE data it could be seen that there were significant number of schools with single teacher in the State. Percentage of single teacher schools varied between 24 *per cent* and 32.56 *per cent* during the period covered under performance audit.

While accepting the audit observations, the Department stated (December 2016) that order has been issued from the Secretary Education to review the posting of teachers for rationalization in the districts.

1.3.10 Provision for free text/work books

As per RTE Rules, a child attending a school of the State Government is entitled to free text books. For the purpose of providing free text books, the framework for implementation of the RTE Act prescribed ₹ 150 per child at primary level and ₹ 250 per child at upper primary level. Within the ceiling of prescribed unit cost per child per year at primary and upper primary levels, States can support work books, work sheets and other essential teaching learning materials which together constitute textual materials for the subject, class or grade. Further, States that have been providing text books to children under State sector schemes and budgets since 2007-08 will continue to fund text books being provided from the State Plans.

Directorate of Elementary Education (DEE), Government of Arunachal Pradesh (GoAP) procured and distributed free text books to government schools under the State Plan, and SPD, SSA, Rajya Mission provided work books to both government run schools and government aided schools. Text books and work books were centrally purchased at the

State level both by DEE, GoAP and SPD, SSA and supplied to DPOs who in turn distributed them to SMCs under their jurisdiction.

1.3.10.1 Provision for free text books by DEE

Position of funds and expenditure on procurement of text books by DEE during the six years period was as under:

Table-1.3.9

Year	Number of students	Number of text books required	Number of text books purchased	Shortfall/ Excess	Amount Allotted *(₹in lakh)*	Expenditure *(₹in lakh)*
2010-11	2,82,478	14,60,681	16,83,145	(+) 2,22,464 (15 %)	503.96	500.14
2011-12	2,51,505	14,34,720	20,33,226	(+) 5,98,506 (42 %)	683.35	680.07
2012-13	2,47,264	14,65,809	15,85,144	(+) 1,03,018 (7 %)	778.24	775.05
2013-14	2,32,809	15,12,229	12,71,990	(-) 2,23,922 (15 %)	771.3	757.13
2014-15*	2,30,603	13,89,963	9,47,280	(-) 4,42,683 (3 %)	71.07	51.27
2015-16	2,24,266	13,62,358	6,13,500	(-) 7,48,858 (55 %)	292.09	292.09
Total		**58,73,439**	**71,87,005**	**(-) 65109**	**3100.01**	**3055.7**

(Source: Departmental Records). **In 2014-15, text books were procured by SPD, SSA.*

During 2010-11 to 2012-13, there was excess procurement of text books ranging from 1.03 lakh to 2.22 lakh but during subsequent years there were shortfall in purchase of text books.

The shortfall in procurement and distribution of text books during three year period from 2013-14 to 2015-16 was stated to be due to fund constraints. This would have adversely affected the quality of education imparted to the students in these years.

In the test checked 120 schools it was noticed that:

- ***East Siang District:*** While 7 to 18 schools were short-supplied 35,363 (25 *per cent*) text books, 2 to 4 schools received 4,976 (4 *per cent*) text books in excess of requirement. Further, 7 to 16 schools could not produce receipt of 62,714 (45 *per cent*) text books.
- ***West Siang District:*** Only 2 to 4 schools received text books as per requirement. While 7 to 20 schools were short-supplied 37,712 (36 *per cent*) text books, 1 to 4 schools received excess of 1459 text books. Further, 2 to 11 schools could not produce receipt of 26,468 (25 *per cent*) text books.
- ***Papumpare District:*** While 2 to 12 schools were short-supplied 39,265 (26 *per cent*) text books, 2 to 3 schools received 1435 text books in excess of requirement. Further, 8 to 16 schools could not produce receipt of 93,560 (62 *per cent*) text books.

- ***Tawang District:*** While 6 to 17 schools were short-supplied 25,915 (40 *per cent*) text books, 1 to 5 schools received excess of 2342 (4 *per cent*) text books. Further, 2 to 14 schools could not produce receipt of 15051 (23 *per cent*) text books.

Thus, it is evident that text books were not distributed by DPOs as per actual requirement of schools.

1.3.10.2 Provision of free work books by SPD, SSA

Position of funds and expenditure on procurement of work/text books during the six years (*During 2010-11 & 2014-15 expenditure was on procurement of text books only)* was as under:

Table-1.3.10

(₹in lakh)

Year	AWP & B*		Expenditure	Number of students enrolled	Expected expenditure as per norm	Excess
	Number of students	*Approved * Amount*				
2010-11	3,40,027	611.59	620.50	2,93,597	518.99	(+) 101.51
2011-12	2,93,577	518.96	518.96	2,66,609	475.63	(+) 43.34
2012-13	2,66,609	475.63	475.63	2,61,690	473.20	(+) 2.43
2013-14	2,61,653	473.13	473.13	2,47,342	450.71	(+) 22.42
2014-15	2,47,322	450.68	450.68	2,45,047	447.25	(+) 3.43
2015-16	2,45,032	447.21	447.21	2,39,430	438.20	(+) 9.01
Total		**2977.21**	**2986.12**		**2803.98**	**(+) 182.13**

*(Source: Departmental records) Note: *Approved amount = Nos. of Students x ₹150 for PS & ₹250 for UPS.*

**Annual Works Plan and Budget*

It can be observed from the above table that during the six years period from 2010-2016, SPD, SSA spent ₹ 29.86 crore as per approved Annual Works Plan and Budget (AWP&B). However, the actual number of the students enrolled in these years was less than the number of students projected in AWP&B. Due to procurement of work books without considering the actual number of students, an avoidable extra expenditure of ₹ 1.82 crore was incurred.

1.3.10.3 Procurement of work books.

Further, despite procurement of excess work books, it was noticed that no work books were received in any of the test checked schools. Thus, 39,065 students in primary schools and 25,764 students in upper primary schools who were studying in these schools were deprived of work books. Monetary value of work books not received in the test checked schools was ₹ 123.02 lakh. The position may not be entirely different in other districts of the State.

Thus, the matter regarding excess procurement of work books and its non-supply to schools needs to be examined by the Government and necessary steps taken to ensure prompt and adequate supply of work books.

Accepting the fact, the Department stated (December 2016) that supply orders were issued as per the approved outlay. Further added that SPD, SSA viewed non-receipt of work books in test checked schools seriously and would pursue the matter and the finding thereof will be intimated to audit.

1.3.10.4 Purchase of text books

In scrutiny of records it was noticed in Audit that in 2010-11, SPD, SSA procured 11,61,162 text books (July 2010) at a cost of ₹ 620.50 lakh from M/s Shanti Enterprises, Naharlagun for distribution to 2,93,597[20] students enrolled during the year.

Audit, however, observed that Directorate of Elementary Education had already procured 16,83,145 text books i.e. more than the requirement of 14,60,681 in February 2010 at a cost of ₹ 500.14 lakh. Further, scrutiny in Audit revealed that the text books were received by the DPOs of four sampled districts from the DEE only. Thus, expenditure on text books worth ₹ 620.50 lakh incurred by SPD, SSA in July 2010 was doubtful.

