

Chapter-II
Performance Audit and
Information Technology Audit

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Performance Audit and Information Technology Audit relating to Government Companies

2.1 Himachal Pradesh State Forest Development Corporation Limited

Executive Summary

Introduction

The Himachal Pradesh State Forest Development Corporation Limited was incorporated (March 1974) under the Companies Act, 1956. The Company is extracting timber / resin, selling timber and finished products extracted from resin besides running Rosin and Turpentine (R&T) factories, wood based industries and has also ventured into Eco tourism.

(Paragraph 2.1.1)

The Company incurred continuous losses during the last four years ended March 2015 and its accumulated loss increased from ₹ 31.66 crore in 2010-11 to ₹ 52.75 crore in 2014-15.

(Paragraphs 2.1.7.1 and 2.1.7.2)

Felling and conversion of trees

Taking over of uneconomical lots which were in difficult areas in contravention to the guidelines resulted in avoidable loss of ₹ 1.52 crore on account of interest on royalty, extension fees, royalty paid on rotten trees etc.

(Paragraph 2.1.10.2)

Failure in getting the extraction work completed even after expiry of four to eight years from scheduled completion period resulted in loss of ₹ 1.28 crore on account of non-recovery of extension fee from contractor and loss of interest on royalty paid besides deterioration of quality of extracted timber lying in the forest for the past many years.

(Paragraph 2.1.10.3)

Payment of royalty

Due to non-payment of instalments of royalty on due dates, the Company had to pay interest of ₹ 6.85 crore to the DoF during 2010-15.

(Paragraph 2.1.12.1)

Sale of timber

The comparison of rates of timber obtained in auction *vis a vis* market rates during 2010-2015 showed the difference ranging between 60 and 105 *per cent* which indicated that the Company is not receiving competitive rates in auction and bidders are getting huge margin either due to limited competition or cartel formation. Had the attempts been made to realise better sale rates through wide publicity the Company could have earned additional revenue of around ₹ 18.00 crore on sale of deodar timber only (which constitutes 8.62 *per cent* of total volume) after allowing a margin of 50 *per cent* to cover the selling expenses and profit.

(Paragraph 2.1.13.1)

Grading of timber was being done at Sale Depots. Only 0.5 *per cent* was graded 'A'. There were no checks on the process of classification and potential revenue loss assuming 25 *per cent* wrong classification works out to ₹ 71.64 crore.

(Paragraph 2.1.13.2)

Supply of fuel wood to tribal areas

Non-adjustment of ₹ 12.01 crore due from DoF on account of supply of fuel wood out of royalty payable to DoF despite recommendations of the COPU resulted in interest loss of ₹ 2.04 crore.

(Paragraphs 2.1.14.1)

Extraction of resin

Against the targets of 2.78 lakh quintals, actual extraction of resin was 2.55 lakh quintals resulting in shortfall (ranging between 6.77 *per cent* and 9.60 *per cent*) of 0.23 lakh quintals of resin valued at ₹ 11.99 crore during the last five years ending March 2015.

(Paragraph 2.1.15)

Disposal of arbitration cases

Failure in deciding 77 pending cases in a time bound manner by the officers of the Company who were the arbitrators in these cases resulted in locking up of Company's funds amounting to ₹ 4.82 crore which included one recovery case of ₹ 1.18 crore pending before the MD since September 2006.

(Paragraph 2.1.18.1)

2.1.1 Introduction

The Himachal Pradesh State Forest Development Corporation Limited was incorporated (March 1974) under the Companies Act, 1956. The Company is extracting timber / resin, selling timber and finished products extracted from resin besides running Rosin and Turpentine (R&T) factories, wood based industries and has also ventured into Eco tourism.

2.1.2 Organisational Set up

The affairs of the Company are managed by the Board of Directors (BoD) consisting of not less than two and more than fifteen (as *per* Companies Act, 2013) Directors including the Chairman, Vice Chairman and the Managing Director. The Managing Director (MD) is the Chief Executive of the Company who is assisted by the Executive Director, Financial Advisor, Company Secretary and three Directors (North, South and Marketing).

2.1.3 Audit objectives

Audit objectives of the Performance Audit were to assess whether:

- felling, conversion and transportation of converted timber are awarded and executed expeditiously;
- the payment of royalty has been computed and paid to the Government as *per* prescribed rates and time schedule;
- the extraction, processing and marketing of resins were done as *per* the prescribed time schedule and penalty recovered in cases of shortfall;
- marketing of timber and forest produce were arranged at competitive rates and collection of revenue was systematic;
- diversification of its activities were profitable;
- manpower deployment was managed efficiently; and
- there was effective internal control and monitoring system in place.

2.1.4 Scope of audit

Performance audit of felling and conversion of trees by the Company was included in the Audit Report (Commercial) for the year ended March 2007 (Para 2.1) which was discussed by the Committee on Public Undertakings in July 2013. The recommendations thereon were presented in the *Vidhan Sabha* vide its 26th Report on 8 December 2014 and action taken notes thereon were awaited (May 2015). The recommendations of the COPU have been taken into consideration while finalising this report.

The Company has 14 Forest Working Divisions¹(FWD), eight *Himkashth* Sale Depots (HSDs)² managed by the Divisional / Depot Managers, two wood based industries at Hamirpur and Shamshi (Kullu), Eco tourism unit at Narkanda besides two R&T factories³ managed by the General Managers. The performance audit on the operations of the Company for five years from 2010-11 to 2014-15 was conducted between January and June 2015. The audit findings included test check of records of the corporate office, two Directorates (North and Marketing), seven⁴ forest working divisions out of total 14, R&T Factory at Bilaspur, two sale Depots⁵, eco-tourism unit, Narkanda and wood based industry at Shamshi. The sample selected for audit were based on random selection covering high & low lying areas of operation.

2.1.5 Audit Methodology

The audit objectives, audit criteria and scope of performance audit were discussed in an entry conference held on 07 May 2015 with the Deputy Secretary (Forests) Government of Himachal Pradesh, Managing Director of the Company and Additional Principal Chief Conservator of Forest (Pr. CCF). Audit findings were issued to the State Government / Management in the form of draft report for their comments on 10.08.2015. Exit conference was held on 02 November 2015 and the replies of the Management received on 6 and 23 October 2015 have been incorporated suitably.

2.1.6 Audit Criteria

The criteria adopted for achievement of audit objectives were derived from the following sources:

- action plan and guidelines issued by the Company;
- Procedure and Instructions for the Timber Extraction Works and Working of *HSD*;
- instructions and guidelines for the extraction of resin as laid down in Manual of Resin Tapping;
- Agenda / Minutes of BoD and Pricing Committee meetings; relating to payment of royalty and taxes to the Government;
- Indian Forest Act, 1927 and Himachal Pradesh Forest Produce (Regulation of Trade) Act, 1982;
- Companies Act, 1956; H.P. VAT Act, 2005 and Labour / Commercial Laws; and the Arbitration Act, 1940.

¹ FWDs: Shimla, Sawra, Chopal, Solan, Nahan, Rampur, Dharamshala, Chamba, Mandi, Sundernagar, Kullu, Fatehpur, Hamirpur and Una.

² HSDs: Baddi, Mantaruwala, Dhanotu, Nurpur, Bhadroya, Swarghat, Udaipur and Shamshi.

³ Bilaspur and Nahan.

⁴ FWDs: Shimla, Chopal, Sawra, Kullu, Rampur, Sundernagar and Dharamshala.

⁵ HSDs: Baddi and Nurpur.

2.1.7 Financial Position and Working Results

2.1.7.1 Financial Position

The Company had finalised its accounts upto the year 2012-13, figures for the years 2013-14 and 2014-15 are provisional. Financial position of the Company for the five years ended March 2015 is given in **Appendix 2.1.1**. It would be seen from details given in the Appendix that accumulated loss increased from ₹ 31.66 crore in 2010-11 to ₹ 52.75 crore in 2014-15.

2.1.7.2 Working Results

The working results of the Company for the five years ended 31 March 2015 were as under:

Table-2.1.1

Particulars	(₹ in crore)				
	2010-11	2011-12	2012-13	2013-14 Provisional	2014-15 Provisional
Income					
Sale of material	164.23	142.52	139.96	178.13	168.42
Other income	12.52	13.67	14.20	11.46	11.14
Total income	176.75	156.19	154.16	189.59	179.56
Expenditure					
Cost of sales ⁶	148.62	150.88	150.92	179.27	170.54
Administrative Expenses	13.88	9.48	12.35	14.03	13.11
Total expenditure	162.50	160.36	163.27	193.30	183.65
Profit(+)/Loss(-) before tax	(+)14.25	(-)4.17	(-)9.11	(-)3.71	(-) 4.09

The above working results showed that the Company had incurred continuous losses during the last four years ended March 2015 and total income of the Company decreased constantly from ₹ 176.75 crore in 2010-11 to ₹ 154.16 crore in 2012-13 which increased to ₹ 189.59 crore in 2013-14 and decreased to ₹ 179.56 crore in 2014-15. The increase in income during 2013-14 was mainly due to increase in sale of rosin and turpentine oil of ₹ 45.04 crore during 2013-14 as compared to previous year. Against this, total expenditure of the Company increased regularly from ₹ 160.36 crore in 2011-12 to ₹ 193.30 crore in 2013-14 mainly due to increase in extraction cost and employee cost and was reduced to ₹ 183.65 crore during 2014-15. The income earned during 2011-12 to 2014-15 was not sufficient to cover its expenditure, consequently the Company incurred losses during these years. Besides other reasons of losses as analysed during performance audit are discussed in audit findings given in the succeeding paragraphs.

⁶ Cost of sales include – expenses on Royalty, extraction, manual carriage, loading / unloading, stacking, transportation and salary / wages.

The Management stated (October 2015) that the efforts are being taken to improve the financial position and working results of the Company.

Audit Findings

2.1.8 Deficient budgetary control

The Company was required to prepare financial budget, its approval from BoD and despatch to field units well before the commencement of each financial year.

It was noticed (March 2015) that the Company did not prepare financial budget well before the commencement of each financial year. The delay in approval of budget by the BoD ranged between five to ten months from the commencement of the respective financial year. The budget approved by the BoD was also intimated to the units after delays ranging between 17 and 34 days after approval. Further, the budget allocations for the years 2012-13 to 2014-15 were sent to field units without the approval of the BoD.

There was no system of reviewing / reporting actual performance periodically with reference to targets and shortfall, if any and so as to take timely remedial measures. The table below indicates the budgeted and actual income and expenditure and variations noticed during last four years ending March 2014:

Table-2.1.2

(₹ in crore)

	2010-11	2011-12	2012-13	2013-14 (Provisional)	2014-15 (Provisional)
Budgeted					
Income	189.83	197.75	199.60	220.54	239.85
Expenditure	166.73	192.26	211.88	217.75	234.46
Actual					
Income	176.75	156.19	154.16	189.59	179.56.
Expenditure	162.50	160.36	163.27	193.30	183.65
Excess Budget provisions					
Income	13.08	41.56	45.44	30.95	60.29
Expenditure	4.23	31.90	48.61	24.45	50.81

The above table showed that there were excess budget provisions in all these years for both income and expenditure. This indicated that the budget estimates were not based on any scientific analysis of performance during earlier years.

The Management while admitting (October 2015) the delay in preparation of annual budget stated that they were in the process of evolving a mechanism so that required information were made available with the close of financial year so that the targets for 2016-17 could be conveyed to the field units well in time.

2.1.9 Taking over of forest lots

Delay in receipt of marking list and taking over of possession of lots

As per provisions of timber extraction manual, Department of Forest (DoF) has to identify each year trees for exploitation and to intimate the Company by 30th June every year. The marking list should reach the Company by 15th September in respect of low lying lots and by 15th December for high lying lots each year. No marking lists should be received without the approval of the MD after the above mentioned time schedule. The lots are to be taken over within one month from the receipt of marking list. During the period from 2010-11 to 2014-15 the Company received 173 road alignment lots (37,193 trees with 22,081.855 M³ standing volume) and 2,210 salvaged lots (9,28,375 trees having 8,71,198.692 M³ standing volume) from the DoF.

