

CHAPTER – III PERFORMANCE AUDIT

ENERGY & POWER DEPARTMENT

3.1 ACCELERATED POWER DEVELOPMENT AND REFORMS PROGRAMME

Performance Audit of implementation of APDRP revealed that although revenue realisation had substantially improved since 2004-05 after implementation of the programme, it was far below the targeted level. The objective of breaking even by the year 2005 and positive returns thereafter, as contemplated in the MOA, could not be fulfilled as of March 2006 indicating that commercial viability may not be achieved within a conceivable time frame unless drastic steps were taken to cut down operational costs, economise capital expenditure, contain energy loss and improve revenue realisation further. The power sector was yet to be re-structured and reformed and the State Electricity Regulatory Commission (SERC) was yet to be constituted even after more than three years of the target date. Metering of feeders and consumers was still incomplete, transmission and distribution (T&D) loss was still high at 30 per cent and critical issues of the reforms agenda such as consumer indexing and energy accounting and auditing were not accorded desired priority. The monitoring mechanism was ineffective to this extent.

Highlights

The Department had not undertaken reform / restructuring of power sector as envisaged under Accelerated Power Development and Reforms Programme and as reported by the Administrative Staff College of India (ASCI) in May 2005.

(Paragraph 3.1.8.1)

The State Electricity Regulatory Commission (SERC) had not been set up even after more than three years of the target date contemplated in the MOA. As a consequence, no follow-up measures could be initiated.

(Paragraph 3.1.8.2)

The T&D loss which was targeted to be reduced to around 10 per cent stood at 30 per cent as at the end of 2005-06 indicating the Department's failure to achieve the target stipulated under the APDRP.

(Paragraph 3.1.9)

Energy accounting and auditing was not initiated despite an expenditure of Rs. 15.93 crore on metering.

(Paragraph 3.1.10.1)

Although the Department exhausted the entire provision of Rs. 72 lakh meant for computerised billing and MIS, only two sub-divisions out of 24 sub-divisions had been computerised, as Rs. 66 lakh was unauthorisedly diverted.

(Paragraph 3.1.8.12)

Consumer indexing had been done in only six sub-divisions out of 24 sub-divisions in the State.

(Paragraph 3.1.8.13)

7,232 consumer meters valuing Rs. 1.31 crore were found defective after their installation. No action was taken to get these meters replaced although the meters were guaranteed for 5/10 years.

(Paragraph 3.1.10.1)

Against the anticipated benefit of Rs. 39.93 crore in 2004-06 projected in the DPRs, there was actual realisation of Rs. 21.84 crore only, indicating unrealistically high projection.

(Paragraph 3.1.13)

There was time overrun ranging from 3 months to 3 years in 12 works.

(Paragraph 3.1.10.3)

The Department had not constituted vigilance squad for conducting regular raids to detect theft of electricity. During the period 2001-02 to 2005-06, raid was conducted in only two occasions.

(Paragraph 3.1.17)

Monitoring was found wanting in case of i) metering of consumers and feeders, ii) Computerised billing and iii) Mapping and indexing of consumers due to which there was high incidence of defective meters in the feeders / consumer premises and failure to introduce computerised billing.

(Paragraph 3.1.18.1)

3.1.1 Introduction

With a view to bring about efficiency as well as commercial viability in the power sector, Government of India (GOI) identified “distribution reforms” as a key area and launched a massive programme of upgradation of Sub-Transmission and Distribution (ST&D) systems including energy accounting and metering and reduction of Transmission and Distribution (T&D) losses under the Accelerated Power Development Programme (APDP) during the year 2000-01. The scheme was to continue till the end of 11th Plan (2012). The original APDP was rechristened (2002-03) as ‘Accelerated Power Development & Reforms Programme’ (APDRP) after integrating incentive financing with the existing investment programme to expedite the reform process and help the State power utilities achieve commercial viability.

The main objectives of APDRP were:

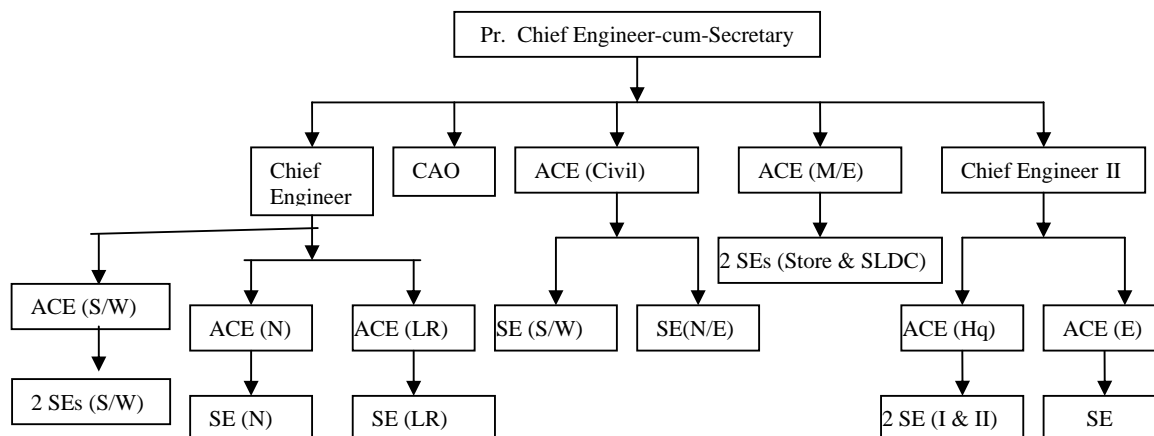
- Reduction of Aggregate Technical and Commercial (AT&C) losses;
- Bring about commercial viability in the power sector;
- Reduce outages and interruptions;
- Increase consumer satisfaction;
- Adopt systems approach with MIS;
- Bring about transparency through computerisation.

3.1.2 Organisational set-up

In Sikkim, the APDRP is being implemented by the Energy and Power Department (EPD), headed by the Principal Chief Engineer-cum-Secretary, a

Chief Accounts Officer (CAO), five Additional Chief Engineers and a host of Junior level engineering staff as shown in the chart below:

Chart: 3.1.1



3.1.3 Scope of Audit

Performance Audit of APDRP was conducted with a view to assess the performance of the Energy and Power Department (EPD) in conceptualisation and implementation of the programme and its achievements in the State with reference to the objectives set for the programme, covering the period from 2000-01 to 2005-06, on the basis of records maintained in the Secretariat of the Department at Gangtok, various Circle offices¹ located at Jorethang (South district), Gyalshing (West district), Namchi (South district) and Mangan (North district). Out of the total expenditure of Rs. 161.11 crore, expenditure of Rs. 80.99 crore (50 per cent) was covered during test check (August-October 2006) in Audit.

3.1.4 Audit objectives

The Audit objectives were to verify whether:

- The programme was carefully designed with adequate planning;
- The funding requirements were realistically assessed;
- Funds were sanctioned and released on time at all levels and were used efficiently, economically and effectively to achieve the objectives of the programme;
- The AT&C losses were reduced in accordance with the action plan and targets;
- The extent of increase in revenue collection was commensurate with the expectations from the programme; and
- The satisfaction levels of consumers had improved in terms of quality, regularity and cost of power supplied.

¹ Although there were 6(six) Circles, Ministry of Power, GOI considered the entire State as one Circle (Sikkim).

3.1.5 Audit criteria

The basic principles, norms, standards, terms and conditions, information and instructions contained in the following documents / sources of information were used as criteria for drawing the Audit conclusions:

- Memorandum of Agreement signed between the State Government and the GOI;
- Guidelines issued by the Ministry of Power from time to time for implementation of APDP/APDRP;
- Technical Manual prepared by the Committee of Experts in November 2001;
- Cabinet Note and the document containing Six level interventions for effective implementation;
- Government decisions and orders in files regarding implementation of the programme;
- Tariff orders / notifications;
- National Electricity Policy, Electricity Act 2003 and Central Electricity Authority norms.
- Prescribed monitoring mechanism.

The above criteria were discussed in detail and agreed with the implementing authorities.

3.1.6 Audit methodology

The methodology adopted for Audit, *inter alia*, included group discussions with various stake-holders (*Advisor-cum-Consultant (A-c-C), ex-bureaucrats and implementers*); setting of benchmarks, test check of records selected on random sampling basis; obtaining information through questionnaire, analysis of data and joint physical inspections. An entry conference was held with the Departmental officers in August 2006 wherein Audit objectives, scope and methodology were discussed. All the four projects² relating to APDRP that were implemented in the State were selected for Audit and 25 per cent of the works under each of these projects were selected at random for detailed scrutiny.

Exit conference was held with the Departmental officers in October 2006. Replies of the Government / Department have not been received (November 2006).

3.1.7 Funding arrangement and financial management

The APDRP was funded through a combination of grant (90 per cent) and soft loan (10 per cent) as additional Central plan assistance. The funds received under APDP/APDRP from the GOI during the period 2000-01 to 2005-06 were as under:

² (i) Metering, (ii) Sub-Transmission & Distribution (South-West & Lagyap), (iii) Improvement of Sub-Transmission & Distribution, and (iv) Supplementary Project for Sub-Transmission & Distribution.

Table-3.1.1

(Rs. in crore)

Year	Opening balance	Amount received from GOI			Expenditure	Closing balance
		Grant	Loan	Total		
2000-01	Nil	5.74	0.64	6.38	Nil	6.38
2001-02	6.38	Nil	Nil	Nil	5.34	1.04
2002-03	1.04	15.48	1.72	17.20	18.11	0.13
2003-04	0.13	54.15	6.02	60.17	18.00	42.30
2004-05	42.30	69.62	7.73	77.35	60.00	59.65
2005-06	59.65	00.00	00.00	00.00	54.30	5.35
Total		144.99	16.11	161.10	155.75	5.35

Source: Information furnished by the Department.

Although availability of funds was not a constraint to the programme, the expenditure in 2003-04 and 2004-05 was significantly low compared to the amounts received from GOI. This was due to less provision made in the State budget by the Finance Department compared to the actual amount received from GOI as detailed below:

3.1.7.1 Non-opening of separate bank account

The APDRP guidelines categorically stipulated opening of a separate bank account by the State Government for temporary parking of funds received for implementation of the programme. The State Government was to release funds to the State EPD within a week of receipt of funds from GOI and send confirmation to this effect, failing which, it was to be treated as diversion of funds and the diverted amount along with 10 per cent penal interest was to be adjusted against the subsequent instalment of Central plan assistance. But when the EPD approached the Finance, Revenue and Expenditure Department (FRED) for permission to open a separate bank account, it was not agreed to on the plea that separate head of account within the Government accounts would suffice, there being no State Electricity Reforms Commission (SERC) in the State unlike in other States. Accordingly a separate accounting classification under the major head '4801-05-800-70.00.81 APDRP (Plan)' was opened within the Government accounts (existing budget heads) and all funds received from GOI under APDRP were credited to the Consolidated Fund of the State in violation of the programme guidelines. This resulted in the EPD being unable to spend money beyond the budget provision made under this head by the FRED though funds from GOI were available with the State Government. The EPD had already spent whatever was provided for the programme in the budget during these years. GOI had not imposed any penalty on the State Government for retaining the APDRP funds beyond the period stipulated in the guidelines.

3.1.7.2 Loss of interest and diversion of fund

Funds ranging from Rs. 1.04 crore to Rs. 83.43 crore received from GOI remained continuously blocked in Government accounts during the period 2001-02 to 2005-06 and were not used for APDRP though the EPD had already spent its budgeted provision during this period and needed more funds for expenditure under the programme. This retention of APDRP funds in the

accounts of the State Government for more than a week was in contravention of the programme guidelines.

3.1.8 Policy formulation and planning

In order to achieve commercial viability in the power sector, the Union Ministry of Power formulated a six level intervention strategy at the National level, State level, SEB / Utility level, distribution circle level, feeder level and consumer level.

The strategy involved technical, commercial, financial and IT interventions, organisational and re-structuring measures and an incentive mechanism for cash loss reduction.

The main reforms envisaged were as follows:

- Setting up of State Electricity Regulatory Commission (SERC),
- Restructuring of SEBs, *i.e.* unbundling into separate entities for generation, transmission and distribution and corporatisation of unbundled entities,
- Securitisation of dues of Central PSUs,
- 100 *per cent* metering and energy audit and accounting for each 11 KV feeder,
- 100 *per cent* metering of all consumers and,
- Distribution circles to be operated as independent profit centres and 11 KV feeders to be operated as business units.

The Union Ministry of Power (MOP) set (January 2001) the State Government the pre-condition of signing a Memorandum of Agreement (MOA) with it charting out a path of mainly 15 points reforms with the ultimate objective of making the power sector commercially viable, for release of any assistance to the State Power Department under the programme. The Department could sign the MOA only as late as December 2002 thereby pushing behind the reforms process by almost two years.

Even after signing the MOA in December 2002, the performance of the State Government in honouring the covenants of the MOA was very poor as elaborated in the succeeding paragraphs:

3.1.8.1 Delay in restructuring of the State Power Utility

The EPD is responsible for generation, transmission and distribution of electricity and related activities in the State. Restructuring of the State power utility and its corporatisation was one of the most important conditions of the MOA. The State Government created (December 1998) Sikkim Power Development Corporation (SPDC), a wholly owned corporation of the State Government with the principal objective of taking over the functions of generation, transmission and distribution and sale of electricity. But as of the date of Audit, the SPDC was involved only in development of new hydro projects; the functions of generation, transmission, distribution and sale of electricity were yet to be transferred to it. In keeping with the conditionality laid down in the APDRP guidelines, the State Government decided (2002-03)

to introduce reforms and restructure the power sector in the State and accordingly, appointed the Administrative Staff College of India (ASCI), Hyderabad as consultants at a fee of Rs. 30 lakh during 2002-03. The ASCI submitted its final report in May 2005, in which, it, *inter alia*, recommended that (i) the power sector in Sikkim be corporatised, (ii) the entire generation, transmission and distribution be handed over to the SPDC, and (iii) the SPDC be organised into three Strategic Business Units / profit centres for pursuing the activities of the power sector more efficiently in future.

The State was, however, yet to take up the reformatory measures/restructuring of the power sector as recommended by the consultants as of September 2006, even after more than three years of signing the MOA with GOI and more than a year of submission of report by the consultants, without any recorded reasons. While the Government had not given any reply to the Audit observations, discussions with the Advisor-cum-Consultants to the State Government on power sector reforms (Power Grid Corporation of India Limited) and the ex-bureaucrats revealed that the reformatory measures could not be initiated mainly due to opposition from the employees who were apprehensive of losing their jobs/benefits in the event of corporatisation / privatisation. Thus implementation of the reform measure in so far as restructuring of the power sector was concerned was unsuccessful (September 2006).

3.1.8.2 Non-formation of State Electricity Regulatory Commission (SERC)

The SERC was targeted for setting up by May 2003, nonetheless the same had not been set-up as of September 2006. In terms of the Electricity Act 2003, the State Government was to constitute a three member Selection Committee for the purpose of selecting members of the SERC.

While the State Government constituted the Selection Committee in November 2004, the SERC could not be set up (September 2006) due to disagreement of the members over the procedure for appointment of the Chairman of the SERC.

3.1.8.3 Non-filing of tariff petitions etc.

Setting up of the SERC was linked to a chain of follow-up reform measures. Its establishment was expected to bring tariff fixation (both bulk and retail) under regulatory regime duly involving the consumers through public hearing. This would have put the onus on the power utility to improve its performance as the tariff fixation would not be based on a simple cost plus basis but would be linked to performance, particularly reduction of T & D losses, etc. The power utility was required to maintain upto date accounts of income and expenditure and details of performance of different consumer services and account for the energy consumed by the subsidised categories. All these measures were expected to improve financial viability of the power utility.

The MOA signed by the State Government with GOI stipulated filing of tariff petitions by May 2003. There being no SERC in the State, this stipulation could not be achieved. Also, none of the activities associated with its setting up could be initiated even after a lapse of more than three years of the target

date (May 2003). Thus the reforms associated with formulation of the SERC and filing of tariff petitions could not be initiated.

3.1.8.4 Designation of the SEs as CEOs and JEs as feeder managers and signing of MOUs.

In terms of the MOA, Superintending Engineers (SEs) of the circles had to be designated as CEOs and Junior Engineers (JEs) as feeder managers. MOUs were to be signed between the State Government and CEOs and the CEOs and feeder managers, with a view to enhance accountability and responsibility towards energy accounting & auditing and proper monitoring of achievements and activities in the respective circles. Though the SEs and JEs had been designated as CEOs and feeder managers and MOUs signed as early as January 2003, this action proved to be perfunctory as (i) mechanism for regulating allocation of power to a feeder at the point of import for regulating over drawal / under drawal had not been put in place, (ii) energy accounting and auditing had not been initiated, and (iii) monitoring was ineffective leading to piling up of huge outstanding revenues and delay in completion of schemes. Hence, the reform measure in this respect failed to yield any positive result.

3.1.8.5 Handing over parts of distribution system on management contract or on lease to local bodies, franchisees etc.

The MOA stipulated formulation of suitable policy for handing over parts of distribution system on management contract or on lease to local bodies, franchisees etc. No action in this regard had been initiated by the Department as on the date of Audit (September 2006). The reforms in this regard had thus failed to yield any result.

3.1.8.6 Formulation of suitable policy for outsourcing activities like consumer indexing, meter reading, billing etc.

The State Government had not formulated any policy to enable the Department to outsource activities like consumer indexing, meter reading, billing, bill delivery and periodic maintenance of DTs, as contemplated in the MOA, as on date of Audit (September 2006). These activities were being carried out by the Department itself. To this extent, the reform measure had failed.

3.1.8.7 Finalisation of standard specification for turnkey contracts and evolution of a rate contract system for equipments of repetitive nature

The works under APDRP were executed in the usual manner, and by following the usual procedure of calling tenders and selecting the lowest bidder. Revised procedure of formulating standard specifications and evolving rate contract system with an accredited list of contractors, as stipulated in the MOA, was not adopted.

3.1.8.8 Mandatory installation of capacitor for consumers of more than 10 HP

The MOA conditionality required mandatory installation of capacitor for consumers of more than 10 HP by the Department. The Department had not

even identified the load centres, as of September 2006, where such capacitors were required to be installed. Hence, the question of installation of these capacitors did not arise and the anticipated benefits from the activity remained unfulfilled.

3.1.8.9 Digital interface for data logging at Sub-Station

This activity had not yet commenced even as of September 2006. The data from the sub-stations thus could not be accessed / extracted.

3.1.8.10 Outages on feeders, their causes and corrective/preventive actions taken to be entered into computer at the sub-stations

No computer existed in any of the sub-stations till date (September 2006). Only a register was being maintained where such data was recorded. Hence, this activity contemplated in the reform conditionality remained unfulfilled.

3.1.8.11 Development of system for recording consumer complains and recording of corrective / preventive action

No such system had been developed as of September 2006 to record consumer complaints, as contemplated in the MOA.

3.1.8.12 Computerised billing and Management Information System (MIS)

Computerised billing and generation of MIS report was one of the important activities introduced under APDRP to bring about transparency and efficiency in billing the energy consumed by various categories of consumers. Rs. 72 lakh were provided for the purpose.

While the Department expended (December 2003) the entire amount for purchase of 41 computers and accessories, computerised billing was introduced in only two sub-divisions (*at a cost of Rs. 6.00 lakh*) located in the Departmental headquarters at Gangtok out of 24 sub-divisions in the State, indicating a mere 3 *per cent* physical achievement. Most of the computers (31) purchased were being used for other purposes, hence the MIS report in the desired format as contemplated under APDRP was yet to be in place and could not be generated. Thus, non-use of computers for computerised billing and generating MIS, besides non-fulfilment of the intended objectives, also resulted in unauthorised diversion of funds to the tune of Rs. 66 lakh for other purposes.

3.1.8.13 Consumer indexing

Consumer indexing captures all users of electricity and connects them upto distribution transformers and feeder level. This helps in identification of overloading of equipments; identification of non-billed consumers; better load management, maintenance of equipments, billing and revenue collection; reduction of technical and commercial losses; and improvement in quality and reliability of power supply.

A provision of Rs. 18 lakh was kept for the purpose. Out of the 24 revenue sub-divisions in the State, consumer indexing in respect of only six sub-divisions located in the Departmental headquarters at Gangtok and Mangan was completed as of September 2006 indicating physical achievement of only

25 per cent. It was further noticed that the sub-division wise targets and likely date of completion of consumer indexing was not fixed. Since this was the most crucial component of metering, energy accounting and audit, its abysmally low coverage questioned the very seriousness of the intent of the State Government to usher in power sector reforms in the true sense (as delineated in the MOA) in the State.

Thus it would be seen that out of the 15 main points of reforms suggested in the programme, the Department failed to initiate any action in respect of ten points, while in the remaining five points, although action was initiated, the achievement was either nil or very poor.

3.1.9 Status of achievement of benchmark parameters

The APDRP was implemented with the main objectives of reducing aggregate technical and commercial losses, bringing about commercial viability in the power sector, reducing outages and interruptions and increasing consumer satisfaction. The data relating to the energy input, metered, billed and revenue realised and the T&D and AT & C losses in the State over the period 2001-02 to 2005-06, as calculated by Audit from available data of the Department was as under:

Table-3.1.2

Sl. No	Descriptions	Year				
		2001-02	2002-03	2003-04	2004-05	2005-06
1	Input Energy (MU)	178.80	161.02	201.34	239.91	308.24
2	Metered Energy (MU)	n.a	n.a	n.a	n.a	n.a
3	Metering efficiency	n.a	n.a	n.a	n.a	n.a
4	Billed energy (MU)	65.19	73.27	100.18	160.54	216.17
5	Billing efficiency (%) ³	36.46	36.39	49.76	66.92	70.13
6	Revenue Billed (Rs. in crore)	12.31	14.06	16.53	23.92	32.21
7	Revenue realised* (Rs. in crore)	11.84	13.31	13.57	21.97	27.01
8	Collection efficiency (%) ⁴	96.18	94.67	87.89	91.84	83.86
9	Revenue Realised(MU)	62.70	69.36	82.24	147.45	181.27
10	T&D losses (%)	63.54	63.61	50.24	33.08	29.69
11	AT&C losses (%)	64.93	65.56	59.15	38.54	41.19

Source: Departmental records. *Includes arrears of earlier periods.