In reply, the Department stated (December 2016) that the text books procured by DEE was for the year 2009-10 while SPD, SSA procured text books for the year 2010-11.

The reply is not acceptable as procurement of text books by DEE at the end of the academic session (in February 2010) when the session was to end in March 2010 meant that the students were deprived of the required text books during the relevant academic session. No evidence of distribution of text books from SPD, SSA during 2010-11 was noticed in Audit in the sampled districts. The system of assessment, procurement and distribution of text books needs to be streamlined to ensure that the students get the text books on time, there is no delay/shortage of books and procurement and supply is as per requirement.

1.3.11 Provision of school uniforms

As per RTE Rules (2010) a child attending a school of the State Government shall be entitled to free uniform. According to the prescribed norm, all girls and SC/ST/BPL children are entitled to two sets of uniform at the rate of ₹ 400 per child. As per guidelines, procurement of uniform was to be decentralized to the school management committee (SMC).

It was noticed in audit that:

- SPD, SSA in violation of the guidelines did not transfer the approved funds for procurement of school uniforms to the districts, but resorted to centralized procurement during 2010-11. During 2011-12, no fund for uniform was provided by GoI though proposed by SPD, SSA in its AWP&B due to non-release of State's share. Funds for uniforms were released to DPOs from 2012-13 onwards.
- However, during 2012-13 procurement of uniforms worth ₹ 89.14 lakh and ₹ 103.21 lakh was done by DPOs in East Siang and West Siang respectively without transferring to SMCs. Only from 2013-14, funds were transferred to SMC in East Siang district.

[20] Government run schools – 2 82,478 and Government aided schools - 11,119

- In Tawang, funds for uniforms were transferred and spent by SMC between 2012-13 and 2015-16.
- While in West Siang, funds were retained and spent by BRCC, in Papumpare, DPOs procured the uniform during 2012-13 to 2014-15.

Status of procurement and distribution of uniforms at the DPO and SMC level during the period 2010-16 based on scrutiny of records of DPOs and the findings in 120 test checked schools in four sample districts were as follows:

(i) ***East Siang District***

An expenditure of ₹ 389.23 lakh was incurred in East Siang District during 2010-11 to 2015-16 for purchase of 97,307 uniforms against requirement of 85,709 uniforms based on enrolment of students which resulted in excess purchase of 11,598 uniforms (₹ 46.39 lakh).

Despite purchase of uniforms in excess of requirement, during test check of schools short supply of uniform ranging between 195 and 245 uniforms in 3 to 10 schools was noticed. No documentary evidence for supply of uniforms to 7734 students was available for verification. Besides, 19 to 397 uniforms were supplied in excess of requirement in 1 to 10 schools. Only 1 to 2 schools received uniforms as per requirement during 2013-14 to 2015-16.

(ii) ***West Siang District***

An expenditure of ₹ 423.62 lakh was incurred during 2010-11 to 2015-16 for purchase of 1,05,904 uniforms against the actual requirement of 1,38,303 uniforms indicating a shortfall by 32,399 uniforms.

In test check of schools, short supply of uniform ranging between 504 and 1051 uniforms involving nine to 12 schools and an excess supply of 29 to 84 uniforms in two to four schools were noticed. Moreover, the above test checked schools could not provide documentary evidence for supply of uniforms for 3053 students enrolled in two to 11 schools during the five year period. Only three to 12 schools received uniforms as per requirement.

(iii) ***Papumpare District***

₹ 657.31 lakh incurred in the district for purchase of 1,64,328 uniforms against requirement of 1,45,833 uniforms as per enrolment of students resulted in excess purchase of 18495 uniforms (₹ 73.98 lakh) during the five year period 2011-12 to 2015-16.

During test check of schools, short supply of uniform ranging between 69 to 649 uniforms in two to eight schools and excess supply of 70 to 107 uniforms in two to three schools during two years of 2014-15 and 2015-16 were noticed. No documentary evidence for supply of uniforms to 9553 students was available for verification. Only one to six schools received uniforms as per requirement.

(iv) *Tawang District*

In Tawang District, an expenditure of ₹ 105.61 lakh was incurred for purchase of 26,402 uniforms against requirement of 22,838 uniforms resulting in excess purchase of 3610 uniforms (₹ 14.44 lakh).

Thus, in the test checked schools there was short supply of uniform ranging between 45 to 322 uniforms in four to 12 schools. Documentary evidence for supply of uniforms to 1440 students was also not available for verification. Besides, 17 to 142 uniforms were supplied in excess of requirement in three to six schools. Only two to seven out of 22 schools received uniforms as per requirement during 2012-13 to 2015-16.

Total shortfall in supply of uniforms in the test checked schools works out to 7745 uniforms costing ₹ 30.98 lakh. Further, shortfall in supply of uniform has to be seen in light of the fact that uniforms were purchased based on the higher enrolment figures projected in the State.

There is a need for streamlining the process of procurement and distribution of free uniforms.

In reply, the Department stated (December 2016) that the shortfall in receipt, and lack of documentary evidence in the sampled districts was due to ignorance of procedure for maintenance of records by the teachers. In actual, there were cases of excess supply of uniforms.

The reply of the Department is not acceptable as there were clear cases of short supply of uniforms in the four sampled districts. Evidence of receipt of uniforms in respect of 21,780 students were not available since actual distribution could not be verified in audit.

1.3.12 Financial Management

For implementation of the provision of the RTE Act, both the Central and State Governments are to provide funds in the ratio of 90:10. GoI released fund on the basis of AWP&B submitted by the State Government in two instalments in April/ May and September each year depending upon the progress of expenditure of earlier releases.

1.3.12.1 Fund Flow and Expenditure

Status of releases of funds and expenditure during the period 2010-16 was as follows:

Table-1.3.11

(₹ in Crore)

Year	Open-ing Balance	Fund Received		Other / Misc. receipt	Total fund available	Total expend-iture	Closing Balan-ce	Percentage of expenditu-re
		Central share	*State share*					
2010-11	11.01	204.02	1.35	3.16	219.54	212.92	6.62	96.98
2011-12	6.62	238.80	25.00	2.10	272.52	260.36	12.16	95.54
2012-13	12.16	437.65	68.66	2.88	521.35	472.62	48.73	90.65
2013-14	48.73	192.62	43.01	16.50	300.86	291.29	9.57	96.82
2014-15	9.57	269.22	34.35	4.55	317.69	306.57	11.12	96.50
2015-16	11.12	181.79	33.11	71.26	297.28	284.25	13.03	95.62
Total		**1524.10**	**205.48**	**100.45**		**1828.01**		

(Source: Departmental Records)

Audit observed that during the period 2010-16 out of the total available fund of ₹ 1841.04 crore (opening balance + funds received from Centre and State Government + other/misc. receipts), ₹ 1828.01 crore (99.29 *per cent*) was utilized. Utilization of available fund ranged from 90.65 *per cent* to 96.98 *per cent* of the total fund available in that particular year. However, there were delays in release of funds to the lower formations as indicated in the following table:

Table-1.3.12

(₹ in Crore)

Year	State to SPD		SPD to DPO		DPO to BRC/SMC		Total Delay at BRC/ SMC
	Delay (months)	*Amount*	*Delay (months)*	*Amount*	*Delay (months)*	*Amount*	
1	***4***	***5***	***6***	***7***	***8***	***9***	***10***
2010-11	-	-	1 to 6	56.65	2 to 3	0.23	5 to 17
2011-12	-	-	1 to 7	63.82	5 to 8	0.13	6 to 15
2012-13	-	-	1 to 5	169.88	4 to 6	0.18	7 to 16
2013-14	-	-	1 to 10	153.44	1 to 9	0.22	7 to 29
2014-15	1 to 2	176.71	1	23.44	1 to 8	1.78	4 to 16
2015-16	1 to 3	171.69	1 to 5	134.93	1 to 12	0.21	8 to 18

(Source: Departmental records) Note: (i) From 2010-11 to 2013-14, GoI released funds directly to SPD, SSA; (ii) Since 2014-15, Central share was released to State Government which in turn was released to SPD, SSA.