It was noticed that:

- Neither the DoF intimated the Company by 30th June about forests to be marked nor did the Company ever insist for timely intimation of details of trees identified each year. Consequently, all stages of extraction got delayed.
- In 10 FWDs⁷ the marking lists of 693 lots (402 lots of low lying and 291 high lying) out of total 1,535 lots test checked were received after the prescribed time schedule (15th September and 15th December) that too without the approval of the MD.
- Out of these 1,535 lots, the possession of 449 lots were taken over by the Company after a delay ranging between 30 and 972 days from scheduled period of one month mainly due to non-settlement of issues noticed during joint inspections and their locations being in difficult areas.

The Management admitted (October 2015) the delay in receipt of marking lists and noted the observations for improvement in the system.

2.1.10 Felling and conversion of trees

The marking lists sent by the DoF and accepted by the Company indicate lease period of each lot determined on the basis of volume of marked trees and after lease period the forest has to be handed over to the DoF. If after lease period, the forest is not handed over to the DoF; the Company has to pay extension fee. To avoid this, the Company is required to plan its activities so as to complete the conversion / transportation work within lease period.

⁷ FWDs: Chopal, Shimla, Hamirpur, Sundernagar, Sawra, Mandi, Kullu, Dharamshala, Rampur and Chamba.

It was noticed that the delay in taking over of possession further delayed finalisation of tender, award of work and completion of works by the Contractors resulting in loss of interest on payment of royalty, loss due to deterioration of quality, escalation in extraction cost *etc.* as discussed in the paragraphs *infra*.

The Management noted (October 2015) the audit observation for improvement of the system and also attributed the delay to various codal formalities required to be completed before finalisation of tenders. The reply was not acceptable as the required formalities should have been completed in a time bound manner.

2.1.10.1 Avoidable payment of extension fee

The Company is required to complete the extraction works within the working period allowed by the DoF. The Company can seek extension in working period on payment of extension fee for the extended period at the rate of 0.2 *per cent per* month of the total royalty whether paid or unpaid with effect from April 2007 onward.

In this regard, it was noticed that:

- Out of total 1,535 lots test checked, the company could complete only 360 lots (23.45 *per cent*) within lease period, 756 lots (49.25 *per cent*) were completed after (delay of one to 1,534 days) lease period and remaining 413 lots (26.90 *per cent*) were yet (March 2015) to be completed though lease period of 399 lots stand expired. 14 lots (0.91 *per cent*) were not due for completion by the end of March 2015 and remaining six lots relating to FWD Chamba were returned back to the DOF.
- Due to non-completion of extraction work in scheduled time in 1,155 lots the Company has to seek extension for which extension fee of ₹ 93.29 lakh was payable to the DoF up to 31st March 2015.

The Management stated (October 2015) that for delay attributable to Labour Supply Mate (LSM) penalty at the rate of one *per cent per* month of the left over work is recovered and the same is taken into account while making payment of extension fee to the DoF. The reply was not acceptable as the extension fee is paid on the full amount of the royalty of the lot and not for the left over work for which the amount is recovered from the LSM.

2.1.10.2 Loss due to taking over of non- working lots

As *per* the decision (September 2007) of the pricing committee, where despite best efforts of the Company (indicated by at least inviting tenders twice) if any lot could not be worked in full or in part for any *bonafide* reasons such as location of trees on steep slopes indicated by joint inspection, no royalty shall be payable by the Company.

It was noticed that 12,991 trees having standing volume of 32,551.45 M³ in respect of ten lots⁸ which were uneconomical⁹ were taken over in contravention of above guidelines after payment of royalty of ₹ 2.05 crore during 2008 to 2012 to the DoF. Consequently, 4,894 trees having standing volume of 16,862.70 M³ (51.80 per cent) were yet to be felled even after three to five years from the expiry of lease period (31st March 2015). Further, 15,688.75 M³ which were felled / extracted were also lying at various stages in the forest and could not be carried over to the sale depots due to difficult topography (March 2015).

Thus, taking over of these lots in contravention to the guidelines *ibid* resulted in avoidable loss of ₹ 1.52 crore¹⁰ on account of interest on royalty, extension fees, royalty paid on rotten trees *etc.*

The Management stated (October 2015) that as *per* the decision of the Pricing Committee joint inspection has been expedited to identify such unworkable lots and joint inspection report was likely to be placed before the Pricing Committee very shortly for approval of deletion of these unworked lots.

2.1.10.3 Loss due to abnormal delay in working of lots by contractors

As *per* clause 12 (a) of the agreements for felling, conversion and carriage executed with the contractors, the extension in completion of works beyond one year can be granted by the Managing Director. If the contractors fail to complete the work during extended period; the agreement automatically will be treated as cancelled and the works be got done at their risk and cost. Extension shall be granted subject to payment of extension fee at the rate of one per cent *per* month on the left over work.

The Company received thirteen lots¹¹ having 15,660 trees (standing volume: 35,699.13 M³) from the DoF between December 2004 and October 2009. The work of these lots was awarded to contractors with completion period between March 2007 and March 2011.

The status of completion of these works showed that even after expiry of more than four to eight years of the scheduled dates for completion, only 3,679.76 M³ could be sent to respective sale depots (March 2015). The remaining works (1,705 trees: 5,011 M³ for felling, 1,330 trees: 3,656.012 M³ for conversion and 2,254.085 M³ for transportation) were yet to be completed and 2,772.507 M³ standing volume were found rotten. As these lots were salvaged lots and with the expiry of four to eight years after scheduled completion period of

⁸ FWDs: Sawra:5, Chopal: 4 and Rampur: 1.

⁹ Lots in difficult locations / slops.

¹⁰ Interest on royalty: ₹ 56.96 lakh, extension fees: ₹ 15.19 lakh, royalty paid on rotten trees: ₹ 11.41 lakh, less recovery of security from contractor: ₹ 5.77 lakh and non-recovery of risk and cost: ₹ 62.96 lakh.

¹¹ FWDs: Sawra: 2, Shimla: 1, Chopal: 1, Rampur: 2, Kullu: 3 and Dharamshala: 4.

extraction, the deterioration in quality of timber cannot be ruled out. Further, the Company had neither recovered the extension fee amounting to ₹ 34.44 lakh from these defaulting contractors nor cancelled these contracts so as to award them to other contractors at their risk and cost. Besides the company also incurred interest loss of ₹ 0.94 crore up to March 2015 on royalty of ₹ 1.71 crore paid in respect of these lots.

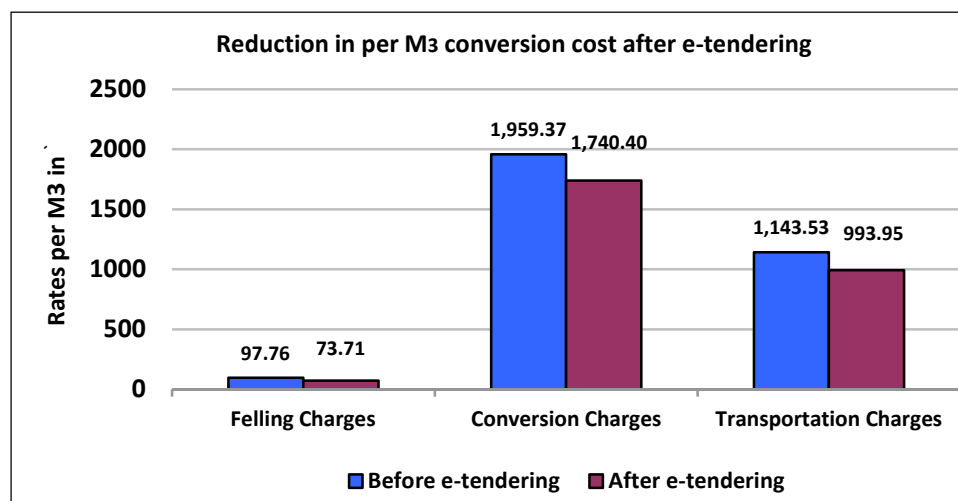
Thus, failure in getting the extraction work completed even after expiry of four to eight years resulted in loss of ₹ 1.28 crore to the Company besides loss on deterioration of quality of extracted timber lying in the forest for the past many years.

2.1.10.4 Non adoption of e-tendering for extraction works

The BoD in its meeting held on 18 September 2012 decided to introduce e-tendering *w.e.f.* January 2013 on trial basis and was to be made mandatory from April 2013 for all tenders valuing ₹ 2.00 lakh and above.

Audit scrutiny (March-May 2015) showed that e-tendering has not been adopted by the Director (North) in any of its eight FWDs under his jurisdiction where as the Director (South) has adopted e-tendering during 2014-15 for all six FWDs. On comparing the rates received (2014-15) after e-tendering in three FWDs (Shimla, Sawra and Chopal) with the rates received before e-tendering (2013-14) in respect of felling, conversion and transportation, it was noticed that there was substantial reduction in *per M³* rates after e-tendering.

The reduction in *per M³* rates in respect of felling, conversion and transportation are mentioned in bar chart below:



Thus, failure in adopting e tendering in all FWDs despite BOD decision, the Company lost the opportunity to get the benefit of similar reduction in rates.

The Management stated (October 2015) that in the meeting held in August 2015 it had been emphasised to switch over to 100 *per cent* e-tendering in all the FWDs and to reject all manual tenders straightway.

2.1.10.5 Non-recovery of full security deposits

Condition no. 14 of tender document provides that the earnest money deposited (EMD) by the bidder would be converted into security and the security amount would be 10 *per cent* of the value of the contract or the EMD whichever is higher. In case the amount of EMD is short of the security, the balance amount would be deducted from the bills of the contractor so as to increase the security amount to 10 *per cent* of the contract value. Further, Condition no. 28 of the tender document provides that in case the contractor's fails to complete the work during the stipulated period including the extended working period if any the security deposit will be forfeited.

It was noticed that the required 10 *per cent* security is not being taken from the contractors immediately after signing the agreement and the difference after adjusting the EMD is recovered from bills submitted by the Contractors on start of work. In case the contractor fails to start the work or subsequently work is rescinded before recoupment of required 10 *per cent* security, the Company could not forfeit the full amount of the security deposits as *per* the conditions of the tender document *ibid*.

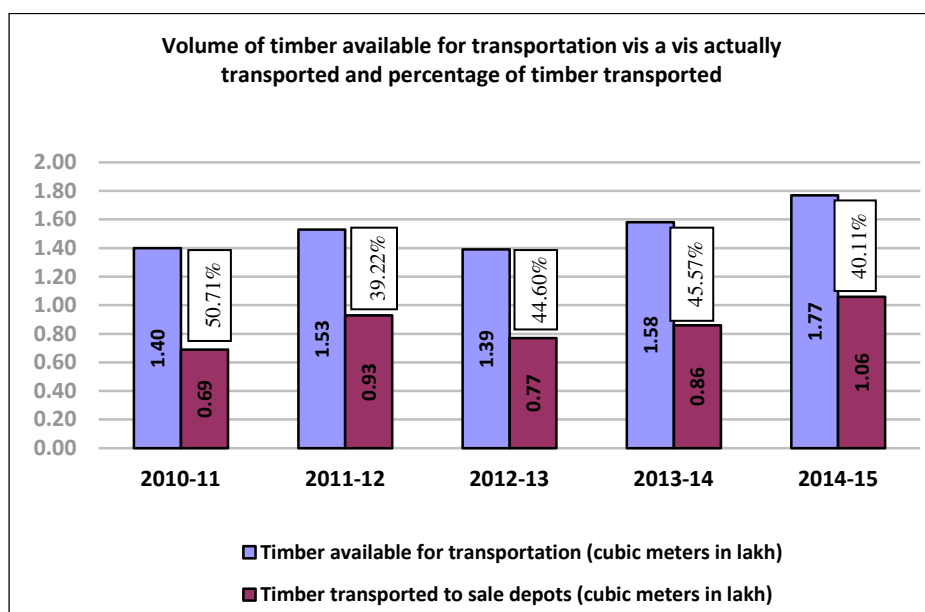
Audit noticed that in respect of six works rescinded under two FWDs Kullu and Chopal the company could recover only ₹ 3.86 lakh out of available EMD against the required security of ₹ 29.01 lakh. This resulted in short recovery of ₹ 25.15 lakh from six contractors. This loss was avoidable by taking full required amount of 10 *per cent* security immediately on signing of the contract. Thus, there is a need to revise the clause to ensure recovery of full security deposit at the time of signing of agreement to enable the Company to forfeit full amount as *per* the condition no. 28 of the tender document.