- The metered energy and metering efficiency could not be worked out in Audit as metering of consumers and feeders had not been completed and hence the data relating to metered energy exhibited by the Department could not be relied upon.
- In terms of the APDRP, the T&D loss was to be reduced to around 10 per cent. As at the end of 2005-06, the T&D loss worked out to around 30 per cent indicating that the Department still had a long way to go before it could achieve the target stipulated by the programme.
- In the Detailed Project Report (DPR) for Sub-transmission & distribution (ST&D) improvement, the Department had projected annual reduction of T & D losses by 28 MU on completion of the project. The project was completed by 2004-05. The T& D loss in 2005-06 over the year 2004-05 in terms of this should have been 73.98

³ Billing Efficiency = Billed Energy X 100 / Input Energy.

⁴ Collection Efficiency = Revenue realised X 100 / Revenue billed

MU⁵ whereas the same was 92.07⁶ MU indicating shortfall in achievement of the target set in the DPR by 18.10 MU.

Thus, although the reformatory measures had succeeded in bringing down the T&D losses from 63.54 *per cent* in 2001-02 to 29.69 *per cent* in 2005-06, it had failed to achieve the targeted level of 10 *per cent*. This could mainly be attributed to failure of the Department in achieving 100 *per cent* metering and energy accounting and auditing.

It was however noticed that the figures furnished by the Department to the GOI on the benchmark parameters significantly varied with the above figures, as shown below:

Table – 3.1.3

Sl No.	Descriptions	Year				
		2001-02	2002-03	2003-04	2004-05	2005-06
1	Input Energy (MU)	205.84	173.56	126.26	120.98	272.14
2	Metered Energy (MU)	49.28	45.86	68.15	65.05	248.54
3	Metering efficiency	23.94	26.42	53.98	53.77	91.33
4	Billed energy (MU)	123.27	117.14	81.45	76.46	184.35
5	Billing efficiency (%)	59.89	67.49	64.51	63.20	67.74
6	Revenue Billed (<i>Rs. in crore</i>)	20.98	20.07	22.39	20.64	30.47
7	Revenue realised (<i>Rs. in crore</i>)	15.00	13.84	16.29	18.41	27.10
8	Collection efficiency (%)	96.18	94.67	87.89	91.84	83.86
9	Revenue Realised(MU)	62.70	69.36	82.24	147.45	181.27
10	T&D losses (%)	63.54	63.61	50.24	33.08	29.69
11	AT&C losses (%)	64.93	65.56	59.15	38.54	41.19

Audit could not vouchsafe authenticity of the figures reported by the Department to the GOI.

3.1.10 Implementation

For implementation of the APDP/APDRP in the State, the Department prepared four DPRs. Details of the DPRs with funds sanctioned, released and upto date expenditure is given below:

Table-3.1.4

(Rs. in crore)

Sl No	Name of project	Sanctioned cost	Funds released	Expenditure (upto 2005-06)	Balance	Physical progress (%)
1	Metering Phase – I & II	6.38	6.38	6.38	00.00	100
	Phase - III	5.83	5.83	5.83	00.00	100
2	ST & D improvement for South-West & Lagyap	2.23	2.23	2.23	00.00	100
3	DPR for ST&D Improvement	55.42	55.42	55.42	00.00	100
4	Supplementary Project for ST&D improvement (including Phase - IV metering)	91.25	91.25	85.90	5.35	60
	Total	161.11	161.11	155.76	5.35	

Source: Departmental records

⁵ $\frac{(239.91 - 160.54) \times 308.24}{239.91} = 101.97 - 28.00 = 73.98$.

⁶ $308.24 - 216.17 = 92.07$

Project-wise analysis and Audit observations are given below:

3.1.10.1 Metering

The Department submitted (August 2000) a proposal for 100 *per cent* metering of all consumers, high tension feeders and sub-stations amounting to Rs. 16.32 crore to GOI, against which GOI sanctioned and released Rs. 15.93 crore in three instalments - Rs. 6.38 crore (March 2001) for Phase I & II metering covering East & Commercial (Gangtok) circles, Rs. 5.83 crore (April 2002) for Phase III of the programme covering 2002-03 & 2003-04 and Rs. 3.72 crore towards 'balance metering' for Phase – IV during 2004-05. Departmental records indicated 100 *per cent* physical achievement in metering of consumers. Audit scrutiny revealed that the same had been compiled on the basis of reports submitted by Assistant Engineers from the revenue sub-divisions, who in turn, based their report on the basis of household survey conducted by Junior Engineers and Meter Readers working under them.

But the details of meters purchased under the programme and the upto date status of metering is shown below:

Table-3.1.5

No of consumers before implementation of APDRP	Meters in working condition before commencement of 100 % metering	No of consumers as on 1 st September 2006	No of meters required	No of meters purchased	Difference	Defective meters
A	B	C	D = C – B	E	F = E – D	
59,947	6,278	70,195	63,917	70,230	6,313	7,232

Source: Departmental records

It would be seen that against the requirement of 63,917 consumer meters, the Department purchased 70,230 meters between 2001-02 and 2004-05 resulting in excess purchase of 6,313 meters worth Rs. 1.14 crore.

Further, 7,232 meters, valuing Rs. 1.31 crore, were found defective after their installation in the premises of the consumers, but the replacement/ repair of these defective meters had not been done by the suppliers although the meters were guaranteed for 5/10 years as per the terms of supply. The Department neither persuaded the suppliers, inspite of the guarantee clause, to replace the defective meters nor initiated any action against the suppliers for supply of defective meters. Further, the Department also failed to replace the defective meters with the 6,313 meters that lay idle to avoid leakage of revenues.

Audit scrutiny revealed that although the Department commenced installation of meters as early as 2001-02 and claimed to have by and large completed 100 *per cent* metering, consumer indexing in the form of identification of the consumers with their respective distribution transformers, feeders and the sub-station, which was mandatory for energy accounting, had not yet been done in

18 out of 24 sub-divisions. Even in the 6⁷ sub-divisions where consumer indexing had been completed, energy auditing had not been initiated as of September 2006. No action had been taken to identify areas of high energy losses. Further, in addition to 7,232 defective consumer meters, seven system meters installed in 66 & 11 KV feeders procured during 2001-05 under the 100 *per cent* metering programme were found defective on physical inspection (October 2006) of the feeders by Audit in the presence of departmental officers. The Department had not insisted upon test certificates from the suppliers and also had not conducted any quality/ performance test of the meters on its own.

Thus, even given that 100 *per cent* metering has been achieved, the expenditure of Rs. 15.93 crore (including installation charges) incurred on the same had not yet yielded the desired benefits as envisaged under the APDRP in the absence of proper energy accounting and auditing.

3.1.10.2 Sub -Transmission and Distribution Improvement

Out of 81 works incorporated in three DPRs prepared during 2001-04 relating to 'Sub-Transmission and Distribution Improvement' at a cost of Rs. 161.11 crore, 19 works involving expenditure of Rs. 68.78 crore were selected for examination in Audit. Results of Audit are detailed in the succeeding paragraphs.

3.1.10.3 Time overrun – delay in completion of works

None of the 19 works examined in Audit was completed within the stipulated time with delay ranging from 3 months to 6 months in one case, 6 months to 1 year in one case, 1 to 2 years in 8 cases and 2 to 3 years in 2 cases. The delay was mainly due to delay in obtaining Forest clearance, land acquisition etc.

3.1.10.4 Irregular payment for templates used in setting up of transmission towers

The improvement of sub-transmission and distribution works involved erecting transmission towers for stringing electric conductors. Metal structures called 'templates' of different sizes are used for setting up and fitting transmission towers of various dimensions (*large angle, medium angle and small angle tension towers with extensions*). The templates, however, do not form part of the towers as these are used only for erecting the towers and are removed by the contractors to be used elsewhere for erecting other towers. The payment for the cost of templates to the turnkey contractors thus did not arise.

The Department, however, paid Rs. 27.55 lakh to contractors in six (out of 19) works involving erection of these towers towards cost of 115 templates, which was irregular and totally undue and excessive as the contractors were being paid 15 *per cent* erection charges over and above the cost of materials, which covered the use of templates as tools for erection of towers in the works.

⁷ 1.Phodong,2.Mangan,3.Chungthang,4.Gangtok I 5.Gangtok II 6.GangtokIV

3.1.10.5 Excess consumption of cement in concrete works

For all cement concrete works, the Schedule of Rates (SOR) of the Sikkim Public Works Department specifies the quantity of cement, sand and stone to be used per unit volume (cubic metre) of such work. In nine (out of 19) works test checked in Audit, which required concreting of the base of power transmission towers in 1:2:4 and 1:3:6 cement concrete mix and allied protective works in 1:4:8 mix coursed / random rubble stone masonry, the Department had paid excess amount of Rs. 35.81 lakh during the period 2003-06 to the contractors towards the cost of 14,323 bags of excess cement claimed to have been consumed over and above the quantities prescribed in the SOR. This consumption of cement by the contractors was abnormally high ranging from 5 to 12 *per cent* as compared to the quantity prescribed in the SOR.

3.1.10.6 Excess expenditure on execution of RCC works

In the civil works portion of the contracts relating to erection of transmission towers, the base of the towers were constructed as a established practice in cement concrete mix of ratio 1:2:4 and 1:3:6 and protective works in 1:4:8 mix. Out of 13 works involving construction of transmission towers (*of the 19 works executed during 2003-06*), in 12 works, the Department constructed the base of towers in cement concrete mix of the prescribed ratio as indicated above. However, in departure from the established practice, the Department in one case⁸ incorporated the item 'supply, bending and binding of steel' totalling 35.65 metric tonnes valued at Rs. 17.32 lakh in construction of the base of the towers, over and above the cement concrete works (ratio 1:2:4 and 1:3:6) and protective works (1:4:8 mix), resulting in excess expenditure to that extent.

3.1.10.7 Extra payment to contractors

The terms of contract in respect of the works executed by various contractors under the APDRP stipulated that the rates of various items of work were inclusive of all charges including erection, commissioning, testing and transportation. Despite this fact, extra charges @ 25 *per cent* of the cost of items of works over and above the rates quoted by the contractors was allowed (2003-06) to two⁹ (out of 19 test checked in Audit) contractors in two works towards erection, commissioning, testing and transportation resulting in undue extra payment of Rs. 2.07 crore to the contractors.

3.1.10.8 Irregular utilisation of provision under works contingency

Sikkim Public Works Code (SPWC) provides the kind of expenditure that could be incurred from the contingency provision of works. Expenditure of Rs. 29.03 lakh were sanctioned by the Secretary of the Department during December 2003 to March 2005 for making payments on items such as computers and accessories (Rs. 17.13 lakh), electricity bill forms (Rs. 11.90 lakh) etc from the contingency provision of various works which was not covered by codal provision contained in para 191 and 192 of the SPWC and hence irregular.

⁸ Construction of 66 KV DC Transmission Line from PGCIL Sub-station at LLHP for interfacing of Sikkim Transmission network with Eastern Regional Grid etc. Contractor - M/s Himal Projects & Investment Pvt. Ltd

⁹ 1) 2x5 MVA 66/11 S/s at Mangan (Rs.1.25 Crore) & 2) LILO of 66 KV LLHP Rongli line and commissioning of 2x10 MVA Transformer (Rs.0.82 crore) . Total Rs. 2.07 crore

3.1.10.9 Excess projection of number of transmission towers

In terms of the norms for laying of transmission lines, the number of towers required for transmission was three towers per Km. During 2003-06, in three works¹⁰ involving 24.1 Km of transmission lines, the requirement of towers as per the norm was 73 against which, the Department used 84 towers resulting in excess expenditure of Rs. 30.14 lakh.

3.1.10.10 Irregular payment of mobilisation advances

There is no provision for payment of mobilisation advance to contractors either in the Sikkim Financial Rules (SFR) or in the Sikkim Public Works Code (SPWC). The Public Accounts Committee (PAC) in relation to an Audit Para on payment of mobilisation advance by another Department (*Building and Housing Department, Audit Report 1997-98*) had recommended that the practice of paying mobilisation advances to contractors/suppliers should be stopped forthwith. The Government however did not act on the PAC recommendation while the Department paid interest free mobilisation advance of Rs. 16.74 crore to 30 contractors in 30 works (awarded between February 2003 to March 2006), which, besides violating the rules/codes resulted in undue favour to the contractors and consequent loss of interest of Rs.0.34 crore to the project on account of cost of borrowing calculated at 8 per cent per annum.

3.1.10.11 Irregular, unnecessary and excess procurement of vehicles

The EPD had 26 officers (*including one Advisor and one Chairman*), in the level of Joint Secretary and above in the departmental headquarters at Gangtok who were entitled to individual vehicles as per notification (January 1997) issued by Home Department. Besides, there were 33 other officers in the departmental headquarters below the level of Joint Secretary who were also collectively entitled to 11 pool vehicles on sharing basis (each vehicle to be shared by three officers). Thus the total requirement of vehicles was 37. Against this requirement, the Department already had a fleet of 59 vehicles under its control indicating an excess of 22 vehicles over and above the entitlement. Despite this, the Department incurred Rs. 60 lakh from funds provided under the APDRP (*communication / mobile van component*) towards procurement (November 2004) of additional 11 vehicles (1 Bolero, 10 Gypsy). Thus incorporation of the component 'communication / mobile van' under APDRP was wholly unnecessary in the first place resulting in unnecessary excess expenditure of Rs. 60 lakh from the project fund. The DPRs prepared by the Department did not, therefore, take the economy aspect of implementation of the projects into account while preparing the same and sending to GOI for approval.

3.1.11 Revenue vis-à-vis O&M

The position of revenue earned vis-à-vis O&M cost of generation and supply of electricity during the five year period 2001-02 to 2005-06 was as under:

¹⁰ 1) 66 KV D/C line from PGCIL (Rs. 26.46 lakh); 2) LILO of 66KV LLHP to Rongli Tr.line (Rs.1.02 lakh) & 3) Const. of 66 KV S/C line from Khamdong to Phodong (Rs. 2.66 lakh). Total Rs. 30.14 lakh.

Table-3.1.6

(Rs. in crore)

Year	Operation & Maintenance cost	Revenue earned through sale of power*	Surplus (+) / Deficit (-)
2001-02	21.07	11.85	(-) 9.22
2002-03	42.56	13.31	(-) 29.25
2003-04	27.76	13.57	(-) 14.19
2004-05	32.06	21.97	(-) 10.09
2005-06	31.36	27.01	(-) 4.35
Total	154.81	87.71	(-) 67.10

Source: Departmental records. *Does not include revenue from trading of electricity outside the State.

As seen from above,

- The huge expenditure of Rs. 42.56 crore during 2002-03 was due to clearing of outstanding liabilities of period prior to 2000-01.
- While the O & M cost increased by 49 per cent from 2001-02 to 2005-06, the corresponding increase in revenue was 128 per cent.
- From 2003-04 to 2005-06, the gap between the O&M cost and the revenue earned gradually declined from Rs. 14.19 crore in 2003-04 to Rs. 4.35 crore in 2005-06 indicating a positive trend.
- The substantial leap in revenue earning from 2004-05 onwards could be attributed to improvement in quality of supply of electricity and consequent increase in consumption of electricity, metering, billing and realisation of revenue.

3.1.12 Incentive Financing

The GOI had provision under the APDRP for payment of incentive to the State Government proportionate to the actual loss reduction. The objective was to encourage the State Power Utility to reduce cash losses.

The EPD had, however, not worked out the actual loss reduction till date and hence not submitted any incentive claim to the GOI. It was seen in Audit that revenue realisation went up since 2004-05 and the gap between the operational expenditure (*O&M cost*) and income (*revenue realised*) gradually narrowed indicating substantial loss reduction. Further, the T&D loss was also found to have been substantially reduced from 63.54 per cent in 2001-02 to 29.69 per cent in 2005-06. Despite this fact, the Department's casual approach in working out the actual loss reduction and pursuance with GOI for incentives led to loss of incentives (grants) to the State to that extent.

3.1.13 Revenue collected vis-à-vis anticipated financial benefits in the DPRs

Comparison of the actual increase in the revenue collected vis-à-vis anticipated financial benefits in the DPRs is shown below:

Table-3.1.7*(Rs. in crore)*

Anticipated annual Benefits in the DPRs	Actual financial benefits	
	In 2004-05 over 2003-04	In 2005-06 over 2003-04
29.09	8.40	13.44

Source: Departmental records.

The actual payback from the projects was evident from 2004-05 onwards. However, this benefit was still far below the anticipated target projected in the DPRs. The three projects – i) Metering Phase I, II & III, ii) Short term measures for ST & D improvement of South / West & Lagyap and iii) DPR for ST&D improvement had become operational / were scheduled to be operational by March 2004 and the fourth project ‘Supplementary project for ST&D Improvement’ was scheduled to be completed by July 2005. Considering this fact, the financial benefits during the years 2004-05 and 2005-06 should at least have been Rs. 10.84 crore and Rs. 29.09 crore respectively. However, the actual realisation of Rs. 8.40 crore during 2004-05 and Rs. 13.44 crore during 2005-06 was far below anticipation. Thus, the projections made in the DPRs were unrealistically high.

3.1.14 Arrears of revenue

Year-wise position of number of consumers, revenue billed vis-à-vis collected, arrears of revenue and collection efficiency during the period 2001-02 to 2005-06 was as under:

Table-3.1.8*(Rs. in crore)*

Sl No	Particulars	2001-02	2002-03	2003-04	2004-05	2005-06
1	Number of consumers	59,947	60,820	61,949	63,260	70,195
2	Dues at the beginning of the year	13.49	13.96	14.71	17.67	19.62
3	Revenue billed during the year	12.31	14.06	16.53	23.92	32.21
4	Total (2 + 3)	25.80	28.02	31.24	41.59	51.83
5	Revenue collected during the year*	11.84	13.31	13.57	21.97	27.01
6	Outstanding revenue at the end of the year	13.96 (54.11%)	14.71 (52.50%)	17.67 (56.56%)	19.62 (47.17%)	24.82 (47.89%)

Source: Departmental records. *Include arrears of earlier periods.

Although the percentage of outstandings compared to the total billed amount (including dues of earlier years) decreased from 54 per cent at the end of 2001-02 to 47.89 per cent at the end of 2005-06, the actual amount of dues progressively increased from Rs. 13.96 crore in 2001-02 to Rs. 24.82 crore in 2005-06. The Department had neither formulated any time bound plan for reducing the arrears nor initiated any legal action against the defaulters indicating laxity of the Department in this regard.

3.1.15 Cost recovery of power supplied

There existed a huge gap between the cost of power and its sale as indicated below:

Table-3.1.9

Year	Average cost (Rs. per unit)	Average tariff (Rs. per unit)	Gap (Rs. per unit)	Percentage cost recovery
2001-02	3.10	1.89	1.21	60.97
2002-03	3.34	1.92	1.42	57.49
2003-04	2.64	1.65	0.99	62.50
2004-05	2.66	1.49	1.17	56.02
2005-06	2.66	1.50	1.16	56.39

Source: Departmental records

Although the average cost of power per unit ranged between Rs. 2.66 to Rs. 3.34, the average tariff per unit was between Rs. 1.49 to Rs. 1.92 indicating a gap ranging from Rs. 0.99 to Rs. 1.21 per unit. Thus the percentage cost recovery which ranged between 56 (2004-05) to 62.50 (2003-04) *per cent* was appallingly low. Despite expenditure of Rs. 155.75 crore so far (2001-02 and 2005-06) in reforming this sector through the APDRP scheme by decreasing aggregate transmission and commercial losses (AT & C) and improving energy accounting and Auditing and the State Government indicating 100 *per cent* physical achievement in three out of four of its projects, the failure to reign in the average cost per unit of power supplied is cause of concern. The reforms have obviously failed to deliver the desired results.

3.1.16 Quality of power supply

The quality of supply of power is determined by the reduction in the failure rate of transformers and reduction in the incidence of outages and tripping of the feeders. The position in this regard during the period 2001-02 to 2005-06 was as under:

Table-3.1.10

Year	Incidence of		
	Trippings (in hours)	Number of DT failure	% of DT fail
2001-02	NA	NA	NA
2002-03	NA	NA	NA
2003-04	132	684	7.95
2004-05	483.17	1,765	10.79
2005-06	395.07	346	8.71

Source: Departmental records maintained in manual registers at sub-stations.

It would be seen from above that while tripping increased from 132 hours in 2003-04 to 395 hours in 2005-06, there was improvement in stability of distribution transformers (DT) as the DT failure decreased from 684 in 2003-04 to 346 in 2005-06. Since the feeder trippings and failure rate of DTs did not show a uniform trend of reduction from the year 2003-04 onwards, reliability of the supply of power to the consumers could not be assured. Data for the period prior to 2003-04 was not available with the Department.

3.1.17 Vigilance mechanism to detect theft/pilferage of power

The Department had not constituted any vigilance squad for conducting regular and routine raids to detect theft / pilferage of electricity. During the period 2001-02 to 2005-06, raids were conducted only on two occasions – during November/December 2005 and April/May 2006 that too in just one

Sub-division (Commercial Sub-division – I, Gangtok). Although 12 offenders were found, they were let off after payment of the differential amount of tariff for the extra energy consumed as assessed by the raiding officials. No penalty, whatsoever, was imposed for the theft of energy, over and above the normal energy charges. Names of the offenders were neither posted in prominent places nor displayed in the print and electronic media to serve as deterrent to other such offenders.