Thus, delay in release of funds at various levels would have impacted on timely completion of planned activities.

1.3.12.2 Retention of cash in hand

As per Manual on Financial Management and Procurement, the contents of the cash chest/cash box should be verified by the Head of Office/ DDO or the senior most official in-charge at least once in a month and the account compared with the cash book balance and the result of verification should be recorded in the cash book each time.

Audit observed that in DPO Upper Subansiri, DPO West Siang and DPO East Siang cash verifications were not carried out as required under the Rules. In Upper Subansiri and West Siang accounts for 2015-16 had also not been prepared.

1.3.12.3 Violation of financial rules

- As per Para 115.4 of Manual on Financial Management and Procurement of SSA, for procurement of goods worth more than ₹ 20 lakhs, invitation of bids shall be published in newspapers and at least in one national English daily.

Scrutiny of records revealed that SPD, SSA placed in March 2011 two supply orders for supply of boys' uniform on M/s Vardhman Garments, New Delhi for ₹ 501.11 lakh and for supply of girls' uniform on M/s Vandana Enterprises, New Delhi for ₹ 614.61 lakh. It was noticed in audit that the above two firms were selected without advertised tender in violation of the guidelines. As a result, competitive bidding was not ensured by SPD, SSA in the selection of suppliers.

- As per Financial Rules of SSA, advance payment to contractors is to be made in respect of construction works only and not for supply of goods and services.

Scrutiny of records of SPD, SSA revealed that in March 2011, an amount of ₹ 157.14 lakh (31 *per cent* of supply order value of ₹ 501.11 lakh) was released to M/s Vardhman Garments, New Delhi as advance payment, in violation of the extant Rules. Further, it was noticed that balance amount of ₹ 343.97 lakh was released (August 2011) without supply of 2760 number of boys' uniform worth ₹ 11.04 lakh.

Similarly, ₹ 614.61 lakh (the total value of supply order) was released as advance to M/s Vandana Enterprises, New Delhi, in violation of the extant Rules. Despite full payment (₹ 614.61 lakh) in advance, 13,700 number of girls' uniform worth ₹ 54.80 lakh were not delivered to SPD, SSA. The follow-up action either to get delivery of the balance uniform from the suppliers or get refund for uniforms not supplied were also not on record.

In reply, the Department stated (December 2016) that advance payment were made to suppliers as mobilization advance for early supply of uniforms after obtaining bank guarantee of required amount. In the case of short supply, efforts are being made to trace the missing challan and the same will be produced to audit.

The reply of the Department is not acceptable as there was no provision under financial rules of SSA for payment of advance in supply contract. Moreover, bank guarantee obtained was only 7.5 *per cent* of the supply order value which was not able to fully cover the interest of the Government and in the instant case bank guarantee obtained was not revoked despite short supply. The State Government needs to investigate and fix responsibility for violation of extant rules leading to non-supply of uniforms for which full payment had been made in advance and depriving the children of free uniform though expenditure has been incurred.

- Audit scrutiny of records in SPD, SSA revealed that during 2010-11 to 2015-16, the supply orders for work/text books were placed on four wholesale suppliers and payment released in advance in violation of the extant Rules as per details given below:

Table-1.3.13

(₹ in lakh)

Year	Name of the firms	Cost of Books	Advance amount	% of advance against total cost
2010-11	M/s Shanti Enterprises, Naharlagun	620.50	620.50	100
2011-12	M/s Shanti Enterprises, Naharlagun	518.99	518.99	100
2012-13	M/s K.T. Traders, Naharlagun	475.63	350	73.59
2013-14	M/s Shanti Enterprises, Naharlagun	473.20	473.20	100
2014-15	M/s T.Y. Traders, Itanagar	45.62	45.62	100
Total			**2008.31**	

(Source: Departmental records)

It was further noticed that despite full payment of ₹ 473.20 lakh as advance to M/s Shanti Enterprises, Naharlagun in 2013-14, 12,299 text books worth ₹ 10.88 lakh were not delivered. No follow-up action either to get delivery of the balance text books from the suppliers or to get refund of proportional value of material not supplied was on record.

In reply, the Department stated (December 2016) that NCERT do not supply books without advance payment. As such advance payment were made to wholesale suppliers for NCERT publications. Efforts are being made to trace the missing challan and the same will be produced to audit.

The reply of the Department is not tenable as financial rules of SSA, did not provide for advance payment for supply of goods and services. The Department was exposed to financial risk while depriving the student of work books and text books.

1.3.13 Monitoring mechanism

The RTE Act provides that the State Advisory Council (SAC) shall advise the State Government on implementation of the provisions of the Act in an effective manner. The State Advisory Council shall consist of a Chairperson and fourteen other members and Minister in-charge of the Ministry/Department of School Education in the State Government who shall also be the ex-officio Chairperson of the Council. Besides, fifty percent of such members shall be from amongst women.

1.3.13.1 Constitution of State Advisory Council

Audit observed that SAC was constituted on 23 August 2012 after two years of the RTE Act which came into effect in the State in April 2010. There were only four women members in the SAC against the requirement of eight members. Audit further observed that though the first term of two year was over by 22 August 2014, no notification for re-constitution of SAC have been issued by State Government till March 2016.

As per the RTE Act, SAC was to meet regularly at such times as the Chairperson thinks fit but three months shall not intervene between its last and the next meeting.

Audit, however, observed that SAC had not held a single meeting during the last six year from 2010-11 to 2015-16. Thus, overall direction and monitoring of the scheme at the State level as envisaged in the Act was not followed.

1.3.13.2 Steering cum Monitoring Committee at District and Block level

Block Resource Centres (BRCs) and Cluster Resource Centres (CRCs) were to be established in each block of every district under SSA to conduct in-service teacher training and to provide academic support to teachers and schools on a regular basis as well as to help in community mobilization activities.

As per RTE norms, Block Resource Centre (BRC) and Cluster Resource Centre (CRC) shall inspect schools in their jurisdiction once in every two months.

It was noticed in audit that inspection of 30 test checked schools were carried out as required in Tawang District. In 90 test checked schools in the remaining three sample districts, inspections were carried out by BRC and CRC only once in a year instead of once every two months.