The Management stated (October 2015) that it was already seized of the situation and as such has revised the slab of EMD. This decision would mitigate the situation and will help to recoup the loss. The Management further added that in the cases pointed out by audit there was specific provision in the agreement to initiate arbitration proceedings or court case. The reply was not acceptable as this situation could have been avoided by taking full amount of security and forfeiting the same as *per* the condition no. 28 of the tender document.

2.1.11 Transportation of timber

After conversion, the timber is required to be transported to the nearest sale depots for auction. The volume of timber obtained after conversion of trees and volume transported to sale depots during the last five years ended March 2015 are shown in the bar chart below:

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(Source: Data supplied by the Company)

It would be seen from the above that shortfall in transportation of timber ranged between 39.22 and 50.71 *per cent* during 2010-15. The delayed transportation had resulted in delay in sale and realisation of sale proceeds. The reasons for this shortfall in transportation were asked for but not provided by the management.

2.1.12 Payment of royalty

The rates of royalty to be paid on timber and resin blazes are fixed by the Pricing Committee constituted by the State Government on the basis of average sale rate of timber / rosin obtained in previous years. The table below indicates the volume of timber received, royalty due / paid during last five years ended

31st March 2015 (excluding FWD, Chamba):

Table 2.1.3

Year	Timber Volume received (in M ³)	Royalty paid (₹ in crore)
2010-11	2,14,496.847	18.14
2011-12	1,25,777.377	14.10
2012-13	1,72,977.200	18.26
2013-14	2,00,395.217	17.48
2014-15	1,79,633.906	22.15
Total	8,93,280.547	90.13

The scrutiny of records relating to the payment of royalty by the Company to State Government showed cases of avoidable payment of interest and non-adjustment of royalty amounting to ₹ 7.90 crore as discussed below:

2.1.12.1 Avoidable payment of interest

Royalty for trees taken over by the Company is required to be paid to the DoF in two to ten instalments depending upon the working period of lots. Delay in payment of instalments attracts interest at the rate of 9 per cent per annum w.e.f. April 2004.

Audit noticed (May 2015) that the Company did not pay the instalments of royalty on due dates in respect of 700 lots and had to pay interest of ₹ 6.85 crore to the DoF during 2010-15 on account of delay ranging between 11 days and 2,211 days in payment of instalment as tabulated below:

Table 2.1.4

Sr. No.	Year	Number of lots	Delay range (in days)	Interest on delayed payment of royalty (₹ in lakh)
1	2010-11	9	90 to 248	13.65
2	2011-12	487	11 to 1153	483.12
3	2012-13	101	11 to 798	108.91
4	2013-14	58	62 to 2211	21.15
5	2014-15	45	30 to 169	58.50
	Total	700		685.33

The above table showed that there was delay in releasing payment of royalty to the DoF in all the years.

2.1.12.2 Avoidable loss of interest on royalty paid in advance

As *per* notification issued by the State Government (October 2003) the minimum working period in respect of lots consisting of *Deodar, Kail, Fir / Spruce* species shall be two years and in respect of other species, it shall be one year from the date of issue of felling order. The royalty for one year period is to be paid in two instalments and for two years lease period in four equal instalments.

Scrutiny of records relating to six FWD¹² showed that during 2011-15, 288 lots (98,453 trees of *Deodar, Kail, Fir / Spruce* having standing volume of 1,28,141.273 M³) were designated one year lease period and on these lots the Company paid royalty amounting to ₹ 14.01 crore to the DoF in two instalments. As these lots were having *Deodar, Kail, Fir / Spruce* species for which the working period should have been treated two years and royalty on these was payable in four instalments as *per* the notification *ibid*. On advance payment of royalty the Company incurred interest loss of ₹ 0.63 crore besides payment of extension fee of ₹ 0.34 crore for second year as the Company could not complete these lots in one year.

Thus, treating two year lots as one year, the Company incurred avoidable loss of ₹ 0.97 crore.

2.1.12.3 Non adjustment of royalty

As *per* the decision (September 1999) of the Pricing Committee, royalty is not payable for rotten and hollow trees where the volume of such rotten / hollow trees is more than 5 *per cent* of the marked volume. In order to ascertain the quantum of the rotten / hollow trees, joint inspection has to be conducted by the Officers of the Company and DoF within two months of felling of trees. It was noticed that in four lots allotted to FWD, Chopal and two lots to FWD, Kullu, the joint inspection of lots were not got conducted within stipulated period of two months and no efforts were made to ensure the presence of the officials of the DoF to verify the rotten volume of 2,279.953 M³ (FWD, Chopal: 355.183 M³ and FWD, Kullu: 1,924.770 M³). In absence of joint inspection royalty amount of ₹ 8.10 lakh paid for the above rotten volume remained unadjusted so far (June 2015).

2.1.13 Sale of timber

Himachal is a timber surplus State. It exports timber to near-by States. It does not import any timber (*deodar, kail, rai / fir and chil*) as it will not be cost effective proposition. So, all timber which is available at retail depots is procured from Himachal Pradesh State Forest Development Corporation

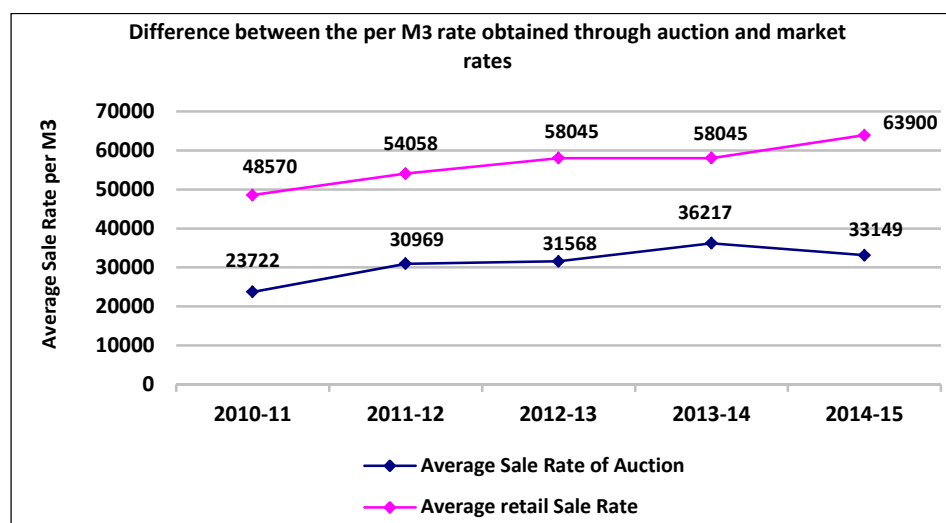
¹² FWDs: Chopal, Sawra, Rampur, Kullu, Mandi and Sundernagar.

Limited. The Company sells its timber through five¹³ major Himkashth Sale Depots (HSDs) and three¹⁴ small Himkashth Sale Depots (HSDs). The company sold 2.76 lakh M³ of timber of different specie out of total 4.31 lakh M³ received at these Sale Depots during the last five years ending March 2015. The sale of timber is made through open auction. In auction procedure adopted by the Company following deficiencies were noticed:

2.1.13.1 Limited publicity for auction

The advertisement of auction is given only in two local newspapers (The Tribune and *Divya Himachal*) on quarterly basis 25 days before the scheduled date of first auction in that quarter. There is no practice to give wide publicity in national newspapers, radio, television, e- auction *etc.* Due to limited publicity, the Company deprived itself from getting the competitive rates for timber.

The comparison of average market rates of *deodar*¹⁵ species (only 8.62 per cent of total volume sold in the State is of this variety) which fetches the highest rates amongst all the species with the rates obtained during auction during the last five years ending March 2015 are given in the line chart below:



The analysis by Audit showed that:

- against constant increase in retail sale rates (during 2013-14 the rates were not revised by the Company) the rates obtained during auction decreased during 2014-15 as compared to the 2013-14.

¹³ Baddi, Mantaruwala, Dhanotu, Nurpur and Bhadroya.

¹⁴ Swarghat, Udaipur and Shamshi.

¹⁵ These species can be grown at an altitude of 1,800 meters and above and hence all the wood of these species available in the market is from Himachal only as it would not be cost effective to bring it from near-by States.

- The comparison of rates obtained in auction *vis a vis* retail sale rates¹⁶ showed that the retail sale rates were 60 to 105 *per cent* higher. This showed that there was scope for getting higher rates provided due publicity was given.
- There was no system in place to pre-qualify the prospective bidders and verify their credentials. Further, the reasons for not receiving the competitive rates during auction were less participation of bidders owing to limited publicity of auction besides, cartel formation between the bidders also cannot be ruled out.

Failure in getting the competitive rates during auction, the Company is incurring huge losses in sale of timber. In case attempts were made to realise the retail sale rates through wide publicity at national level, the Company lost the opportunity to earn additional revenue of around ₹ 18.00 crore¹⁷ on the sale of 18,338.768 M³ of deodar timber sold during the last five years.

The Management stated (October 2015) that the suggestions / recommendations made by the audit, have been noted for further formulation of policy of marketing of timber and bringing improvements.

2.1.13.2 Grading of timber at sale depots

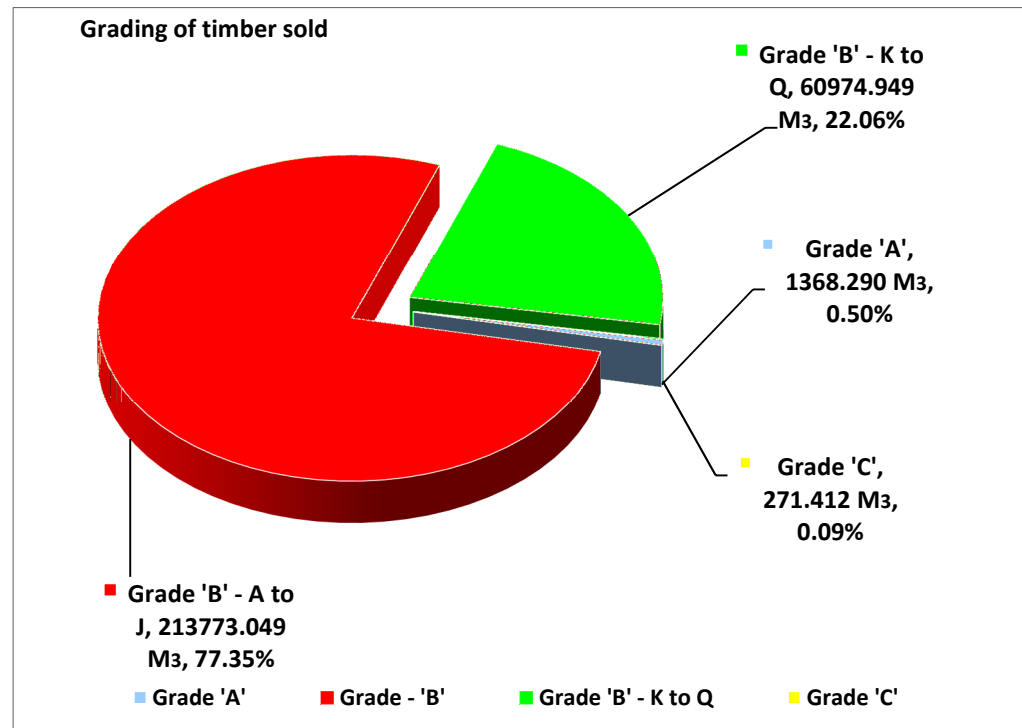
As *per* instructions for sale of timber (B-Grading of timber only after unloading) for grading of timber the Assistant Manager/ Deputy Ranger of sale depots will classify the timber and the Deputy Ranger deputed from the field will actively associate during classification / grading to avoid any subsequent dispute.

During audit, it was noticed (May 2015) that the classification of timber was being done by Guard/ Deputy Ranger at sale depot and no Deputy Ranger from the field, which supplied the timber to sale depots has attended / was associated in classification of timber thereby deviating from the instructions *ibid*. Leaving this work at the sole discretion of sale depot officials was prone to error. This fact is evident from the fact that the percentage of Grade B timber was 99.41 *per cent* which included 22.06 *per cent* B grade (K to Q having more defects) and 77.35 *per cent* B grade (A to J less defects), Grade A was only

¹⁶ Since timber sold in the whole sale market only by the Company and the same is sold at retail depots in totality, no other whole sale rates are available for comparison, the comparison has been made after allowing a margin of 50 *per cent*.