3.1.18 Monitoring and evaluation

3.1.18.1 Monitoring

The Department had constituted (October 2003) a six member Monitoring Committee comprising the Chief Engineer as Chairman, four Superintending Engineers as members and one Executive Engineer as member Secretary. The function of the Committee was to monitor the execution of works to ensure that the schemes were result oriented and also to compile information obtained from the districts on monthly basis for submission to the Government. Audit verification revealed that the work files were referred to the Committee for verification before releasing payments to the contractors. Out of 19 works examined in Audit (including metering), the Committee recorded its findings in 17 works in the respective work files after inspection of the works. However, monitoring was found wanting in case of the most crucial components of the scheme, namely, i) metering of consumers and feeders, ii) computerised billing and iii) mapping and indexing of consumers. This is the reason why high incidence of defective meters in the feeders / consumer premises remained undetected / un-rectified. This lack of effective monitoring also resulted in failure to introduce computerised billing in 22 out of total 24 sub-divisions and, failure to implement consumer indexing in 18 out of 24 sub-divisions. There was also no semblance of monitoring of the activities relating to the energy accounting and Auditing. This vital activity could not even be initiated so far. Thus while the monitoring committee concentrated its efforts in monitoring the physical aspects of construction works (*where money was being spent*), it missed the point of the reforms agenda in the power sector completely by not effectively monitoring key areas such as metering of feeders, consumer indexing, setting up computerised billing and MIS, energy accounting and Audit mechanism etc (*which are less capital intensive in nature*).

3.1.18.2 Evaluation

The Union Ministry of Power awarded evaluation of APDRP works in Sikkim to 'The Energy and Resource Institute' (TERI), New Delhi in December 2004. The scope of works for evaluation covered only those projects where more than 50 *per cent* works had been completed. The TERI submitted its Evaluation Report in July 2005 which, inter alia, summarised the following:

- The project reports were prepared in a hurry without making any system studies to avoid changes in the scope of works.
- Actual field conditions like terrain conditions, transportation, forest clearance, low working season, exorbitant land acquisition cost etc. were not properly accounted for resulting in delay in completion of works and also change in the scope of works.

- Quality and reliability of electricity supply improved over the last few years due to improved voltage conditions, reduced interruptions and breakdowns, less billing complaints and reduction in fault rectification time.
- On the whole, the quality of works carried out by the Electricity and Power Department was rated as 'very good'.

This is the only evaluation of the implementation of the scheme done in the State so far. This report was however deficient to the extent that it did not point out slippages of the State Government in achieving most of the covenants of the MOA signed with the GOI.

3.1.19 Conclusion

Performance Audit of implementation of APDRP indicated that none of the targets incorporated in the MOA could be achieved. The power sector reforms and restructuring thereof was yet to be implemented. Although revenue realisation and quality of power supply had substantially improved since 2004-05 after implementation of the programme, it was far below the targeted level. The objective of breaking even by the year 2005 and positive returns thereafter, as contemplated in the MOA, was a far cry as of March 2006 giving rise to the apprehension that commercial viability may not, after all, be achievable within a conceivable time frame unless drastic steps were taken to cut down operational costs, economise on capital expenditure, contain energy loss and improve revenue realisation further. There was abysmal failure in critical areas of reforms such as consumer indexing, computerised billing and MIS and energy accounting and Audit. The monitoring mechanism in place also failed to address these issues instead concentrating more on progress of construction works.

3.1.20 Recommendations

The Department should take immediate steps to:

- Constitute State Electricity Regulatory Commission and file tariff petition expeditiously;
- Ensure 100 *per cent* metering, repair the defective meters and take immediate steps towards energy accounting and Auditing;
- Take appropriate steps to improve billing and collection efficiency and reduce T&D and AT & C losses as contemplated in the APDRP scheme;
- Expedite implementation of computerised billing system.
- Strengthen vigilance mechanism and take stringent action against theft of electricity.
- Strengthen monitoring activity in the areas of metering, billing and energy accounting and Auditing;
- Wherever Department undertakes works / projects, it should display information as required under the Right to Information Act.
- Department should publicise works undertaken and completed.

**FOOD & CIVIL SUPPLIES AND CONSUMER AFFAIRS
DEPARTMENT AND HEALTH CARE, HUMAN SERVICES &
FAMILY WELFARE DEPARTMENT**

3.2 Implementation of Acts and Rules relating to Consumer Protection

Performance Audit of implementation of various Acts and Rules relating to consumer protection viz. the Consumer Protection (CP) Act 1986, the Prevention of Food Adulteration (PFA) Act, 1954 and the Standards of Weights and Measures (Enforcement) (SWM) Act 1985 during the period 2001-06 in Sikkim revealed that the enforcement of the Acts in protecting the interests of the consumers against adulterated foods and exploitation through incorrect weighing and measurement was grossly inadequate. It was further compounded by non-fixation of targets for collection of food samples for analysis under PFA, non-achievements of targets under SWM and absence of dedicated monitoring mechanism at the State level to review and evaluate the extent of successful implementation of these Acts in the State.

Highlights

Establishment of the State Consumer Disputes Redressal Commission and the District Consumer Disputes Redressal Forums was delayed by 31 months due to Government's inaction.

(Paragraph-3.2.6.1)

Despite availability of Central assistance of Rs. 90 lakh, there was delay of five years in completion of construction of buildings for the State Commission and District Forums. Handing over of the District Forum, North District was abnormally delayed by a further 34 months.

(Paragraph-3.2.6.3)

The District Forums disposed off 10 per cent (2001) to 57 per cent (2002) of consumer dispute cases within the prescribed 90/150 days. The performance of the State Commission in disposal of cases during the same period was nil to 50 per cent and left much to be desired.

(Paragraph-3.2.6.6 & 3.2.6.7)

44 consumer awareness camps representing less than nine camps in a year were organised by Food & Civil Supplies and Consumer Affairs Department (FCSCAD) during the period 2001-06 indicating that the Government had not initiated serious measures to sensitise the public under the CP and other Acts.

(Paragraph-3.2.9.2)

Monitoring mechanism was neither introduced at the State Commission nor in the Consumer Affairs Department to ensure speedy disposal of grievances.

(Paragraph-3.2.10)

3.2.1 Introduction

The Consumer Protection Act 1986, (CP Act), a Central Act, came into force from July 1987. It was primarily aimed at providing simple, speedy and

inexpensive redressal to consumer grievances in respect of goods purchased and services availed and paid for by them. It provided for the additional remedy of “compensation” to the consumers.

While the Prevention of Food Adulteration (PFA) Act was enacted in April 1997 with a view to ensuring availability of unadulterated food and articles other than drugs to consumers, the Standards of Weights and Measures (Enforcement) (SWM) Act 1954 and 1985 was enacted in September 1985 (amended) to protect consumers against unfair trade practices of manufacturers and against exploitation through incorrect weighing and measurement. The SWM and PFA Acts do not, however, provide for awarding monetary compensation to consumers; they contain mostly preventive and punitive measures against defaulters.

3.2.2 Implementation Arrangement

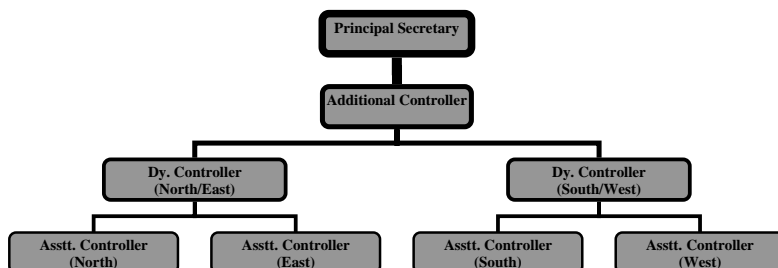
The CP Act stipulated establishment of a separate three-tier quasi-judicial consumer dispute redressal machinery (otherwise called Consumer Courts) at the National, State and District levels by the State Governments with assistance from the Government of India (GOI). The Food and Civil Supplies & Consumers’ Affairs (FCSCA) Department headed by the Principal Secretary administered, enforced and monitored the implementation of CP Act as well as the Standards of Weights and Measures (Enforcement) (SWM) Act, assisted by others subordinate staff. Besides, the Presidents of the State Commission and the Districts Forums at the District-level were responsible for implementation of the provisions of the Act.

Similarly, in respect of the Prevention of Food Adulteration (PFA) Act, the Secretary, Health Care, Human Services and Family Welfare (HCHSFW) Department was responsible for implementation of the Act, assisted by an Additional Director and his subordinates.

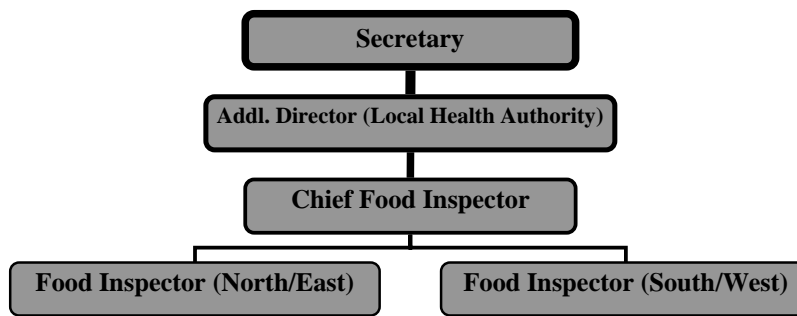
Overall, however, the FCSCA Department is the nodal agency responsible for creating awareness and ensuring empowerment of consumers and protecting their rights in the State.

Organisational charts of both FCS&CAD and HCHS&FWD are given below:

Chart -3.2.1
Food and Civil Supplies & Consumers’ Affairs Department(FCS&CAD)



Health Care, Human Services and Family Welfare Department
(HCHS&FWD)



3.2.3 Scope of Audit

Implementation of the Acts and Rules relating to Consumer Protection for the period 2001-02 to 2005-06 was reviewed in Audit during April 2006 through a test check of the records of the State Commission and the Administrative Departments (FCS&CAD and HCHSFWD) along with their subordinate offices located in four¹¹ districts of the State.

3.2.4 Audit objectives

The objectives of Audit examination were to assess/verify whether:

- the adjudication mechanism for implementation of the Acts was adequate and effective;
- the Acts and Rules succeeded in providing simple, speedy and inexpensive redressal to consumer grievances (as specifically envisaged under the CP Act);
- the awareness and empowerment efforts of the consumers were adequate and effective; and
- the execution mechanism was efficient, effective and economical for the consumers.

3.2.5 Audit criteria and methodology

Prescribed provisions of the Acts and Rules were adopted as criteria to arrive at Audit conclusions. These criteria were discussed with the Departments concerned in an entry conference (April 2006) and was agreed by them. All the points raised during the course of Audit were discussed and views of the implementing authority obtained in an exit conference (May 2006) at the conclusion of Audit.

3.2.6 Consumer Protection Act, 1986

3.2.6.1 Delay in establishment of Consumer Courts

The State Government set up the State Consumer Disputes Redressal Commission (State Commission) and four District Forums at the district

¹¹ East, West, North and South

headquarters only on 30 January 1990 after a delay of 31 months (July 1987) as prescribed in sub-section 2 of Section 30 of the CP Act.

3.2.6.2 Formulation of Rules

Though the CP Act came into force from July 1987, the State Government framed the Sikkim Consumer Protection Rules in 1990 and adopted the same from 30 January 1990. There was thus a delay of 31 months in formulation of the Rules.

3.2.6.3 Delay in construction of buildings for State Commission/District Forums

Though the State Government received one time Central assistance of Rs. 90 lakh¹² between November 1995 and May 1997 for infrastructure development, the FSC&CAD completed the infrastructure development works by renovating its existing old buildings at Gangtok and Mangan at a cost of Rs. 48.74 lakh (Rs. 45.66 lakh at Gangtok and Rs. 3.08 lakh at Mangan) for accommodating the State Commission and the East District Forum at Gangtok and the North District Forum at Mangan, while a new building was constructed at Namchi at Rs. 15.70 lakh to house the South District Forum between January and September 2002 after a delay of more than five years of receipt of fund from the GOI and 12 years after issue of notification (1990) by the State Government setting up these bodies. It was seen that there was a further abnormal delay of 34 months in handing over the building of District Forum, North District by the executing Department (Building & Housing). The Department attributed the delay to non-availability of land at suitable and prominent location. But no infrastructure had been created to house the West District Forum at Gyalshing till April 2006; it was functioning from the office of the District and Session Judge, West, Gyalshing.

3.2.6.4 Office Infrastructure

Supporting infrastructure like fax, scanner, high-speed printer and sufficient furniture were not provided to the District Forums except xerox machines to East, North and South District Forums. During joint inspection (September 2006) conducted by Audit team with Departmental officers, it was found that even basic equipments like fax machine, xerox machine etc. were not found provided in any of the District Fora.

3.2.6.5 Amenities for consumers

Joint inspection (September 2006) by Audit team and Departmental officers confirmed that seating arrangements for consumers were not provided in any of the District Fora.

3.2.6.6 Functioning of Consumer Courts

The Act provided for speedy and inexpensive redressal of consumer disputes within a prescribed time frame. Rule 4 (9) of Sikkim Consumer Protection Rules 1990 (effective 30 January 1990) stipulated that endeavour was to be made to decide the complaint within a period of three months (90 days) from the date of receipt of notice by opposite party, where the complaint does not

¹² State Commission: Rs. 50 lakh and District Forum in four districts: Rs.10 lakh each

require analysis or testing of commodities and five months (150 days) if it required analysis or testing of the commodities. Analysis of the position of consumer dispute cases filed and disposed of during the years 2001-02 to 2005-06 in respect of the State Commission and District Forums revealed that despite extremely low number of cases filed, there were no disposals in 2005 and 2006 (upto March) in the State Commission. As for other years, the extent of disposal on time was about 33-75 per cent as shown below:

Table- 3.2.1

Calendar year	State Commission					District Forums				
	Opening balance	Cases filed during the year	Total	Disposal during the year	Cases pending to the end of the year	Cases (opening balance)	Cases filed during the year	Total	Disposal during the year	Closing balance
2001	1	2	3	1 (33)	2 (67)	3	16	19	12 (63)	7 (37)
2002	2	2	4	2 (50)	2 (50)	7	14	21	15 (71)	6 (29)
2003	2	3	5	2 (40)	3 (60)	6	9	15	12 (80)	3 (20)
2004	3	1	4	3 (75)	1 (25)	3	8	11	7 (64)	4 (36)
2005	1	-	1	- (0)	1 (100)	4	11	15	9 (60)	6 (40)
2006	1	1	*2	- (0)	2 (100)	6	5	*11	3 (27)	8 (73)
Total	1	9	-	8	2	3	63	-	58	8

* Figure upto March 2006.(Source: State Commission & District Fora). Figures in brackets represent percentage.

It was also noticed that the percentage of cases disposed by the District Forums within the prescribed 90/150 days ranged from 10 per cent to 57 per cent only during 2001-06 while the performance of the State Commission during the same period ranged from 'nil' to 50 per cent working out to less than two cases disposed per year as shown in table below:

Table- 3.2.2

Year	State Commission/ District Forms	Cases disposed						Pending
		OB	New cases	Total cases	within 90 days	within 150 days	beyond 150 days	
2001-02	SC	1	3	4	-	1 (25)	3 (75)	-
	DF	5	20	25	6 (24)	5 (20)	11 (44)	3
2002-03	SC	-	3	3	2 (67)	-	1 (33)	-
	DF	3	11	14	8 (57)	3 (21)	2 (14)	1
2003-04	SC	-	1	1	-	-	1 (100)	-
	DF	1	7	8	3 (38)	3 (38)	1 (13)	1
2004-05	SC	-	1	1	-	-	-	1
	DF	1	9	10	5 (50)	-	1 (10)	4
2005-06	SC	1	1	2	-	-	-	2
	DF	4	14	18	4 (22)	3 (17)	3 (17)	8
Total	SC		10*	10	2 (20)	1 (10)	5 (20)	2
	DF		66	66	26 (39)	14 (21)	18 (27)	8

Source: State Commission & District Fora. * Including opening balance of 2001-02. Figures in bracket represent percentage.

3.2.6.7 Non-disposal of cases within the prescribed time limit

According to Section 13 (3A) of the CP Act 1986 as amended in 2002 (effective 15 March 2003) read with Rule 4(9) of Sikkim Consumer Protection Rules 1990 (effective 30 January 1990), in the event of non-disposal of

complaint within the time specified, the District Forum was to record in writing the reasons for delay at the time of final disposal. Similar provision existed (Section 19-A and Rule 8 *ibid*) for disposal of appeal cases within 90 days by the State Commission.

Audit analysis revealed that the State Commission (SC) and District Forums (DF) could not dispose off 22 *per cent* of cases within the prescribed time limit during the period covered under Audit. Reasons, whatsoever, were neither recorded as envisaged in the Act nor furnished either by the SC or the DF for such delay beyond the prescribed time limit.

3.2.7 Sikkim State Consumer Welfare Fund (CWF)

In pursuance of the directives (April 1999) of the GOI, the Sikkim State Consumer Welfare Fund Scheme, 2000 was set up (September 2000) by the Government of Sikkim with a view to provide financial assistance to Voluntary Consumer Organisations (VCOs) to enable them to undertake publicity measures and other activities to promote and protect the welfare of the consumers and strengthen the voluntary consumer movement in the State, especially in the rural areas.

Scrutiny of records revealed that though the fund was being generated mainly from contribution from sale of petroleum and diesel, issue of new photo identity ration cards, accrued interest on deposit and contribution from GOI and State Government towards the State Consumer Welfare Fund, the Department did not initiate sufficient measures to utilise the available Fund leading to savings ranging between 12 *per cent* and 38 *per cent* during the years 2001-02 to 2005-06.

3.2.7.1 Short deposits towards CWF

It was noticed that out of 23 petrol dealers operating in the State, only Rs. 10.58 lakh was received during 2003-04 to 2005-06 from 12 petrol dealers as their share towards the CWF while the remaining dealers did not credit the amount recovered from the consumers to CWF. While the Department had not initiated any action to realise the dues from the defaulting dealers, it also had no idea about the outstanding amount due, periodicity of outstanding etc. as it had not maintained dealer-wise details of lifting and distribution of HSD and petrol.

The Department assured (May 2006) that action would be initiated for recovery of the dues, if any, from the dealers. But no time frame was given for the same.

3.2.7.2 Irregular expenditure from CWF

The Department irregularly incurred Rs. 5.57 lakh from out of CWF towards the purchase of 5,000 shares of Citizens Co-operative Bank Ltd., Gangtok (Rs. 5 lakh), and payment of muster roll (MR) (Rs. 0.57 lakh) of District Consumers Information Centres (DCIC) of East and West districts for the years 2004-05 and 2005-06. This expenditure was neither permissible under

the provisions of the Fund nor contributed towards strengthening the consumer movement in the State.

The Department accepted the irregularity.

3.2.8 Other Acts relating to protection of consumers' interests

The implementation of Prevention of Food Adulteration (PFA) Act, 1954 (enforced by the Health Care, Human services and Family Welfare Department) and the Standards of Weights and Measures (Enforcement) (SWM) Act, 1985 (enforced by FCS&CA Department) was also found deficient in safeguarding the interests of consumers as discussed below:

3.2.8.1 Non-fixation of target for the collection of samples for analysis

Rule 9A of PFA Rules, 1955 prescribed that all licensed establishments for the manufacture, storage or sale of food articles should be inspected by Food Inspectors (FIs) at prescribed intervals and suspected samples sent to the Public Analyst for analysis and report to the Health authorities.

It was noticed in Audit that the Department had neither set up laboratory for analysis of food samples of its own nor prescribed any procedure on targets for collection and testing of samples. A total of 229 samples, however, were collected and sent for analysis to Public analysts, Guwahati between 2001-02 and 2004-05 of which 49 (21 *per cent*) were found adulterated. A joint inspection conducted (September 2006) by the Departmental officers in the presence of Audit in 29 hotels/restaurants and roadside stalls revealed that the kitchens of four road side hotel/stalls were unhygienic.

It was also revealed during the joint inspection that:

- Five hotels/stalls could not produce the copy of licence issued under PFA Act by HCHSFW to the inspecting team.
- Two hotels had failed to renew the licences for the period 2003-04 and 2006-07 respectively.
- Out of 4 samples collected during joint inspection which were sent (*September 2006*) to the Public Analyst, Guwahati for analysis, one sample was found adulterated in terms of the specifications laid down in the PFA Act.

The Department should have immediately closed the hotels/ stalls operating without licenses / renewal of licenses issued under the PFA Act, which it failed to do. The Department had also failed to take any action against the adulterators as of November 2006.

3.2.8.2 Vacancies in the post of Food Inspectors

Scrutiny of records of the Department revealed that four out of six posts of Food Inspectors (FIs)/ Senior FIs were vacant for over five to eleven years as of March 2006, leading to the possibility of adulterated food articles being sold in the market going undetected for want of collection of sufficient number of samples.

3.2.8.3 Non-achievement of inspection targets

According to Rule 15 (7) of the Sikkim Standards of Weights and Measures (Enforcement) Rules, 1987, the Department fixed the number of surprise checks/ raids to be conducted annually by the Inspectors/Assistant Controller on a year to year basis, as shown below:

Table – 3.2.3

District	2001-02	2002-03	2003-04	2004-05	2005-06
East	70	70	75	80	170
South	20	20	25	27	120
West	15	15	18	20	115
North	10	10	12	13	110

Source: Food Civil Supplies & Consumer Affairs Department (FCSCAD)

The Office Order prescribed that reports after such checks/raids were to be submitted to the Additional Controller by 10th of the following month by Inspectors/Assistant Controller. However, records relating to the surprise checks/ raids conducted were not submitted to the Additional Controller (Weights & Measures) through their respective Deputy Controllers in the absence of which, the extent of cheating on account of defective weights and measuring instruments etc. by the shopkeepers could not be vouchsafed in Audit.