1.3.13.3 Monitoring by SCPCR

The Act provides that the State Commission for Protection of Child Rights (SCPCR) in addition to duties assigned under Commission for Protection of Child Right Act, 2005 shall also perform the following functions:

- Examine and review the safeguards for rights provided by or under Act and recommend measures for their effective implementation and;
- Inquire into complaints relating to child right to free and compulsory education.

For this purpose, the SCPCR was required to set up a child helpline, accessible by SMS, telephone and letter to register complaint regarding violation of child rights.

Audit observed that though SCPCR was constituted in November 2013 consisting of one chairperson and six other members and some these nominated members were also members of Arunachal Pradesh State Commission for Women (APSCW).

The present SCPCR has not set up child helpline, accessible by SMS, telephone and letter to register complaint regarding violation of child rights as required under the Act.

1.3.14 Conclusion

The objective of providing free and compulsory education to every eligible children has not been achieved even after six years of RTE implementation. School mapping and household survey for identification of children eligible for elementary education has not been carried out.

At the end of March 2016, out of school children stood at 57,032 after six years of implementation of the Act. 232 primary schools and 130 upper primary schools though constructed had not been made operational. The required infrastructure/facilities as prescribed in the RTE Act were not provided in all the schools. Still sizable number of teachers do not possess the minimum qualifications prescribed by the State Government.

There were anomalies in procurement and distribution of school uniforms and text books. There were instances of lapses/short comings in financial management. The monitoring mechanism was not effective.

1.3.15 Recommendations

The State Government may:

- conduct household survey and school mapping for identification of eligible children in the State to ensure providing compulsory education to the eligible children.
- ensure timely release of fund to the implementing society and various implementing units for smooth implementation of the scheme.
- streamline the procurement of text books and uniforms to ensure proper procurement, accounting of receipts and distribution to targeted schools/students.
- Strengthen the monitoring mechanism and ensure necessary periodical inspection by BRC and CRC.

Compliance Audit Paragraphs

Health Department

1.4 Bio-Medical Waste Management

Government of India framed the 'Bio-Medical Waste (BMW) (Management and Handling) Rules, 1998' under the provisions of Environment (Protection) Act, 1986 which prescribed the procedures for treatment and disposal of bio-medical waste generated by institutions such as hospital, nursing home, clinic, dispensary etc. It was decided to do an audit regarding compliance of the BMW management at the Health Department and the Arunachal Pradesh State Pollution Control Board (APSPCB). Some of the important audit findings are as follows:

Highlights

- ***Arunachal Pradesh State Pollution Control Board did not have state level data on Health Care Establishments which required compliance of rules and regulations of BMW.***

(Paragraph 1.4.6)

- ***Only 12 out of 437 Health Care Establishments are functioning with authorisations issued by Arunachal Pradesh State Pollution Control Board. Authorisations were issued by Arunachal Pradesh State Pollution Control Board even when the Health Care Establishments did not possess the necessary capacity to handle BMW in accordance with the Rules.***

(Paragraph 1.4.7 and 1.4.8)

- ***Treatment plants installed in 10 Government hospitals at a total cost of ₹635.46 lakh remained non-functional due to lack of trained manpower, technical defects, lack of funds for maintenance and power shortage, etc.***

(Paragraph 1.4.9)

- ***Twelve hospitals inspected by Audit did not observe the standards prescribed in the Rules for disposal of bio-medical waste.***

(Paragraph 1.4.13)

1.4.1 Introduction

BMW is generated during diagnosis, treatment or immunisation of human beings or animals or in research activities pertaining thereto. BMW consists of human anatomical waste, animal waste, discarded drugs, waste sharps, such as, needles, syringes, scalpels, blades, glass, etc., soiled wastes such as items contaminated with blood, and body fluids including cotton dressings, plaster casts, linens, beddings, etc., solid waste such as tube, catheters, intravenous sets etc. Improper disposal of BMW would lead to adverse effect to human health and the environment.

Institutions such as hospital, nursing home, clinic, dispensary, veterinary institution, animal house, pathological laboratory, blood bank, etc., are the BMW generating

establishments. GoI framed the Bio-Medical Waste (Management and Handling) Rules, 1998 (BMW Rules) under the provisions of Environment (Protection) Act, 1986, wherein the procedure for treatment and disposal of BMW was prescribed. The Rules require the BMW generating institutions to ensure compliance of the provisions of the Rules in disposal of the BMW generated by them. The compliance audit of the Health Department and APSPCB was selected by Audit in order to see whether the Health Care Establishments (HCEs) especially the Government hospitals in the State were complying with the provisions of the Rules in management of BMW.

1.4.2 Organisational Set Up

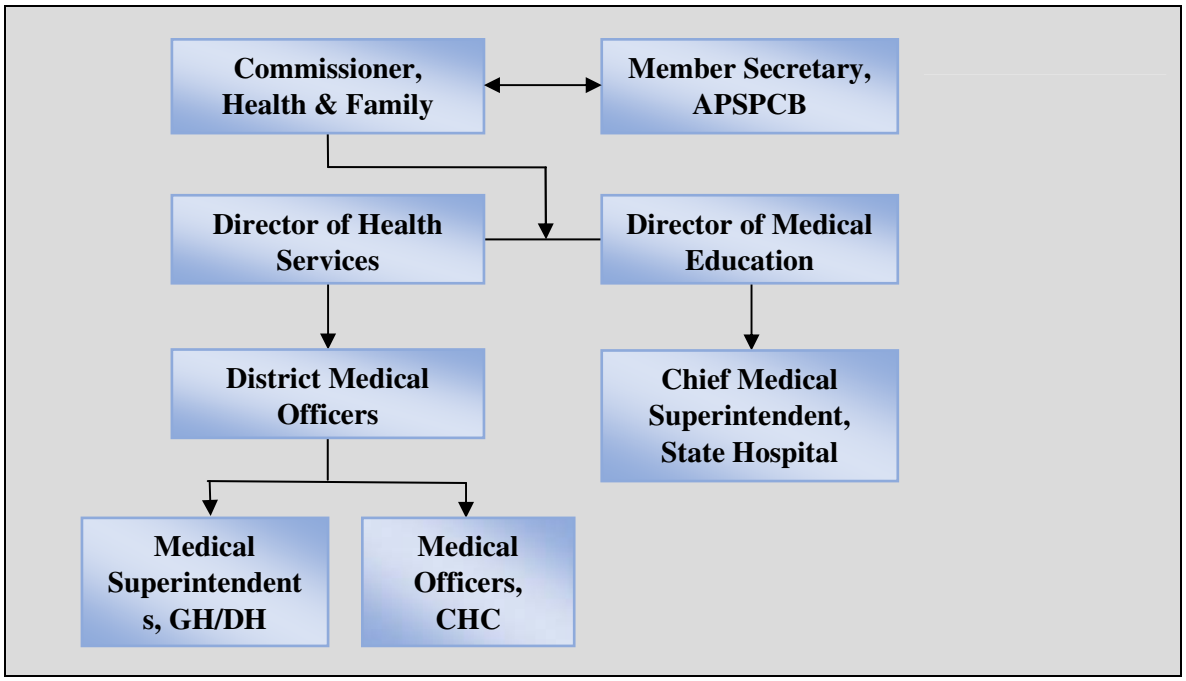
For management of bio-medical waste, both Health Department and APSPCB are responsible for implementation, enforcement and monitoring in all HCEs (both Government and private hospitals).