¹⁷ Worked out after allowing 50 *per cent* (20 *per cent* for profit, 10 *per cent* for transportation and 20 *per cent* for difference in quality of timber).

0.50 per cent out of total timber sold during the period from April 2010 to March 2015 as shown in the pie chart below:



The difference in realisation of sale of timber between the grade A and B of different species of wood is given in **Appendix 2.1.2**. The scrutiny of Appendix showed that wrong classification would result in less realisation of *per M³* ranging between ₹ 21,828 and ₹ 30,751 for Deodar, ₹ 25,471 and ₹ 31,839 for Kail, ₹ 8,116 and ₹ 14,726 for Rai / Fir and ₹ 4,024 and ₹ 7,319 for Chil. It was observed that timber being sold at Retail Sale Depots (RSD) was mostly of Grade 'A' classification and this was extracted by the Himachal Pradesh State Forest Development Corporation Limited only as no wood is imported in the State. Since, the provisions of the instructions for sale of timber (B-Grading of timber only after unloading) for gradation were not being followed and the quantum of Grade 'A' timber was unusually low, it is evident that the quality of wood was not classified properly. It is also apparent that timber classified as Grade 'B' or lower by HPSFDC was being sold as Grade 'A' in the retail depots as no wood is imported in the State. Since there is a huge difference in price between the Grade 'A' and other grades of timber, huge loss has actually been incurred by the HPSFDC due to wrong classifications of timber.

In order to quantify the extent of potential revenue lost by Forest Corporation we have to make certain assumptions regarding the extent of error in the classification of wood. The less realisation from timber would be to the tune of ₹ 71.64 crore, if the volume of wrong classification was 25 per cent on total

sale of 2,12,840.466 M³ of four species made by the Company during the last five years ending March 2015.

The Management stated (October 2015) that due to frequent retirement of staff, the FWDs are sometimes unable to depute their representative to the HSDs, however, it will be ensured that the field representatives are invariably deputed to the HSDs.

2.1.13.3 Undue favour to bidders

Condition for auction sale of timber (no. 8.1) provides that earnest money deposit (EMD) payable by the highest bidder shall be 10 *per cent* (reduced to 8.5 *per cent* from August 2011) of the total purchase price. Condition 8.3 further provides that the EMD shall be deposited at the fall of hammer.

There was no practice to obtain required EMD from the successful bidder at the fall of hammer. In case the successful bidder did not turn up, the Company could not forfeit his EMD except eligibility deposit of ₹ 10,000 (₹ 5,000 up to January 2014) which is obtained from all the participants before start of auction.

During audit it was noticed that in 14 cases under HSD Baddi, the bidders did not honour their bids during the period from August 2011 to January 2015. Due to non-obtaining of required amount of EMD of ₹ 3.06 lakh at the fall of hammer from them, the Company could forfeit only ₹ 0.90 lakh (eligibility deposit) and the amount of ₹ 2.16 lakh remained unrecovered.

2.1.13.4 Non recovery of ground rent from private owners

The Company is also selling timber on behalf of the private parties through auction. For this activity the Company is also charging 18 *per cent* handling charges on the amount of sale. The dates of holding auction for sale of timber at each HSD in respect of private lots are announced in one month advance. Instructions are also issued to all private owners to be present on the date of auction and the sale of private timber cannot be made without the written consent of the owner. However, there is no provision of charging the ground rent in case the timber of private parties is not sold for long. Where as in case the auctioned timbers are not lifted by the successful bidder within 40 days the depot rent at the rate of 22 *per cent per annum* is recovered from them.

It was noticed in audit that 230.252 M³ timber relating to private parties were lying unsold at three HSD¹⁸ for two months to 38 months after allowing 40 days due to the reason that the concerned owners did not give their consent for its sale. In absence of any provision for charging of ground rent, the Company could have charged the ground rent amounting to ₹ 10.02 lakh¹⁹.

¹⁸ Baddi: 137.999M³, Nurpur: 73.996M³ and Badroya:18.257M³.

¹⁹ Calculated at the rate of 22 *per cent per annum* on the basis of approved upset price of this timber.

The Management stated (October 2015) that the suggestions made by the audit will be considered positively in the best interest of the Company.

2.1.13.5 Non-clearance of suspense head

The cases of loss of timber due to flood, fire, *ghall*, theft, shortages in transportation *etc.* are shown under the head stock suspense pending enquiries / recoveries / settlement / write off *etc.*

Audit noticed (June 2015) that timber valuing ₹ 3.40 crore was kept under suspense head as on March 2014. This included 7,267.968 M³ timber valuing ₹ 1.02 crore in respect of three FWDs (Shimla, Sawra and Sundernagar) was pending for clearance though more than eight years had elapsed from the date of last entry in the account. The reason for non-settlement of this amount as ascertained in audit was that the Company had no details which were necessary for its settlement.

2.1.14 Supply of fuel wood to Tribal areas

2.1.14.1 Non adjustment of fuel wood charges

The Company is supplying fuelwood to the DoF since September 1992 for further distribution to tribal areas at the rates fixed by State Government from time to time. These rates of fuel wood were lesser for the local inhabitants as compared to the rates applicable for the government offices located in the tribal areas. The payment for the fuel wood so supplied is given by the DoF to the Company.

The matter regarding delay in realisation of fuel wood charges from the DoF was commented in the Audit Report (Commercial) for the year 2006-07 (Para no. 2.1.21). The COPU in its recommendations (26th Report) presented to the State Legislature in December 2014 had recommended that the amount due from the DoF should be adjusted out of royalty.

It was noticed that despite these recommendations the Company neither adjusted the payments from the royalty nor the DoF is releasing full payment to the Company. Further the DoF charges interest from the Company at the rate of 9 per cent per annum on belated payment of royalty. The details of fuel wood supplied, payment received there against and the amount outstanding

during the period from 2010-11 to 2014-15 is tabulated below:

Table -2.1.5

Sr. No.	Year	Opening Balance	Supplied during the year	Total	Amount recovered/ adjusted	Balance recoverable	Loss of interest
(₹ in crore)							
1	2010-11	4.39	5.29	9.68	6.05	3.63	0.33
2	2011-12	3.63	5.17	8.80	4.52	4.28	0.33
3	2012-13	4.28	4.87	9.15	4.33	4.82	0.39
4	2013-14	4.82	6.18	11.00	4.76	6.24	0.43
5	2014-15	6.24	5.79	12.03	0.02	12.01	0.56
	Total:						2.04

Scrutiny of details given in the table showed that recoverable amount on March 2015 has increased to ₹ 12.01 crore from ₹ 3.63 crore in 2010-11. Further, on late payment of fuel wood charges by the DoF, the Company has incurred interest loss of ₹ 2.04 crore during the above mentioned period.

Thus, non-adjustment of full amount of fuel wood from the royalty paid to the DoF despite recommendations of the COPU resulted in interest loss of ₹ 2.04 crore during the period mentioned above.

The Management stated (October 2015) that the Company is well aware of the financial burden and losses on account of fuel wood supplied to tribal areas, the matter is being pursued vigorously with the State Government as well as with Forest Department even highlighting the observations made by the Audit. The reply was not acceptable as the amount recoverable from the DoF should have been adjusted out of royalty as *per* the recommendations of the COPU.

2.1.15 Resin

Resin extraction is an important activity and for extraction of resin, the DoF hands over resin lots to the Company. The yield *per* section²⁰ is fixed in view of the past yield, health / condition of trees *etc.* The schedule for marking resin extraction is given for each lot. The extraction process involves three stages *i.e.* Enumeration, Crop Setting and Tapping. Enumeration work is to start from 15th of November and to be completed by 31st December each year. The work for Crop setting is to be taken in hand on 15th February and completed by 15th March. After crop setting, the work of resin extraction is to start from 15th March and ends on 15th October in colder and 15th November in warmer locations.

²⁰ One Section consists of 1,000 blazes.

The details of resin blazes received, royalty paid, target of yield fixed, yield obtained and shortfall in extraction for the last five years ending 31 March 2015 (except FWD, Chamba) are mentioned in **Appendix 2.1.3**.

The details given in the Appendix showed that against the targets of 2.78 lakh quintals actual extraction of resin was 2.55 lakh quintal resulting in shortfall (ranging between 6.77 *per cent* and 9.60 *per cent*) of 0.23 lakh quintals valued at ₹ 11.99²¹ crore during the last five years ending March 2015.

Audit analysis of reasons for shortfall showed that:

- (i) Extraction works in most of the areas were started in April and May instead of scheduled date of 15 March each year; thereby reducing the extraction span.
- (ii) Targets (ranging between 34 and 42 quintal *per section*) fixed and actual yield (ranging between 32 and 39 quintals) for warmer areas were lower as compared to the targets for colder locations such as Chopal and Kullu (ranging between 36 and 47 quintals) and actual yield (ranging between 42 and 49 quintals) *per section*. Thus, there is a need to investigate the reasons for less extraction in warmer areas where the target / yield should normally be on higher side as compared to the colder areas.
- (iii) Further targets for Sundernagar and Dharamshala FWDs (warmer locations) were fixed on lower side (ranging between 36.25 and 42.49 quintals *per section*) as compared to Chopal (colder location ranging between 46.73 and 48.16 quintals *per section*) during the period from 2010-11 to 2014-15. Even the reduced targets could not be met and the shortfall in comparison to the targets (reduced) there was a shortfall of 1,686.09 quintals (up to 10 *per cent*) in 119 cases relating to Sundernagar and Dharamshala FWDs. These shortages were recommended to the Director (North) for waiver, stating reasons such as excess rainfall (59 cases), short deployment of labour (3 cases), without any reason (41 cases) and late crop setting (16 cases). The Director (North) waived off this shortfall without any verification as a matter of routine, resulting in a loss of ₹ 0.97 crore during 2011 to 2015.

2.1.16 Rosin and Turpentine (R&T)

2.1.16.1 Processing of Resin

The Company had two R&T factories at Bilaspur and Nahan, which were transferred (1974) by the DoF. The installed capacity of R&T factory, Bilaspur is 74,000 quintals and R&T factory Nahan is 37,000 quintals *per annum*. The resin is processed into rosin and turpentine oil in these factories. The details of

²¹ Calculated by applying transfer price as fixed by the Management during the respective years.

resin processed and percentage of capacity utilisation of both the factories during last five years ending March 2015 is tabulated below:

Table-2.1.6

Year	R&T factory, Bilaspur			R&T factory, Nahan		
	Installed Capacity	Resin processed	Percentage Capacity Utilisation	Installed Capacity	Resin processed	Percentage Capacity Utilisation
	(in Qtls.)			(in Qtls.)		
2010-11	74,000	60,297.89	81.48	37,000	21,152.02	57.17
2011-12	74,000	28,026.73	37.87	37,000	16,407.93	44.35
2012-13	74,000	40,551.33	54.80	37,000	24,840.56	67.14
2013-14	74,000	47,157.26	63.73	37,000	20,193.10	54.58
2014-15	74,000	33,995.29	45.94	37,000	16,638.47	44.97

The capacity utilisation of both the factories remained low during these years. The reason for less capacity utilisation was continuous reduction in allotment of resin blazes (15.16 lakh blazes in 2010-11 to 13.74 lakh in 2014-15) to the Company by the DoF. The Company had not taken up the matter with the DoF for allotment of required number of blazes so as to increase the capacity utilisation.

The Managing Director during exit conference held in November 2015 attributed low utilisation of capacity to reduction in allotment of blazes by the DoF besides old machinery of these factories.

2.1.16.2 Excess Process loss

While processing Resin into Rosin certain process loss is incurred in R&T Factories. The Management has not fixed any norms for this process loss so as to control excess process losses.

Audit analysis of the R&T Factory, Bilaspur showed that the process loss during 2003-04 to 2007-08 ranged between 6.35 and 6.50 *per cent*, whereas the percentage of process loss continuously increased from 6.51 to 7.05 *per cent* during 2012-13 to 2014-15. On comparing the process loss with 6.50 *per cent* being the highest percentage achieved during 2003-04 to 2007-08 there was excess process loss of 735 quintals valued at ₹ 35.82 lakh during the last five years ends March 2015 as shown in the **Appendix 2.1.4**. The management has neither fixed the norms for process losses nor investigated the reasons for this excess loss so as to exercise control in future.