3.2.9 Awareness and empowerment of consumers

One of the key elements of Government intervention in the consumer movement was to promote the concept of consumer rights and to empower the consumer through well thought out awareness campaign programmes to take full advantage of the redressal mechanism provided under the CP and other allied Acts. But the spread of awareness in the State was grossly inadequate as discussed below:

3.2.9.1 Non-utilisation of electronic/print media

Out of the total allocation of Rs. 44.09 lakh for awareness campaign during 2001-06, the Department spent Rs. 26.60 lakh on awareness generation through printing of booklets, organising consumer camps, programmes and banners, while only Rs. 5.26 lakh were spent in 2001-06 for awareness generation through public media like TV, Radio and installation of electronic scroll based at Gangtok. An amount of Rs. 12.23 lakh was still lying (May 2006) in Government account.

3.2.9.2 Holding of Consumer Awareness Programmes/Camps

For spreading consumer awareness with a view to making the consumers aware of their rights, the FCS&CA Department was organising consumer awareness programmes and camps departmentally as well as through NGOs/ Voluntary Consumer Organisations (VCO). During the period 2001-02 to 2005-06, the Department organised 44 programmes besides holding consumer awareness programmes and camps every year on the occasion of World Consumer Rights Day and National Consumer Day on 15 March and 24 December respectively.

Even the World Consumer Rights Day and the National Consumer Day Programmes were mostly organised in Gangtok while in other districts, only banners and hoardings were displayed. This indicated that the Department's awareness programmes lacked rural and mass-base focus.

The State Consumer Welfare Fund was created (May 2000) to assist VCOs in undertaking publicity measures and other activities relating to consumer protection. However, scrutiny of records revealed that against the 44 awareness programmes, 16 awareness programmes were organised by involving three¹³ VCOs/ NGOs. The Department had not taken any action to create or encourage other VCOs/ NGOs.

3.2.9.3 Non-utilisation of funds by District Consumer Information Centres

Although the District Consumer Information Centres (DCICs) were set up, all of them were being run by the Department itself in the absence of financially stable and capable VCOs to manage and run the DCICs as per the norms. While three DCICs had been set up (East, South and North) the Government had not set up the DCIC in the West District till April 2006 though the GOI had sanctioned and released a grant of Rs. 9.25 lakh (March 2002 to October 2003) for establishment of the DCICs, against which an expenditure of Rs. 8.10 lakh was incurred (2001-02 to 2004-05) leaving an unspent balance of Rs. 1.15 lakh as of March 2006.

3.2.10 Monitoring and evaluation

The State Government did not have a separate cell for monitoring consumer related activities in the State. The Department had not yet created facilities for computer network interlinking all the three tiers of the consumer courts for better analysis of various data relating to receipt and disposal of consumer cases in these courts and their monitoring and transparent functioning in the interest of the consumers.

3.2.11 Conclusion

The State Government had not initiated serious measures for spreading the message of consumer rights by organising adequate awareness programmes. Though the adjudication mechanism was put in place, significant number of complaints (30 per cent) were not decided within the prescribed time limit of 90/150 days. Similarly no action was taken against hotels for non-renewal of licences. This way the effectiveness of the concerned Acts was compromised. The enforcement machinery in respect of PFA and SWM Acts, was grossly deficient with staff vacancies and inadequate monitoring at the Government level. In short, Government has a long way to go for building up a vibrant consumer movement in the State so that consumers get speedy and inexpensive redressal of their genuine grievances.

¹³ Kalyan Pariwar, South Sikkim; Federation of Consumer Association, Sikkim and Upabhokta Jagaran Samiti, East Sikkim.

3.2.12 Recommendations

Following recommendations are made:

- The Department should take initiatives to encourage more VCOs/NGOs for creating awareness among consumers in the urban/ rural areas as per the provisions/ facilities provided under the CP Act. Department should also publicise its activities and functions.
- Target for inspection/raids/collection of food samples should be fixed for each Food Inspectors/ Assistant Controllers under the PFA and SWM Acts and regularly monitored.
- Department should expedite filling up of vacancies of food inspectors.
- Establishment of a food testing laboratory should be expedited.
- Department should display information about its activities as required under the Right to Information Act.
- Actions against defaulters of concerned Acts should be expedited so that effectiveness of the Act is not compromised.

HEALTH CARE, HUMAN SERVICES AND FAMILY WELFARE DEPARTMENT

3.3 Health Care Management

Performance Audit of health care management revealed that though the State was faring well in terms of general health indicators and programme management, it was deficient in the area of policy perspectives, fund management, infrastructure development and its upkeep, deployment of medicos and para-medicos and delivery of services as detailed below.

The State was yet to formulate a Health Policy to provide policy direction and enable perspective planning, absence of which led to lower allocation of funds to the health sector, non-fixation of realistic targets, etc. Infrastructure management was characterised by inadequate facilities both in terms of the number of CHCs, PHCs and PHSCs and also availability of required facilities such as water, electricity, labour¹⁴ table, anaemia measuring machine, BP machine etc in the existing PHCs and PHSCs. Analysis of human resources management revealed acute shortage of specialists, wide inter-district variation in deployment of doctors and nurses, irrational deployment of paramedical and medical staff, shortfall in imparting integrated and specialised training. Effectiveness of delivery of medical care and services was affected by shortage of medicines, non-operation of drug testing laboratory, delay in construction of CHC at Mangan, drug de-addiction centres at Namchi and Geyzing, non-commissioning of machines and equipments etc.

¹⁴ Child delivery table.

Highlights

The Department failed to formulate 'State Health Policy' indicating policy direction and road map. This resulted in casual approach to health activities in the State as well as less allocation of Rs. 29.12 crore as per norms.

(Paragraph-3.3.7)

Existing infrastructure of PHSC and CHC fell short of requirement by 8 and 33 *per cent* respectively depriving the easy access of health care facilities to the people.

(Paragraph- 3.3.9.1)

There were acute shortage of Specialists (75%), Health Educators (62%) and Laboratory Technician (11%) amongst others and wide inter-district disparities in their deployment.

(Paragraph- 3.3.10.1)

Effective delivery of health care facilities was handicapped owing to non-availability of basic amenities in PHCs and PHSCs. Medicines and injections prescribed by doctors for issue to the poorer patients could not be provided to the extent of 43 and 44 *per cent* respectively owing to inadequate stock.

(Paragraph- 3.3.11.2)

Of the two blood banks in the State, STNM showed remarkable improvement in collection of blood from voluntary donors from 4 *per cent* in 2001 to 52 *per cent* in 2005, Namchi (CHC, South) was far behind the target with 2 to 9 *per cent* of total collection.

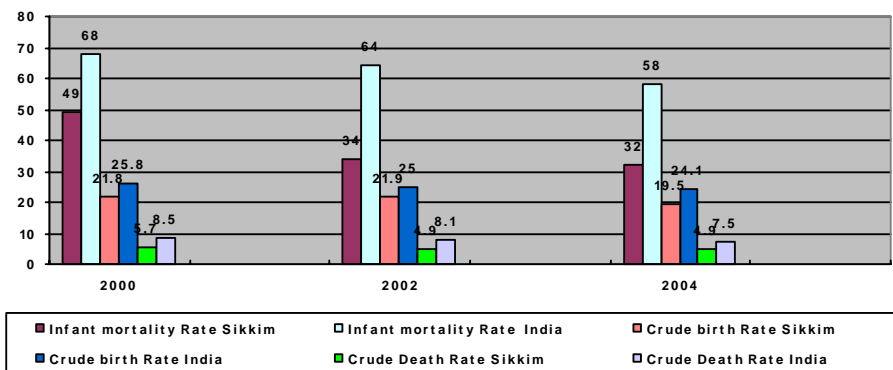
(Paragraph- 3.3.12.1)

3.3.1 Introduction

Providing economic, efficient, effective health care to all the citizens is the prime responsibility of any welfare State. Towards this end, the thrust of the State Government is to implement various national and State run programmes in the health and family welfare sector and undertake policy initiatives to improve and create quality health care facilities and ensure their easy delivery to the general public in the State, particularly the poor and the downtrodden. Consequently, consolidating, strengthening and modernising the health care infrastructure, upgrading technical skills of medicos, paramedics, nursing personnel and other non-medical officers and ensuring their easy access to the common people are some of the major activities that come under the responsibility of the State.

The State of Sikkim was faring well in respect of some general health indicators such as Infant Mortality Rate (IMR), Crude Birth Rate and Crude Death Rate compared to the national average as can be seen from the graph below:

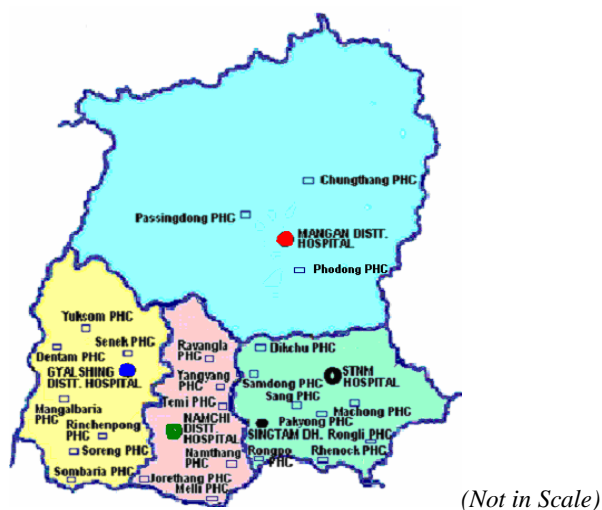
Graph- 3.3.1



(Source: Annual Report and Sample Registration Survey (SRS) bulletin)

3.3.2 Organisational set-up

Health Care, Human Services and Family Welfare Department, Government of Sikkim is responsible for health care in the State of Sikkim. The Department implemented various national and State-sponsored programmes in the areas of health care and family welfare as well as prevention and control of diseases, through a network of 147 Primary Health Sub-Centres (PHSCs), 24 Primary Health Centres (PHCs), 4 Community Health Centres (CHCs) and one 300 bedded State Referral Hospital¹⁵ at Gangtok besides a Hospital-cum-Medical college¹⁶. Location of CHCs/ district hospitals, PHCs, PHSCs and State Referral Hospital (STNM) is shown below in the map of the State:



Distance from Gangtok to:

Mangan: 67 Kms; Gyalshing: 103 Kms

Namchi: 84 Kms; STNM: 0 Kms

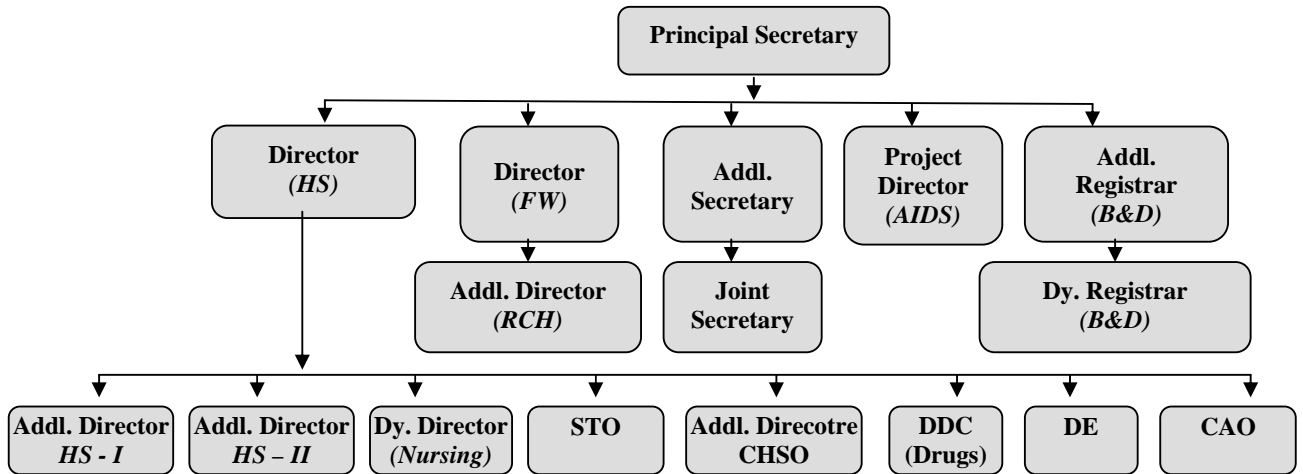
The overall administrative control of the Department is vested with the Principal Secretary who is assisted by Directors (2), Addl. Secretary (1),

¹⁵ Sir Tashi Namgyal Memorial Hospital, Gangtok

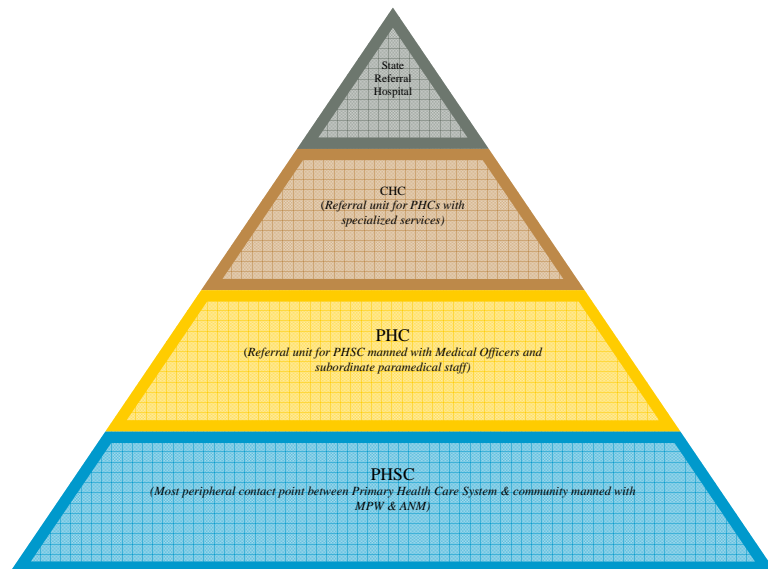
¹⁶ Central Referral Hospital, Tadong (a joint venture between the Manipal group and the State Government).

Project Director (1) and Additional Registrar (1) besides a team of subordinate officers/ medical officers as shown in the chart¹⁷ below:

Chart – 3.3.1



In Sikkim, health care is delivered through a four-tier network comprising of PHSCs, PHCs, CHCs/ district hospitals and State Referral Hospital as shown below:



Details of roles of all the four tiers and the availability of level of medical professional under each of them is given below:

¹⁷ HS: Health Services; FW: Family Welfare; AIDS: Acquired Immune deficiency syndrome; RCH: Reproductive and child health; B&D: Birth & Death; STO: State TB Officer; DDC: Dy. Drug Controller; DE: Divisional Engineer; CAO: Chief Accounts Officer; CHSO: Central Health Stores Organisation.

SI	Units	Roles
1	State Referral Hospital	<ul style="list-style-type: none"> ➤ Named as STNM and is situated at Gangtok; ➤ Headed by Director-cum- Medical Superintendent; ➤ It has specialists in the field of Cardiology, Medicine, Surgery, Obstetrics & gynaecology, Dermatology & venerology, Ophthalmology, Dental, Paediatrics, Otolaryngology and Psychiatry; ➤ Amenities for Pathology, Radiology, and blood transfusion, etc; ➤ Provides secondary and tertiary level health care to public.
2	CHC	<ul style="list-style-type: none"> ➤ Established at the district headquarters in North, South and West districts and at Singtam for East district; ➤ Provides secondary level medical care; ➤ Manned by medical specialists <i>i.e</i> surgeon, physician, and gynaecologist, paediatricians supported by paramedical and other staff.
3	PHC	<ul style="list-style-type: none"> ➤ First contact point between community and the Medical Officer; ➤ Provides primary level health care; ➤ Envisaged to provide an integrated curative and preventive health care to the rural population with emphasis on preventive and promotive aspects of health care; ➤ Manned by Medical Officers supported by paramedical and other staff.
4	PHSC	<ul style="list-style-type: none"> ➤ Serves as the most peripheral and first contact point between the primary health care system and the community; ➤ Provides primary level health care; ➤ Interpersonal communication with the community in order to bring about behavioral change; ➤ Provide services in relation to maternal and child health, family welfare, nutrition, immunisation, diarrhea control and control of communicable diseases; ➤ Provides basic drugs for minor ailments needed for taking care of essential health needs of people; ➤ Manned by Auxiliary Nurse Midwives (ANM), Male health workers and Lady health workers.

3.3.3 Scope of Audit

Performance Audit of the health care management system in the State covering a period of five years from 2001-02 to 2005-06 was conducted by a test check of the records in the office of the Principal Secretary, Health Care, Human Services and Family Welfare Department and all the four Chief Medical Officers of district hospitals/ CHCs and Central Medical Stores, Gangtok. Besides the State Referral Hospital (STNM), eight PHCs and 27 PHSCs were also test checked during Audit, selected on the basis of a two-stage sampling process *i.e* population (*census of 2001*) and the distance of the PHC from the district for selection of PHSCs. Out of total expenditure of Rs. 318.48 crore, Rs. 84.17 crore (26 per cent) pertaining to the above units was test checked in Audit.

3.3.4 Audit objectives

The main objectives of the performance Audit of 'Health Care Management' were to assess whether:

- A clear policy frame work was in place and allocation and utilisation of funds for the health sector was adequate;

- Programme and schemes were implemented economically, efficiently and effectively for providing acceptable standards of health care to the people especially the vulnerable sections of the society;
- Deployment of manpower was efficient and effective compared to the requirement;
- Delivery mechanism in health care was adequate, economical, efficient, effective and equitable; and,
- Monitoring and evaluation mechanism was appropriate, timely and effective.

3.3.5 Audit Criteria

For arriving at conclusions against the above objectives, the following criteria were adopted:

- Policy pronouncements by the State Government and GOI (National Health Policy and National Blood Policy of 2002);
- National averages of success in IMR, MMR and similar other acceptable indicators;
- GOI norms / WHO norms regarding availability of quality infrastructure, medicos and para-medicos;
- Sikkim Public Works Code and Manual, Sikkim Financial Rules, Orders/notifications issued by the State and Central Government,
- Monitoring mechanism prescribed.

3.3.6 Audit Methodology

The performance Audit commenced with an entry conference with the Departmental officers in May 2006, wherein the Audit objectives, scope, criteria and methodology were discussed and the inputs of the Department were obtained. Audit conclusions were arrived at on the basis of a test check of records as detailed in paragraph 3.3.3 and replies of the Department to the questionnaire issued. The report was finalised after taking into consideration the points put forth by the Department during an exit conference held in September 2006 with the Principal Secretary and other officers of the Department.

Audit findings

3.3.7 Policy frame work

The GOI announced a revised '*National Health Policy*' in 2002 which, *inter alia*, stipulated i) framing of a State policy taking into consideration the specific conditions prevailing in the State, ii) increase in State health sector spending from 5.5 to 7 per cent of the budget by 2005 with a view to achieve an acceptable standard of good health among the general populace of the State, iii) improve access to health care and iv) render effective service delivery by augmenting existing health infrastructure and creating new infrastructure in deficit areas.

It was however, noticed that the State Government had not yet (as of September 2006) formulated a comprehensive health policy for implementation of various measures towards quality health care in the State.

The State also lagged behind in allocating adequate resources for health sector. The health sector allocation ranged between 3.9 to 4.6 *per cent* of the State plan during the period 2001-02 to 2005-06 and was short of the stipulation of the National Health Policy by 1.3 to 3.1 *per cent*, aggregating Rs. 29.12 crore during 2001-06. In fact, the gross allocation decreased from 4.6 *per cent* in 2001-02 to 3.9 *per cent* in 2005-06 as shown below:

Table – 3.3.1

(Rupees in crore)

Year	State plan size	Allocation to health sector	Stipulation of National Health Policy		Short allocation
			Percentage	Amount	
2001-02	281.50	13.00 (4.6)	5.5	15.48	2.48 (0.9)
2002-03	350.00	16.00 (4.6)	5.5	19.25	3.25 (0.9)
2003-04	370.00	17.00 (4.6)	5.5	20.35	3.35 (0.9)
2004-05	446.33	19.00 (4.2)	5.5	24.54	5.54 (1.3)
2005-06	470.00	18.40 (3.9)	7.0	32.90	14.50 (3.1)
Total					29.12

(Source: Demand for grant). Figures in brackets represent percentage.

In reply, Principal Secretary, Health Care, Human Services and Family Welfare Department stated (September 2006) that the matter would be taken up with the State Government for suitable enhancement in allocation.

3.3.8 Financial Performance

Budget provision, actual expenditure, savings and excess expenditure under revenue and capital heads during the period 2001-02 to 2005-06 were as under:

Table-3.3.2

(Rupees in crore)

Year	Budget provision			Actual expenditure			Savings (-) / Excess (+)		
	Capital	Revenue	Total	Capital	Revenue	Total	Capital	Revenue	Total
2001-02	4.47	41.60	46.07	4.40	37.72	42.12	(-)0.07 (2)	(-)3.88 (9)	(-)3.95 (9)
2002-03	3.32	45.40	48.72	3.33	40.77	44.10	(+)0.01 (0.30)	(-)4.63 (10)	(-)4.62 (10)
2003-04	3.85	42.51	46.36	3.85	39.86	43.71	0.00 (0)	(-)2.65 (7)	(-)2.65 (6)
2004-05	4.04	57.86	61.90	3.87	54.46	58.33	(-)0.17 (4)	(-)3.40 (6)	(-)3.57 (6)
2005-06	8.92	54.68	63.60	7.94	52.81	60.75	(-) 0.98 (11)	(-)1.87 (3)	(-)2.85 (4)

(Source: Appropriation Accounts). Figures in brackets represent percentage.