The Commissioner, Health & Family Welfare is in overall charge of the Health Department. He is assisted by Directors and District Medical Officers in the administration and monitoring of the functioning of the Department. The Chief Medical Superintendents, Medical Superintendents and Medical Officers look after the management and activities of various government hospitals in the State.

Arunachal Pradesh State Pollution Control Board is the designated authority for monitoring and enforcement of BMW Rules in the State. The APSPCB discharges all its functions and activities from its head office located in the capital region and does not have any regional or district level offices.

Chart-1.4.1

Organisational Chart



1.4.3.1 Audit Objective

The compliance audit focused on whether Health Care Establishments in the State especially Government hospitals were complying with the provisions of the BMW (Management & Handling) Rules in management of BMW.

1.4.3.2 Audit Criteria

Audit findings were benchmarked against the criteria contained in following sources:

- BMW (Management & Handling) Rules, 1998;
- CPCB Guidelines on Design and Construction of BMW Incinerator and Installation of Common Bio-medical Waste Treatment Facility; and
- The Clinical Establishments (Registration and Regulation) Act, 2010.

1.4.4 Audit scope and methodology

The audit was conducted by test-check of records of APSPCB, Commissioner of Health & Family Welfare, Director of Health Services, Director of Medical Education and Mission Director of NRHM for the period from 2011-12 to 2015-16. Joint verification of 12 hospitals[21] was conducted along with representatives of APSPCB.

An entry conference was held (April 2016) with the Member Secretary, APSPCB and Joint Secretary, Health & Family Welfare Department to discuss the audit objectives and methodology. An exit conference was held on 6 October 2016 wherein audit observations were discussed and the comments and replies of the APSPCB and that of the Government had been suitably incorporated in the report.

Audit Findings

Audit findings are discussed in the following paragraphs.

1.4.5 Notification of BMW Rules by APSPCB

The Bio-Medical Waste (Management and Handling) Rules framed by GoI as per the provisions of the Environment (Protection) Act 1986 came into effect on 20 July 1998. As per Rule 7, the State Pollution Control Board was the designated authority for enforcement of the provisions of these Rules. APSPCB was the designated authority in Arunachal Pradesh.

1.4.6 Identification of BMW generating HCEs

For effective implementation of the Rules, the APSPCB would require to identify all HCEs functioning in the State by way of survey and maintaining records for inspection and monitoring.

Audit, however, observed that the APSPCB had not conducted any survey of HCEs in the State so as to ascertain and monitor the mode of treatment of BMW generated by them to prevent adverse effect on human health and environment. Moreover, the

[21] Nine Government Hospitals (viz., Tomo Riba State Hospital, Naharlagun; General Hospital, Ziro; General Hospital, Bomdila; General Hospital, Tezu; General Hospital, Khonsa; General Hospital Pasighat; General Hospital Aalo; District Hospital Daporijo) and District Hosiptal, Doimukh and three private hospitals (viz., RK Mission Hospital Itanagar; Heema Hospital Itanagar; and Niba Hospital Naharlagun).

APSPCB did not have state level data of HCEs for purpose of proper implementation of the Rules.

Audit noticed that APSPCB had not prepared a state level list of Health Care Establishments (HCEs) functioning in the State, though the Rules were notified in 1998. As per information available with Director of Health Services, 437 HCEs[22] were registered with the Health Department under 'The Clinical Establishments (Registration and Regulation) Act, 2010'. There was nothing on record to indicate that the list of 437 HCE available with the Health Department was utilised by APSPCB to ensure that these were compliant to BMW Rules and Regulations.

In reply, the APSPCB stated (May2016) that steps are being taken to identify all the BMW generating institutions.

1.4.7 Issue of authorisation

Rule 8 (1) of BMW Rules provides that every HCE treating 1000 or more patients every month is required to obtain authorisation from the prescribed authority for generating, collecting, receiving, storing, transporting, treating, disposing and/or handling BMW.

Audit observed that only 12 HCEs[23] (5 Government hospitals and 7 private hospitals) were functioning with authorisations of APSPCB, out of which the validity of authorisation of Tomo Riba State Hospital, Naharlagun had expired in July 2014 but had not been renewed.

Further, it was observed that the APSPCB as well as the Health Department had no information relating to the number of patients treated by each HCE in a month. Also, as identification of HCEs generating bio-medical waste had not been carried out, APSPCB had no information as to how many HCEs were actually required to apply for authorisations as per the Rules.

Thus, majority of the HCEs in the State were functioning without obtaining the required authorisations from the APSPCB.

1.4.8 Authorisation without compliance to prescribed standards

As per Rule 7 (4) of BMW Rules, the prescribed authority shall on receipt of application for authorisation make such enquiry as it deems fit and if it is satisfied that the applicant possesses the necessary capacity to handle bio-medical waste in accordance with these rules, grant or renew an authorisation as the case may be.

Audit noticed that the APSPCB conducted inspections of five HCEs[24] out of these 12 HCEs functioning with authorisation to verify the availability of BMW management facilities. From the inspection reports of the Board, it was noticed that three[25] out of the

[22] Government – 193 and Private – 244

[23] Tomo Riba State Hospital, Naharlagun; District Hospital, Pasighat; District Hospital, Aalo; District Hospital, Tawang; District Hospital, Yingkiong; RK Mission Hospital, Itanagar; Heema Hospital, Itanagar; Niba Hospital, Naharlagun; Emmanuel BTM Hospital, Naharlagun; Arun Dristi, Itanagar; Assa Diagnostic & Nursing Home, Pasighat; and T.L. Health Care, Basar.

[24] RK Mission Hospital, Itanagar; Heema Hospital, Itanagar; Niba Hospital, Naharlagun; Emmanuel BTM Hospital, Naharlagun; and Assa Diagnostic & Nursing Home, Pasighat.

[25] Heema Hospital, Itanagar; Niba Hospital, Naharlagun; and Emmanuel BTM Hospital, Naharlagun.

five HCEs inspected did not follow the prescribed procedures for management of BMW. But follow-up action taken on these HCEs was not on record.

Accepting the fact the Department stated (October 2016) that the three HCEs inspected were not following bio-medical waste management procedure due to lack of training, which would be addressed in due course of time.