The Managing Director during exit conference held in November 2015 stated that necessary action to fixed the norms will be initiated.

2.1.16.3 Loss due to excess consumption of furnace oil

The R&T Factory, Bilaspur uses Furnace Oil (FO) while processing resin into rosin and Turpentine oil. Scrutiny of records showed that the management has not fixed any norms for consumption of FO based on past experience so as to

exercise control over its consumption. The details of furnace oil consumed during the last five years ending March 2015 are mentioned in **Appendix 2.1.5**.

The details mentioned in the Appendix showed that the consumption of FO on processing *per* quintal remained below 11 litres during the 2010-11, 2012-13 and 2013-14 but it was above 11 litres during 2011-12 (11.47 litres) and 2014-15 (12.24 litres). In absence of any norms fixed by the Company actual loss on excess consumption could not be worked out in audit. However, on comparing the lowest consumption of 10.65 litre achieved during the year 2008-09, the excess consumption of FO during the past five years ending March 2015 works out to 1,07,450 litres valued at ₹ 44.43 lakh.

The Management stated (October 2015) that if the factory runs in three shifts, then the consumption of oil get reduced, but in case the number of shifts get reduced, the consumption of furnace oil increases. During the period under audit the factory ran in single or two shift basis which resulted in excess consumption of oil. The reply was not acceptable as the Management should have fixed the norms for consumption of oil considering the number of shifts so as to exercise control over the consumption of oil.

2.1.17 Diversification of activities

Company had also diversified its activities into Eco Tourism and Wood based industry. Audit scrutiny of these activities showed that the Company had incurred losses on running these activities since inception as discussed below:

2.1.17.1 Eco-Tourism Nature Camp, Narkanda

Keeping in view the tremendous scope of eco-tourism in the State, the Company had setup a nature camp (Six Log Huts and 10 tents) at Dhomri, Narkanda during 2009-10 at a total cost of ₹ 47.63 lakh.

Audit scrutiny showed that the Company is incurring losses every year on running this nature camp. The loss of ₹ 15.03 lakh in 2010-11 increased to ₹ 32.68 lakh in 2013-14 and reduced to ₹ 27.21 lakh during 2014-15. Against total expenditure of ₹ 1.79 crore (includes expenditure of ₹ 0.91 crore on pay and allowances), the Company could earn an income of ₹ 0.59 crore only during the period from 2010-11 to 2014-15 as detailed below:

Table – 2.1.7

Year	Total Expenditure	Total Income	Loss	Number of guests stayed	Percentage of occupancy
2010-11	23.17	8.14	15.03	1,913	14.46
2011-12	34.38	12.08	22.30	1,816	14.06
2012-13	34.27	11.78	22.49	1,559	14.75
2013-14	45.76	13.08	32.68	1,605	13.17
2014-15	41.46	14.25	27.21	2,211	19.38
Total	179.04	59.33	119.71	9,104	

The above table showed that there was total loss of ₹ 1.20 crore during the period from 2010-11 to 2014-15. The reason for losses were posting of one Area Manager, two Forest Guards and three chowkidars against the sanctioned strength of two chowkidars, two part time cleaner & washer boys in the camp. Further, lack of proper publicity also contributed to low occupancy which ranged between 13.17 and 19.38 during the period *ibid*.

The Management stated (October 2015) that the proposal to hand over the unit to DoF was under active consideration to avoid further losses.

2.1.17.2 Wood Based Industry, Shamshi

The Company took over possession of Joinery Unit, Shamshi from the DoF in June 2010 and started (September 2010) the joinery work (floor tiles / panelling and joinery articles *etc.*). The joinery work was allotted to a contractor through tender under which the unit has to provide facilities to local people of surrounding areas at reasonable rates.

The working results of the industry during the period from 2010-11 to 2014-15 are tabulated below:

Table-2.1.8

Year	Direct ²² Cost	Total Expenditure	Total Income	Loss
	(₹ in lakh)			
2010-11	19.76	25.07	14.51	10.56
2011-12	35.94	46.41	33.46	12.95
2012-13	27.37	37.87	30.12	7.75
2013-14	24.81	35.81	22.32	13.49
2014-15	14.80	26.80	19.86	6.94
Total	122.68	171.96	120.27	51.69

The above table showed that the unit was incurring losses since inception and during the past five years ending March 2015 the unit incurred total loss of ₹ 51.69 lakh. The main reasons for losses were huge wastage of raw material which ranged between 36 *per cent* and 60 *per cent*. The Management has not fixed any norms for wastage of raw material and due to high percentage of wastage, the unit was not even able to meet its direct cost.

2.1.18 Arbitration cases

In terms of Clause 27 of the standard agreement deed executed with the contractors, disputes shall be referred to the MD for appointment of Arbitrator. In all cases, the Arbitrators were officers of the Company. Audit scrutiny

²² Direct cost includes the cost of raw material, labour, electricity and rent charges.

showed abnormal delays in disposal of arbitration cases and non-recovery of awarded amount as discussed below:

2.1.18.1 Delay in disposal of Arbitration cases

Out of total pending 82 cases involving recovery of ₹ 4.85 crore, only 5 cases were decided (2011-12:1 and 2014-15:4) in favour of the Company and the amount of ₹ 3.31 lakh involved in these cases had been recovered from the concerned contractors. Remaining 77 cases involving ₹ 4.82 crore were pending for decision for three months to 13 years. Moreover, the Company has not framed any guidelines for distribution of cases among the Arbitrators (*i.e.* Managing Director or Executive Director or Directors). In respect of seven cases under FWD, Dharamshala involving recovery of ₹ 11.23 lakh the arbitrators were appointed (March 2015) by the Company after a delay²³ of 487 days and 851 days after completion of resin extraction works by the contractors.

Failure to decide the cases in a time bound manner was a matter of concern especially when the officers of the Company were arbitrators in all the cases. Out of these one case involving recovery of ₹ 1.18 crore was pending before the MD since September 2006.

Thus, failure in deciding arbitration cases in a time bound manner resulted in locking up of Company's fund amounting to ₹ 4.82 crore.

The Management attributed (October 2015) the delay to non-submission of claims / counter claims by the parties in time, non-appearance of witnesses / advocates on scheduled dates. The reply was not acceptable as the delay was avoidable by adopting strict time schedule by the arbitrators who were the officers of the Company so as to safeguard own financial interests.

2.1.18.2 Non-recovery of awarded amount

In two cases in FWD, Shimla involving recovery of ₹ 6.98 lakh on account of less extraction of resin, the contractors filed civil suits against the decision of the Arbitrator in May 2003 and July 2003. The concerned courts in one case dismissed the case of the contractor in December 2013 and in another case the matter was referred back to the arbitrator in September 2009 to reconsider after affording opportunity of being heard to the party. The said case was again decided by the arbitrator in favour of the company in November 2014. After this no efforts have been made by the Company for recovery of ₹ 6.98 lakh (May 2015).

2.1.19 Manpower deployment

2.1.19.1 Payment of salary and wages to officials not working with the Company

The COPU in its 26th Report presented before the State Legislature on 08 December 2014 (Para 2.1.32) of the Report of the Comptroller and Auditor General of India (Commercial) for the year 2006-07 has recommended that the

²³ Delay of 487 days in three cases and 851 days in four cases.

staff of the Company cannot be posted on permanent basis with the State Government, however, as and when a specific demand of staff is received, the Company can provide them but not on permanent basis.

It was noticed that the Company had not complied with these recommendations and seven employees of the Company (two PAs, one Sr. Stenographer, one Junior Assistant, two peons, and one *Chowkidar*) are still working with H.P. Secretariat for the last nine months to more than 16 years and the Company was regularly reimbursing their pay and allowances from the date of their posting. This deployment has been made despite shortages in the categories of staff so deputed.

The Company did not initiate any remedial action to withdraw these employees as *per* the recommendations *ibid* and has paid wages amounting to ₹ 1.73 crore during August 1998 to March 2015.

The Management stated (October 2015) that the Company can depute the officials in the office of the Hon'ble Forest Minister, Additional Chief Secretary (Forests), Chief Parliamentary Secretary (Forests) who are the Directors and overall deciding authorities of the Company. The reply was not acceptable as the deployment were being made in contraventions to the recommendations of the COPU *ibid*.

2.1.20 Internal control

Internal control is an important management tool and comprises all the methods and procedures adopted by the management of an entity to assist in achieving management's objective of ensuring orderly and efficient conduct of its business, including adherence to policies, prevention and detection of fraud and error, the accuracy and completeness of the accounting records and the timely preparation of reliable financial information. A well-defined monitoring mechanism and Management Information System (MIS), reflect the existence of systems to make available timely, adequate and accurate information to the relevant authority in the organisation.

Audit noticed that internal control mechanism was weak and was required to be strengthened as would be evident from the following instances:

2.1.20.1 Management Information System

With a view to strengthen internal control system, the Company decided (June 2010) to install Tally software in all its units. This work was awarded to M/s Him Productivity Institute of Education (HPIE) in September 2010 for ₹ 55.39 lakh with completion period of six months from the date of award. The work was to be completed in two phases. In the first phase the firm has to provide and install software at 25 locations and to provide training to two persons at each location for 18 days besides carrying out data entry for six months at five locations. Thereafter, in second phase the firm has to customize the modules, synchronize and integrate the data at head office and unit level.

It was noticed that the firm completed first phase and also imparted training to two persons each at 25 locations after incurring an expenditure of ₹ 23.41 lakh but failed to complete the IInd phase. The Company instead of rescinding the agreement had allowed the staff of the firm to continue to carry out data entry work up to September 2012, though the scheduled time of six months expired in March 2011. During the period from April 2011 to September 2012 the Company paid ₹ 55.47 lakh to the firm for data entry work which could have been got done from those 50 employees to whom 18 days training was provided. Further, due to non-completion of 2nd phase the very purpose of developing / training the staff after incurring an expenditure of ₹ 78.88 lakh remained unachieved.

2.1.20.2 Non-updating of Manuals

The present manual *viz.* Procedure and instructions for the timber extraction work and working of HSDs was prepared long back in 1988, manual of resin tapping and accounting system manual prepared in 2003 have not been updated by incorporating all important instructions issued from time to time.

2.1.20.3 Deficiency in maintenance of cash books

The procedure laid down in the Himachal Pradesh General Financial Rules regarding maintenance of cash book was not being followed in many units of the Company.

In R&T Factory, Bilaspur one official was entrusted duties of both cashier and accountant. The Drawing and Disbursing Officer also failed to authenticate entries made by him in the cash book on daily basis as *per* the requirement. Due to non-following the prescribed guidelines in this regard, Audit detected misappropriation of cash of ₹ 1.60 lakh²⁴ by cashier who was performing the duties of cashier and accountant. On this being pointed out, the concerned employee deposited the amount on 25 May 2015 after keeping the amount for about two years.

Further, the same employee also allowed various advances, released payments to employees of the factory / private parties of ₹ 1.92 lakh without sanctions / supporting documents during the years 2013-14 and 2014-15. Though the *ex post facto* sanctions for the same were obtained after issue of audit comment but in absences of any records, the recoveries of these advances and legitimacy of payments could not be verified.

2.1.20.4 Internal Audit

The Company did not possess separate Internal Audit wing. Internal Audit was being conducted by the firms of Chartered Accountants on annual basis. The Company had not prepared any internal audit manual / guidelines. The reports

²⁴ ₹ 20,000 misappropriated on 31.05.2013; ₹ 10,000 on 31.07.2013 and ₹ 1,30,000 on 31.08.2013.

furnished by the Internal Auditors did not envisage the scope of assignments besides the internal audit reports were not being put up to the BoD.

2.1.20.5 Absence of MIS Evaluation Mechanism

Evaluation Mechanism of different activities at different stages of operation was not in place in the Company as would be evident from the following:

- There was no system of comparing the actual financial figures with the budget estimates of the Company, unit wise, activity wise;
- Monthly progress data compiled on the basis of information received from the units were being put up to the BoD from which it was not possible to evaluate lot wise performance.
- There was no system of grading the timber in the field in the manner in which it was being sold in the sale depots.
- The Company has not created accounts cadre so as to post qualified accountant in each unit / office to have a better financial control. This has also delayed the preparation of annual accounts. Consequently, annual accounts of the Company remained in arrears for two to three years for the past many years.