Availability of funds was not a constraint to the Department. As is evident from the above table, the savings ranged between 3 and 10 *per cent* of the provision. Audit analysis revealed that major portion of savings ranging between Rs. 2.69 crore (101 *per cent*) in 2003-04 and Rs. 4.43 crore (96 *per cent*) in 2002-03 were from plan funds meant for developmental purposes as shown below:

Table-3.3.3*(Rupees in crore)*

Year	Total savings	Plan	Non-plan
2001-02	3.95	3.78 (96)	0.17 (4)
2002-03	4.62	4.43 (96)	0.19 (4)
2003-04	2.65	2.69 (101)	(-) 0.06 (0)
2004-05	3.57	3.58 (100)	(-) 0.01 (0)
2005-06	2.85	2.78 (98)	0.07 (2)

Audit analysis further revealed that sizeable funds meant for implementation of various programmes such as National Programme for Control of Blindness (NPCB), Reproductive and Child Health (RCH), Revised National Tuberculosis Programme (RNTCP), and National Mental Health Programme (NMHP) were not utilised in full in all the five years as shown below:

Table- 3.3.4*(Rupees in lakh)*

Programme	Particulars	Year				
		2001-02	2002-03	2003-04	2004-05	2005-06
NPCB	Available fund	24.33	11.60	9.60	15.70	Not furnished
	Utilised	24.18 (99)	2.81 (24)	2.05 (21)	3.63 (23)	Not furnished
RNTCP	Available fund	114.90	86.24	60.17	78.50	94.75
	Utilised	100.43(87)	78.89(91)	58.51(97)	63.82(81)	79.85(84)
NMHP	Available fund	28.50	15.40	10.32	18.11	12.44
	Utilised	13.10 (46)	5.08 (33)	3.70 (36)	5.67(31)	2.62 (21)
RCH	Available fund	158.36	211.15	212.99	298.19	361.90
	Utilised	69.14 (44)	78.87 (37)	180.43 (85)	255.40 (86)	126.69 (35)

Source Annual Accounts and Information furnished by the Department. Figures in brackets represent percentage.

Availability of funds was not a constraint to the schemes. Fund utilisation was very poor in all these schemes during some years. Savings under these programmes occurred primarily due to absence of plans for incurring expenditure, non-identification of beneficiaries, delay in finalisation of tenders, partial implementation of schemes, non-appointment of staff, etc. These cases also indicated that the programme management in the Department was not satisfactory resulting in denial of intended benefits to the targeted groups.

While accepting the fact, the Department stated (September 2006) that efforts were being initiated to ensure timely implementation of the schemes to minimise the savings in future.

3.3.9 Infrastructure

Scrutiny of records revealed that while essential infrastructural facilities (such as water supply, electricity, labour room, operation table, telephone connection, etc) relating to delivery of medical facilities to the public was by and large adequate in secondary and tertiary sectors, these were deficient in primary sectors *i.e.* PHSCs and PHCs. The shortages of hospitals led to denial of easy access of health care facilities to the populace as envisaged in the National Policy. It was noticed in Audit that the Department failed to not only ensure completion of construction works within the stipulated time frame but

also slipped in creating associated infrastructure for making the equipment and machines operational. The Department was also found deficient in expeditious completion and commissioning of infrastructure within the stipulated time frame, and their upkeep. The cases noticed during the course of Audit are elucidated below:

3.3.9.1 Inadequacy of CHCs, PHCs and PHSCs

According to GOI norms, one PHSC, PHC and CHC each should be set up for a population size of 3,000, 20,000 and 80,000 respectively. Although the Department showed 100 *per cent* achievement in coverage of PHSC, PHC and CHC in the State to the GOI through its monthly/ quarterly returns, the existing number of PHSCs and CHCs were found short of the norm by 13 (8 *per cent*) and 02 (33 *per cent*) considering population size as per Census – 2001. Details are shown below:

Table- 3.3.5

Institutions	Particulars	State	Districts			
			East	North	South	West
Population as per 2001 census		4,80,488	1,91,803	39,775	1,27,560	1,21,300
CHCs	<i>Required</i>	6	2	1	2	1
	<i>Existed</i>	4	1	1	1	1
	<i>Shortage</i>	2 (33)	1 (50)	-	1(50)	-
PHCs	<i>Required</i>	24	10	2	7	6
	<i>Existed</i>	24	8	3	7	6
	<i>Shortage</i>	nil	2 (20)	(-1)	-	-
PHSCs	<i>Required</i>	160	64	13	43	40
	<i>Existed</i>	147	48	19	41	39
	<i>Shortage</i>	13 (8)	16 (25)	(-6)	2 (5)	1 (3)

(Source: Quarterly Progress Report on Rural Health Schemes- quarter ending March 2006)
 Figures in brackets represent percentage.

The shortage was more pronounced in secondary sector¹⁸ (33 *per cent*) followed by primary sector¹⁹ (8 *per cent*). The district-wise analysis revealed that the shortage was most in East District (secondary 50 *per cent*, primary *i.e* PHC and PHSC by 20 and 25 *per cent* respectively) followed by South district (secondary by 50 *per cent* and primary *i.e.* PHSC by 5 *per cent*).

While accepting the shortages, the Department intimated (September 2006) that 100 *per cent* achievement was shown as per 1991 census and further informed that projection in 11th Five Year Plan had been made for establishment of new health infrastructure in the deficient area.

3.3.9.2 Inordinate delay in construction of 100 bedded Community Health Centre

The construction of 100 bedded Community Health Centre at Mangan, North Sikkim was taken up (April 1997) through the Building and Housing Department (BHD) at an estimated cost of Rs. 4.41 crore with a stipulation to complete within 36 months (March 2000). It was, however, noticed that the hospital remained incomplete even after eight years of commencement of

¹⁸ CHCs.

¹⁹ PHSCs and PHCs.

work, primarily due to paucity of funds under capital head. This not only deprived the people of North district from availing proper health care facilities but also led to blocking of funds of Rs. 5.27 crore as of March 2006 for more than eight years besides cost escalation of Rs. 23.68 lakh towards difference in the cost of material.

The Department informed (September 2006) that the matter had been taken up with the BHD for early completion of CHC.

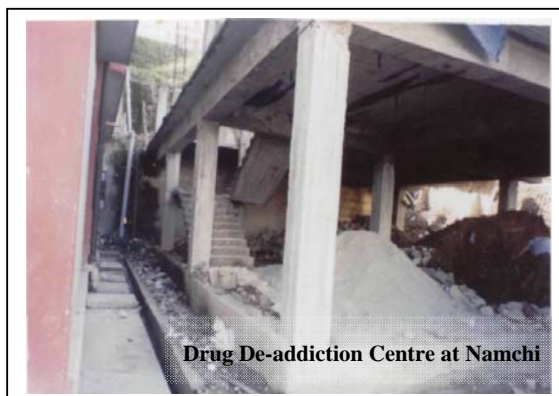
3.3.9.3 Non-establishment of drug testing facilities

The Department did not have any laboratory facilities in the State for drug testing and thus drug samples were sent to Guwahati for testing which took on an average six months time for analysis by which time drugs were utilised/ consumed by the patients. To overcome the problem, GOI based on the proposal submitted (July 1999) by the State Government approved and sanctioned (August 2000) Rs. 15.80 lakh for construction of Drugs Testing Laboratory (DTL) at Deorali, Gangtok. Although, construction was completed (April 2005) at a cost of Rs. 15.80 lakh, it was allotted to the Central Health Medical Stores instead of DTL. The drugs samples continued to be sent to Guwahati for testing. Thus, despite expenditure of Rs. 15.80 lakh, the long felt need of the Department to establish drug testing facility locally, especially to meet emergent need of testing and obviate administration/distribution of possible sub-standard and/or spurious drugs to the patients was not achieved.

While accepting the fact, the Department informed (September 2006) that the proposal for vertical extension of the building by two more floors had been initiated to accommodate the DTL. Thus the purpose for which the building was constructed was defeated. As of date (November 2006), drug testing laboratory had not been made operational and samples continued to be sent to Guwahati for testing.

3.3.9.4 Non-completion of Drug De-addiction centres

GOI sanctioned (September 1997) Rs. 8 lakh for construction of drug de-addiction centres at District hospital, Namchi with the stipulation to utilise the grant within 18 months from the date of sanction. The fund was not utilised within the stipulated period and only as late as in December 2000 the work was taken up departmentally at an estimated cost of Rs. 19.33 lakh. It was noticed that even after spending Rs. 19.33 lakh (March 2006), the construction remained incomplete and the centre could not be operationalised for treatment of drug addicts of South district.



Drug De-addiction Centre at Namchi

In reply, Principal Secretary informed (September 2006) that the remaining work had since been taken up departmentally with revised estimate and the building was likely to be completed by December 2006.

Similarly, Rs. 8 lakh sanctioned (November 1999) for West district for drug de-addiction centre was utilised for acquiring (May 2003) a building (an erstwhile food godown belonging to Food and Civil Supplies Department) at a cost of Rs. 15.49 lakh. But the drug de-addiction centre had not become operational till the date of Audit (June 2006).

The Principal Secretary informed (September 2006) that the building being old was proposed to be dismantled and a new drug de-addiction centre constructed during the eleventh five year plan.

On account of the casual approach of the Government, the people of the State were deprived of two drug de-addiction centres.

3.3.9.5 Non- Commissioning of essential machines

Three x-ray machines purchased (between October 1997 and 2003) at a cost of Rs. 6 lakh were not commissioned due to lack of supporting infrastructure facilities such as proper room, electrical connection etc. and were lying at Rangpo, Soreng and Dentam PHCs depriving the needy patients of much needed facilities. Further, an anaesthetic machine and a horizontal auto-clave machine purchased during October 2001 and March 2002 for Rs. 15.11 lakh and Rs. 16.40 lakh respectively were lying unused at Mangan Hospital in the absence of adequate space.

These cases point towards absence of proper planning before finalising purchases at the level of Secretary and lack of initiation on the part of the concerned Medical Officer and Chief Medical Officers in-charge of the respective PHCs to make the equipment operational at the earliest. Thus the above equipment could not be used for the purpose it was purchased depriving the people of diagnostic, surgical operation and life saving facilities.

3.3.9.6 Non- repair of machines and equipment

Equipment worth Rs. 1.21 crore²⁰ was lying in unserviceable condition in STNM Hospital as of March 2006 since April 2002 due to its non-repair. Although, work orders were issued (February 2003) to one Gangtok based firm²¹, based on the lowest offer, for carrying out repair works within one month at a cost of Rs. 2.06 lakh, the firm declined (November 2004) citing its inability to repair. The Director-cum- Superintendent of STNM had neither initiated any alternative measures to make the equipment functional nor penalised the firm for backing out after acceptance of work order. Similarly, other important and useful equipments such as operating microscope (2); slit lamp, dager SA2 OT ventilator; image processors, pringer for echo machine; Oxy monitor sat BPL; etc. were also lying non-functional for a considerable period of time.

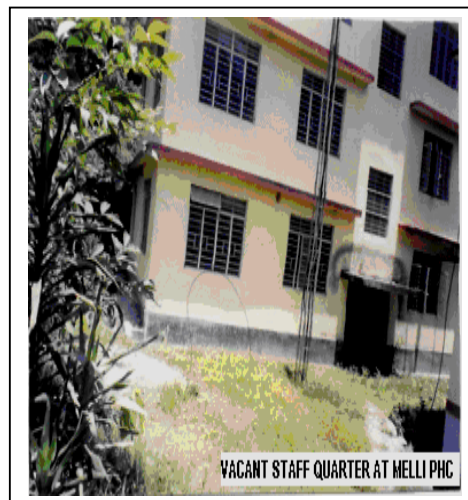
²⁰ Digital Elecro-Myograph:Rs 22.11 lakh, Holter Monitor with Telemetry: Rs 30.59 lakh, Surgical Laser Rs. 38.14 lakh and Blood Gas Analyser: Rs. 30.25 Lakh.

²¹ M/s Bright Scientific Instruments.

The Principal Secretary, while accepting faulty planning for purchase of equipment in the past assured (September 2006) synchronisation of all purchases with associated facilities in future.

3.3.9.7 Vacant staff quarter for medical staff

12 units of class II staff quarters, constructed between 1988 and 2003 for Rs. 52.44 lakh, remained vacant in East²² (4 units costing Rs. 16.16 lakh) and South²³ (8 units costing Rs. 36.28 lakh) districts since the date of construction mainly because there were no takers as most of the staff posted in the PHCs and PHSCs were local residents. Further, 10 residential quarters in four districts were occupied only for a short period and thereafter remained vacant; cost of these quarters was not available with the Department.



The fact that there were no takers indicated that the quarters were constructed without proper assessment of the requirement. The fund which remained blocked in these unused quarters instead could have been fruitfully utilised towards construction of 29 PHSCs (out of total 147 PHSCs) as these were functioning from rented buildings as of May 2006.

While accepting the facts, the Principal Secretary stated (September 2006) that in order to encourage occupation of the existing Government quarters, a proposal was being mooted for recovery of nominal house rent from the health functionaries posted in the remote health Centre.

3.3.10 Manpower management

Analysis of sanctioned strength, men-in-position and deployment of specialists, doctors and nurses revealed that the Department did not have any mechanism for monitoring the cadre-wise position of sanctioned and effective staff strength of various categories of medical personnel at appropriate intervals for proper management of manpower resources as is evident from the following paragraphs:

3.3.10.1 Shortage of specialists and para-medicos

Audit analysis of sanctioned strength *vis-a-vis* men in position revealed that against the sanctioned strength of 639 posts, 118 posts (18 per cent) remained vacant as shown below:

²² Bering PHSC (2) and Pachak PHSC (2).

²³ Melli PHC (6) and Katang bonray PHSC (2).

Table - 3.3.6

Category	Sanctioned	In-position	Shortages
(i)	(ii)	(iii)	(iv)
Surgeon	4	1	3 (75)
Obstetrician/Gynaecologist	4	1	3 (75)
Physician	4	1	3 (75)
Paediatrician	4	1	3 (75)
Anaesthetist	4	1	3 (75)
Block Extension Educator	9	3	6 (33)
Pharmacist	28	3	25 (89)
Health Assistant(F)/LHV	29	25	4 (72)
Health Workers(F)/ANM	293	286	7 (2)
Health Assistant(M)	30	8	22(73)
Health Worker(M)	171	149	22 (87)
Lab. Technician	36	32	4 (11)
Radiographer	8	5	3 (25)
Public Health Nurse	2	0	2 (100)
Health Educator	13	5	8(62)
Total	639	521	118

(Source: Quarterly progress report for the quarter ending March 2006)
 Figures in brackets represent percentage.

It would be seen from above that the shortages were higher in the cadre of specialists²⁴ (75 per cent) followed by Health Educators (62 per cent) and Laboratory Technicians (11 per cent).

Acute shortages of specialists adversely affected the health care system, especially in secondary and tertiary level in all the four districts of the State and led to referral of patients outside the State for treatment, involving considerable expenditure from the State exchequer as reimbursement. The Department attributed (August 2006) the shortages of specialists to non-availability of qualified manpower. No tangible action was, however, initiated by the Department to overcome this phenomenon.

3.3.10.2 Irrational deployment of doctors and nurses

State Government had not fixed any norms for deployment of doctors, nurses etc. as fixed by GOI. Audit analysis revealed that deployment of doctors, paramedicals and others in PHCs, PHSCs and CHCs had no bearing with that of total population, patients' turnout or even the identified cases as shown below:

Table- 3.3.7

Particulars	GOI norms #	Deployment ratio ²⁵				
		State as a whole	East	West	North	South
Population/ Doctor	3,500	2,121	1,441	3,852	2,735	3,461
Population/Nurse	5,000	3,401	1,960	12,326	5,861	7,737
Population/health workers	3,000	1,762	2,042	1,666	1,001	1,827
Population/Health Assistants	20,000	16,389	15,315	24,651	13,677	14,612
Population/Lab Tech	10,000	10,401	9,075	12,326	10,257	11,957

(Source: Information furnished by the Department)
 # 1 post catering to the designated population size.

²⁴ Surgeons, Obstetricians/Gynecologists, Physicians, Pediatricians, Anesthetists.

²⁵ Population covered by one doctor/nurse/health worker etc.

In the absence of any norms fixed by the State Government, comparison with national norms was done in Audit. It was seen that there was overall surplus in doctors, nurses, health workers and health assistants category in the State compared to the national norm, though there were wide inter-district variations. While East district had higher concentration of nurses (1,960:1), North, South and West districts were deprived due to less deployment of nurses as compared to the norms, the ratio being 5,861, 7,737 and 12,326 respectively for one nurse.

In reply, the Principal Secretary admitted the fact and stated (September 2006) that absence of health policy led to irrational posting of doctors and health functionaries which would be eliminated after formulation of State health policy.

3.3.10.3 Doctor-bed ratio

Similarly, doctor-bed ratio was also not considered before deciding the deployment of doctors, specialists, staff-nurses, auxiliary nurses and midwives (ANMs), etc., as shown below, leading to wide inter-district disparities in delivery of medical services:

Table- 3.3.8

Name of Hospital	STNM ²⁶	South	West	North	East
No. of beds	300	100	100	50	100
No. of specialists	44 (6.8)	7 (14.3)	3 ²⁷ (33.3)	1 ²⁷ (50)	4(25)
No. of MOs	61(4.9)	18(5.6)	13(7.7)	3(17)	12(8.3)
Total No. of Doctors	105(2.9)	25(4)	16(6.3)	4(12)	16(6.3)
Staff nurses	115(2.6)	15(7)	10(10)	7(7)	3(33.3)

Source: Information furnished by Department.

Figures in brackets represent number of beds per doctor/nurse.

3.3.11 Delivery of service

3.3.11.1 Absence of basic amenities in primary sector

While basic amenities such as water supply, electricity, labour table, telephone connections, anaemia measuring machines etc. relating to delivery of medical facilities to the public was by and large adequate in the secondary and tertiary sectors, these were deficient in the primary sector *i.e.* PHSCs and PHCs. In the 8 PHCs and 27 PHSCs test checked in Audit, the following deficiencies were noticed:

- 2 PHCs²⁸ and 12 PHSCs²⁹ were functioning without proper water facility;
- All 27 PHSCs were functioning without electricity connection;
- 1 PHC³⁰ and 6 PHSCs³¹ did not have appropriate Labour table;

²⁶ Sir Tashi Namgyal Memorial Hospital

²⁷ Dentist

²⁸ Dikchu & Namthang

²⁹ Makha, Middle Camp, Tarethang, Gor, Lum, Spantok, Pakki, Singling, Zoom, Rateypani, Katang, Phong,

³⁰ Namthang

³¹ Tarethang, Gor, Phong, Uttarey, Boongtar, Hee Yangthang.

- Anaemia measuring machines for measuring the haemoglobin level in pregnant women and other patients for treatment of anaemia was not available in any of the 27 test checked PHSCs;
- In 4 PHSCs, there were no sphygmomanometers (a pressure gauge for measuring blood pressure);
- 7 PHSCs and 1 PHC were not connected by motorable road;



- Existing building of 10 PHSCs require immediate repairs.



- Ambulances in two PHCs were not found to be in road - worthy condition while in 7 other PHCs, these were more than eight years old.



It indicated lack of urgency on the part of the Department to take care of the basic health care need of the people and equip the PHSCs and PHCs adequately for the purpose.

In reply, the Principal Secretary informed (September 2006) that all the health centres in the State would be fully equipped in terms of basic equipment/instruments by 2006-07 with the sanction of 'Up-gradation of Hospitals and Health Centres' project. The Department further added that the road connectivity to the Sub-Centres as well as adequate provision for replacement of ambulances and programme vehicles would be taken up in the 11th Five Year Plan.

3.3.11.2 Shortage of medicines

Excluding charges for x-ray, CT-scan, ECG, private room etc., all other medical facilities are provided free of cost by the State Government.

Test check of records revealed that on an average, only 43 *per cent* of tablets, 44 *per cent* of injections and 24 *per cent* of capsules prescribed by the doctors were supplied to the indoor patients forcing the poor and needy patients to buy the same from open market or compromise without adequate doses. Central Medical Health Stores (CMHS), responsible for procurement and issue of medicines for the entire Department, attributed (August 2006) this to lack of adequate funds. Had the sectoral allocation been kept at the GOI stipulated 5.5 and 7 *per cent*, as discussed in paragraph 3.3.7, and also full utilisation of the allocated fund, shortage of funds could have been obviated and the poor and needy patients would not have been denied the basic health care facilities.

In reply, the Principal Secretary informed (September 2006) that with the implementation of the National Rural Health Mission in the State the shortage of drugs and medicines was expected to be reduced to some extent.

In view of what has already been stated by Audit, the reply of the Government is not tenable.

3.3.11.3 Status of institutional deliveries (child birth)

Considering the very high Maternal Mortality Rate (MMR) in India, deliveries in hospitals are encouraged for safe delivery and survival of the child. It was seen that while institutional deliveries increased from 47 per cent in 2001-02 to 57 per cent in 2005-06 in the State, deliveries by untrained attendants decreased from 17 per cent to 11 per cent in the corresponding period. Analysis, however, revealed that 37 to 45 per cent of the institutional deliveries emanated from STNM Hospital (*Urban Family Welfare Centre*) indicating that there was not much of improvement in the functioning of primary and secondary sectors as would be seen from the data given below:

Table- 3.3.9

Year	Total deliveries	Home deliveries		Institutional deliveries	
		Untrained attendants	Trained attendants	Total institutional deliveries	Deliveries in STNM
2001-02	8,410	1,400 (17)	3,087(37)	3,923(47)	1,448(37)
2002-03	8,507	1,111(13)	3,506(41)	3,791(45)	1,496(39)
2003-04	9,525	1,262(13)	3,437(36)	4,826(51)	2,078(43)
2004-05	8,515	879(10)	2,637(31)	4,999(59)	2,243(45)
2005-06	9,590	1,074(11)	3,090(32)	5,526(57)	2,488(45)
Total	44,547	5,726	15,757	23,065	9,753

Source: Annual Report of the Department.

Figures in brackets represent percentage.

In fact, no delivery took place in two PHSC (Gor and Lingding under Passidong PHC) and three PHSCs (Linkey, Bearing and Tarehang under Machung) primarily due to non-availability of basic facilities in the PHSCs and PHCs and absence of availability of specialists in CHC/district hospitals as stated in para 3.3.11.1 and 3.3.10.1 respectively.