Further, six[26] out of the 12 HCEs which were functioning with authorisations issued by the APSPCB were jointly inspected by audit for ascertaining the availability of BMW treatment plants such as incinerator, autoclave, shredder and Effluent Treatment Plant (ETP). The position of availability of BMW treatment plants in HCEs jointly inspected was as under:

Table - 1.4.1

Sl. No.	Name of HCE	Name of plant			
		Incinerator	Autoclave	Shredder	ETP
1	State Hospital, Naharlagun	✗	✗	✗	✗
2	RK Mission Hospital, Itanagar	✓	✗	✗	✗
3	Heema Hospital, Itanagar	✗	✗	✗	✗
4	Niba Hospital, Naharlagun	✗	✗	✗	✗
5	General Hospital, Pasighat	✓	✗	✓	✗
6	General Hospital, Aalo	✗	✗	✗	✗

✓ - Available; ✗ - Not available

- Out of the six HCEs, only two hospitals, namely, General Hospital, Pasighat and RK Mission Hospital, Itanagar had incinerators, but the incinerator at General Hospital, Pasighat was lying idle since September 2009. During a joint physical inspection of RK Mission Hospital conducted with an officer of APSPCB, it was noticed that the temperature at the primary chamber of incinerator was displayed as 99° C against requirement of 800 ± 50° C and the temperature at the secondary chamber was displayed as 750° C against the requirement of 1050 ± 50° C as contained in Schedule V of the Rules. This indicated that the bio-medical wastes were not treated as per prescribed standards, and which could have an adverse effect on human health and environment.

  The Department stated (October 2016) that RK Mission Hospital had been instructed to follow the schedule V of the Rules and ensure operation guidelines.

  - Only General Hospital, Pasighat had a shredder, however, it was non-functional since September 2009.
  - None of the six HCEs had Autoclave for bio-medical waste disposal and ETP for treatment of liquid waste.

  The Department stated (October 2016) that the proposal for ETP is under consideration of State Government.

[26] Tomo Riba State Hospital, Naharlagun; RK Mission Hospital, Itanagar; Heema Hospital, Itanagar; Niba Hospital, Naharlagun; General Hospital, Pasighat; and General Hospital, Aalo.

Thus, it is evident that authorisations were issued by the Board even when the HCEs did not possess the necessary capacity to handle BMW in accordance with the Rules.

1.4.9 Installation of BMW treatment plants

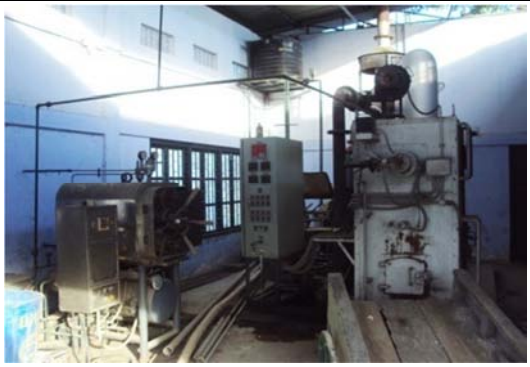
As per Rule 5 of BMW Rules, every occupier shall set up between December 1999 and December 2002 requisite bio-medical waste treatment facilities like incinerator, autoclave and microwave system for the treatment of waste. Under the Rule, bio-medical waste shall be treated and disposed off in accordance with the provisions of Schedule I and in compliance with standards prescribed in Schedule V.

Status of treatment plant in eight government hospitals as observed during joint inspection was as indicated below:

State Hospital, Naharlagun: BMW treatment plant installed (June 2004) at the cost of ₹ 70.88 lakh under Central assistance was subsequently dismantled in June 2012 to accommodate construction of 300 bedded hospital at the site. No replacement had been provided since then.

Dismantled plant at State Hospital, Naharlagun

General Hospital, Pasighat: The plant installed (June 2004) costing ₹ 70.88 lakh under Central Assistance was lying idle since September 2009 due to technical defects. Subsequently, another plant costing ₹ 68.50 lakh funded (December 2013) under NRHM remained incomplete even after two years of its sanction.



Treatment plant lying idle at General Hospital, Pasighat

Dismantled part of incinerator at General Hospital, Aalo

General Hospital, Aalo: The plant installed at the cost of ₹ 22.89 lakh (2009) under NRHM was not functional since its installation due to unsatisfactory installation and lack of trained operator. The plant was dismantled. A new plant costing ₹ 50.00 lakh taken up under NRHM (2015-16) remained incomplete.

General Hospital, Ziro: The plant costing ₹ 22.89 lakh installed in 2009 was lying in damaged condition since May 2015. Even another plant costing ₹ 70. 49 lakh installed (July 2013) was not operational due to technical defects since June 2014.

Broken part of chimney of an incinerator at General Hospital, Ziro

Idle plant at General Hospital, Bomdila

General Hospital, Bomdila: The treatment plant installed (November 2013) at ₹ 70.49 lakh could not be made operational due to absence of formal training as well as lack of fund to operate the plant since its installation.

General Hospital, Tezu: The plant installed (June 2014) at the cost of ₹ 70.49 lakh was not put to use since installation reportedly due to absence of separate power source.

Non-functional plant was installed in this shed at General Hospital, Tezu.

The roof of incinerator room of General Hospital, Khonsa blown away by storm.

General Hospital, Khonsa: The plant installed (June 2014) at the cost of ₹ 70.49 lakh was not functional due to shortage of power supply.

District Hospital, Daporijo: The plant costing ₹ 25.00 lakh installed in 2011 under NRHM was not operational since installation due to lack of trained manpower.	
	Condition of a shed of treatment plant lying idle at District Hospital, Daporijo.

Further, scrutiny of records of Director of Health Services and Mission Director NRHM revealed that:

- The plant installed in **District Hospitals at Tawang and Changlang** at a cost of ₹ 70.49 lakh each in June 2012 and March 2015 respectively,were non-functional due to lack of trained manpower.
- During 2015-16, the plants at **District Hospital, Seppa; District Hospital, Anini; District Hospital, Roing and District Hospital, Palin** were sanctioned at the cost of ₹ 50.00 lakh each under NRHM. The installation work of treatment plants was stipulated to be completed by March 2016. However, Mission Director of NRHM could not produce any physical progress report of the work, though ₹ 92.00 lakh was released as mobilization advance to the supplier in February 2016.

Thus, treatment plants installed at 10 Government hospitals at the cost of ₹ 6.35 crore were not being utilized for treating bio-medical waste generated by the hospitals mainly due to lack of trained manpower, technical defects, lack of funds for maintenance and power shortage, etc. In the absence of functional treatment plants, the bio-medical waste generated by these hospitals were not treated as required and were being disposed off without treatment as per the standards prescribed in the Rules.

The Department accepted (October 2016) the audit observation and stated that the non-functional plants in the districts would be made functional very soon.

1.4.10 Reporting of BMW generated and treated

Rule 10 provides that every establishment generating BMW shall submit an annual report to the prescribed authority by 31 January every year, to include information about the categories and quantities of bio-medical wastes handled during the preceding year. The prescribed authority shall send this information in a compiled form to the CPCB by 31 March every year.

Audit observed that as against 437 HCEs registered in the state, the APSPCB could obtain reports from only one to 11 HCEs during the last three years. Out of 12 HCEs jointly inspected in audit, it was observed that none of these HCEs maintained records of daily generation and treatment of bio-medical waste. The annual reports submitted by APSPCB to CPCB thus were incomplete and the figures reflected in these reports were not based on any verifiable records maintained by the HCEs.