In absence of effective evaluation mechanism, the Management was not in a position to assess the impact of its initiatives on the working of the Company for taking necessary remedial actions.

2.1.21 Corporate Governance

Corporate Governance is a system by which Companies are directed and controlled by the management in the best interest of the shareholders and other stake holders ensuring greater transparency, better and timely financial reporting. As on 31st March 2015, the BODs had 15 Directors – 7 Government Directors and 8 Non-government Directors including Chairman and Vice-Chairman of the Company.

In this regard, the following deficiencies were noticed:

- Nominee of the Finance Department did not attend 15 meetings out of total 22 meetings held during 2011-15.
- The agenda papers, attendance register of members and minutes book in respect of sub-committees constituted for (i) Budget Proposal (ii) Service Committee and (iii) Pricing Committee are not prepared and maintained for permanent record as *per* requirement of Company's Amendment Act, 2013.
- As the Managing Director is a nominee of the BOD who manages the Company and executes the decisions of the BOD as such the tenure should be for a reasonable period. During 2011-15, six Managing Directors were posted in the Company having duration of six months to one and a half year.

Conclusions and Recommendations

The Company is the only agency which has been authorised to extract and sale of forest produce in the State. Despite enjoying monopoly in extraction and sale of timber, the Company was incurring huge financial losses year after year. The main reasons for losses as analysed in audit were delay in receipt of marking lists, taking over of lots and delay in extraction and transportation of timbers which increases cost of extraction due to non-completion of works in time and payment of extension fee besides deterioration of quality of timber.

The Company should ensure receipt of marking lists from the DoF as per prescribed schedule and close monitoring on contractors with a view to complete extraction and transportation work within lease period.

Non-payment of royalty as per the prescribed schedule resulted avoidable payment of interest for delay.

The Company should ensure payment of royalty as per the prescribed schedule so as to avoid payment of interest for delay.

Defective classification system of timber before auction and non-getting of competitive rates during auction due to limited publicity was the major contributors of losses.

The Company may review system of classification of timber besides adoption of e auction to attract more bidders to rule out any chances of cartel formation during auction of timber at its various sale depots.

The capacity utilisation of its both R&T factories were very low. Further there were no norms fixed for process losses and utilisation of furnace oil by these two factories during processing of resin in to rosin.

The Company should make efforts to improve capacity utilisation of R&T factories and to fix norms for the process losses and consumption of furnace oil.

The diversification of its activities in to wood based industry and eco-tourism also proved loss making propositions to the Company since inception.

The Company may analyse the reasons for continuous losses being incurred by these units so as to initiate appropriate action to improve their performance.

Management Information System and Internal control mechanism were also found deficient.

The Company should strengthen MIS and internal control mechanism.

The above points were reported to the Government in August 2015; the reply was awaited (December 2015).

2.2 IT Audit of HT / LT Billing System of Himachal Pradesh State Electricity Board Limited

Executive Summary

The IT Package awarded (May 2006) under Accelerated Power Development Reform Programme (APDRP) with 90 *per cent* grant on turnkey basis was to be completed by April 2008, however, the same was still under implementation (March 2015). Meanwhile the APDRP was closed in March 2009 and before closure, the Company could spend only ₹ 3.22 crore and was deprived from availing GoI grant amounting to ₹ 4.71 crore. Further, for delay in completion the firm was liable to pay liquidated damages of ₹ 1.32 crore, but the Company recovered only ₹ 0.55 crore resulting in short-recovery of ₹ 0.77 crore.

{Paragraphs 2.2.5 (i) and 2.2.5 (iv)}

Master data of consumers was incorrectly fed in the billing software resulting in inadmissible allowance of Higher Voltage Supply Rebate (HVSR) amounting to ₹ 40.63 lakh in 45 cases.

{Paragraph 2.2.5 (iii)}

Deficiencies in mapping of business rules resulted in revenue loss of ₹ 5.26 crore due to non-recovery, short recovery and incorrect assessment of various energy charges from consumers.

{Paragraphs 2.2.6 (i), 2.2.6 (iii) and 2.2.6 (iv)}

The delay in implementation of application software in all the Electrical Sub-divisions also resulted in revenue loss of ₹ 2.48 crore on account of non-recovery / short recovery of Late Payment Surcharge, Low Voltage Supply Surcharge and Demand charges from consumers due to non-detection / calculation errors through manual process.

{Paragraphs 2.2.10 (ii) (a to c)}

2.2.1 Introduction

For computerisation of High Tension (HT) / Low Tension (LT) consumers billing, the Himachal Pradesh State Electricity Board Limited (Company) spent ₹ 1.26 crore under Phase I and II of the "Computer Master Plan" completed prior to 2005. The Information Technology (IT) audit report of the system was included in C&AG's report for the year ended 31 March 2006 (refer Para 3.3). Subsequently, to ensure accurate assessment of energy bills and commercial losses, improve revenue realisation, to improve the customer relationship the Company decided to develop a new IT application to computerise activities like billing, cash collection, customer complaint handling, energy accounting, load flow and network analysis under the Accelerated Power Development Reform

Programme (APDRP). The Company awarded (May 2006) a new IT Package for “Computerisation of Billing and Management Information System (MIS)” with complete system integration and Data Centre at Shimla for ₹ 23.22 crore to M/s HCL Info Systems Limited, Noida (HCL) on turnkey basis. The package was further revised (December 2009) to ₹ 30.51 crore due to changes in the scope of work. As *per* award the whole package was to be completed by April 2008, however, the same was still under implementation as on March 2015.

2.2.2 Salient features of the billing software

The Billing Software was developed by HCL, on Oracle10g at backend and ELP soft as front end tool under multi user requirement. The data entry and printing of bills were being done by field units while the preparation of bills and online consumers' complaints were being handled by HCL at Data Centre of the Company at Shimla.

The system has been devised for preparation of monthly bills of consumers, besides accounting of revenue and issue of receipts to them. Data input is done manually by the designated staff of the concerned Electrical Sub-Division (ESD).

2.2.3 Scope of audit

Audit of HT / LT billing software covers System Development, Implementation and Application Controls of the software and was conducted by examining the data / records pertaining to the period from April 2010 to March 2015 of 21 ESDs out of total 124 ESDs of the Company, three²⁵ Central Billing Cells out of 12 and IT Cell at corporate office selected randomly. The audit was carried out between May-June 2015.

2.2.4 Audit findings

Audit scrutiny of implementation of IT package and working of billing software showed the following:

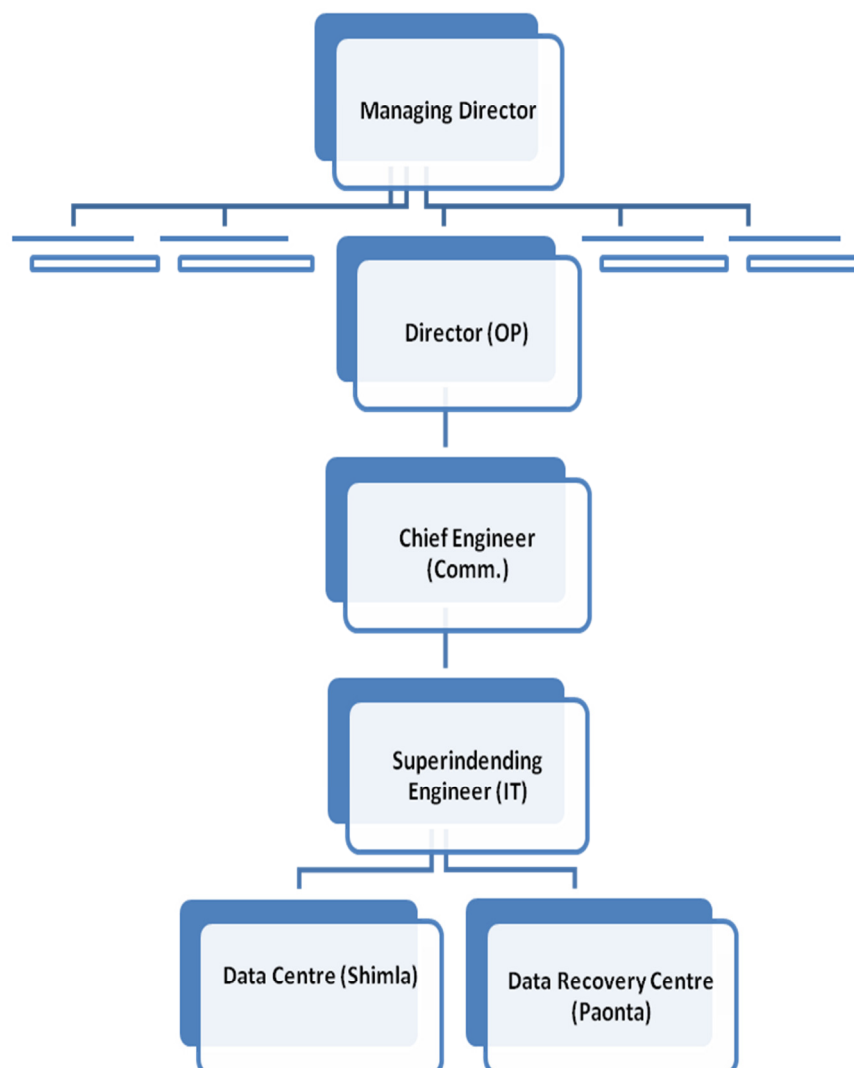
2.2.5 System acquisition and implementation

As *per* award the computerisation programme was to be implemented in only urban divisions of all the circles.

The Superintending Engineer (IT) as head of the IT cell was responsible for implementing the computerisation. The hierarchy for decision making in this regard in the company was as shown below:

²⁵ Nahan, Solan and Kullu.

Fig 2.2.1 Hierarchy for decision making



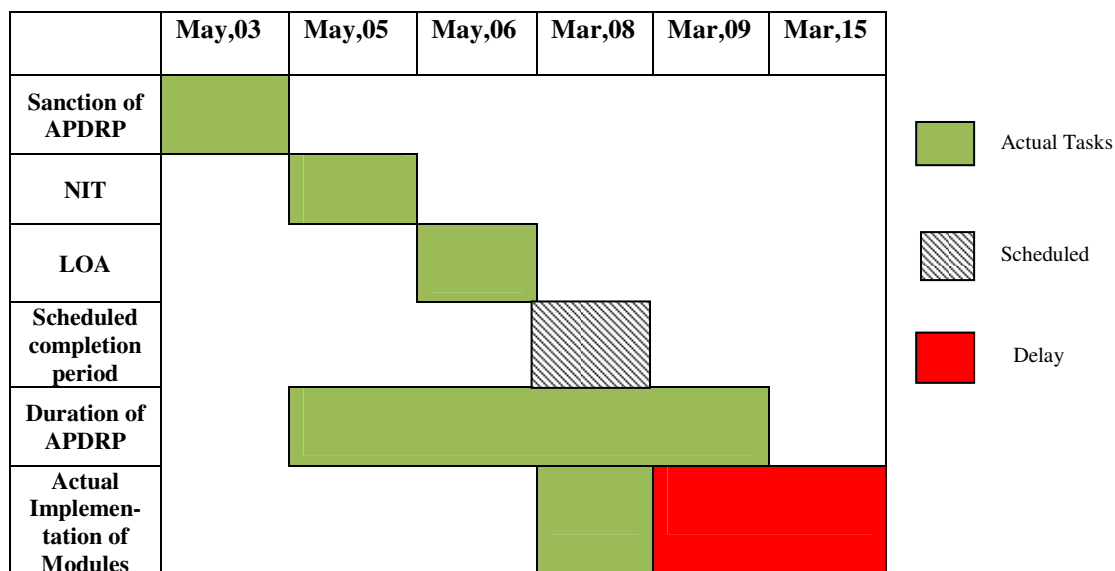
No dedicated project management team with involvement of various user groups was created for implementation of the new application.

(i) Delay in implementation

The Computer Master Plan under Accelerated Power Development Reforms Project (APDRP) was sanctioned by Government of India during 2002 and 2003 for all 12 operation circles in the State. In the sanctioned scheme there was provision of ₹ 8.45 crore with 90 per cent grant for computerised billing.