It was also noticed that the number of deliveries (child births) reported by the PME cell of the Department was 34,957 against 43,117 (44,590 minus 1,473 birth at CRH, Tadong) deliveries recorded by the Birth and Death Cell for the period 2001-02 to 2004-05³² indicating that 8,160 cases of delivery (19 per cent) were not reported to the Department and were, thus, not covered by institutional deliveries or deliveries attended by trained attendants, depriving them of much needed access to health care facilities relating to safe deliveries.

While accepting the observation, the Principal Secretary stated (September 2006) that almost all the referred cases from all over the State were brought to STNM hospital taking the figure high as compared to rural areas and added that action for 24 hours services at district hospitals and PHCs and labour rooms with labour tables to all the Sub-Centres was being initiated.

3.3.12 Hospital management**3.3.12.1 Blood transfusion**

A well organised Blood Transfusion Service (BTS) is a vital component of healthcare delivery system. The GOI formulated 'National Blood Policy'

³² Data relating to the period 2005-06 was not yet finalised by the birth and Death Cell.

(NBP) in 2002 (adopted by the State Government in January 2005), to ensure easy accessibility and adequate supply of safe and quality blood and blood components from voluntary blood donors by gradual phasing out of replacement donors in a time bound programme. The GOI subsequently set a target of 95 *per cent* for voluntary blood donation by 2007.

Sikkim has two Government blood banks at (i) STNM hospital and (ii) district hospital, Namchi. An analysis of blood collection revealed that while STNM had showed remarkable improvement from 4 *per cent* in 2001 to 52 *per cent* in 2005 in collection of blood from voluntary donors, the District Hospital, Namchi was far behind the target (95 *per cent*) as their collection from voluntary donors ranged between 2 and 9 *per cent* of total collection during the corresponding period as shown below:

Table- 3.3.10

Calendar year	Total units of Blood collected		Collected through voluntary donors		Replacement	
	STNM	Namchi	STNM	Namchi	STNM	Namchi
2001	769	339	34 (4)	11 (3)	735 (96)	328 (97)
2002	748	325	34 (5)	5 (2)	714 (95)	320 (98)
2003	955	240	125 (13)	10 (4)	830 (87)	230 (96)
2004	811	576	136 (17)	47 (8)	675 (83)	529 (92)
2005	857	380	443 (52)	34 (9)	414 (48)	346 (91)

Source: Information furnished by the Department. Figures in brackets represent percentage.
Upto March

The Department stated (September 2006) that fund constraints were the main reasons for low performance in voluntary donation in respect of Namchi Hospital resulting in lack of Information, Education and Communication (IEC) activities in the district.

3.3.12.2 Bio-waste management

The GOI sanctioned (May 2001) and released (June 2001) Rs. 1.36 crore for 'Hospital Waste Management'. It was noticed in Audit that while incinerators at Geyzing, Mangan and STNM hospital were not commissioned as of May 2006, incinerator at Singtam, though commissioned in July 2005, was closed down in August 2005 due to non-provisioning of fuel.

While non-commissioning at STNM and Mangan was attributed to lack of required electrification and likely shifting of CHC to new building respectively, no reason was furnished by the Department for Geyzing. Thus, failure to commission the incinerators despite an expenditure of Rs. 1.60 crore not only violated the Bio-Medical Waste (Management and Handling) Rules, 1998 which stipulated setting up of waste treatment facilities by December 2001 for hospitals having 200 to 500 beds and December 2002 for hospitals having 50 to 199 beds but also led to blocking of funds. Absence of proper treatment of bio-medical waste was fraught with the risk of environmental hazards.

3.3.12.3 Referral cases

According to Rule 8(i) of Sikkim Medical Facilities Rules, referral outside the State can be made in case adequate facilities for treatment of specialised

disease (cancer etc.) were not available within the State. It was, however, noticed that STNM hospital referred patients to other States who could have otherwise been treated within the State thereby saving substantial Government funds on reimbursement of medical expenses. During the years 2001 to 2006 (upto March) 50,486 patients comprising 8 to 12 *per cent* of the total patients, suffering from major and minor diseases, were referred outside the State and Rs. 2.05 crore was incurred by the Department in this regard as shown below:

Table- 3.3.11

Year	In patient admitted	Patients referred outside
2001	8,863	738 (8)
2002	9,993	848 (8)
2003	9,859	1,025 (10)
2004	10,051	1,142 (11)
2005	9,607	1,169 (12)
2006 (upto March)	2,113	264 (12)
Total	50,486	5186 (10)

*Source: Information furnished by the Department.
Figures in brackets represent percentage.*

This is all the more inexplicable in view of the fully functional Central Referral Hospital at Tadong (set up as a joint venture between the Manipal Group and the State Government) where facilities were either free or at a very nominal rate to the patients of the State.

Thus referral of minor diseases outside the State was not justified.

The Principal Secretary assured that referral cases would be reduced in future with the upgradation of the STNM hospital and full functioning of the Manipal Hospital.

3.3.12.4 Recovery of charges

The Government of Sikkim, through the Department, notified the charges/fees for various investigations and tests, from time to time, under STNM and other District hospitals. According to the latest notification (10 November 2004) Rs. 5 per card was to be realised as fee from patients other than below poverty line (BPL) patients towards issue of out patient department (OPD) card at STNM and District hospitals. It was noticed that while three District hospitals (East, North and South) and STNM hospital were realising this fee irrespective of above poverty line /below poverty line status, no fee was levied by District hospital, Geyzing.

While realisation of fee from poor patients was against the intent of the Government to extend easy accessibility of health care facilities to BPL families, non-realisation of fee in West district led to loss of revenue.

3.3.13 Monitoring and evaluation

The Department had in place a Planning, Monitoring and Evaluation (PME) cell headed by the Director, Health Services, mainly engaged in obtaining information periodically from the CHCs, PHCs and PHSCs on vital events like

birth, death, immunisation, treatment of patients etc. There were minor discrepancies in the number of immunisation and number of births between initial records and what was reported. Cross verification of data submitted by various field functionaries was never attempted.

Monitoring for the effective management of hospitals was however wanting both at the Directorate and CMO level as data relating to basic amenities like medicines, equipments (x-ray, anaemia measuring machine, labour table), bed occupancy ratio, turnover interval³³, doctor bed ratio, doctor patient ratio, status of medical equipments etc. were never reported and as a consequence corrective action in this regard could not be taken. This was despite the appointment of medical records technicians to work out and compile the above data. The Director and the CMOs had thus failed to effectively supervise and monitor the management of hospitals.

During 2001-06, the status of health services was neither evaluated by the State Government nor by any other external agencies.

3.3.14 Conclusion

Although the State was performing well in terms of achievement of general health indicators and containment of diseases, it lacked in the area of policy perspectives, rational deployment of available medicos, infrastructure management, etc. Acute shortage of Specialists, non-synchronisation of purchase of equipment with that of associated facilities leading to its non-use, shortages of medicines, etc reduced the effectiveness of health care management in Sikkim. While the primary sector (PHSCs and PHCs) lacked basic amenities, secondary and tertiary sectors suffered from acute shortage of Specialists affecting delivery of services to the public.

3.3.15 Recommendations

The following recommendations are made:

- The State Government should formulate 'State Health Policy' to provide policy perspectives and directions for implementation of various measures towards improving health care in the State.
- Allocation to health sector should be enhanced to 7 per cent of plan fund as envisaged in National Health Policy of 2002.
- Efforts should be initiated to create adequate infrastructure in terms of CHCs, PHCs and PHSCs; operationalise the first referral units in the remaining three districts; ensure essential associated facilities such as machines and equipment are in proper condition; fill up the vacant post of specialists, arrest inter-district disparities in deployment of doctors and nurses.
- Rational deployment of man power may be ensured for optimum utilisation of facilities in State referral hospital so that poor people get treatment in proximity to their homes.

³³It is the average period in a day a bed remains vacant between one discharge and another admission. It may be negative or positive. A negative is indicative of scarcity of beds and over utilization; a long positive is indicative of under utilization because of either defective admission procedures or poor quality medical care.

HUMAN RESOURCE DEVELOPMENT DEPARTMENT

3.4 SARVA SHIKSHA ABHIYAN

Performance Audit of Sarva Shiksha Abhiyan (SSA) for the period 2001-02 to 2005-06 disclosed deficient planning, delayed and short release of funds, excessive management cost, appointment of teachers in excess of requirement, etc. The State failed in achieving the main objective of SSA to bring back all out-of-school children to school within 2003. Implementation of SSA did not contribute towards quality improvement of education as envisaged in the programme as course curriculum was not revised, training of teachers was far below the target and research and development activity was not accorded desired priority. Monitoring and evaluation of the programme was never conducted to gauge its success.

Highlights

Short as well as delay in release of State's matching share of Rs. 8.09 crore led to non-release of further instalment of Central share of Rs. 17.07 crore.

(Para 3.4.7.2)

In spite of availability of Rs. 1.72 crore, the target of training 8,766 teachers was not achieved. Shortfall ranged between 72 to 100 per cent during 2002-03 to 2005-06.

(Para 3.4.8.8)

Despite considerable expenditure towards implementation of SSA, SIS failed to bring back 6,310 out-of-school children indicating a shortfall of 42 per cent even after five years of implementation.

(Para 3.4.8.2)

Research and Development (R&D) activities were not carried out despite release of Rs. 23.94 lakh.

(Para 3.4.9)

3.4.1 Introduction

Sarva Shiksha Abhiyan (SSA) is a flagship programme of GOI, launched in January 2001, to achieve Universal Elementary Education (UEE) in the country in a mission mode by providing useful and relevant elementary education to all children in the age group 6 to 14 years by 2010. The main objectives of the programme were as follows:

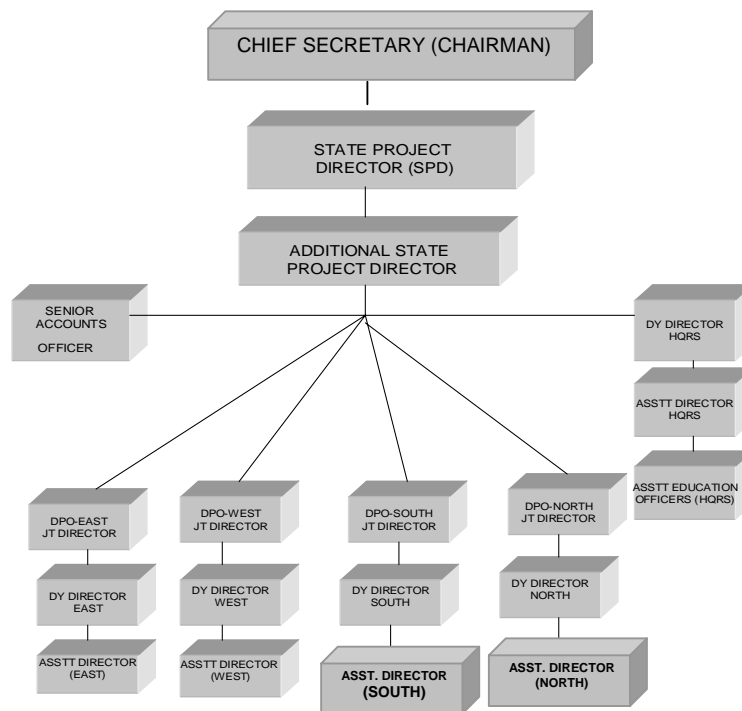
- To have all children in school, education guarantee centre, alternative schools and 'back to school' camps by 2003 (revised to 2005 in March 2005);
- To ensure that all children complete five years of primary schooling by 2007;
- To ensure all children complete eight years of elementary schooling by 2010;

- Focus on elementary education of satisfactory quality with emphasis on education for life;
- Bridge all gender and social category gaps at primary stage by 2007 and at elementary education stage by 2010;
- Universal retention by 2010.

3.4.2 Organisational set-up

In Sikkim, SSA was implemented through “Sarva Shiksha Abhiyan State Mission Authority” (SSASMA), a society registered (February 2001) under the Sikkim Society Act. The General Body of the SSASMA was formed in September 2002 with the Chief Minister as the President and Minister of Education and Welfare as Vice – Presidents amongst other members. To administer the affairs of the Mission, an Executive Committee was constituted (September 2002) with the Chief Secretary as the Chairman and Principal Secretaries of Education and Welfare Departments as the Vice- Chairmen, amongst others. Similarly, District Units of SSA Mission (SSAM) were established (February to August 2002) with District Collectors as Chairmen for all the four districts of the State. All the State level activities relating to the scheme were done at the Directorate known as State Project Office (SPO) and district level execution was carried out by the District offices of the Education Department known as District Project Units (DPUs). Organogram of the SSA in the State is shown below:

Chart-3.4.1



3.4.3 Scope of Audit

Performance Audit of SSA for the period 2001-02 to 2005-06 was carried out through a test check of records maintained in the State Project Office and all the four District Project Offices located at East, West, North and South Districts relating to entire expenditure of scheme. The Audit was conducted during August-September 2005 and was updated during April-May 2006.

3.4.4 Audit Objectives

Performance Audit of SSA was carried out with a view to assess whether:

- All the targeted children were enrolled in schools, Education Guarantee Centres, alternative schools, back to school camp by 2003;
- The major interventions under SSA were carried out as per the norms fixed in SSA guidelines;
- The quality of educational standard as envisaged in the programme guidelines were achieved;
- Planning for implementation of various programmes through NGOs was efficient.

3.4.5 Audit criteria

Following criteria were used to ascertain:

- Annual work plans, standards of output and benchmarks of performance for each component of the scheme;
- Norms for appointment of teachers and facilities to be provided in schools;
- Standards of education including curricula, teaching learning materials and teachers' training;
- Coverage of special target groups as prescribed;
- Monitoring mechanism specified by the GOI.

3.4.6 Audit methodology

Performance Audit of SSA commenced with entry conference (July 2005) in which the Director and Additional Director besides other senior officers of the Education Department responsible for implementation of SSA participated. Audit was carried out based on an analysis of the procedures existing in the implementing Department, State implementing agency, District implementing agencies, block resource centres, cluster resource centres and schools and analysis of data provided by these agencies to obtain specified results. Questionnaires were also issued and replies were examined with reference to original records before arriving at Audit conclusions. Social and Rural Research Institute (SRI), a specialist unit of Indian Market Research Bureau (IMRB) was commissioned by Audit for assessing the impact of SSA from the perspective of the beneficiaries and their parents. The findings of SRI have been incorporated in this report. The report was finalised after obtaining the views of the State Project Director and Commissioner-cum Secretary, Human Resources Development Department.

Audit findings**3.4.7 Fund Management****3.4.7.1 Funding pattern**

The expenditure under SSA was financed by the GOI and the State Government in the ratio of 85:15 during IX Plan (1997-2002), 75:25 during X Plan (2002-07) and 50:50 thereafter. The funds from GOI were to be released directly to the State Implementing Society (SIS). The State Government was required to give written commitments to transfer its share to the SIS within thirty days of the receipt of Central contribution. The appraisal and approval of plans were to be completed in time for the first instalment, to meet the proposed expenditure of the first six months to be released by 15th April. Release of further instalments to the SIS was to be made only after the State Government had transferred its share to the SIS and expenditure of at least 50 *per cent* of the available funds (Centre and State) was incurred. Details of approved work plan and budget, Central and State share and its release, expenditure, etc for the period 2001-02 to 2005-06 was as shown below:

Table – 3.4.1*(Rupees in lakh)*

Year	Annual Work Plan & Budget	Share		Released		Total release	Expenditure
		Central	State	Central	State		
2001-02	146.22	124.29	21.93	62.00 (50)	11.00 (50)	73.00	73.00
2002-03	566.86	425.14	141.72	425.14 (100)	75.00 (53)	500.14	309.93
2003-04	1,096.60	822.45	274.15	269.73 (33)	140.24 (51)	409.97	618.04
2004-05	1,600.68	1,200.51	400.17	600.25 (50)	200.00 (50)	800.25	755.00
2005-06	1989.87	1,492.40	497.47	1,000.25(67)	100.00(20)	1,100.25	964.64
Total	5,400.23	4,064.79	1,335.44	2,357.37(58)	526.24(39)	2,883.61	2,720.61

*(Figures in brackets represent percentages)**Source: Annual Report 2004-05 and 2005-06 of State Project Office of SSA and Departmental figure***3.4.7.2 Short release of funds**

According to the financing pattern of SSA, Rs. 40.65 crore³⁴ and Rs. 13.35 crore³⁵ was required to be released by GOI and the State Government respectively as per the Annual Work Plan of Rs. 54 crore for the years 2001-02 to 2005-06. However, as against this, GOI and the State Government released Rs. 23.57 crore (58 *per cent*) and Rs. 5.26 crore (39 *per cent*) indicating a shortfall of 42 and 61 *per cent* respectively.

Audit analysis revealed that the State Government neither kept adequate provision in the budget nor gave written commitments as required under guidelines and released only Rs. 5.26 crore against the requirement of Rs. 13.35 crore indicating a shortfall of Rs. 8.09 crore.

Thus the short release of funds by the State Government and the consequent curtailment of the GOI share led to less availability of funds to the extent of

³⁴ Rs. 124.29 lakh (85% of Rs. 146.22 lakh) for 2001-02 and Rs. 3940.50 lakh (75% of Rs. 5254.01lakh) for the years 2002-03 to 2005-06= Rs. 4,064.79 lakh.

³⁵ Rs. 21.93 lakh (15% of Rs. 146.22 lakh) and Rs. 1313.51 lakh (25% of Rs. 5254.01lakh) for the years 2002-03 to 2005-06= Rs. 1,335.44 lakh.

Rs. 25.17 crore for the years 2001-02 to 2005-06 which adversely affected implementation of the programme as elucidated in subsequent paragraphs.

While accepting the facts, the SPD, SSA stated (September 2006) that the State Project Office would approach the Government to release the shortfall in regard to the State's share.

3.4.7.3 Delayed release of funds

In spite of clear stipulation in the guidelines to release first instalment by the GOI within 15 April and subsequent instalments after the release of matching share to the Society by the State Government, funds were released belatedly by both the Central and the State Governments. Notwithstanding this, even during 2004-05 (Rs. 6 crore) and 2005-06 (Rs. 10 crore) when funds were released in time by GOI, corresponding matching share (Rs. 2 crore & Rs. 1 crore) was released by the State Government at the fag end of the year with the delay ranging between 79 and 288 days which adversely affected the implementation of programme as the required fund was not available for incurring expenditure as envisaged in the approved plan.

While accepting the facts, the State Project Director (SPD) stated (September 2006) that the matter would be taken up with the State Government for timely release of funds to make the programme successful.

3.4.8 Programme implementation

SSA envisaged following major interventions to achieve the scheme objectives:

- Household surveys, planning, studies, community mobilisation, school based activities, trainings etc;
- Opening of new primary schools and upper primary schools, EGS centres, Alternative schools, and innovative Education centres;
- Appointment of teachers;
- Construction of additional classrooms, other basic facilities and repairs & maintenance of existing school buildings;
- Free text books to all girls and SC/ST children;
- Teaching learning equipment (TLE) for Upper Primary Schools;
- School grants and teachers grants;
- Training to teachers and community leaders;
- Management cost;
- Setting up of BRCs and CRCs;
- Innovative activities *i.e.* girls education, early child care and education (ECCE), children belonging to SC/ST community, computer education in UPS level; and
- Research, Evaluation, Supervision and Monitoring.

Audit observations relating to above major interventions are detailed below:

3.4.8.1 Planning

The planning process starts at the habitational level and moves upwards to block level, district level, and then to State level. It was noticed that critical

steps involved in planning such as strengthening / setting up of district education offices and selection of personnel at district/ block/ cluster level; formation of core planning teams at district, block and village level; training and orientation of these teams; collection of various data, undertaking household survey and baseline studies; plan formulation by consolidating the habitational/ cluster/ block level plans; etc were although appropriately done, matching funding was not forthcoming from the State Government leading to curtailment of funds by the Central Government which affected programme implementation as brought out in the previous paragraphs. Project Appraisal Board (PAB) meeting for approval of plan and sanction of funds for first instalment was held belatedly between July (2004-05)/May (2005-06) during 2001-02 to 2005-06 instead of April each year. PAB meeting for second instalment was usually held at the fag end of the year which obviously affected programme implementation.

3.4.8.2 Out of school children

The main objective of the SSA was to enrol all the children in schools, education guarantee centres, alternative schools and back to school camps by 2003. It was noticed in Audit that out of 15,033 out-of-school children identified by SIS in 2001 only 8,723 (58 *per cent*) children could be brought back to school as of March 2006 leaving 6,310 out-of-school children indicating a shortfall of 42 *per cent*. Thus, the SIS failed to achieve the basic objectives of SSA to bring back all the children to school by 2003 even after five years of implementation of the scheme and involvement of considerable expenditure. On the contrary, enrolment at elementary stage was progressively decreasing from 1,05,213 in 2003 to 1,01,485 in 2004 and 99,905 in 2005 academic session instead of increasing indicating less impact of SSA intervention.

The reply (September 2006) of the SPD confirmed the above position.

3.4.8.3 Opening of new Upper Primary Schools (UPS)

SSA guidelines laid down one upper primary school (UPS) for every two primary schools (PS). As on date of Audit, the ratio between UPS (288) and primary schools (782) was 1:2.8 indicating a shortage of 103 UPS in the State as can be seen from the table below:

Table – 3.4.2

District	Primary school	Upper primary school	Ratio
East	242	95	1:2.54
West	225	74	1:3.04
South	225	89	1:2.68
North	90	30	1:3.00
Total	782	288	1:2.72

Source: District Information System of Education (DISE) Report

Mismatch between the desired ratio (1:2 between UPS and PS) and actual ratio was indicative of improper planning which was bound to have adverse impact on effective programme implementation.