1.4.11 Segregation and disposal of BMW

Rule 6 (2) of BMW Rules provides that bio-medical waste shall be segregated into containers/bags at the point of generation prior to its storage, transportation, treatment and disposal as per the type of waste as shown below:

Table - 1.4.2

Colour code	Type of waste	Type of treatment
Yellow	(i) Human anatomical waste (ii) Animal waste (iii) Microbiology & biotechnology waste and (iv) soiled waste such as cotton, dressing etc.	Incineration/deep burial
Red	(i) Microbiology & biotechnology waste (ii) soiled waste such as cotton, dressing etc. and (iii) solid waste such as catheters, intravenous sets etc.	Autoclaving/Microwaving/Chemical treatment
Blue/White translucent	(i) Waste sharps and (ii) solid waste such as catheters, intravenous sets etc.	Shredding after Autoclaving/Microwaving/Chemical treatment
Black	(i) Discarded medicines and cytotoxic drugs (ii) Incineration ash and (iii) chemical waste	Disposal in secured landfill

The containers/bags shall be labelled as bio-hazards and carry/display cytotoxic hazard symbols.

During joint inspections of the 12 test-checked HCEs, following lapses/short comings were noticed:

- The HCEs did not store the bio-medical wastes in the coloured containers/bags as per their types.
- Bio-medical wastes were stored with the general waste in the same container/bag.
- Most of the HCEs did not have containers with the prescribed labels of bio-hazard and cytotoxic hazard symbols.

Thus, none of the above 12 HCEs inspected through joint verification adhered to procedure prescribed under the Rules for segregation of bio-medical waste at point of generation.

1.4.12 Disposal of bio-medical waste

According to Rule 6 (1) of BMW Rules, bio-medical waste shall not be mixed with other wastes. Rule 6 (6) also provides that the municipal body shall collect and transport non bio-medical waste as well as treated bio-medical waste for disposal at municipal dump site.

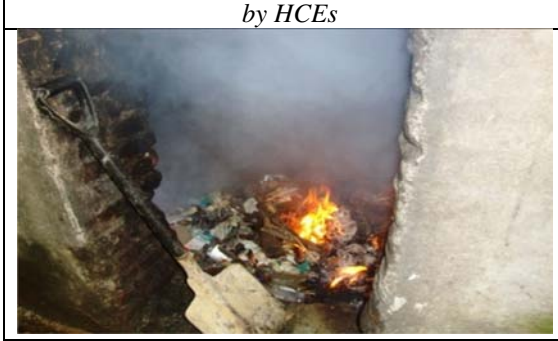
Schedule V of the BMW Rules prescribes operating and emission standards for incinerator, which should achieve certain combustion efficiency, temperature and emission limits for proper treatment of waste. As per Schedule V, a pit or trench should be dug about 2 metre deep. It should be half filled with waste and then covered with lime before filling the rest of the pit with soil. It must be ensured that animals do not have any access to burial sites. Covers of galvanized iron/wire meshes may be used. The deep burial site should be relatively impermeable. The pits should be distant from habitation, and sited so as to ensure that no contamination occurs of any surface water or ground

water. The location of the deep burial site will be authorized by the prescribed authority, which is APSPCB.

A joint inspection of 12 test checked hospitals was conducted with the representatives of APSPCB and the concerned hospital authorities revealed number of deviations from the prescribed procedure for disposal of BMW as indicated described below:

- *Untreated bio-medical waste was disposed with solid waste* at State Hospital, Naharlagun, General Hospital, Pasighat and RK Mission Hospital, Itanagar (Private).
- *Bio-medical waste was disposed by burning in open space in hospital premises at* General Hospital, Tezu, General Hospital, Khonsa, General Hospital, Ziro, General Hospital, Bomdila, General Hospital, Aalo, District Hospital, Doimukh and District Hospital, Daporijo.
- *Bio-medical waste was disposed by burning in local made chullah in hospital premises at* Heema Hospital, Itanagar (Private) and Niba Hospital, Naharlagun (Private).
- *Bio-medical waste was disposed in kutcha pit in hospital premises without authorization from APSPCB* in General Hospital, Tezu, General Hospital, Khonsa, General Hospital, Ziro, General Hospital, Bomdila and District Hospital, Doimukh.
- *Bio-medical waste was disposed in RCC pit in hospital premises without authorization from APSPCB* in General Hospital, Pasighat and Niba Hospital, Naharlagun (Private).

The disposal mode adopted by the HCEs can be seen from the photographs below:

<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>Municipal dump site at Chimpu, Itanagar, where the untreated bio-medical wastes were disposed by HCEs</td><td>Untreated bio-medical wastes at General Hospital Pasighat before being collected by Pasighat Municipal.</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Bio-medical waste being burnt in locally made chullah at Heema Hospital, Itanagar.</td><td>Bio-medical waste were burnt in open space at General Hospital, Aalo.</td></tr>
</table>

	
Open kutcha pit for disposal of bio-medical waste at General Hospital, Ziro.	*Bio-medical waste disposed with general waste in this open kutcha pit at General Hospital, Tezu.*

Thus, it is evident from the above that all the 12 hospitals inspected disposed of BMW without treatment either by dumping at municipal dump site with other waste or by burning in open space or local made chullah inside the hospital premises. The human anatomical wastes were disposed in deep burial pit mostly in open kutcha pit without authorisation from the APSPCB. Thus, audit observed that the standards prescribed in the Rules for disposal of BMW were not complied with by HCEs.

The Department accepted (October 2016) the audit observation and stated that the bio-medical wastes were disposed as per convenience due to non-operationalization of the treatment plants.

1.4.13 Penalty provisions not invoked on defaulting HCEs

Section 15 of the Environment (Protection) Act, 1986 provides that whoever fails to comply with or contravenes any of the provisions of this Act, or the rules made or orders or directions issued there under, shall be punishable with imprisonment or fine or both.

Despite the fact that majority of the HCEs did not comply with the standards and requirements for handling and disposal of bio-medical waste, the prescribed authority did not impose any penalty on the HCEs for ensuring compliance with the Rule during the audit period.

1.4.14 Monitoring mechanism

(i) Advisory Committee

Rule 9 (1) of BMW Rules provides that the Government of every State shall constitute an advisory committee, who shall advise the Government of the State and the prescribed authority about matters related to the implementation of these rules.

The first Advisory Committee was constituted in March 1999 but not a single meeting was held during 14 years of its tenure. A second Advisory Committee was constituted in December 2013, which met only once in June 2015 after a gap period of more than one year since its constitution.

The Committee discussed issue of authorisations to HCEs, setting up of Common Bio-Medical Waste Treatment Facilities by HCEs and timely submission of annual reports by all the HCEs. Audit, however, noticed that no follow-up action on the decisions taken by the Committee was carried out even after a lapse of one year.

(ii) State Level Committee and District Task Force

In December 2010, the State Government constituted a State Level Committee and a District Level Task Force to monitor the compliance of the BMW Rules in the State. The State Level Committee was headed by the Principal Secretary (E&F). The Deputy Commissioners were the chairpersons and the District Medical Officers were members of the District Level Task Force. These were required to monitor and send their reports to the APSPCB to take necessary action against the defaulting HCEs.

Audit, however, observed that the State Level Committee and the District Level Task Force had not sent their reports even after five years of their formation.

The Department stated (October 2016) that monitoring and supervision by the state monitoring committee and district task force would be carried out on periodical basis.