Audit noticed (May & June 2015) inadequacies in project management leading to delays in several segments of implementation, right from the stage of initiation of tenders as shown below:

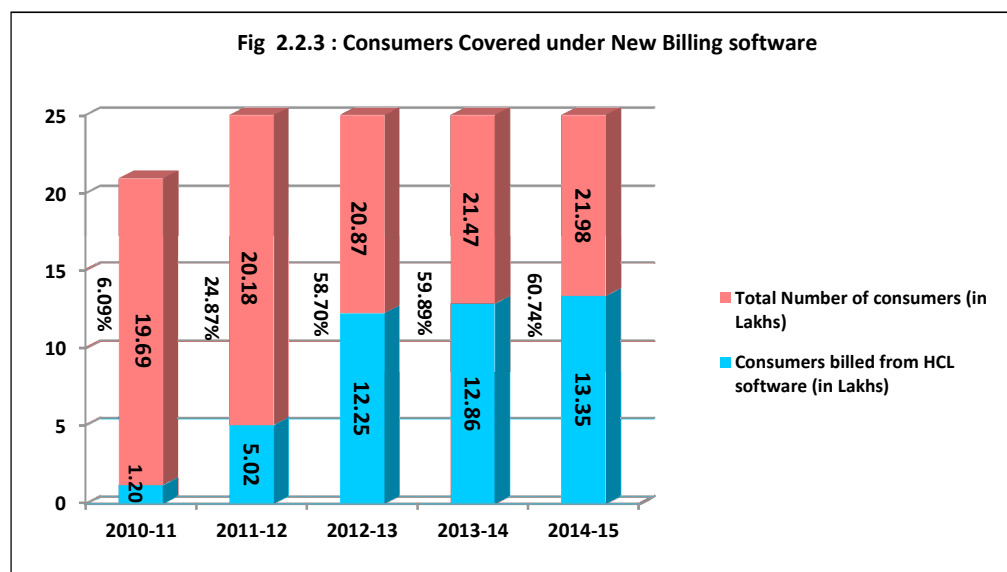
Fig 2.2.2 Progress of IT Package Implementation



The notice inviting tender (NIT) for IT package under the scheme was issued by the Company during May 2005 after a delay of 24 months from the date of sanction. The Letter of Award was issued during May 2006 to HCL for ₹ 23.22 crore after a delay of 12 months from opening of the bids. The APDRP scheme was closed in March 2009 and before closure, the Company could spend only ₹ 3.22 crore due to non-completion of work by HCL. As there was 90 per cent grant under APDRP and due to non-completion of works in time, the Company failed to avail the grant amounting to ₹ 4.71 crore and had to meet the remaining expenditure from its own resources.

The package was further revised (December 2009) to ₹ 30.51 crore due to changes in the scope of work. The whole package was to be completed in two parts as per contract award i.e. 1st part for Shimla Circle by 28 April 2007 and 2nd part for remaining 11 circles after 12 months of completion of Part-I. The new application was launched in August 2008 in 10 Electrical Sub-Divisions (ESDs) and gradually extended to 124 ESDs up to March 2015 against the total provision of 132 ESDs under the package. The project was still (March 2015) under implementation and electricity bills were being prepared partly on this software, partly on the old software and partly manually. At the time of award, the whole package was planned to be completed within the operation period of APDRP i.e. by April 2008. Audit noticed (May 2015) that HCL had completed Part-I (Shimla Circle) of the package in August 2009 after a delay of 28 months and part-II of the contract was to be completed by August 2010 (12 months after completion of Part-I) and the same was still incomplete (March 2015). So

far only 60 per cent of the consumers could be covered under the scheme as evident from the table below:



The main reasons for delay in implementation of the package were inadequate monitoring in the absence of any dedicated project management group, delay in supply of hardware and connectivity problem in few ESDs. During the period of delay bills of few categories of consumers were being prepared from the old software and of some categories were being prepared manually. Due to continuation of old software and manual preparation of bills, accuracy in preparation of bills and efficiency in collection of revenue suffered resulting in short recovery of revenue as discussed in paragraph 2.2.6 *infra*.

(ii) Poor documentation and internal control: Overpayment

Part-I of the package (revised) was to be completed within ₹ 7.55 crore (including taxes and duties). Audit noticed (June 2015) that against this, HCL had submitted invoices for ₹ 8.84 crore and the Company released ₹ 8.43 crore resulting in excess payment of ₹ 0.88 crore. The excess payment was due to lack of internal control as neither the SE (IT) nor accounts wing of the Company had maintained proper bill register / ledger to keep control over the payments for the package.

(iii) Inadequate control on master data entry: Loss of revenue

As per chapter 1 (J) of schedule of tariff applicable from time to time, consumers availing electricity supply at a voltage higher than the “Standard Supply Voltage” (SSV) as specified under the relevant category shall be given a ‘Higher Voltage Supply Rebate (HVSR)’ at the specified rates only on the billed amount of energy charges.

Correct implementation of this rule required correct feeding of master data relating to the consumers. In few cases master data of consumers was

incorrectly fed in the billing software leading to risk of revenue loss. Audit found 45 cases where this risk materialised in four²⁶ ESDs resulting in inadmissible allowance of HVSR amounting to ₹ 40.63 lakh for the period between August 2013 to June 2014 to those consumers who were availing supply at standard voltage of 11 KV for which no HVSR was applicable. Further, in five other cases under above three ESDs availing supply at 33 KV against the standard voltage of 11KV were allowed HVSR ranging between four to eight *per cent* against three *per cent* admissible which resulted in payment of extra rebate of ₹ 4.05 lakh. This resulted in non-recovery of ₹ 44.68 lakh from the consumers *ibid*.

(iv) Recovery of Penalty from vendor

As *per* terms of the award the vendor (M/s HCL) was also liable to pay liquidated damages (LD) for delay amounting to ₹ 37.75 lakh²⁷ at the rate of five *per cent* for part-I, but the Company had recovered only ₹ 33.21 lakh from HCL at the rate ranging between three *per cent* and five *per cent*. Similarly, LD amounting ₹ 21.36 lakh only was recovered from the bills of HCL in respect of part-II against the recoverable amount of ₹ 94.25 lakh²⁸. Thus, there was short-recovery of LD of ₹ 77.43 lakh from HCL till March 2015.

2.2.6 Deficient mapping of business rules

As the billing system is the core application for revenue realisation for the Company, it is imperative that the business rules are mapped completely. Audit observed deficiencies in mapping of business rules leading to business risks as discussed in following paragraphs:

(i) Fixed demand charges

Clause 3.9 of Electricity Supply Code (May 2009) issued by the Himachal Pradesh Electricity Regulatory Commission stipulates that where the licensee has completed the work required for supply of electricity to the HT / Extra High Tension (EHT) applicant but the applicant is not ready or delays in receiving the supply or does not avail the full contract demand, the licensee shall, after a notice of 60 days, charge on *pro-rata* basis, fixed demand charges on the sanctioned contract demand as *per* the relevant tariff order. Rules in the billing software of the HCL were not mapped to link the completion of work for release of supply to that consumer so as to issue required 60 days' notice immediately after completion of work. In absence of mapping of rules in this regard in the application, compliance of this rule was being ensured through manual control by issuing notices to such consumers manually after reviewing

²⁶ ESDs :Baddi, Barotiwala, Manali-II and Paonta.

²⁷ At the rate of 5 *per cent* of the total value of the contract of ₹ 7.55 crore as *per* Special Conditions of the Contract (No.9.1 & 9.2).

²⁸ At the rate of 5 *per cent* of the total value of the contract of ₹ 18.85 crore as *per* Special Conditions of the Contract (No.9.1 & 9.2).

the load sanctioned cases and progress of the related works. The manual control was found to be weak resulting in non-recovery of ₹ 26.53 lakh for the period from August 2010 to March 2014 in three such cases noticed (March 2014) during audit under two ESDs Baddi and Manali-II. The possibilities of non-recovery of demand charges in ESDs not covered in audit resulting in similar loss cannot be ruled out.

(ii) *Treatment of Defective Energy Meters*

As *per* instruction No. 4.4.8 (ii) of the Supply Code, 2009, when the energy meter of the consumer becomes defective the same should be replaced immediately. Further, the consumers' account should be overhauled for the period during which the meter remained defective and be charged on the basis of average monthly consumption recorded through the correct energy meter installed.

Audit noticed that this business rule was not mapped correctly in the software and in case of defective meters the system calculates the average consumption by applying LDHF²⁹ formula instead of calculating the average on the basis of energy recorded during the period for which correct meter remained installed.

(iii) *Application of wrong multiplying factor*

As *per* prevalent practice in case the Current Transformer / Potential Transformer and energy meter installed at the premises of the consumer are of different ratio, for arriving at correct energy consumption of the consumer, energy recorded through meter is multiplied by a certain Multiplying Factor (MF).

It was imperative that the new application was to be designed in a manner that the MF would be applied automatically on the basis of parameter recorded in MRI³⁰. Audit noticed that such provision was not designed into the application and MFs were being worked out separately & entered in the master data. This carried the risk of errors & miscalculation of energy consumed. Audit found, in four³¹ ESDs, multiplying factors for ten consumers were incorrectly worked out which resulted in short recovery of ₹ 3.04 crore. The short-recovery was due to non-provisions for automatic calculation of multiplying factor directly on the basis of parameter recorded in MRI.

(iv) *Non assessment of enhanced energy charges*

The Company simplified (March 2012) the procedure for assessing the unauthorised use of power under Section 126 of the Electricity Act, 2003. The procedure prescribes for ignoring up to 20 *per cent* violation over and above the

²⁹ Load, Days in a month, Hours *per* day & Demand factor.

³⁰ Meter Reading Instrument.

³¹ ESDs: Kala Amb, Paonta, Baddi and Manali-II.

sanctioned load and thereafter the consumer was to be assessed under Section 126 of the Electricity Act, 2003.

Audit noticed (June 2015) that the billing software being used by the Company had no provision for automatic assessment of such defaulting consumers under Section 126 of the Act *ibid*. In absence of the provision in the application the assessment is to be done manually leaving the risk of errors and manual discretion. An illustration of the risk being substantiated is included in the text box below:

Illustration: A consumer having account no. BHT-61 (connected load of 459.25 KW) under ESD Baddi had availed load of 628.36 KW (683 KVA with average Power Factor of 0.92) during July 2013. Load availed by the consumer was in excess of 20 *per cent* of connected load. Thus, the consumer was required to be charged energy charges on double rates as *per* above provisions. However, due to non-provision for the same in the new application enhanced energy charges of ₹ 38.30 lakh could not be levied / recovered as the compensatory manual control was less stringent.

Similar errors were noticed in 20 cases resulting in non-assessment / recovery of ₹ 1.95 crore in ten³² ESDs on account of enhanced energy charges from the defaulting consumers for the period from March 2011 to October 2014.

(v) **Clubbing of load**

As *per* sales circular No 5/2001 of the Company regarding clubbing of loads, in case of any industrial consumer running more than one connection in the same premises, the loads of all such connections should be clubbed against one account and the remaining accounts / meters should be permanently disconnected. This provision had not been mapped correctly in the billing software and in case of clubbing of consumers' connections, system generates Meter Change Order against the connection for which clubbing of load is registered and for remaining connections the system does not accept the PDCO³³ request which has to be registered manually. Therefore in absence of the provisions in the application, the officials were resorting to manual methods which makes the process time consuming and leaving the risk of manual discretion.

³² ESDs :Kala Amb, Paonta, Barotiwala, Manali-II, Baddi, Mandi-II, Manali-I, Dulehar, Reckong Peo, and Sataun.

³³ Permanent Disconnection Order.

(vi) **Security deposit**

As per orders of the State Regulatory Commission security deposits of the consumers should be reviewed annually on the basis of average energy bills of the consumer and should be revised accordingly so as to safe guard the one month's energy bill of that consumer.

Audit noticed that the shortfall in security deposit of the consumers was being calculated manually as there were no provisions for the same in the software. Therefore there was scope of manual errors. The financial implication in three test checked ESDs³⁴ worked out to ₹ 1.13 crore.