In reply, the SPD stated (September 2006) that there was no mismatch between the desired and actual ratio in the State as per the required ratio of 1:2. The reply is factually incorrect as the ratio was worked out by Audit on the basis of actual number of UPS and PS.

3.4.8.4 Education Guarantee Scheme (EGS) Centres

SSA guidelines (Para 3.2) envisaged opening of Education Guarantee Scheme (EGS) centres for bringing back out-of-school children to schools with the help of NGOs. To achieve this, opening of 87 EGS centres in the State was approved (December 2002) and Rs. 42.52 lakh was sanctioned (between 2002-03 and 2004-05) and released by the GOI (December 2002).

It was noticed during Audit that:

- Only as late as in March 2005, 22 EGS centres were opened with the involvement of 5 NGOs and another 29 additional EGS centres were opened during 2005-06 which accommodated 256 out-of-school children.
- In spite of projected requirement and sanction of funds, EGS centres were not opened in time and as a result even after five years only 8,723 out-of-school children from the total of 15,033 (April 2001) could be brought back to school till March 2006.
- No financial assistance was released to the NGOs for running the EGS centre so far in the absence of which it was highly unlikely that the NGOs would be either able or willing to carry out any worthwhile work.

Thus, opening of EGS centres contributed little towards achieving the SSA programme objectives of bringing back all out-of-school children to school.

3.4.8.5 Excess appointment and irregular deployment of Coordinators and teachers appointed under SSA

SSA guidelines envisaged appointment of:

- At least two teachers in a primary school ;
- One graduate teacher for every class in the upper primary schools opened under SSA;
- One co-coordinator each in BRCs and CRCs.

It was seen that 111 graduate teachers, 106 monastic teachers and 140 coordinators were appointed for schools opened under SSA, of which 14 graduate teachers, 38 monastic teachers and 26 coordinators were posted to Government schools which were not covered under SSA, without any recorded reasons. Thus, the expenditure of Rs. 1.75 crore incurred on salaries of these teachers and coordinators did not contribute towards development of education under SSA and instead led to diversion of SSA funds.

In case of primary schools opened under SSA, SIS appointed (2003-04) 82 School Mothers (SM) and 80 Primary Teachers (PRT) during 2003-04 against the requirement of 30 school mothers and 60 PRTs for 30 completed schools under SSA. This led to appointment of 52 excess SM and 20 PRTs. Expenditure of Rs. 1.41 crore incurred on the salaries of SM (Rs. 69.36 lakh) and PRTs (Rs. 71.86 lakh) thus stood diverted. Details are shown below:

Table -3.4.3

(Rupees in lakh)

Year	Appointment		No. of primary schools		Requirement as per norms		Excess teachers		Excess expenditure on salary	
	PRT	SM	Constructed	Progressive total	PRT	SM	PRT	SM	PRT	SM
2003-04	80	82	11	11	22	11	58	71	34.80	25.56
2004-05	-	-	10	21	42	21	38	61	22.80	21.96
2005-06	-	-	9	30	60	30	20	52	14.26	21.84
Total	80	82	30	30		30		--	71.86	69.36

Source: Annual Report

While accepting the facts, SPD informed (September 2006) that the 20 PRTs and 82 SMs were deployed in schools other than SSA schools. The reply is not tenable as the guidelines did not provide for appointment of PRT and SM for non-SSA schools.

3.4.8.6 Non-execution of civil works for infrastructure development

As per the SSA norms infrastructure such as new school buildings, additional rooms, block resource centres, etc should be created according to the plan prepared by the District Project Offices (DPOs) and approved in the AWP. Annual plans prepared by the DPOs were approved by the PAB as AWP for phase-wise implementation. Audit scrutiny revealed that the SIS failed to execute the civil works relating to creation of infrastructure as per the targeted plan. No civil works were executed for creation of infrastructure during 2001-02 and 2002-03. Other basic amenities (toilets, drinking water facilities, electrification of new primary schools and other upgraded UPS schools) which were required for schools were also not provided as per the approved plan. From 2003-04, although some progress was shown in the civil works, the total achievement as on April 2006 was far from satisfactory. While the shortfall in construction of new school buildings was 33 per cent, shortfall in additional rooms was 57 per cent, construction of block resource centres was 56 per cent and cluster resource centres was 65 per cent. Slow progress of the civil works led to huge pendency of civil works as can be seen from the table below:

Table – 3.4.4

Component	2001-02		2002-03		2003-04		2004-05		2005-06		Total		Shortfall (per cent)
	T	A	T	A	T	A	T	A	T	A	T	A	
New school building	2	Nil	11	Nil	23	11	4	10	5	9	45	30	15 (33)
Addl rooms	3	Nil	44	Nil	105	29	124	75	-	15	276	119	157 (57)
BRCs	-	-	-	-	7	Nil	2	1	-	3	9	4	5 (56)
CRCs	-	-	8	Nil	3	6	22	Nil	35	18	68	24	44 (65)
Fencings	-	-	-	-	56	14	80	13	40	113	176	140	36 (20)
Toilets	120	Nil	299	Nil	114	366	111	67	75	196	719	629	90 (13)
Drinking water	65	Nil	212	Nil	140	113	74	161	38	84	529	358	171 (32)
Electricity connections	-	-	-	-	165	40	150	50	70	153	385	243	142 (37)

Source: Annual Report. T= Target, A= Achievement.

Further, as per the norms of SSA, two classrooms with verandah and a room for the Headmaster was to be provided in each of the upper primary schools. Although 37 primary schools were upgraded to upper primary schools under SSA during 2002-03 to 2005-06 incurring Rs. 1.51 crore, rooms for the

Headmaster as envisaged in the SSA guidelines was not provided in any of the 37 upgraded primary schools. Audit scrutiny revealed that slow pace of civil works was primarily due to shortage of funds as major chunk of available funds were utilised towards meeting the salary of the teachers appointed under SSA.

The beneficiary survey conducted by SRI also confirmed slow pace of progress in civil works as evidenced from the following:

- While none of the upper primary schools completed construction of new buildings, only 14.3 *per cent* of primary schools and 5.6 *per cent* of high schools completed construction;
- While none of the primary schools and upper primary schools undertook repairs of compound walls and installation of gates, only 1.6 *per cent* of high schools undertook construction of compound walls;
- While none of the upper primary school reported construction of staff quarters, only 1.6 *per cent* of primary schools and high schools constructed staff quarters and separate room for the Headmaster respectively;
- About 3.2 *per cent* of primary schools, 1.6 *per cent* upper primary and high schools each reported utilising funds from SSA to construct water supply installation in the schools;
- 1.6 *per cent* each of primary schools and high schools had constructed staff rooms for the teachers and separate room for the Headmaster respectively, while none of the upper primary schools reported construction of staff rooms.

While accepting the facts, the SPD stated (September 2006) that civil works for infrastructure development could not be executed in time due to funds constraint as the available funds were utilised towards teachers' salary and informed that civil works had since been initiated.

3.4.8.7 Shortfall in training of BRCs and CRCs

SSA envisaged establishment of BRCs / CRCs to work as resource centres for catering to a group of schools in a block / cluster by way of professional upgradation of primary school teachers through conducting various in-service training programmes at block level itself. The BRCs and CRCs were required to impart training to teachers, visit schools, train SMC members for proper implementation of SSA at grass root level and identify issues and problems inside and outside the classroom.

It was noticed that although sufficient funds were earmarked for training of SMC members, co-ordinators, community leaders' etc. training provided to them fell short of requirement as detailed below.

Table – 3.4.5

Particulars	2003-04		2004-05		2005-06		Total		
	T	A	T	A	T	A	T	A	Shortfall in percentage
Training of SMC members/ community leaders	4,378	1,673	4,378	1,673	5,302	2,250	1,4058	5,596	60
Training of Coordinators	140	Nil	140	Nil	140	Nil	420	Nil	100

Source: Annual Report. T= Target, A= Achievement.

It was also noticed that the services of Coordinators (BRC/CRC) were not utilised as coordinators but instead were deployed as teachers in the Government schools. Thus, the very objective of the scheme to appoint them as co-ordinators was defeated and their appointment did not also contribute towards quality improvement of education in SSA schools as envisaged in the guidelines. This was also confirmed during joint physical verification conducted by Departmental officers in presence of Audit team.

3.4.8.8 Shortfall in teachers' training

To upgrade the skills of teachers, the SSA provided for 20 days in-service course for all teachers each year, 60 days refresher course for untrained teachers and 30 days orientation for fresh recruits. The State had one institute each of District Institute of Education and Training (DIET) and State Council of Education, Research and Training (SCERT) located at Gangtok. According to the annual plan of SSA, the responsibility of teachers' training was assigned to DIET and SCERT and accordingly Rs. 1.72 crore was released to them between 2002-06 for training 8,766 teachers.

Test check of records revealed that against the target of 8,766 teachers only 1,872 teachers were imparted training in various categories leaving 6,794 teachers untrained. Shortfall of training in various categories ranged between 72 and 100 *per cent*, both in physical as well as financial terms indicating that the objective of training the teachers, with the ultimate goal of improvement in quality of education, remained largely unfulfilled. Details are shown below:

Table – 3.4.6

Training Category	Physical							Financial						
	Target			Achievement			Shortfall (%)	Target			Achievement			Shortfall (%)
	2004-05	2005-06	Total	2004-05	2005-06	Total		2004-05	2005-06	Total	2004-05	2005-06	Total	
60 days	690	1,050	1,740	-	-	-	100	28.68	44.10	72.78	-	-	-	100
30 days	225	252	477	56	-	56	88	4.73	10.29	15.02	1.18	-	1.18	92
20 days	4,270	2,279	6,549	699	1,117	1,816	72	50.78	33.31	171.89	9.78	15.02	25.98	72
Total	5,185	3,581	8,766	755	1,117	1,872	78	84.19	87.70	171.89	10.96	15.02	25.98	86

Note: The programme was not implemented till 2003-04

No reply was furnished by the SPD.

3.4.8.9 Excess expenditure on management cost

Programme guidelines forbade expenditure in excess of 6 *per cent* of yearly budget of a district plan towards 'management cost' for meeting expenditure such as office expenses, hiring of experts, POL, community planning processes, civil works, and development of effective teams at State/District/Block/Cluster levels.

It was, however, noticed that the SPO and four districts incurred expenditure towards management cost for the period 2003-04 to 2005-06 aggregating Rs. 2.70 crore indicating 14 *per cent* as against the permissible 6 *per cent* limit of Rs. 1.17 crore. Details are given below:

Table – 3.4.7

(Rupees in lakh)

Year	Budget	Permissible expenditure (6 per cent of cost)	Actual expenditure			Excess expenditure
			Districts	SPO	Total	
2003-04	404.54	24.27	61.42	22.73	84.15 (21)	59.88
2004-05	600.00	36.00	58.79	40.24	99.03 (17)	63.03
2005-06	942.25	56.54	66.27	20.15	86.42 (9)	29.88
Total	1,946.79	116.81	186.48	83.12	269.60 (14)	152.79

Source: Annual Reports & Monthly Progress Report

Thus there was an excess expenditure of Rs. 1.53 crore (8 per cent) which not only resulted in irregular expenditure on management cost beyond the permissible limit but also led to the curtailment of other components already approved in AWP&B.

It was also seen that the South district incurred the maximum expenditure with 14 per cent followed by the North district (10 per cent), East district (8 per cent) and West district (7 per cent) beside the SPO comprising 31 per cent of the total expenditure on management cost.

In reply, the SPO stated (September 2006) the expenditure of Rs. 2.70 crore towards management cost was within the prescribed limit of 6 per cent of the approved budget. Further, the SPO also stated that it was not possible to restrict the expenditure on the basis of actual receipt of the funds as SMA would not know the likely receipt of funds at the year end. The reply of the SPO is not tenable as guidelines categorically stipulated restriction of management cost to 6 per cent of the budget of the district plan.

3.4.8.10 Non-maintenance of assets registers

According to the conditions of sanction of grants, asset register indicating all assets acquired out of the grant upto the end of the period of the return was to be maintained and submitted at the close of the financial year along with certified copies of such register.

Details of funds released by the GOI and State Government to DPOs and SPOs are detailed below:

Table – 3.4.8

(Rs. In lakh)

Year	West	North	East	South	SPO	Total
2001-02	7.07	6.72	5.96	8.34	-	28.09
2002-03	-	-	-	-	4.31	4.31
2003-04	8.20	37.48	33.40	35.34	4.03	118.45
2004-05	65.58	45.98	10.90	24.98	128.36	275.80
2005-06	99.55	84.25	51.15	40.02	140.10	415.07
Total	180.40	174.43	101.41	108.68	276.80	841.72

It was seen during Audit that although the major chunk (Rs. 8.42 crore) of funds released by the GOI and State Government for implementation of the programme was utilised towards creation of assets (i.e school buildings and other infrastructure, computers, furniture, vehicles, Xerox machines and other

fixed assets), the asset registers as required under the terms and condition of sanctions were not maintained by the SIS nor the yearly returns furnished to the Ministry. The joint physical verification carried out by Departmental officers and Audit also confirmed the above facts.

The reply of the SPD (September 2006) that the assets registers were being maintained is not tenable as the SIS could not produce any of the assets registers even after repeated reminders.

3.4.9 Research and Development

SSA considered Research and Development (R&D) activity as one of the important activities to bring about improvement in quality education and accordingly provided Rs. 1,500 per school per year for research, evaluation, and supervision and monitoring under the programme.

Test check of records revealed that out of Rs. 23.94 lakh sanctioned and released between 2002 and 2006, only Rs. 5.96 lakh (25 per cent) was spent on R&D activities which was indicative of the fact that the work on this front was not given due importance by the SIS.

During exit conference (September 2006), the Departmental officers admitted that the sanctioned amount was not properly utilised for the appropriate purposes. Thus, the objective of SSA to bring about quality improvement through research and development was not achieved.

3.4.10 Monitoring and evaluation

Monitoring of the implementation of the SSA programme was to be done at two levels i.e local level and State level. Professional institutes were also required to be involved with supervision and monitoring of SSA. To facilitate effective monitoring, quarterly and six-monthly reports were to be obtained from DPOs etc for consolidation at the State level.

It was noticed in Audit that the monitoring was severely lacking as local level monitoring by village education committees was almost absent and SPO had not attempted any evaluation of quality improvement of education as envisaged in the SSA guidelines. No report indicating any monitoring ever conducted by the professional institute (North Bengal University) was produced to Audit. No Action Plan was ever drawn for monitoring of SSA activities by the DPOs and SPO. Even General Body and executive committee had not attempted any evaluation studies to gauge the success of the programme. This was indicative of the fact that emphasis was more on spending than monitoring the progress of SSA in bringing down number of out-of-school children and improving quality of education, etc.

3.4.11 Conclusion

Even after completion of five years of implementation of SSA in the State, 6,310 out- of- school children in the age group of 6-14 years could not be

brought back to the mainstream of the education system. EGS centres and alternative schools were opened only as late as February 2005. Major chunk of available funds were utilised towards teachers' salary, civil works, computer education and management cost while crucial activities like research and development, curriculum development, teacher training, etc remained neglected. Monitoring of the scheme was not attempted either by the State Government or the Ministry to gauge the effectiveness of the programme. The emphasis was more pronounced on spending rather than the actual attainment of the programme objectives.

3.4.12 Recommendations

Considering the status of the implementation, following recommendations are made:

- All out effort should be made to bring back out- of- school children to mainstream of education without further delay;
- Teachers training, curriculum development, R&D activities should be given due priority to bring about quality improvement in the education;
- Proper monitoring mechanism be instituted to check misutilisation/ diversion of funds;
- Infrastructure facilities such as school buildings and other basic amenities (toilets/drinking water/boundary wall/ electrification etc.) should be created expeditiously.
- In respect of programmes undertaken by the SSA information should be displayed as required under the Right to Information Act.

WATER SECURITY AND PUBLIC HEALTH ENGINEERING DEPARTMENT

3.5 Urban Water Supply

Performance Audit of Urban Water Supply System revealed non-framing of 'State Water Policy' in line with the 'National Water Policy' and absence of long-term perspective planning. Baseline survey for assessing actual requirement of potable water and preservation of water sources had never been conducted. Contamination of water was prevalent due to inadequate and ineffective water treatment and alignment of pipelines through drains and jhoras. Leakages and wastage of water was rampant as the Department failed to put in place vigilance mechanism to detect un-authorized connections and wastage of water. There was excess and unnecessary expenditure in execution of works while beneficiary participation in creation of assets could not be obtained. Water tariff fixed by the Department was devoid of any cost analysis and revenue collection lax leading to huge gap between the revenue earned vis-à-vis operation and maintenance costs.

Highlights

The State Government failed to formulate its State Water Policy as envisaged in the National Water Policy (NWP) 2002 leading to absence of policy directives.

(Para- 3.5.7)

The Department gave assurance that sufficient drinking water was supplied without conducting any baseline survey evaluating its supply systems.

(Para- 3.5.7 & 3.5.12)

Supply of quality drinking water could not be assured in the absence of effective treatment and alignment of pipelines through drains and *jhoras*³⁶.

(Para- 3.5.10.2)

Non-metering of consumers led to wastage of water and consequent loss of revenue of Rs. 1.51 crore per annum.

(Para- 3.5.7.4)

There was a huge gap of Rs. 14.24 crore between the revenue realised and the operation and maintenance cost during the period under Audit.

(Para- 3.5.7.5)

Failure to realise 5 per cent capital cost from the beneficiaries led to loss of Rs. 3.64 crore to the Government.

(Para- 3.5.11.1)

3.5.1 Introduction

The Water Security and Public Health Engineering Department (WS&PHED) is responsible for ensuring sufficient supply of clean and safe drinking water to all consumers of the capital town of Gangtok, eight other notified towns³⁷ and 55 Rural Marketing Centres (RMCs)³⁸ in Sikkim. This primarily involved (i) planning and implementation of new water supply schemes/programmes, (ii) adequate and timely maintenance and repairs of the existing water supply systems and (iii) developing strategies to meet the increasing demand for water due to population growth, besides timely formulation of water tariff and collection of revenue.

3.5.2 Organisational set-up

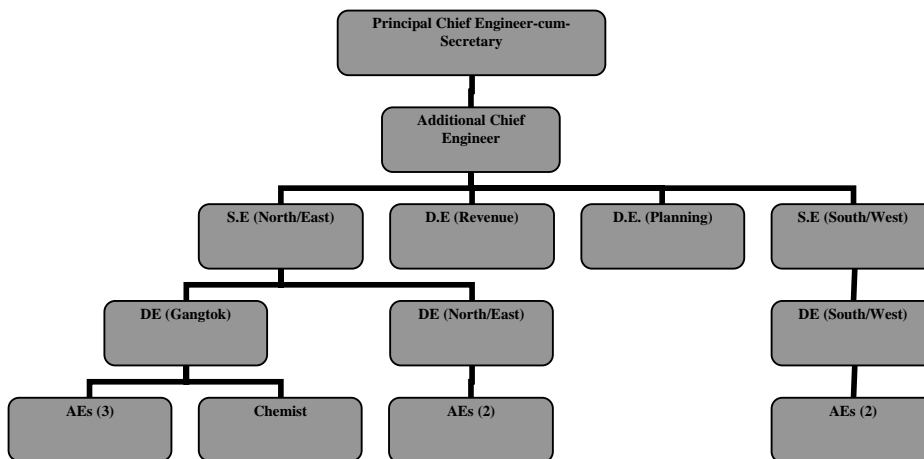
The responsibility of all activities relating to urban water supply system vested with the Principal Chief Engineer-cum-Secretary, Water Security and Public Health Engineering Department (WS&PHED), supported by an Additional Chief Engineer at the Headquarters and a number of other engineers and staff as shown in the chart below:

³⁶ Mountain streams usually carrying filthy water.

³⁷ Jorethang, Namchi, Naya Bazar, Rongpo, Singtam, Mangan, Gyalshing and Melli.

³⁸ RMCs are small bazaars in rural areas away from the main towns.

Chart- 3.5.1



3.5.3 Scope of Audit

Records relating to the period from 2001-02 to 2005-06 in the office of the Principal Chief Engineer-cum-Secretary and three (North-East, Gangtok and Revenue) out of the five Divisional Engineers' offices were reviewed during the Performance Audit carried out between May and June 2006. About 40 per cent (Rs. 40 crore) of the total expenditure of Rs. 100 crore on water supply schemes undertaken/ completed during the period were test-checked in Audit during this period.

3.5.4 Audit Objective

The primary objective of the Performance Audit was to assess the efficiency and effectiveness of various programmes in the WS&PHE Department in ensuring supply of sufficient and safe drinking water to the consumers. This entailed assessing and verifying whether:

- The State Water Policy was formulated and implemented in an efficacious manner;
- Sustainability of the water sources was ensured;
- Adequate treatment facility existed for ensuring prescribed drinking water quality;
- Infrastructure maintenance / up-gradation was adequate;
- Works were executed economically, efficiently and effectively; and
- Monitoring, evaluation and vigilance mechanism was adequate, efficient and effective.

3.5.5 Audit criteria

For arriving at conclusions against the above Audit objectives, the following criteria were adopted in Audit:

- Targets and milestones set in the policy pronouncements of the Government,
- Norms / scale for discharge capacity of water sources and requirement of water per consumer as prescribed,
- Treatment as per prescribed norms for ensuring quality,
- Codal provisions for execution of works, and
- Norms / standards for replacement/ up-gradation and maintenance of assets.

3.5.6 Audit methodology

The Performance Audit process began with group discussions (February 2006) with various stake holders, followed by selection of sample based on multi-stage sampling combining simple random sampling and probability proportionate to size (expenditure). Before commencement of the field Audit, Audit engagement letter (April 2006) was sent to the Department followed by entry conference (May 2006) wherein the broad performance indicators and criteria for evaluating implementation of the water supply system were discussed and agreed to.

Questionnaires were issued on various aspects like targets, achievement and status of various water supply projects etc. The data provided by the Department was analysed with reference to original records in three divisional offices and head office and discussed with senior officers of the Department. At the end of the Audit, exit conference was held (September 2006) and the report finalised after taking into consideration the views of the Department during the exit conference.