1.4.15 Conclusion

Though APSPCB is the prescribed authority for enforcement of BMW Rules, it did not have state level list of HCEs even after lapses of 17 years of notification of the Rules. As of March 2016, only 12 out of 437 HCEs registered under 'The Clinical Establishments (Registration and Regulation) Act, 2010 were functioning with authorisations issued by APSPCB. The Health Department did not have long term action plan for providing BMW treatment plants to Government hospitals and for maintenance of the existing non-functional plants. The annual reports submitted by APSPCB to CPCB were incomplete and the figures reflected in these reports were not based on any verifiable records maintained by the HCEs. Segregation of waste was not carried out as per the prescribed guidelines in any of the 12 HCEs inspected by Audit. Further, the standards prescribed in the Rules for disposal of BMW were not complied with by these HCEs. Monitoring mechanism was also not effective due to lack of proactive action by Advisory Committee, State Level Committee and District Task Force.

1.4.16 Recommendation

It is recommended that the State Government may

- adopt a system/mechanism for enlisting all the HCEs functioning in the state for issue of authorisation and effective monitoring of their functioning.
- prepare a detailed plan for establishment of BMW treatment plants in Government HCEs and also take necessary steps to operationalise the existing idle plants by providing budgetary provision.
- ensure that all the HCEs in the State dispose BMW in compliance with the prescribed standards to prevent adverse effect on human health and environment and obtain necessary authorisation from APSPCB.

Sport & Youth Affairs

1.5 Payment for work not done

Director of Sports & Youth Affairs, Itanagar made payment of ₹ 100.33 lakh for *Viewers' Gallery* without execution of the work and paid ₹ 118.98 lakh for items not included in the approved detailed estimate/MB without obtaining the approval of the competent authority.

According to Rule 129(1) (vi) of GFR 2005, no works shall be commenced or liability incurred until tenders are invited and processed in accordance with rules. Rule 132 (iii) of GFR provides that no work shall be undertaken before issue of administrative approval and expenditure sanction by the competent authority on the basis of estimates framed. As per para 2.3.4 and 2.5.2 of CPWD Manual, material deviations over original sanctioned scheme that significantly alter the scope of work from the original sanction should not be made without the approval of the authority that accorded administrative approval of the work.

North Eastern Council (NEC) accorded administrative approval of ₹ 450.00 lakh for *"Construction of Football Stadium"* at Changlang in September 2010. The project was funded in the ratio 90:10 between NEC and the GoAP to be implemented by the Director of Sports & Youth Affairs (S&YA). Subsequently, administrative and expenditure sanction of the State Government was accorded in March 2011. The construction was to be completed by October 2013. The detailed estimated cost of ₹ 416.66 lakh was technically approved by the Chief Executive Officer, Arunachal Pradesh Rural Road Development Agency (ARRDA), Itanagar.

Scrutiny of records (November 2015) of the Director of Sports & Youth Affairs, Itanagar revealed that:

- The work was awarded to M/s Roshan Construction Company without inviting tenders and an agreement was entered into (November 2010).
- The work commenced in November 2010, four months before the administrative approval was accorded (March 2011) by the State Government.
- In December 2012, after the Contractor had stopped the work for many months ₹ 100.33 lakh was paid for Viewers' Gallery, which was had not been constructed.

  As there was no progress of work, the contract was terminated in July 2014. The entire work of Viewers' Gallery (290 metre) at a cost of ₹ 140.28 lakh was re-awarded in January 2015 to five contractors on work order and total payment of ₹ 91.44 lakh had been made till August 2015.
- Further, ₹ 118.98 lakh was paid to M/s Roshan Construction Company against 16 items of work (**Appendix-1.5.1**) which were not included in the approved detailed estimate nor found recorded in the Measurement Book.

Thus, payment of ₹ 100.33 lakh and ₹ 118.98 lakh made to the Contractor for *Viewers' Gallery* without actual execution of work and 16 items of work not recorded in MB appeared to be fraudulent.

In reply (July 2016), the Department stated bill for Viewers' Gallery was drawn in advance before execution of work against M/s Roshan Construction Company to avoid cost escalation and obtaining re-budgeting and kept in Deposit at Call Receipt (DCR). After the agreement was terminated, the work was taken up by engaging many contractors and payment was made from the amount drawn against the company.

The reply of the Department is not acceptable as audit observed that payment totalling to ₹ 306.42 lakh, which inter-alia included payments towards Viewers' Gallery and 16 items not included in the approved estimate nor found recorded in measurement book, was made to M/s Roshan Construction Company on 13 different instances as per Cash Book entries between March 2011 and December 2012 **(Appendix-1.5.2)**.

The matter needs investigation and appropriate action taken to recover any loss of Government money.

District Rural Development Agency, Changlang

1.6 Suspected embezzlement of funds under MGNREGA scheme

In absence of documentary evidence to support the receipt material and its utilisation for the MGNREGA works, the expenditure of ₹ 74.81 lakh incurred by the Block Development Officer, Khimiyang (DRDA), Changlang, in violation of MGNREGA guidelines and prescribed procedures,was doubtful.

As per para 7.4.2 of the MGNREGA guidelines, centralized procurement of tools and implements for MGNREGA works shall be avoided. If the workers are unable to manage their own tools, these may be arranged by Panchayats/SHGs, etc., and the cost of procurement shall be booked under material expenditure. Further para 10.3.10 (iv) of the guidelines stipulates that Programme officer (PO) at block level shall maintain stock register containing details of all the receipts & issues of the stock items under MGNREGA Scheme. The inward and outward movement of materials for a given period should be recorded to ensure an effective inventory control.

Scrutiny of records (September 2015) of the Block Development Officer (BDO), Khimiyang of District Rural Development Agency (DRDA), Changlang revealed that BDO, Khimiyang[27] between February 2010 and March 2012 made five payments totalling ₹ 74.81 lakh by cheques in favour of M/s Liani Enterprises, Changlang from Bank Account[28] of MGNREGA against supply orders for materials such as cement, aggregate[29], jumper[30], sausage wire, sand, spade, shovels, etc., for MGNREGA works as per details given in **Appendix-1.6.1**.

Scrutiny of records in audit revealed following irregularities/lapses:

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27 Shri T. Techi.

28 No. 11864779999 at SBI, Changlang.

29 Aggregate, is a broad category of coarse particulate material used in construction, including sand, gravel and crushed stone.

30 A long drilling tool used by masons and quarry workers, consisting of an iron bar with a chisel-edged tip at one or both ends, operated by striking it against the rock.

- The records relating to sanction, execution of work and labour payments in respective works for which material was stated to have been used was not produced to audit.
- There was no documentary evidence to support that materials worth ₹ 74.81 lakh were actually procured and used on the MGNREGA works, as no entry was made in the stock register regarding its receipt and issue as per extant guidelines.

Thus, the possibility of fraudulent payment and misappropriation of government fund cannot be ruled out. Moreover, the records show that BDO who issued the supply orders, issued the cheques and made payment signed a certificate of receipt of materials which indicated complete absence of segregation of duties necessary to ensure internal checks.

The matter needs investigation and appropriate action taken to recover any loss of Government money. The matter was reported to the Department/Government (July 2016); reply is still awaited (February 2017).