(vii) **Non linking of master data**

For installation of energy meters in the premises of new consumer erection charges are recovered from the consumer at different rates based upon the category of the consumer. These rates for different categories of consumers appear in SDO modules. Audit noticed that access to this master data table had not been linked to the actual operational module (Junior Engineer module) that could have simplified the process for applying correct rates to different categories of consumers while preparing service estimates for new connections. This carried the risk of dependence on manual processes.

2.2.7 Inadequacies in application functionality

Audit noted the following design deficiencies in the application for supporting some business functional requirements:

(i) **Tariff data updation : short recovery of peak load demand charges**

Tariff master table should have been so designed in the billing application that whenever there is any change in the tariff rates the same may be made applicable from the date of its revision by updating the master data. Audit noticed that in case of Peak Load Demand Violation Charges (PLDVC) the issue was hard coded in the application design resulting in dependence on the developer for revision of rates, risk of delay in revision of rates and consequential revenue loss.

Audit noted that the rates of PLDVC were revised from ₹ 300 per KVA to ₹ 600 per KVA per month as per schedule applicable from 1st April 2013. However, it was found (February 2014) that the revision could not be done due to the fact that this variable was hard coded in the application design and the change could not be implemented appropriately. Thus, due to non-updation of the master data, PLDVC in respect of Large Supply Consumers was recovered at the old rates. This had resulted in short recovery of PLDVC amounting to

³⁴ ESDs : Manali-1, Kangra and Mandi II.

₹ 2.61 crore from 442 consumers in five³⁵ ESDs during the period from April 2011 to August 2014.

(ii) Revenue received from non-consumers

Legal and Vigilance Modules of the application have provision for adjustment of assessed amount for theft of power by consumers only. In case of any recovery / adjustment for theft by non-consumer there was no provision for generation of receipt from the designed application.

Similarly in case of permanent disconnection for default in payment of dues and the payment received from a person after PDCO³⁶ no cash receipt can be generated and the receipt has to be issued manually, due to the fact that after PDCO system application does not recognise the person as consumer.

Therefore, due to above the revenue assessment does not tally with the monthly revenue receipt. Provision for issue of receipt even to the non-consumer should also have been made in the application.

(iii) In certain cases one domestic consumer is linked to multiple energy meters in his / her premises and in such cases when consumer makes payment of more than one bill through single cheque, pay-in-slip generated shows the same cheque number against all the bills thereby making it difficult for the bank as well as to the Company to tally the actual number of cheques and entries in the pay-in-slip. The pay-in-slip indicates the name of the bank against the column for depositors and there was space only to insert bank account number up to 14 digits, though certain banks have account numbers with more than 14 digits.

(iv) As per Instruction No. 7.1.2 of the Supply Code 2009, if the consumer fails to clear the amount of energy bill within 15 days after due date mentioned in the bill, connection of the consumer should be temporarily disconnected. Thereafter, if the default continues for another six months the connection may be disconnected permanently. Audit noticed that the procedure for issue of TDCO³⁷ and PDCO was very lengthy which requires seven steps and number of entries to be fed in the system before generating the required orders. Audit noted that the process could have been automated by linking the due date of energy bill and receipt of actual payment there against available in the other modules of the application.

2.2.8 IT Security

IT Audit scrutiny (May-June 2015) showed that the system installed in the 21 ESDs test checked was not secured properly and was vulnerable to

³⁵ ESDs :Paonta, Baddi, Barotiwala, Mandi-II and Sataun.

³⁶ Permanent Disconnection Order.

³⁷ Temporary Disconnection Order.

unauthorised use due to inadequate access controls. Some instances are provided below:

- (i) The access to different user privileges was possible from any nodes and user authentication was not linked to assigned work terminals. Thus, new connections can be entered in the system through ID of the Assistant Executive Engineer (AEE) by passing all the required steps *i.e.* Junior Engineer and Commercial modules. Even sundry credits can be posted in the account of consumers by any employee through the access credentials of AEE. In one case under ESD-II, Nahan ₹ 3.70 lakh was embezzled by using the ID & password of AEE, which indicates the practice of sharing of credentials.
- (ii) Audit noticed that there is no procedure of review of user logs and sessions. Further, on transfer of employee, there is no procedure to block his / her ID allocated to him / her in the previous office so as to prevent him from accessing the data.
- (iii) MRI data downloaded from the meters has to be converted into text file at ESD / CBC before transmitting the same to Data Centre (DC), Shimla which includes operator's intervention. This process of manual intervention is not in compliance with the APDRP guidelines on use of MRI instruments and upload of data to the server of the billing application. The conversion of data into text file at the CBC / ESD carries the risk of data manipulation prior to generation of energy bills.

2.2.9 Business Continuity Planning

The billing system is a critical system as it has a direct impact on the revenue realisation of the Company. In case of any untoward incident or disaster, the consumers' bills are not generated in time or done incorrectly, earnings of the Company may be substantially affected and also can cause lot of inconvenience to the consumers. It is, therefore, essential for the entity to have a well-documented disaster recovery and business continuity plan to be implemented such that information processing capability can be resumed at the earliest in case of any disaster.

It was noticed that the Company had established its Data Centre (DC) at Shimla and Data Recovery Centre (DRC) at Paonta. Both these centres are located in the same seismic zone (Zone IV) as *per* Global Seismic Hazard Assessment Programme map for Himachal Pradesh. Thus, by establishing both centres at the same seismic zone, the business risk of severe disruption is not appropriately mitigated, even after incurring an expenditure of ₹ 10.36 crore on establishment of the DRC.

In addition, it was also noticed that as *per* specifications / requirements supplied to the contractor, the software should maintain Recovery Point Objective

(RPO)³⁸ at less than 15 minutes for all application and data at primary site and Recovery Time Objective (RTO)³⁹ was between six and 36 hours for different applications such as metering, billing and collection, new connection, disconnection, meter data acquisition *etc.*

Audit noticed (April 2014) that as *per* inspection carried out (4 to 7 February 2014) by the inspection committee of the Company, RPO and RTO could not be verified as the contractor had not submitted the business continuity plan and drill in this regard had not been conducted till June 2015.

In reply the Company stated (May 2014) that the Power Finance Corporation had given consent (December 2009) for establishment of DC and DRC in the same seismic zone. The reply was not acceptable as the consent was applicable for states having only one seismic zone, whereas Himachal Pradesh falls under two seismic zones and the centres could have been established in separate zones.

2.2.10 Miscellaneous

(i) *Non recovery of demand charges*

In the billing software there was programming error due to which the demand charges were not computed correctly as *per* the tariff resulting in short recovery of demand charges amounting to ₹ 75.29 lakh up to April 2010 (Para 2.14.8 of the C&AG's Report for the year ended March 2011). Though this error in programming was subsequently corrected, the recoveries had not been made from the consumers so far (June 2015). Thus, non-recovery of demand charges of ₹ 75.29 lakh from the consumers had further resulted in interest loss of ₹ 38.90 lakh⁴⁰ up to June 2015.

(ii) *Consequences of delay in implementation*

The software was to be implemented to ensure accurate assessment of energy bills, to improve revenue realisation, but due to delay in implementation the company had to continue with the old system of preparing bills through deficient old billing software involving risk of loss of revenue. Test check of records relating to 7 ESDs showed that there was loss of revenue as discussed below:

(a) *Late Payment Surcharge*

If the consumer fails to clear his bill by due date as indicated on the energy bills, he was liable to pay surcharge at the rate of 2 *per cent per* month or part thereof, on the outstanding amount excluding electricity duty / taxes. Further, the payment through cheque was required to be made two days prior to the due date for payment by cash.

³⁸ Maximum amount of time lag between Primary and Secondary storages.

³⁹ Maximum elapsed time allowed to complete recovery of application processing at DR site.

⁴⁰ Calculated at the rate of 10 *per cent per annum* for the period from May 2010 to June 2015.

Audit noticed (June 2015) that in respect of industrial consumers who had deposited their energy bills through cheques after due date of payment by cheque, the late payment surcharge amounting to ₹ 58.62 lakh could not be recovered from 108 consumers for the period from April 2011 to December 2013 in three ⁴¹ ESDs through manual process due to delay in implementation of application software in these ESDs.

(b) *Non / short- recovery of Low Voltage Supply Surcharge*

As *per* chapter 1 (I) of schedule of tariff applicable from time to time, consumers availing electricity supply at a voltage lower than the “Standard Supply Voltage” as specified under the relevant category shall, in addition to other charges be also charged a Lower Voltage Supply Surcharge (LVSS) at the prescribed rates.

During audit (June 2015), it was noticed that in 30 cases (under seven ⁴² ESDs) of large supply consumers (availing supply on voltages lower than the standard supply voltage) LVSS was not charged or short charged due to calculation error as the same was being calculated manually on the old software. This had resulted in non / short recovery of ₹ 1.39 crore.

(c) *Short recovery of demand charges*

As *per* two part tariff (July 2005), the consumers having connected load in excess of 20 KW shall be billed for demand charges in addition to energy charges at the rate specified. The bills of the Large Industrial Supply consumers were being prepared by the concerned Central Billing Cells (CBC) through old software which could not generate the bills directly by downloading data from meter reading instruments (MRI). The bills were being prepared in excel sheets by feeding data manually by taking readings from MRI data due to delay in implementation of new software.

Audit noticed (June 2015) that in 65 cases (test checked) demand charges of ₹ 50.56 lakh were short levied due to calculation mistakes during the period from April 2009 to March 2015 in seven ESDs⁴³.

(d) *Short recovery of average charges*

As *per* instruction No. 4.4.8 (ii) of the Supply Code, 2009, when the energy meter of the consumer becomes defective the same should be replaced immediately. Further, the consumers’ account should be overhauled for the period during which the meter remained defective and be charged on the basis of average monthly consumption recorded through the correct energy meter installed.

⁴¹ ESDs: Baddi, Barotiwala and Manali-II.

⁴² ESDs: Baddi, Barotiwala, Kala Amb, Manali-II, Paonta, Mandi-II & Sataun.

⁴³ ESDs: Kala Amb, Paonta, Manali-II, Baddi, Kangra-I, Sataun, and Reckong Peo.

Test check of records during audit (June 2015) showed that after replacing defective meters of ten consumers (Five⁴⁴ ESDs) with new meters, their accounts were not overhauled due to non-existence of such provision in the old billing software. In absence of which energy charges amounting to ₹ 52.68 lakh were short recovered during the period from September 2011 to August 2014.

(e) ***Short-recovery due to Non-levy of revised tariff***

Energy bills of small industrial consumers having connected load of less than 20 KW (single part tariff) were being generated by the ESD, Baddi through old billing software.

Audit noticed (March 2014) that after revision of tariff in April 2012, the billing software could not be modified due to some technical reasons. Consequently, the consumers of this category continued to be billed at old rates up to July 2013. It was only after switching over (July 2013) to new billing software provided by the HCL the deficiency was removed but no recoveries on account of difference in rates were made for the period prior to July 2013.

Thus, due to technical problem in the software, an amount of ₹ 20.65 lakh was short recovered from 295 consumers during the period from April 2012 to July 2013.

Conclusions and Recommendations

The Computer Master Plan under APDRP sanctioned by GoI during 2002 and 2003 and awarded in May 2006 was still under implementation. Consequently the Company had to prepare the energy bills manually which resulted in non / short-recovery of revenue on account of Late Payment Surcharge, Low Voltage Supply Surcharge, application of incorrect rates of High Voltage Supply Rebate and Demand Charges *etc.*

The Company should expand coverage of the new application to other ESDs for its complete implementation to eliminate manual preparation of bills.

The software which was made operational in 124 sub divisions out of total awarded 132 was also deficient in mapping of business rules which resulted in revenue loss due to non / short-recovery of Fixed Demand Charges, application of wrong multiplying factor and non assessment of enhanced energy charges *etc.* Besides, the Data Centre and Data Recovery Centre established in connection with this IT package had been established in the same seismic zone which defeated the very purpose of establishing the Data Recovery Centre.

⁴⁴ ESDs: Kala Amb, Barotiwala, Baddi, Kangra-I and Reckong Peo.

The Company should initiate action to rectify deficiencies in mapping of business rules as pointed in audit so as to avoid recurring loss of revenue. Access controls and data security controls may be strengthened to mitigate risk of data manipulation.

The above points were reported to the Government / Company in August 2015; their reply was awaited (December 2015).