Audit findings

3.5.7 Policy and planning

A National Water Policy (NWP) adopted in September 1987 and reviewed and updated in April 2002 *inter alia* envisaged formulation of State Water Policy (SWP) backed by an operational action plan to achieve the desired objective of provision of safe drinking water to entire population. The State Government, however, had neither formulated a SWP nor worked out any long term perspective plan to build capacity for increased demand in future. Besides, no base line survey was ever conducted to assess the present and future requirements of water given the population growth and expansion of urban conglomerates. Absence of policy directives resulted in the following deficiencies:

3.5.7.1 No annual targets fixed

The WS&PHED did not have annual targets for accomplishing various works (new construction, up-gradation and maintenance) since there was no long term perspective plan in place. Audit analysis revealed that even the broad based targets (*institutional reforms, preparation of master plan, outsourcing revenue collection, contain leakages and establishment of water testing laboratories in all districts*) mentioned in the State Plan documents (2002-07)

were not achieved as of September 2006. There was no time frame set by the Department as to when each of these targets would be met. The Department while accepting the Audit observation stated (September 2006) that necessary steps would be initiated to formulate SWP, master plan, institutional reforms and establishment of laboratories.

3.5.7.2 Misplaced priority

In terms of population coverage, the capital town of Gangtok was shown as 'fully covered' while the seven notified towns and 34 Rural Marketing Centres (out of 55) were shown as 'partially covered'. But despite the fact that there was still some coverage to be done / achieved, the Department took up construction of water fountain and beautification works like laying of tiles and compound lighting etc. at Selep in Gangtok for Rs. 71.50 lakh during 2005-06 as can be seen from the photograph. This indicated misplaced priorities by the Department in its planning.



***Beautification works in Selep Treatment Plant:
Laying of tiles etc.***

3.5.7.3 Preservation of water sources

The water supply systems of the State were based on snow-fed rivers and mountain streams which were sensitive to pollution, population growth and environmental degradation. Audit scrutiny revealed that the Department had not conducted any detailed study to record the gradual decline in the yield of water from the sources and had not initiated any tangible action for preservation of ecology and water sources.

3.5.7.4 Non-metering of consumers

Sikkim Water Supply and Water Tax Act 1986 stipulated fixation of water charges for supply of water under the Act on metered basis or on the basis of number of taps installed. The Department chose to fix water charges on the basis of number of taps installed rather than on metered consumption although the former had several well known inherent deficiencies.

The Government fixed (Notification dated 3 October 2001) water charges on metered basis at the rate of Rs. 3 per 1,000 litres (minimum) for industrial units, commercial establishments and residential premises where the Department made bulk supply of water. In terms of the notification, water meters were to be procured and installed by the consumers themselves. The average consumption of water per capita per day for urban areas was estimated

at 135 litres by the Department, which translated to 4,050 litres per capita per month, indicating bulk consumption. At this rate, annual water consumption for the year 2005–06 would be 60,750 lakh litres for a population of 1.25 lakh of Gangtok. The revenue from water charges for the year 2005-06 would, therefore, work out to Rs. 1.82 crore, if realised on metered basis. Against this, the revenue realised on the prevailing tap based tariff for the year 2005-06 was only Rs. 30.53 lakh – a difference of Rs. 1.51 crore in one year alone. Metering of domestic connections was also recommended (February 2005) in a report by AUSAID³⁹. However, the Department had failed to adopt a clear policy on this issue so far.

In reply, the Department stated (September 2006) that metering of the water supply system of Gangtok would be taken up once the detailed project report submitted to Asian Development Bank for funding was cleared.

3.5.7.5 Revenue generation vis-à-vis O & M cost

Scrutiny revealed that the methodology adopted by the Department to fix water charges was not based on an analysis of the operating cost, depreciation and assets replacement cost vis-à-vis the anticipated revenue. Tariff structures were neither revised periodically nor the Department/Government fixed any norms for such regular revision. During 2001-02 to 2005-06, water tariff was revised only once (October 2001). Thus there was a huge gap between the operation & maintenance cost (not including depreciation) and the corresponding revenue realised as indicated below:

Table- 3.5.1

(Rupees in lakh)

Particulars	2001-02	2002-03	2003-04	2004-05	2005-06	Total
O & M	320.20	325.26	417.94	334.71	332.46	1,730.57
Revenue	38.34	57.29	56.96	73.71	80.69	306.99
Difference	281.86	267.97	360.98	261.00	251.77	1,423.58

Source: Detailed Appropriation Accounts and Finance Accounts

It was seen that while formulating the water supply schemes, the Department invariably projected a favourable cost benefit ratio on the basis of which the projects were sanctioned by the funding agencies. However, in reality, the Department did not take resolute steps to translate the projections into a reality leading to gap between the revenue earned and the O & M cost and consequential huge financial liability of Rs. 14.24 crore during the five year period alone.

3.5.7.6 Leakage / wastage of water

The Department had not fixed any norms for probable maximum quantity of leakage from a water supply system. The 'Gangtok Water Supply System', supplied 30 to 36 million litres per day (mld) of water for catering to the requirement of the city. For the Gangtok population of 1.25 lakh the requirement of water per day would be 16.86 mld⁴⁰ at the rate of 135 lpcd⁴¹.

³⁹ Australian Aid Agency.

⁴⁰ Million litre/day

⁴¹ Litre per capita/day

Thus 13.14 mld of water, which constituted 44 *per cent* of the minimum daily discharge (30 mld) from the treatment plant was unaccounted for. Similarly, the loss/leakage of water from systems in the other towns and RMCs ranged from 7 to 80 *per cent* of the quantity of water released from the respective sources.

The Central Public Health & Environmental Engineering Organisation norm for leakage / loss was 10 *per cent*. Compared to this norm, the loss/leakage/pilferage of water at 44 *per cent* for Gangtok and 20 to 80 *per cent* for other towns and RMCs was abnormally high. The Department had not put in a policy to mitigate the problem by installation of bulk meters at various points in the feeder lines, strengthening of vigilance and surveillance mechanism etc.

In reply, the Department stated (September 2006) that after completion of the ongoing augmentation works wastage/leakages in Gangtok would be minimised and similar exercise shall be carried out in other towns and RMCs in a phased manner.

3.5.8 Budget and Financial Management

Budget estimates, actual expenditure, savings and excess figures under revenue and capital head during the period from 2001-02 to 2005-06 were as under:

Table- 3.5.2

(Rupees in lakh)

Year	Budget Provision			Actual Expenditure			Saving (-)/Excess (+)		
	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total
2001-02	521.15	976.32	1,497.47	520.44	974.30	1,494.74	-0.71 (0.14)	-2.02 (0.21)	-2.73 (0.18)
2002-03	543.45	1,031.01	1,574.46	541.00	1,030.85	1,571.85	-2.45 (0.45)	-0.16 (0.02)	-2.61 (0.17)
2003-04	661.62	966.87	1,628.49	663.02	893.43	1,556.45	1.40 (0.21)	-73.44 (7.59)	-72.04 (4.42)
2004-05	352.55	2,183.12	2,535.67	349.93	2,186.92	2,536.85	-2.62 (0.74)	3.80 (0.17)	1.18 (0.05)
2005-06	603.18	2,413.13	3,016.31	609.93	2,201.92	2,811.85	6.75 (1.12)	-211.21 (8.75)	-204.46 (6.78)
Total	2681.95	7570.45	10252.40	2684.32	7287.42	9971.74	2.37	-283.03	-280.66

Source: Appropriation Accounts. Figures in brackets represent percentage

Analysis of budgetary and financial management revealed the following defects:

3.5.8.1 Significant savings

Significant savings of Rs. 0.72 crore during 2003-04 and Rs. 2.04 crore in 2005-06 was due to delayed/non-receipt (December 2003) of funds from GOI.

3.5.8.2 Substantial committed liability

The Department incurred substantial financial liability year after year without adequate budgetary support in contravention of the State Public Works Code leading to accumulated committed liability increasing from Rs. 57.74 lakh in 2001-02 to Rs. 1.10 crore in 2003-04. It however dipped thereafter to Rs. 92.18 lakh in 2004-05 and Rs. 28.23 lakh in 2005-06⁴². The spending

⁴² The figure for 2005-06 was provided by the Department; for remaining years calculation was made by Audit in the value of works physically completed but payment not made/partially made.

Department as well as the Finance, Revenue and Expenditure Department failed to impose any restriction on creation of liabilities beyond the approved allocation indicating inadequate budgetary control. The Department stated (September 2006) that it shall be more vigilant in future.

3.5.9 Implementation of Projects/Schemes

During the period 2001-06, the Department had undertaken 43 schemes/projects for execution, out of which 28 were completed and 15 were under progress (*ranging between 20 to 99 per cent of completion*) as of March 2006. Out of the above, 14 projects were selected for scrutiny in Audit; the results are enumerated in the succeeding paragraphs:

3.5.9.1 Avoidable wasteful expenditure on abandonment of Rangpo Water Supply System due to faulty design

The Department took up (January 2003) the “augmentation of the Rangpo water supply system by lifting water from Rangpo Khola” at an estimated cost of Rs. 1.31 crore though it was fully aware of the design flaw issues in the new venture pointed out (July 2001) to it by the Principal Secretary-cum-Development Commissioner, Planning and Development Department. A similar project by the Animal Husbandry & Veterinary Services (AH & VS) Department had also failed in the past. The result was that while the civil works and procurement of pipes and fittings were progressing, the entire foundation work of the Pumping Station and the intake structure were damaged due to flooding of the river during May 2003, as initially apprehended. To make good the damage and ensure viability of the project, the Department proposed revision of the original estimates of Rs. 1.31 crore to Rs. 1.87 crore by making extensive changes to the scope of work. The revised proposal was however turned down (January 2004) by NABARD and in the absence of fund, the project was suspended after incurring Rs. 1.02 crore. The Additional Chief Engineer also proposed (September 2005) closure of the project. No decision on the matter had been taken as of September 2006. Thus, despite failure of AH & VS in similar project and knowing there was design flaws the Department went ahead with the Rangpo water supply System rendering the whole expenditure as wasteful.

3.5.9.2 Irregular and excess contingency provision

The Department irregularly inflated the contingency provision to Rs. 1.16 crore (13 *per cent* of the work value) as against the stipulated provision of 3 *per cent* (Rs. 26.13 lakh) as per the Sikkim Public Works Code, in case of the ‘Augmentation of Gangtok Water Supply Scheme, Phase – II’ project thereby making excess provision of Rs. 89.79 lakh. This excess amount was diverted in meeting expenditure on muster roll, maintenance of sewerage system and buildings, etc which were not related to the project.

3.5.9.3 Avoidable excess projection of expenditure in carpeting works

The project ‘Augmentation of Gangtok Water Supply Scheme, Phase – II’ envisaged carpeting of damaged road surfaces wherever the pipelines were laid along the roads for total length of 14,150 metres in 28 sub-works. However, in the analysis of costs for carpeting works, the width of the surface

to be carpeted was taken as 100 cm instead of 60 cm (*actual width of the trench*), thereby unduly inflating the quantities of labour and materials consumed and incurring excess expenditure of Rs. 22.64 lakh.

3.5.9.4 Excess purchase of sockets

In addition to procurement of pipes for laying of water supply lines, the Department also purchased sockets for connecting the pipes. Test check revealed that all the pipes procured by the Department invariably came with a socket attached at one end. The Department, however, never took into account the sockets that came with the pipes and instead procured additional sockets worth Rs. 24.87 lakh during the year 2001-02 to 2005-06 leading to extra expenditure as there was no requirement for additional sockets for joining the pipes.

In reply, Department stated (September 2006) that cutting of pipes to shorter lengths at places necessitated additional sockets. The reply is not tenable as the Department had never taken into account the sockets already available with pipes when newly purchased, as seen during scrutiny of their purchase proposals.

3.5.9.5 Estimation of quantity of steel for RCC works

Audit scrutiny revealed that in all *nine*⁴³ schemes out of 14 involving construction of RCC structures, the method of estimation of steel by the Department was fundamentally flawed as the detailed drawings of RCC structures and the *bar bending schedules*⁴⁴ as prescribed in principles of civil engineering were never prepared. Resultantly, the Department used different quantities of steel per unit volume of RCC in different schemes within the same State for the same type of work as can be seen from the table below:

Table-3.5.3

Sl	Item of work	Requirement of steel
1.	RCC sedimentation tanks	130 kg per cum (1 case) , 160 kg per cum (2 cases) and 192.44 kg per cum (3 cases).
2.	Intake tanks	160 kg per cum (1 case), 130 kg per cum (4 cases) and 128 kg per cum (2 cases)
3.	Reservoir/ distribution tanks	160 kg per cum (5 cases) and 130 kg per cum (1 case)
4.	Distribution chambers	82 kg per cum, 110 kg per cum and 130 kg per cum

In reply, the Department stated (September 2006) that the quantity of steel varied widely from 47 to 300 kg/cum of concrete and the same was permissible under Indian Standard Code of Practice for re-enforced concrete works. The reply was not tenable as it did not explain the reasons for such a wide variation, particularly when all these structures were built for similar purposes in almost similar terrain.

⁴³ Strengthening of Distribution System, Pakyong WSS, Augmentation of Jorethang WSS, Augmentation of Gangtok WS: Ph-II, Augmentation of Singtam WSS, Lachen WSS, Augmentation of Pakyong WSS, Chungthang WSS, WSS to tourist cultural centre at Chemchey.

⁴⁴ Detailed statement containing calculation sheet of different size, shape, position and quantity of steel bars required in RCC works.

3.5.10 Water quality

Water supplied to public must be potable from the point of view of its chemical, physical and biological characteristics. The Department was, however, found wanting in this respect despite substantial investments so far in this sector during the period under Audit as is evident from following observations:

3.5.10.1 Pre distribution treatment

The Department had not attached the desired importance to pre-distributed water treatment as out of 35 water supply systems in the State, only five had full water treatment facilities (*with sedimentation, filtration and disinfection*) while the remaining 30 systems had partial treatment facilities (*physical application of bleaching powder and alum only*). Inadequate treatment of water was fraught with the risk of health hazard, outbreak of water borne diseases, etc. Audit point was borne out by the fact that instances of water borne diseases like diarrhoea, gastroenteritis, cholera afflicting 42,843, 48,573 and 50,617 persons resulting in five, two and one death had come to notice of the Health Department of the State Government during 2003, 2004 and 2005 respectively due to consumption of contaminated water. In reply, the WS & PHED stated (September 2006) that it would provide full treatment facilities for all the systems under its purview in a phased manner as per availability of resources. But Audit scrutiny revealed that the Department had not made any time bound plan for achieving the same.

3.5.10.2 Ineffective water treatment

Scrutiny of test reports of Central Water Testing Laboratory, Selep for 34 months between June 2002 to October 2005 revealed bacterial contamination of water in one or the other consumer points in the reports of as many as 30 months indicating ineffective treatment of bacteriological contamination. This rendered the expenditure on chemicals, salaries and wages of chemist, lab attendants and the equipments largely ineffective. Similarly, test reports (June 2002) in respect of Mangan, Phodong and Chungthang in the North District also indicated bacteriological contamination. In reply, the Department stated (September 2006) that the consumers lines were laid through jhoras and drains which may probably be the source of contamination for which remedial measures had been initiated. However as of September 2006, no progress could be seen during physical verification by the departmental officials in the presence of Audit.

3.5.10.3 En-route contamination of water

Survey (November 2002) conducted under the Aus-aid project indicated coliform contamination of water leading to high gastro-intestinal related morbidity. Physical verification by Audit in the presence of Departmental Officers confirmed the enroute contamination of water due to cross-contamination between sewer lines and drains with water lines *as can be seen from the photograph below:*



Pipelines running through drain in Tibet Road area

While accepting the Audit observation, the Department assured (September 2006) to initiate action for removal of consumer supply lines from the jhoras / drains to mitigate the problem.

3.5.11 People participation and recovery of charges

With a view to inculcate a sense of participation and ownership, it is widely advocated to ensure beneficiary participation and recover user charges so as to offset O&M cost to the maximum extent possible. The GOI guidelines on Accelerated Urban Water Supply Programme (AUWSP) stipulated 5 per cent beneficiary contribution towards creation of water supply systems. The Department was found wanting in this respect as elucidated in the following paragraphs:

3.5.11.1 Recovery of beneficiary contribution

The Department proposed (June 2000) to proportionately offset 5 per cent of estimated cost as community participation by way of carriage of materials, land donation, *shram daan* etc. while implementing AUWSP in Jorethang and Singtam at an expenditure of Rs. 4.62 crore (Singtam - Rs. 1.26 crore, Jorethang – Rs. 3.36 crore) during 2002-04. However, during actual execution, the Department failed to achieve this and instead incurred an expenditure of Rs. 23.10 lakh. During 2004-05, in a water supply scheme implemented under the Aus-Aid project in the Arithang area of Gangtok, a local NGO (ECOSS) could offset 30 per cent (Rs. 23.44 lakh) of the project cost (Rs. 77.33 lakh) through the community participation whereas the Department failed to seek the full and unequivocal support and participation of the beneficiary communities.

The Department could have saved Rs. 3.64 crore (5 per cent of Rs. 72.70 crore)⁴⁵ during the period 2001-06 had it ensured community participation. Reply of the Department (September 2006) that people's participation was realised through donation of land is not tenable as no value was mentioned for land and no community participation in the form of labour was taken. As mentioned above the NGO managed to offset 30 per cent of the cost in case of the Aus-aid project.

⁴⁵ capital cost of creation of water supply systems during 2001-02 to 2005-06

3.5.11.2 Arrears of revenue

As mentioned in preceding paragraph, every consumer was billed on the basis of the number of taps and was required to pay the water charges every month. It was, however, noticed that the Revenue divisions of the Department had failed to collect the revenue in time from the consumers leading to substantial increase in arrears of revenue from Rs. 52.40 lakh in 2001-02 to Rs. 56.57 lakh as of March 2006. The major defaulter was Gangtok sub-division (Rs. 32.52 lakh) followed by Namchi sub-division (Rs. 11.53 lakh).

The huge arrear of revenue is indicative of the lackadaisical approach of departmental authority to ensure timely collection of Government revenue.

3.5.12 Monitoring and Evaluation

The Department had not created any monitoring and evaluation cell till date. There was no central authority within the Department to independently monitor the schemes and evaluate their effectiveness. There was no periodic inspection of supply connections to consumers to detect cases of unauthorised connections, leakages and losses of water despite presence of adequate staff (JEs & AEs) to do the same. The level of oversight required to be exercised at the highest level (PCE-cum-Secretary and Additional Chief Engineers) was also found inadequate. It was seen that the monthly progress reports furnished to Planning & Development Department and the Chief Minister's office were mostly incomplete as vital information like scheduled date of commencement of projects, actual date of commencement and completion, revised cost of works, reasons for delay and cost revision etc were not mentioned in most cases.

In reply, the Department agreed (September 2006) to set up a monitoring and evaluation cell.

The Department had also not undertaken any evaluation of its water supply systems during the last five years to assess whether the consumers were being supplied with sufficient drinking water and to identify weak areas and take consequent remedial actions. A study conducted (February 2005) by Aus-aid on Gangtok water Supply systems, *inter alia*, concluded that there was very high incidence of unauthorised connections, leakage / wastage of water and cross contamination of water with drain and sewer lines.

3.5.12.1 Inventory of Assets

The Department had not evolved any system of asset accounting in the form of Asset Registers. Due to this deficiency, an accurate track of assets created by the Department since inception till date could not be made available to Audit. It was also not clear how the Department calculated its budget estimate and how it monitored the requirement of regular maintenance/ replacement to its assets suffering erosion due to time and usage in the absence of a comprehensive listing of its assets.

In reply, the Department stated (September 2006) that it shall initiate the work in this regard during the current financial year itself.

3.5.12.2 Testing for quality of material

There was no system in the Department to conduct test to determine the quality of materials like pipes and fittings, steel, cement, sand and stone aggregates used extensively in construction of the projects. No quality testing laboratory was established in the State till date. In reply, Department stated that it was proposing to establish a testing laboratory during 11th Plan period.

3.5.12.3 Vigilance mechanism to detect un-authorized connections

Survey conducted (February 2005) under Aus-aid project indicated a very high incidence of un-authorized connections, against the Department's assessment of un-authorized connections of 17 per cent (1,676 nos.). Despite the above facts, the Department had not constituted any vigilance mechanism towards regular vigil and detection of un-authorized connections although the Department was not short of manpower. Detection and regularisation of unauthorised connections could have earned the Department minimum recurring revenue of Rs. 6.23 lakh per annum calculated at the minimum rate of Rs. 31 per connection per month.

In reply, the Department stated (September 2006) that unauthorised connections were being checked and would be eliminated by the next two years.

3.5.13 Conclusion

The Water Security and Public Health Engineering Department failed to conduct baseline survey for assessing the actual requirement and usage of water by the consumers. As contamination of water was prevalent due to inadequate and ineffective water treatment and alignment of pipelines through drains and jhoras, the quality of water supplied to the consumers also could not be assured. Due to absence of an effective monitoring and vigilance mechanism, un-authorized connections, leakage / wastage of water continued unchecked.

3.5.14 Recommendations

Following recommendations are made:

The Department should take immediate steps to:

- Expedite formulation of a State Water Policy;
- Conduct baseline survey and prepare master plan for future planning;
- Prioritise activities to accord utmost priority to uncovered areas;
- Improve water quality to supply hygienic and safe water by adequate pre-distribution treatment and prevent en-route contamination;
- Introduce volumetric tariff for making the Department a self sustaining entity;
- Inculcate sense of participation and ownership among the users by realising beneficiaries contribution and publicise all its programme;
- Evolve system of asset accounting in the form of Asset Registers;
- In respect of projects completed and in progress it should display information as required in the Right to Information Act.